| CPH, Inc.      |   |                     |         |                   |                               |    |        |      |  |  |
|----------------|---|---------------------|---------|-------------------|-------------------------------|----|--------|------|--|--|
| Bid Contact    | Nik Jindal<br>njindal@cphcorp.con<br>Ph 407-322-6841  | 1                   | Address | 500 We<br>Sanford | st Fulton Stre<br>I, FL 32771 | et |        |      |  |  |
| Supplier Code  | 276855  |                     |         |                   |                               |    |        |      |  |  |
| Qualifications | PP-DRUGFREE PP-EQUAL PP-LBTR PP-LOCAL PP-SCRUTINIZED PP-SWORN PP-<br>VENDORINFO PP-VOSB PP-W9 |                     |         |                   |                               |    |        |      |  |  |
| Bid Notes      | CPH, Inc. Response f  | or RFQ # PSUT-20-01 |         |                   |                               |    |        |      |  |  |
|                |   |                     |         |                   |                               |    |        |      |  |  |
| Item #         | Line Item   | Notes               | Unit    | t Price           | Qty/Unit                      |    | Attch. | Docs |  |  |
| DOLLT 20 01 0  | 1 01 Disson unload 9  | Supplier Dreduct    | First ( | 046.              | 1 / project                   |    | v      | v    |  |  |

| PSUT-20-0101-01 | Please upload & submit all required documents here. | Supplier Product<br>Code:<br>Supplier Notes:<br>CPH, Inc. Response<br>for RFQ # PSUT-20-<br>01 | First Offer - | 1 / project    | Y     | Υ |
|-----------------|---|--|---------------|----------------|-------|---|
|                 |   |  |               | Supplier Total | \$0.0 | 0 |

3/3/2020

#### CPH, Inc.

Item: Please upload & submit all required documents here.

#### Attachments

RFQ PSUT-20-01\_CPH Response.pdf



## City of Pembroke Pines PROFESSIONAL ENGINEERING SERVICES FOR THE CITY OF PEMBROKE PINES

"Design & Post Design Services: Raw Water Supply Line (Between Water Treatment Plant and Eastern Wellfield) & 30" Force Main Relocation" RFQ# PSUT-20-01









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INFORMATION

08

**03** PAST PERFORMANCE







February 25, 2020

1992 SW 1st Street Miami, FL 33135 Phone: 305.274.4805 Fax: 305.274.4807 info@cphcorp.com

City of Pembroke Pines Public Services Department Utilities Division 8300 South Palm Drive Pembroke Pines, FL 33025

Re: RFQ # PSUT-20-01 "Design and Post Design Services: Raw Water Supply Line (Between Water Treatment Plant and Eastern Wellfield) & 30" Force Main Relocation"

Dear Selection Committee Members:

CPH, Inc. (CPH), which has been located in South Florida for over 15 years, and in Florida for more than 38 years, has extensive experience with public infrastructure improvements. Our team has successfully implemented these types of projects throughout Florida for over 40 years for small to large size utility service areas. The team has designed and permitted utility infrastructure projects with pipe sizes ranging from 4" to 84" and has provided services for over 500 miles of pipeline projects, including several projects in South Florida.

CPH has a reputation for successful completion of similar projects throughout Florida. CPH recently finished design and CEI services for the City of Casselberry Water Quality Improvement Project, which included over 35 miles of asbestos cement water mains replacement utilizing pipe bursting. The largest project of its kind on the Country. This project was through an urbanized residential area and included heavy public notification and involvement. This project was received favorably by the City, and also by the residents. Other successful similar projects include the Moselle Avenue and Corinne Terrace Utility Replacements project, and the Orange County R/R Utility System Improvements and Replacement Package 1 Project. We have provided links below for our website to the construction plans for these projects to demonstrate out proficiency and the quality of our plans. These projects had many similar components, including switching meter locations for individual properties and densely populated urban residential neighborhoods.

#### Moselle Ave. & Corinne Terrace

http://www.cphcorp.com/Proposal Management\Moselle Ave. & Corinne Terr\O28206 Complete Set Revised 3-19-10.pdf

#### Orange County Gravity Package

http://www.cphcorp.com/Proposal Management\Orange County Gravity Package 1\O28521 Conformed Drawings - reduced.pdf



Our team has extensive experience in hydraulic modeling and the development of water main looping projects. We have completed projects that utilize traditional open cut, as well as alternative methods such as directional drilling, pipe bursting, tunneling, etc. Further, our in house team includes qualified MOT / pavement design engineers as well as surveyors. Our team stands ready to deliver this project to the City. We have visited the site and have provided a detailed approach in Tab 7.

We appreciate the opportunity to submit our qualifications and look forward to working with the City of Pembroke Pines.

Sincerely, CPH, Inc.

Todd H. Hendrix, P.E., CGC Sr. Vice President

# TAB 2. ABILITY OF PROFESSIONAL PERSONNEL

## **ORGANIZATIONAL CHART**

CPH has assembled a vastly diverse and highly qualified team with extensive experience in completing identical projects that require infrastructure improvements through residential neighborhoods, such as this project requested by **The City of Pembroke Pines**. Our team has the capabilities and expertise to complete the "**Raw Water Supply Line and 30-Inch Force Main Relocation**" project successfully. The CPH Team Organizational Chart depicts the overall reporting and communication hierarchy as well as project roles and responsibilities in relation to the City's scope of services.





CONSTRUCTABILITY REVIEWSURVEYGEOTECHNICALGERALD M. COX, CGC, CUCTHOMAS J. GALLOWAY, PSMTBD \*

\* CPH will utilize a Geotechnical Engineering firm from the City's existing continuing contracts.

## **KEY PERSONNEL CHART**

We have considered multiple criteria prior to assigning the key members listed below. This criteria includes: LOCAL knowledge, RECENT relevant project experience, CURRENT availability and COMMITMENT to the City of Pembroke Pines. CPH has the ability to pull from over 240 staff members to assist in design and construction services. Our total level of in-house resources consists of engineers, designers, environmental scientists, contractors, architects, surveyors, planners, GIS analysts, and landscape architects. The chart below identifies our project team and their roles in relation to the City.

| NAME / ROLE / YEARS OF EXPERIENCE                                     | <b>KEY SKILLS / QUALIFICATIONS</b>  | RECENT RELEVANT EXPERIENCE   | EDUCATION / LICENSES  |
|---|---|--|---|
| <b>TODD H. HENDRIX., P.E., CGC</b><br>PRINCIPAL-IN-CHARGE<br>21 YEARS | <ul> <li>Project Management</li> <li>Land Development Coordination</li> <li>Commercial, Industrial, and Residential Site Development</li> <li>Water and Wastewater Planning and Design</li> <li>Stormwater Management and Design</li> <li>Environmental Permitting and Compliance</li> <li>Project Budgeting, Scheduling, and Quality Control</li> </ul>  | <ul> <li>✓ Islamorada Village Wide Wastewater System, Design, Build, Operate (DBO)</li> <li>✓ City of Miramar – Huntington Wellfield and Raw Water Main</li> <li>✓ Village of Islamorada – LPFM Hydraulic Model Evaluations</li> <li>✓ Miami Shores Village Central Business District Low Pressure Sewer System (LPSS) and Water Main Improvements</li> <li>✓ Miami-Dade Water &amp; Sewer Department ACP Force Main Pipe Replacements</li> </ul>  | <ul> <li>M.S. in Environmental Engineering, Florida<br/>International University</li> <li>B.S. in Biological Science, Florida<br/>International University</li> <li>Professional Engineer - FL (No. 66794)</li> <li>General Contractor License - FL (No.<br/>1518490)</li> </ul>  |
| <b>KYLE M. BECHTELHEIMER, P.E.</b><br>PROJECT MANAGER<br>6 YEARS      | <ul> <li>Project Management</li> <li>Utilities Engineering</li> <li>Hydraulic Modeling</li> <li>Construction Administration</li> <li>Utility Coordination</li> <li>Pumping Facilities</li> <li>Reclaimed Systems</li> <li>Design on Aerial Crossings, Jack and Bores, and Directional Drills</li> <li>I &amp; I Studies and Improvements</li> </ul>   | <ul> <li>Seminole County - Inflow and Infiltration (I&amp;I) Program Manager</li> <li>City of Miramar - Huntington Wellfield and Raw Water Main</li> <li>Miami Shores Village Central Business District Low Pressure Sewer System<br/>(LPSS) and Water Main Improvements</li> <li>Miami-Dade Water &amp; Sewer Department ACP Force Main Pipe Replacements</li> <li>Village of Islamorada - LPFM Hydraulic Model Evaluations</li> <li>Pigeon Key Wastewater Treatment Plant (WWTP)</li> </ul>  | <ul> <li>B.S. in Environmental Engineering,<br/>University of Central Florida</li> <li>Professional Engineer - FL (No. PE86673)</li> </ul>  |
| <b>DAVID A. GIERACH, P.E., CGC</b><br>QA / QC<br>37 YEARS             | <ul> <li>Project Management</li> <li>Facility Interconnect Projects</li> <li>Pipelines in Highly Urban Areas</li> <li>Pumping Facilities</li> <li>Planning, Design and Engineering Services during construction for<br/>water, wastewater, and reclaimed water type projects</li> <li>Process Design / Analysis</li> <li>Master Water / Wastewater / Reclaimed Water Plans</li> <li>I &amp; I Studies and Improvements</li> </ul>   | <ul> <li>SR 46 Utility Relocations</li> <li>SR 429 (Wekiva Parkway Section 7A) Utility Relocations</li> <li>Midway Utilities Replacement - Phase 1, Seminole County</li> <li>State Road 16 Water System Interconnect</li> <li>Islamorada Village Wide Wastewater System, Design, Build, Operate (DBO)</li> <li>Miami Shores Village Central Business District Low Pressure Sewer System<br/>(LPSS) and Water Main Improvements</li> </ul>  | <ul> <li>B.S. in Environmental Engineering,<br/>University of Florida</li> <li>Professional Engineer - FL (No. 38642)</li> <li>General Contractor License - FL (No. 060789)</li> </ul>  |
| <b>JASON L. JAMES, P.E.</b><br>PROJECT ENGINEER<br>14 YEARS           | <ul> <li>✓ Utilities Design</li> <li>✓ General Site Planning</li> <li>✓ Commercial Land Development</li> <li>✓ Permitting</li> </ul>  | <ul> <li>✓ Islamorada Village Wide Wastewater System, Design, Build, Operate (DBO)</li> <li>✓ Miami Shores Village Central Business District Low Pressure Sewer System (LPSS) and Water Main Improvements</li> <li>✓ City of Miramar - Huntington Wellfield and Raw Water Main</li> <li>✓ Miami-Dade Water &amp; Sewer Department ACP Force Main Pipe Replacements</li> </ul>  | <ul> <li>B.S. in Civil Engineering, University of<br/>Central Florida</li> <li>Professional Engineer - FL (No. 76936)</li> </ul>  |
| <b>N. KATRIINA BOWMAN, P.E., CCS</b><br>PROJECT ENGINEER<br>32 YEARS  | <ul> <li>✓ Utility Design and Permitting</li> <li>✓ Lift Station Design</li> <li>✓ Pressure System Modeling</li> <li>✓ Preparation of FDEP SRF Loan Applications</li> <li>✓ Utility Distribution Systems</li> <li>✓ Construction Documents/Administration</li> </ul>  | <ul> <li>WWTP No. 2 Reclaimed Water Wetland Discharge</li> <li>SR 46 Utility Relocations</li> <li>Volusia-Sanford Reclaimed Interconnect</li> <li>SR 429 (Wekiva Pkwy Section 7A) Utility Relocations</li> <li>Old Kings Road North &amp; South Reclaimed Water Mains</li> <li>Palm Coast Matanzas Woods Reclaimed Water Main</li> <li>Pump Station Upgrades - FY 2012</li> </ul>  | <ul> <li>M.S. in Civil Engineering, Clemson<br/>University</li> <li>B.S. in Civil Engineering, Clemson<br/>University</li> <li>Professional Engineer - FL (No. 45155)</li> <li>Certified Construction Specifier -<br/>Construction Specifications Institute (CSI)</li> <li>Qualified Stormwater Management<br/>Inspector</li> <li>Advanced Maintenance of Traffic<br/>Qualification (FDOT)</li> </ul> |
| <b>ROCCO R. NASSO, P.E.</b><br>PROJECT ENGINEER<br>19 YEARS           | <ul> <li>Extensive Utility Design and Permitting Experience</li> <li>Extensive Construction Engineering and Inspection Experience</li> <li>Wastewater Collection/Transmission Systems</li> <li>Utility Distribution Systems</li> <li>Stormwater calculations and modeling of large drainage basins</li> <li>Expert in Conveyance systems</li> <li>Stormwater Management Systems</li> <li>Roadway Design</li> <li>Construction Documents and Administration</li> <li>I &amp; I Studies and Improvements</li> </ul> | <ul> <li>City of Miramar - Huntington Wellfield and Raw Water Main</li> <li>SR 46 Utility Relocations</li> <li>SR 429 (Wekiva Parkway Section 7A) Utility Relocations</li> <li>Midway Utilities Replacement - Phase 1, Seminole County</li> <li>Fox Hollow Force Main Improvements</li> <li>Old Kings Road North &amp; South Reclaimed Water Mains</li> <li>State Road 16 Water System Interconnect</li> <li>Lake Harriet Water Transmission Main</li> <li>Area IV Well Outfitting and Raw Water Transmission Main - Phases 1 and 2</li> </ul> | <ul> <li>B.S. in Civil Engineering, University of<br/>Central Florida</li> <li>Professional Engineer - FL (No. 64727)</li> <li>Qualified Stormwater Management<br/>Inspector</li> <li>Advanced Maintenance of Traffic<br/>Certification</li> <li>OSHA Construction Safety and Health<br/>Certification</li> <li>CTQP Asphalt Paving Technician Level I &amp;<br/>II</li> </ul>                        |

#### City of Pembroke Pines

| NAME / ROLE / YEARS OF EXPERIENCE   | <b>KEY SKILLS / QUALIFICATIONS</b>  | RECENT RELEVANT EXPERIENCE  | EDUCATION / LICENSES   |
|---|---|---|--|
| <b>ALYSSA FILIPPI, P.E.</b><br>PROJECT ENGINEER<br>7 YEARS                      | <ul> <li>Site Design</li> <li>Utility Relocations Within Roadway ROW</li> <li>Water main, Reclaim water main, and Force Main Design</li> <li>Hydraulic Modeling</li> <li>Permitting</li> <li>Construction Administration</li> <li>Pumping Facilities</li> <li>Plan and Specification Preparation</li> </ul>   | <ul> <li>Highland Avenue Gravity Sewer and Water Main Replacement Project</li> <li>Simpson Road 30" Water Main Project</li> <li>SR-50 Utility Relocation Project (FDOT JPA)</li> <li>SSA-ESA 36" Water Main and 24" Reclaimed Water Main Project</li> <li>SR 15 Utility Relocation Project (FDOT JPA)</li> <li>SR 482 Utility Relocations (FDOT JPA)</li> <li>Snggy Creek Road Intersection Utility Relocation Project</li> <li>Lake Underhill Utility Relocations</li> </ul>   | <ul> <li>B.S. in Environmental Engineering,<br/>University of Central Florida</li> <li>Professional Engineer - FL (No. 82339)</li> </ul>   |
| <b>MASON GARDBERG, P.E.</b><br>PROJECT ENGINEER (HYDRAULIC MODELING)<br>7 YEARS | <ul> <li>Water main, Reclaim water main, and Force Main Design</li> <li>Utility Relocations Within Roadway ROW</li> <li>Construction Administration</li> <li>Pumping Facilities</li> <li>Plan and Specification Preparation</li> <li>Hydraulic Modeling</li> <li>Permitting</li> <li>Site Design</li> </ul>   | <ul> <li>SR-50 Utility Relocation Project (FDOT JPA)</li> <li>Miami Shores Village Central Business District Low Pressure Sewer System (LPSS) and Water Main Improvements</li> <li>Simpson Road 30" Water Main Project</li> <li>SR 482 Utility Relocations (-4 and -5 segments) (FDOT JPA)</li> <li>Highland Avenue Gravity Sewer and Water Main Replacement Project</li> </ul>   | <ul> <li>B.S. in Environmental Engineering<br/>and Civil Engineering (double major),<br/>University of Central Florida</li> <li>Professional Engineer - FL (No. 86595)</li> </ul>  |
| <b>KURT R. LUMAN, JR., P.E.</b><br>PROJECT ENGINEER (MOT)<br>20 YEARS           | <ul> <li>Project Management</li> <li>Roadway paving, widening, extensions, new roads; as well as turn lane additions and traffic upgrades</li> <li>FDOT guidelines and FDOT LAP</li> <li>Trails and Shared-Use Paths</li> <li>Signing and Pavement Parking</li> <li>Maintenance of Traffic Plans</li> <li>Streetscapes</li> <li>Permitting</li> </ul> | <ul> <li>✓ SR-50 Utility Relocation Project (FDOT JPA)</li> <li>✓ SSA-ESA 36" Water Main and 24" Reclaimed Water Main Project</li> <li>✓ W. Central Blvd. Sanitary Sewer Replacement and Streetscape Design/Build</li> <li>✓ JEA - Otter Run Water Treatment Plant Renewal &amp; Replacement</li> <li>✓ Simpson Road 30" Water Main Project</li> </ul>  | <ul> <li>B.S. in Civil Engineering, University of<br/>Central Florida</li> <li>Professional Engineer - FL (No. 65036)</li> <li>Advance Maintenance of Traffic, FDOT,<br/>Critical Structures Construction Issues<br/>Course</li> </ul> |
| <b>GERALD M. COX, CGC, CUC</b><br>CONSTRUCTABILITY REVIEW<br>43 YEARS           | <ul> <li>✓ Licensed General and Underground Utility Contractor</li> <li>✓ Expert in conveyance systems and treatment plants</li> <li>✓ Extensive scheduling and cost estimation expertise</li> <li>✓ Expertise in: Commercial, Industrial, Infrastructure, Construction<br/>Management, Utility Systems, and Value Engineering</li> </ul>             | <ul> <li>Northern Forcemain and Southern Forcemain Project- Key Largo Wastewater<br/>Treatment District</li> <li>Key Largo Wastewater Treatment District, Vacuum Pump Station Serving Basin A<br/>and B</li> <li>Analysis and Redesign / Phase I Collection System - Islamorada, Village of Islands</li> <li>Islamorada Village Wide Wastewater System, Design, Build, Operate (DBO)</li> <li>Miami Shores Village Central Business District Low Pressure Sewer System<br/>(LPSS) and Water Main Improvements</li> <li>St. Johns Parkway</li> </ul> | <ul> <li>B.S. in Building Construction, University of<br/>Florida</li> <li>Certified General Contractor - FL (No.<br/>010771)</li> <li>Certified Utility Contractor - FL (No.<br/>051667)</li> </ul>                                   |
| <b>THOMAS J. GALLOWAY, PSM</b><br>PROJECT SURVEYOR<br>29 YEARS                  | <ul> <li>✓ Surveying and Management</li> <li>✓ Highway Projects</li> <li>✓ Land Development</li> <li>✓ Commercial and Private Projects</li> <li>✓ Municipal Projects</li> <li>✓ Park Improvements Projects</li> </ul>   | <ul> <li>Apple Valley Interconnect - Phase 3</li> <li>Key Largo Wastewater Treatment District, Vacuum Pump Station Serving Basin A and B</li> <li>Islamorada Village Wide Wastewater System, Design, Build, Operate (DBO)</li> <li>Area IV Well Outfitting and Raw Water Transmission Main - Phase 1 and 2</li> <li>Miami Shores Village Central Business District Low Pressure Sewer System (LPSS) and Water Main Improvements</li> </ul>  | <ul> <li>B.S. in Surveying and Mapping, University of Florida</li> <li>Professional Surveyor &amp; Mapper - FL (No. 6549)</li> <li>NCEES Council No. 1291</li> </ul>   |



Mr. Hendrix serves CPH as Branch Manager for the Miami Office. He is responsible for overseeing a diverse staff that manages site development for commercial, residential, and municipal projects. Mr. Hendrix joined CPH in 1998. His municipal experience includes project coordination, design, and permitting of various potable water systems, wastewater systems, and stormwater management systems. He has experience in the areas of design and permitting of water supply wells, ground storage and treatment facilities, and high service pumping and distribution systems.

## EDUCATION

M.S. in Environmental Engineering, Florida International University B.S. in Biological Science, Florida International University

## LICENSES / CERTIFICATIONS

Professional Engineer - FL (No. 66794) General Contractor License - FL (No. 1518490)

## **KEY STRENGTHS**

- Project Management
- Permitting
- Small to Large Diameter Conveyance Systems
- · Water and Wastewater Planning and Design
- Stormwater Management and Design
- · Environmental Permitting and Compliance
- · Project Budgeting, Scheduling, and Quality Control



## TODD H. HENDRIX, P.E., CGC

**Principal-in-Charge** 

#### 21 Total Years of Experience • 21 Years with CPH

#### SIMILAR PROJECT EXPERIENCE

#### Islamorada Village Wide Wastewater System, Design, Build, Operate (DBO)

- Areas of responsibility included the design and permitting of the vacuum collection system for the Island of Upper Matecumbe Key; vacuum pumping stations for the Islands of South Plantation Key, Upper Matecumbe Key and Lower Matecumbe Key; and low pressure force main collection systems for the Island of Windley Key and portions of Upper Matecumbe Key.
- Combined the project consists of 37,410 LF of HDPE pipe ranging in size from 1 1/4-6". The team provided a complete system design including plan and profile drawings of each pipe run. The team conducted system hydraulics calculations using Sewercad. The team provided limited CEI services for this portion of the project.

#### City of Miramar - Huntington Wellfield and Raw Water Main

- CPH completed preliminary design and plan for re-developing the well at 4,500 gpm for
- approximately 60 hours to ensure it will meet the needs of the City's Water Treatment Plant (WTP). Based on CPH's Preliminary Design Report, the City was able to select the appropriate route to meet their needs.
- The route included 60% design of approximately 1.6 miles of 16" Raw Water Main, installed through open trench. The design also included a 400 linear-feet, 18-inch HDPE directional drill, and subaqueous canal crossing under South Broward Drainage District's Canal 4. During Phase 2 (100% Design), CPH will complete the design for the well site and raw water main, assist in bidding services, and coordinate construction administration efforts.

#### Village of Islamorada - LPFM Hydraulic Model Evaluations

- Evaluated and determined if the design capacity of the existing low pressure force main (LPFM) is adequate for the proposed additional connections and estimated flow rates (AADF & PHF) required by the village
- Determined if the existing service connections are of sufficient capacity for the proposed development
- Evaluated if any LPFM improvements downstream of the proposed connection locations are required
- Provided a written recommendation of proposed engineering improvements required on the Village's low pressure wastewater collection system
- Will perform periodic updates to the hydraulic model based on approved, permitted connections

#### Miami Shores Village Central Business District Low Pressure Sewer System (LPSS) and Water Main Improvements

- Responsible for the engineering, design, permitting and inspection to support the construction, installation, testing and commissioning activities associated with the construction of a new Low Pressure Sewer System in the Central Business District of Miami Shores Village with discharge to a new regional Pump Station, as well as the associated grinder stations, water main
- Approximately 3,112 If of 8-inch internal diameter DIP Force Main.
- New Regional Pump Station that will consist of a wet well application with centrifugal pumps and standby generator and generator building.
- Approximately 4,300 lf of 3 -inch -4 -inch HDPE low pressure sanitary (LPS) force mains to collect the effluent from the Low Pressure Grinder Stations and convey them to the new regional pump station.
- Approximately 4,100 lf of upgraded 12 -inch water mains will replace the existing undersized mains.

#### Miami-Dade Water & Sewer Department ACP Force Main Pipe Replacements

- CPH was awarded three (3) separate contracts by the Miami-Dade County Water & Sewer Department (WASD) to replace approximately 10,736 lf of asbestos cement pipe (ACP) in the areas of Kendall, Homestead Air Reserve Base, and the City of Miami Gardens.
- The ACP that was replaced served as the sanitary sewer force main distribution system for the listed areas, but had to be replaced with ductile iron pipe (DIP) to better serve its customers.
- The Kendall replacement project routed through primarily residential roadways, and included a series of aerial canal crossings and connections. The existing 10 -inch and 12-inch ACP force mains were abandoned in-place, and relaced by 10 -inch and 12 -inch DIP force mains as per WASD Standards. The project replaced 6,623 lf of ACP.
- The Homestead Air Reserve Base project is within a Federally secured property and featured an existing 8 -inch ACP which routed from WASD pump station PS1132 to a gravity manhole located NE of the project vicinity. The 8-inch DIP replacement pipe was routed along the private roadway of Bikini Blvd to an alterna Red Starting sewer manhole. p. 158



Mr. Bechtelheimer serves CPH as a project engineer with over 6 years of experience specializing in land development, project management and utilities engineering.

## **EDUCATION**

B.S. in Environmental Engineering, University of Central Florida

## LICENSES / CERTIFICATIONS

Professional Engineer - FL (No. 86673)

## **KEY STRENGTHS**

- I&I Reduction
- I&I Studies and Improvements
- Sewer Collection/Transmission
- Permitting
- Asbestos Cement
- Pipe Replacement
- Water Mains
- Project Management
- Utilities Engineering
- AutoCAD
- ArcGis
- InfoWater & H20MAP

### KYLE M. BECHTELHEIMER, P.E. Project Manager

#### 6 Total Years of Experience • 3 Years with CPH

#### SIMILAR PROJECT EXPERIENCE

#### Seminole County - Inflow and Infiltration (I&I) Program Manager

Responsible for creating Master I&I Plan for 313 miles of sanitary sewer gravity main with over 7,500 manholes. Designed phasing plan based on SCADA Lift Station data analysis. Managed the selected contractor for I&I smoke testing and repairs of each phase of the Master Plan.

#### City of Miramar - Huntington Wellfield and Raw Water Main

- CPH completed preliminary design and plan for re-developing the well at 4,500 gpm for approximately 60 hours to ensure it will meet the needs of the City's Water Treatment Plant (WTP).
- Based on CPH's Preliminary Design Report, the City was able to select the appropriate route to meet their needs.
- The route included 60% design of approximately 1.6 miles of 16" Raw Water Main, installed through open trench. The design also included a 400 linear-feet, 18-inch HDPE directional drill, and subaqueous canal crossing under South Broward Drainage District's Canal 4. During Phase 2 (100% Design), CPH will complete the design for the well site and raw water main, assist in bidding services, and coordinate construction administration efforts.

#### Miami Shores Village Central Business District Low Pressure Sewer System (LPSS) and Water Main Improvements

- Responsible for the engineering, design, permitting and inspection to support the construction, installation, testing and commissioning activities associated with the construction of a new Low Pressure Sewer System in the Central Business District of Miami Shores Village with discharge to a new regional Pump Station, as well as the associated grinder stations, water main
- Approximately 3,112 If of 8-inch internal diameter DIP Force Main.
- New Regional Pump Station that will consist of a wet well application with centrifugal pumps and standby generator and generator building.
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- The Kendall replacement project routed through primarily residential roadways, and included a series of aerial canal crossings and connections. The existing 10 -inch and 12-inch ACP force mains were abandoned in-place, and relaced by 10 -inch and 12 -inch DIP force mains as per WASD Standards. The project replaced 6,623 If of ACP.
- The Homestead Air Reserve Base project is within a Federally secured property and featured an existing 8 -inch ACP which routed from WASD pump station PS1132 to a gravity manhole located NE of the project vicinity. The 8-inch DIP replacement pipe was routed along the private roadway of Bikini Blvd to an alternate gravity sewer manhole.

#### Village of Islamorada – LPFM Hydraulic Model Evaluations

- Evaluated and determined if the design capacity of the existing low pressure force main (LPFM) is adequate for the proposed additional connections and estimated flow rates (AADF & PHF) required by the village
- Determined if the existing service connections are of sufficient capacity for the proposed development
- Evaluated if any LPFM improvements downstream of the proposed connection locations are required
   Provided a written recommendation of proposed engineering improvements required on the Village's
- low pressure wastewater collection system
  Will perform periodic updates to the hydraulic model based on approved, permitted connections





Mr. Gierach serves CPH as President and has over 34 years of experience in engineering and construction for projects that include trails, parks, roadways, treatment facilities, pump/ lift stations, drainage, pipelines, and vertical construction projects. He has managed the planning, design, permitting, and construction of projects that range from \$1 Million to projects over \$200 Million in value. Mr. Gierach has provided services to clients including the Cities of Palm Coast, Sanford, Lake Mary, Casselberry, Winter Springs, Orlando, the U.S. Navy and Volusia County among numerous others.

## **EDUCATION**

B.S. in Environmental Engineering, University of Florida

## LICENSES / CERTIFICATIONS

Professional Engineer – FL (No. 38642) General Contractor License – FL (No. 060789)

## **KEY STRENGTHS**

- Project Management
- I&I Studies and Improvements
- Facility Interconnect Projects
- Pipelines in Highly Urban Areas
- Pumping Facilities
- Planning, Design and Engineering Services during construction for water, wastewater, and reclaimed water type projects
- Process Design / Analysis
- Master Water / Wastewater / Reclaimed Water Plans



## DAVID A. GIERACH, P.E., CGC

#### 34 Total Years of Experience • 30 Years with CPH

#### SIMILAR PROJECT EXPERIENCE

#### SR 46 Utility Relocations

Project included 10,100-ft of new 12" water main, 675-ft of new 6"-10" water main, 4,200-ft directional drill 12" water main, 8,100-ft of new 6"-8" force main, 900-ft directional drill 6"-8" force main, 1,590-ft of new 10" sanitary sewer and manholes, 2,350-ft of new 20" reclaimed water main, one new Master Meter Assembly, and the removal of approximately 26,900-ft of existing water main, force main, sanitary sewer, and reclaimed water main.

#### SR 429 (Wekiva Parkway Section 7A) Utility Relocations

- CPH provided design, permitting, and limited CEI services for the relocation of existing Seminole Co. utilities along a 2.6 mile stretch of SR 46 between Longwood-Markham Rd. to Orange Blvd., and along a 1200-ft long section of Orange Ave. and Wayside Dr. from Capri Cove PI. to Orange Blvd. from Wayside Dr. to SR 46.
- Construction included open cut construction consisting of 11,300-ft of new 12" water main, 1400ft of new 16" reclaimed water main, 6440-ft of new 20" reclaimed water main, 13,900-ft of new 24" force main, 1680-ft of new 24" reclaimed water main, 3800-ft of new 30" reclaimed water main, and 16,800-ft of new conduit, pull boxes and splice boxes for the new fiber optic system. Directional drill construction included 1690-ft of new HDPE pipeline ranging in size from 12" to 36".

#### Midway Utilities Replacement - Phase 1, Seminole County

- The project included construction of approximately 10,665-ft of new 4-inch -10-inch water main, water services, and fire hydrants within Midway, and the abandonment in place (via grouting) of existing 6 -inch water main.
- The design included preliminary layout of the new lines and coordination with the County on the proposed construction, permitting requirements, known future plans of other utilities and agencies for the project area.

#### State Road 16 Water System Interconnect

- CPH teamed with Masci Construction to prepare the final construction documents and construct the proposed State Road 16 Water System Interconnect.
- The design/build project consisted of design and construction of approximately 18,038 If of new water main from just east of Verona Way to the Turning Point Church for the St Johns County Utility Department.
- Segment 1 approximately 4,313 lf of 20 -inch new water main from the east side of Verona Way to the existing 20 -inch DI water main located at the backside of the Sevilla Subdivision.
- Approximately 3,325 If was proposed within a 15ft Utility Easement along the north property line of the Mura Bella Subdivision and approximately 988 If was to be installed within the FDOT right of way.

#### Islamorada Village Wide Wastewater System, Design, Build, Operate (DBO)

- Areas of responsibility included the design and permitting of the vacuum collection system for the Island of Upper Matecumbe Key; vacuum pumping stations for the Islands of South Plantation Key, Upper Matecumbe Key and Lower Matecumbe Key; and low pressure force main collection systems for the Island of Windley Key and portions of Upper Matecumbe Key.
- Combined the project consists of 37,410 LF of HDPE pipe ranging in size from 1 1/4-6". The team provided a complete system design including plan and profile drawings of each pipe run. The team conducted system hydraulics calculations using Sewercad. The team provided limited CEI services for this portion of the project.

## Miami Shores Village Central Business District Low Pressure Sewer System (LPSS) and Water Main Improvements

- Responsible for the engineering, design, permitting and inspection to support the construction, installation, testing and commissioning activities associated with the construction of a new Low Pressure Sewer System in the Central Business District of Miami Shores Village with discharge to a new regional Pump Station, as well as the associated grinder stations, water main
- Approximately 3,112 If of 8-inch internal diameter DIP Force Main.
- New Regional Pump Station that will consist of a wet well application with centrifugal pumps and standby generator and generator building.
- Approximately 4,300 lf of 3 -inch -4 -inch HDPE low pressure sanitary (LPS) force mains to collect the effluent from the Low Pressure Grinder Stations and convey them to the new regional pump station.
  - Approximately 4,100 If **Bfdsygc**aded 12 -inch water mains will replace the existing undersized 160 ins.



Mr. James serves CPH as Project Engineer. He is responsible for design and engineering infrastructure, grading, drainage, potable water, sanitary sewer systems, as well as the preparation and processing of permits through various regulatory agencies.

## **EDUCATION**

B.S. in Civil Engineering, University of Central Florida, 2005

## LICENSES / CERTIFICATIONS

Professional Engineer – FL (No. 76936)

## **KEY STRENGTHS**

- Commercial Land Development
- General Site Planning
- Utilities Design
- Permitting

### JASON L. JAMES, P.E Project Engineer

#### 14 Total Years of Experience - 14 Years with CPH

#### SIMILAR PROJECT EXPERIENCE

#### Islamorada Village Wide Wastewater System, Design, Build, Operate (DBO)

- Areas of responsibility included the design and permitting of the vacuum collection system for the Island of Upper Matecumbe Key; vacuum pumping stations for the Islands of South Plantation Key, Upper Matecumbe Key and Lower Matecumbe Key; and low pressure force main collection systems for the Island of Windley Key and portions of Upper Matecumbe Key.
- Combined the project consists of 37,410 LF of HDPE pipe ranging in size from 1 1/4-6". The team provided a complete system design including plan and profile drawings of each pipe run. The team conducted system hydraulics calculations using Sewercad. The team provided limited CEI services for this portion of the project.

## Miami Shores Village Central Business District Low Pressure Sewer System (LPSS) and Water Main Improvements

- Responsible for the engineering, design, permitting and inspection to support the construction, installation, testing and commissioning activities associated with the construction of a new Low Pressure Sewer System in the Central Business District of Miami Shores Village with discharge to a new regional Pump Station, as well as the associated grinder stations, water main
- Approximately 3,112 If of 8-inch internal diameter DIP Force Main.
- New Regional Pump Station that will consist of a wet well application with centrifugal pumps and standby generator and generator building.
- Approximately 4,300 If of 3 -inch -4 -inch HDPE low pressure sanitary (LPS) force mains to collect the effluent from the Low Pressure Grinder Stations and convey them to the new regional pump station.
- Approximately 4,100 lf of upgraded 12 -inch water mains will replace the existing undersized mains.

#### City of Miramar – Huntington Wellfield and Raw Water Main

- CPH completed preliminary design and plan for re-developing the well at 4,500 gpm for approximately 60 hours to ensure it will meet the needs of the City's Water Treatment Plant (WTP).
- Based on CPH's Preliminary Design Report, the City was able to select the appropriate route to meet their needs.
- The route included 60% design of approximately 1.6 miles of 16" Raw Water Main, installed through open trench. The design also included a 400 linear-feet, 18-inch HDPE directional drill, and subaqueous canal crossing under South Broward Drainage District's Canal 4. During Phase 2 (100% Design), CPH will complete the design for the well site and raw water main, assist in bidding services, and coordinate construction administration efforts.

#### Miami-Dade Water & Sewer Department ACP Force Main Pipe Replacements

- CPH was awarded three (3) separate contracts by the Miami-Dade County Water & Sewer Department (WASD) to replace approximately 10,736 lf of asbestos cement pipe (ACP) in the areas of Kendall, Homestead Air Reserve Base, and the City of Miami Gardens.
- The ACP that was replaced served as the sanitary sewer force main distribution system for the listed areas, but had to be replaced with ductile iron pipe (DIP) to better serve its customers.
- The Kendall replacement project routed through primarily residential roadways, and included a series of aerial canal crossings and connections. The existing 10 -inch and 12-inch ACP force mains were abandoned in-place, and relaced by 10 -inch and 12 -inch DIP force mains as per WASD Standards. The project replaced 6,623 lf of ACP.
- The Homestead Air Reserve Base project is within a Federally secured property and featured an existing 8 -inch ACP which routed from WASD pump station PS1132 to a gravity manhole located NE of the project vicinity. The 8-inch DIP replacement pipe was routed along the private roadway of Bikini Blvd to an alternate gravity sewer manhole.





Ms. Bowman has been an engineer with CPH since 1989. She has worked with local governments and private developers on a variety of projects. Her stormwater design capabilities include large basin drainage studies, stormwater modeling, and permitting. She also has extensive utility design and permitting experience, including pressure system modeling, lift station design, preparation of utility adjustment plans, preparation of FDEP State Revolving Fund Loan program loan applications. Her roadway design capabilities include alignment, pavement design, local collection system and stormwater management design, preparation of signing and marking plans, and preparation of traffic control plans.

## **EDUCATION**

M.S. in Civil Engineering, Clemson University B.S. in Civil Engineering, Clemson University

## LICENSES / CERTIFICATIONS

Professional Engineer - FL (No. 45155) Certified Construction Specifier -Construction Specifications Institute (CSI)

Qualified Stormwater Management Inspector

Advanced Maintenance of Traffic Qualification (FDOT)

## **KEY STRENGTHS**

- Utility Design and Permitting
- Lift Station Design
- Pressure System Modeling
- Preparation of FDEP SRF Loan
   Applications
- Utility Distribution SystemsConstruction Documents/



## N. KATRIINA BOWMAN, P.E., CCS

#### 32 Total Years of Experience - 30 Years with CPH

#### SIMILAR PROJECT EXPERIENCE

#### WWTP No. 2 Reclaimed Water Wetland Discharge

- The Project consists of the construction of approximately 7,865-ft of new 18" reclaimed water main, 160-ft of new 16" reclaimed water main, 1,760-ft of new 20" force main, and 1,900-ft of new 10" reclaimed water main.
- The construction also includes installation of a precast structure (wetland discharge), an above grade meter assembly, and the construction of a dechlorination facility.
- CPH provided surveying, environmental, design, permitting, bidding, and CEI services and assisted with securing from the Florida Dept. of Environmental Protection (FDEP) State Revolving Fund loan program.

#### SR 46 Utility Relocations

The project consisted of the construction of approximately 10,100-ft of new 12" water main, 675-ft of new 6"-10" water main, 4,200-ft directional drill 12" water main, 8,100-ft of new 6"-8" force main, 900-ft directional drill 6"-8" force main, 1,590-ft of new 10" sanitary sewer and manholes, 2,350-ft of new 20" reclaimed water main, relocation and modification of an existing Master Meter Assembly, and the removal of approximately 26,900-ft of existing water main, force main, sanitary sewer, and reclaimed water main.

#### Volusia-Sanford Reclaimed Interconnect

- Provided services for the extension of the City of Sanford's existing reclaimed water system across the St. Johns River into Volusia County.
- The project connected the existing 20-inch DIP line with a new 20-inch DIP line; projected flows to be sent to Volusia County are between 150,000 to 1,500,000 GPD
- Provided the design, permitting, and construction services for both Sanford and Volusia Counties

#### SR 429 (Wekiva Pkwy Section 7A) Utility Relocations

- CPH provided design, permitting, and limited CEI services for the relocation of existing Seminole Co. Utilities along a 2.6 mile stretch of SR 46 between Longwood-Markham Rd. to Orange Blvd., and along a 1200-ft long section of Orange Ave. and Wayside Dr. from Capri Cove Pl. to Orange Blvd. from Wayside Dr. to SR 46.
- Construction included open cut construction consisting of 11,300-ft of new 12" water main, 1400-ft of new 16" reclaimed water main, 6440-ft of new 20" reclaimed water main, 13,900-ft of new 24" force main, 1680-ft of new 24" reclaimed water main, 3800-ft of new 30" reclaimed water main, and 16,800-ft of new conduit, pull boxes and splice boxes for the new fiber optic system.
- Directional drill construction included 1690-ft of new HDPE pipeline ranging in size from 12" to 36".

#### **Old Kings Road North & South Reclaimed Water Mains**

- The Old Kings Road North project improvements consisted of a 30-inch reclaimed water main that extended westerly from WWTP No. 1 to the FPL easement at the intersection of Oak Trails and Old Kings Road.
- The 30-inch reclaimed water main then connected to a 16-inch reclaimed water main to the North and to a 20-inch reclaimed water main to the South.
- The Old Kings Road South project improvements consisted of a 20-inch reclaimed water main that extended from the 30-inch reclaimed water main at Oak Trails and Old Kings Road southerly along the FPL easement to Cigar Lake.

#### Palm Coast Matanzas Woods Reclaimed Water Main

CPH provided engineering services in connection with the design update and construction of 3.1 miles of a 16-18 -inch reclaimed water main to connect the reuse systems of two wastewater treatment plants in the City of Palm Coast, allowing for joint reuse and disposal of reclaimed water.

#### Pump Station Upgrades – FY 2012

- The Project consisted of improvements at seven existing sanitary sewer pump stations located throughout Seminole County
- The improvements at each station included replacement of pumps, pump bases, pump guide rails, electrical panels, electrical equipment racks, power feeds, replacement of pipes, fittings, and valves in the wet well and valve vault; replacement of emergency pump outs, and replacement of site concrete. The improvements also included new coatings in the valve vaults and wet wells.



Mr. Nasso serves CPH as a Project Manager and Engineer. His design experience includes extensive utility design and permitting, wastewater collection/transmission systems, stormwater calculations and modeling (ICPR and Hydraflow), water transmission main design and modeling (WaterCAD), pump sizing, and lift station design. His other duties include the Construction Engineering and Inspection (CEI) over numerous utility projects, water and wastewater treatment facilities and roadway projects.

## **EDUCATION**

B.S. in Civil Engineering, University of Central Florida, 2001

## LICENSES / CERTIFICATIONS

Professional Engineer - FL (No. 64727), Qualified Stormwater Management Inspector (FDEP), Advanced Maintenance of Traffic Certification, OSHA Construction Safety and Health Certification

## **KEY STRENGTHS**

- Extensive Utility Design and
   Permitting Experience
- I&I Studies and ImprovementsExtensive Construction
- Engineering and Inspection Experience
- Wastewater Collection/ Transmission Systems
- Utility Distribution Systems
- Stormwater calculations and modeling of large drainage basins
- Expert in Conveyance systems
- Stormwater Management
- SystemsRoadway Design
- Construction Documents and Administration



### ROCCO R. NASSO, P.E. Project Engineer

#### **19 Total Years of Experience - 19 Years with CPH**

#### SIMILAR PROJECT EXPERIENCE

#### City of Miramar – Huntington Wellfield and Raw Water Main

- CPH completed preliminary design and plan for re-developing the well at 4,500 gpm for
- approximately 60 hours to ensure it will meet the needs of the City's Water Treatment Plant (WTP). Based on CPH's Preliminary Design Report, the City was able to select the appropriate route to meet their needs.
- The route included 60% design of approximately 1.6 miles of 16" Raw Water Main, installed through open trench. The design also included a 400 linear-feet, 18-inch HDPE directional drill, and subaqueous canal crossing under South Broward Drainage District's Canal 4. During Phase 2 (100% Design), CPH will complete the design for the well site and raw water main, assist in bidding services, and coordinate construction administration efforts.

#### SR 46 Utility Relocations

Project included 10,100-ft of new 12" water main, 675-ft of new 6"-10" water main, 4,200-ft directional drill 12" water main, 8,100-ft of new 6"-8" force main, 900-ft directional drill 6"-8" force main, 1,590-ft of new 10" sanitary sewer and manholes, 2,350-ft of new 20" reclaimed water main, one new Master Meter Assembly, and the removal of approximately 26,900-ft of existing water main, force main, sanitary sewer, and reclaimed water main.

#### SR 429 (Wekiva Parkway Section 7A) Utility Relocations

- CPH provided design, permitting, and limited CEI services for the relocation of existing Seminole Co. utilities along a 2.6 mile stretch of SR 46 between Longwood-Markham Rd. to Orange Blvd., and along a 1200-ft long section of Orange Ave. and Wayside Dr. from Capri Cove Pl. to Orange Blvd. from Wayside Dr. to SR 46.
  - Construction included open cut construction consisting of 11,300-ft of new 12" water main, 1400ft of new 16" reclaimed water main, 6440-ft of new 20" reclaimed water main, 13,900-ft of new 24" force main, 1680-ft of new 24" reclaimed water main, 3800-ft of new 30" reclaimed water main, and 16,800-ft of new conduit, pull boxes and splice boxes for the new fiber optic system. Directional drill construction included 1690-ft of new HDPE pipeline ranging in size from 12" to 36".

#### Midway Utilities Replacement - Phase 1, Seminole County

- The project included construction of approximately 10,665-ft of new 4-inch -10-inch water main, water services, and fire hydrants within Midway, and the abandonment in place (via grouting) of existing 6 -inch water main.
- The design included preliminary layout of the new lines and coordination with the County on the proposed construction, permitting requirements, known future plans of other utilities and agencies for the project area.

#### Midway Utilities Replacement, Phase I

- Performed limited inspection services, shop drawing review, post design services, attendance at progress meetings, as-built drawings, clearance letter, certification of completion of construction, substantial completion and final inspections, review of change orders, and negotiation assistance for changes in the work.
- Construction of approximately 9,600 l.f. of 4-inch to 10-inch water lines to replace the existing substandard and undersized water mains, water services, and fire hydrants

#### **Old Kings Road North & South Reclaimed Water Mains**

- The Old Kings Road North project improvements consisted of a 30-inch reclaimed water main that extended westerly from WWTP No. 1 to the FPL easement at the intersection of Oak Trails and Old Kings Road.
  - The 30-inch reclaimed water main then connected to a 16-inch reclaimed water main to the North and to a 20-inch reclaimed water main to the South.
- The Old Kings Road South project improvements consisted of a 20-inch reclaimed water main that extended from the 30-inch reclaimed water main at Oak Trails and Old Kings Road southerly along the FPL easement to Cigar Lake.





Ms. Filippi serves CPH as a Project Engineer for both public and private civil projects. Her role includes developing and preparing engineering plans, reports and studies, engineering inspections, reviews and prepares permits, and conducts engineering research to provide technical assistance to the design team. In addition, she has directly worked on all types of utility engineering projects. These projects have involved water, wastewater, and reclaimed water design, planning, analysis, permitting, inspections and construction engineering/ administration services.

## **EDUCATION**

B.S. in Environmental Engineering, University of Central Florida

## LICENSES / CERTIFICATIONS

Professional Engineer - FL (No. 82339)

## **KEY STRENGTHS**

- Site Design
- Utility Relocations Within Roadway ROW
- Water main, Reclaim water main, and Force Main Design
- Hydraulic Modeling
- Permitting
- Construction Administration
- Pumping Facilities
- Plan and Specification Preparation



## ALYSSA B. FILIPPI, P.E.

### Project Engineer

## 7 Total Years of Experience - 6 Years with CPH

#### SIMILAR PROJECT EXPERIENCE

- Highland Avenue Gravity Sewer and Water Main Replacement Project
- Replacement of approximately 9,500 ft. each of aged gravity sewer and small diameter water main
- Also included a sewer and roadway repair
- Over 240 service connections within the projects residential streets that required both new water and sewer connections
- Responsible for the reconstruction of existing streets, including construction of stormwater inlets and storm sewers, replacement of sanitary sewers and laterals, installation of new water mains, construction of new concrete curb, and roadway reconstruction.

#### Simpson Road 30" Water Main Project

- TWA needed to extend a 30" water main from their Parkway Water Treatment Plant north along Simpson Road to just south of Boggy Creek Road. The water main route had significant crossings of both US Highway 192 and the Florida Turnpike.
- This phase of the Project consisted of approximately 5,300 l.f of conventionally installed Ductile Iron 30" water main Right of way, 1,080 l.f. of 30" fusible PVC installed within 1,060 l.f of directionally drilled 36" fusible PVC casing pipe across the Florida Turnpike.

#### SSA-ESA 36" Water Main and 24" Reclaimed Water Main Project

- Orange County Utilities (County) recently selected CPH for design, bidding, and construction services for seven miles of both a 36-inch Potable Water Main and a 20-inch Reclaimed Water Main.
- The project includes the installation of approximately 7 miles of parallel 36-inch potable water main and 24-inch reclaimed water main from J. Lawson Blvd. to Moss Park Rd via a combination of directional drill, jack and bore, and open-cut installation.

#### **Boggy Creek Road Intersection Utility Relocation Project**

- 2,150 LF of 16-inch ductile iron water main and relocating 2,000 LF of PVC 16-inch force main due to conflicts with a roadway intersection improvement project
- This project also includes removal of existing 16" force main and smaller water and sewer mains

#### SR-50 Utility Relocation Project (FDOT JPA)

- CPH has provided improvements to over 13 miles of the water distribution system and wastewater collection and transmission system within the SR-50 Corridor.
- The project included the installation of approximately 5.5 miles of 8, 12, 16, 20 and 24-inch diameter water main and 7.7 miles of 4, 8, 12, 16, 20 and 30-inch diameter force main along SR-50 from West SR-436 to Old Cheney Road (the project). Connection of existing services and lateral mains were required while maintaining service to customers.
- Also included the design of 15,000 LF of gravity collection lines ranging in size from 8-inch to 24inch in diameter; installation of approximately 83 manholes with depths to 20-ft. deep; installation a triplex pump master pump station; removal of certain sections of force main, connection of other force main systems to the gravity collection system, and a new lateral connection to the gravity sewer service on SR 50.

#### SR 15 Utility Relocation Project (FDOT JPA)

- The completed utility project involved the relocation of utilities along approximately 3.9 miles of the densely developed roadway of SR 15 from Conway Rd to Lee Vista Blvd.
- The overall project included the installation of 870 LF of 4-inch force main, 8130 LF of 6-inch force main, and 9,000 LF of 8-inch force main as well as 200 LF of 6-inch water main, 1,000 LF of 8-inch water main, 1,000 LF of 12-inch water main, 10,400 LF of 16-inch water main, and 3,700 LF of 24-inch water main.
- Our CPH team provided all preliminary investigations, plan preparation, required FDEP and FDOT permits, bidding assistance as well as provided part-time construction observation services.

#### Lake Underhill Utility Relocations

- Relocation or replacement of 1,810 LF of 16" PVC force main; and, 1,650 LF of 20"; 650 LF of 12" and 400 LF of 8" ductile iron water mains, plus smaller segments of water and force main connecting to the existing water mains and force mains
- In addition, there was approximately 2,300 LF of 8" gravity main replacement and installation of a temporary bypass system for a 740 LF segment of the 12" water main.



Ms. Gardberg serves CPH as a Project Engineer for both public and private civil projects. She has directly worked on all types of utility engineering projects. These projects have involved water, wastewater, and reclaimed water design, planning, analysis, permitting, inspections and construction engineering/ administration services. Her primary role includes developing and preparing engineering plans, reports and studies, engineering inspections, reviews and prepares permits, and conducts engineering research to provide technical assistance to the design team.

## **EDUCATION**

B.S. in Environmental Engineering and Civil Engineering (Double Major), University of Central Florida

## LICENSES / CERTIFICATIONS

Professional Engineer – FL (No. 86595) Florida Water Environmental Association (FWEA)

## **KEY STRENGTHS**

- I&I Reduction
- Sewer Collection/TransmissionWater main, Reclaim water main,
- and Force Main Design
   Utility Relocations Within Roadway ROW
- Construction Administration
- Pumping Facilities
- Plan and Specification
   Preparation
- Hydraulic Modeling
- Permitting
- Site Design

## MASON GARDBERG, P.E.

**Project Engineer / Hydraulic Modeling** 

#### 7 Total Years of Experience • 7 Years with CPH

#### SIMILAR PROJECT EXPERIENCE

#### SR-50 Utility Relocation Project (FDOT JPA)

- CPH has provided improvements to over 13 miles of the water distribution system and wastewater collection and transmission system within the SR-50 Corridor.
- The project included the installation of approximately 5.5 miles of 8, 12, 16, 20 and 24-inch diameter water main and 7.7 miles of 4, 8, 12, 16, 20 and 30-inch diameter force main along SR-50 from West SR-436 to Old Cheney Road (the project). Connection of existing services and lateral mains were required while maintaining service to customers.
- Also included the design of 15,000 LF of gravity collection lines ranging in size from 8-inch to 24inch in diameter; installation of approximately 83 manholes with depths to 20-ft. deep; installation a triplex pump master pump station; removal of certain sections of force main, connection of other force main systems to the gravity collection system, and a new lateral connection to the gravity sewer service on SR 50.

#### Miami Shores Village Central Business District Low Pressure Sewer System (LPSS) and Water Main Improvements

- Responsible for the engineering, design, permitting and inspection to support the construction, installation, testing and commissioning activities associated with the construction of a new Low Pressure Sewer System in the Central Business District of Miami Shores Village with discharge to a new regional Pump Station, as well as the associated grinder stations, water main
- Approximately 3,112 If of 8-inch internal diameter DIP Force Main.
- New Regional Pump Station that will consist of a wet well application with centrifugal pumps and standby generator and generator building.
- Approximately 4,300 lf of 3 -inch -4 -inch HDPE low pressure sanitary (LPS) force mains to collect the effluent from the Low Pressure Grinder Stations and convey them to the new regional pump station.
- Approximately 4,100 lf of upgraded 12 -inch water mains will replace the existing undersized mains.

#### Simpson Road 30" Water Main Project

- TWA needed to extend a 30" water main from their Parkway Water Treatment Plant north along Simpson Road to just south of Boggy Creek Road. The water main route had significant crossings of both US Highway 192 and the Florida Turnpike.
- This phase of the Project consisted of approximately 5,300 l.f of conventionally installed Ductile Iron 30" water main Right of way, 1,080 l.f. of 30" fusible PVC installed within 1,060 l.f of directionally drilled 36" fusible PVC casing pipe across the Florida Turnpike.

#### SR 482 Utility Relocations (-4 and -5 segments) (FDOT JPA)

- This project is currently under construction and involves the relocation of utilities along approximately 2.4 miles of existing roadway from International Drive to just east of Shingle Creek. This project also includes the relocation of an existing duplex lift station on International Drive.
- The west segment includes the installation of 60 LF of 4-inch force main, 420 LF of 8-inch force main, 1,200 LF of 16-inch force main, 1,350 LF of 24-inch force main, 500 LF of 15" CIPP lining, and a duplex lift station including 18-inch gravity sewer.
- The east segment includes the installation of 310 LF of 12-inch force main, 6,700 LF of 24-inch force main, 2,650 LF of 36-inch reclaim water main, 1,400 LF of 36-inch force main via directional drill, and 630 LF of 42-inch force main.

#### Highland Avenue Gravity Sewer and Water Main Replacement Project

- Replacement of approximately 9,500 ft. each of aged gravity sewer and small diameter water main
  - Also included a sewer and roadway repair
  - Over 240 service connections within the projects residential streets that required both new water and sewer connections
- Responsible for the reconstruction of existing streets, including construction of stormwater inlets and storm sewers, replacement of sanitary sewers and laterals, installation of new water mains, construction of new concrete curb, and roadway reconstruction.





Mr. Luman serves the firm of CPH in the capacity of Vice President of our Transportation Services. He is responsible for managing, engineering, and designing roadway, traffic, and trail projects, including geometric design, stormwater management systems, traffic intersections, and traffic control plans. Mr. Luman is also responsible for the preparation and processing of permits through various regulatory agencies including FDOT Local Agency Program (LAP) projects. In addition to highway and traffic design he has experience in preparing stormwater pollution prevention plans, construction estimates and site inspections.

## **EDUCATION**

B.S. in Civil Engineering, University of Central Florida

## LICENSES / CERTIFICATIONS

Professional Engineer - FL (No. 65036) Advanced Maintenance of Traffic

## **KEY STRENGTHS**

- Roadway paving, widening, extensions, new roads; as well as turn lane additions and traffic upgrades
- FDOT guidelines and FDOT LAP
- Trails and Shared-Use Paths
- Signing and Pavement Parking
- Maintenance of Traffic Plans
- Streetscapes
- Public Involvement
- Permitting
- Drainage/Flood Plain

### KURT R. LUMAN, JR., P.E. Project Engineer (MOT)

#### 20 Total Years of Experience - 19 Years with CPH

#### SIMILAR PROJECT EXPERIENCE

#### SSA-ESA 36" Water Main and 24" Reclaimed Water Main Project MOT Plans

The Orange County Utilities SSA-ESA 36" WM and 24"RWM & Re-Pump Station project was to install sizeable upgrades to the existing utility facilities to allow for the continued development of southeastern Orange County, Florida. The utility lines would run beneath four major roadways (J. Lawson Blvd., Lake Nona Blvd., Narcoossee Rd., and Moss Park Rd.) and would cross through two Central Florida Expressway Authority interchanges for the S.R. 417 Toll Road. Furthermore, Lake Nona Blvd. is a City of Orlando, not Orange County, road. As such, a lengthy permitting effort was required to complete the MOT plans, as it involved addressing comments to the satisfaction of all three permitting agencies. Due to the length of the project, the MOT plan was divided into 36 phases. No detours wer possible due to the lack of a suitable grid network in the vicinity to carry the traffic. Therefore, two-way traffic had to be maintained on every roadway. For Moss Park Rd., Narcoossee Rd., and J. Lawson Blvd. this meant single and double lane closures in order for the pipelines to travel beneath the lanes or cross through the intersections. The MOT plan for Lake Nona Blvd. was the most extensive. A four-lane, divided roadway, Lake Nona Blvd. had to be converted to a two-lane undivided road for this MOT plan because the only position available to fit the pipes was directly beneath the northbound lanes. All traffic was shifted over to the southbound lanes by means of temporary diversion crossovers of the median.

#### W. Central Blvd. Roadway Reconstruction, Streetscape, and Sanitary Sewer Replacement Design/Build

Project included Fully Detailed Lane Closure Plans for Central Blvd. at the I-4 overpass Phased Road, Closures and Detours for Central Blvd. and all intersecting streets Dedicated Pedestrian detours, All MOT plans had to accommodate simultaneous Roadway and overhead and undergound utility work, MOT plan development and implementation required extensive coordination between FDOT, City of Orlando, SGL, CPH, and the CMAR contractor.

#### **Otter Run WTP Renewal and Replacement MOT Plans**

This Otter Run WTP Renewal and Replacement project was conducted because the water treatment plant in Otter Run sub-division was in need of upgrades. Part of this included the replacement of the existing water main that connected the treatment plant to the main utility line beneath Otter Run Drive. Otter Run Drive is a 22ft. wide residential street. As such, a fully detailed MOT Plan was developed that showed the block of Otter Run Drive adjacent to the treatment plant was closed to allow for the installation of the pipe and structures, and subsequent roadway restoration. Local residents who lived outside this block were detoured around the closure through the sub-division's internal network of streets. The JEA contractor coordinated access to the driveways of the residences located within the closure as their work progressed.

#### Texas Avenue Utility Improvement Project MOT Planst

The Texas Avenue Utility Project came about as Orange County planned on shifting the alignment of the existing roadway due to the acquisition of additional right-of-way in the vicinity. As this would also cause a shift in the location of the storm sewer, it was necessary to relocate the sanitary sewer because it was in conflict. were also needed. However, the County was concerned that the original MOT plans developed by the Inwood Consulting Engineers for the roadway work left gaps that would make the utility installation difficult. However, with careful examination of the roadway MOT plans and CPH's careful coordination with Inwood, it was discovered that with only minor alterations to our utility plans and their current MOT, the vast majority of the work could be conducted under the Inwood MOT plan. Only the initial directional boring underneath Texas Avenue at Duskin Avenue on the south end of the project would need to be done as a separate MOT plan because it was outside the roadway construction limits. The directional bore would allow Texas Avenue to remain open, but the receiving pit was located in the roadway of Duskin Avenue itself, meaning that it would have to be closed. Duskin Avenue is a two-lane residential street, so closing the street at the Texas Avenue intersection and detouring around was the chosen solution. A pedestrian detour was also required as there is a local elementary school located on Duskin Avenue adjacent to the work zone and the existing sidewalk was going to be blocked by construction activity.





Jerry serves CPH as a lead in construction inspection/observation services and quality control. He is a licensed utility and general contractor with over 43 years of experience in the design and construction of industrial, commerical and utility projects. With his extensive construction experience, Jerry assists CPH in development of design strategies and value engineering. He also serves as a quality control manger to ensure proposed designs are correct and constructable. Jerry is proficient at estimating, scheduling, consttruction means & methods and construction management.

## **EDUCATION**

B.S. in Building Construction, University of Florida

## LICENSES / CERTIFICATIONS

Certified General Contractor – FL (No. 010771) Certified Utility Contractor – FL (No. 051667)

## **KEY STRENGTHS**

- Licensed General and
   Underground Utility Contractor
- Expert in conveyance systems
   and treatment plants
- Extensive scheduling and cost estimation expertise
- Expertise in: Commercial, Industrial, Infrastructure, Construction Management, Utility Systems, and Value Engineering

# Northern Forcemain and Southern Forcemain Project- Key Largo Wastewater Treatment District Project Engineer for an abandoned 30-inch water main existed within the US-1 corridor, KLWTD was able to obtain the rights to utilize this pipe as their corridor for the forcemain 4,503 l.f. of 4-inch PVC, 4,156 l.f. of 6-inch PVC, 19.846 l.f. of 8-inch PVC, 11.750 l.f. of 10" PVC

- 4,503 l.f. of 4-inch PVC, 4,156 l.f. of 6-inch PVC, 19,846 l.f. of 8-inch PVC, 11,750 l.f. of 10" PVC, 573 l.f. of 10-inch HDPE (slipline), 13,198 l.f. of 12-inch HDPE (slipline), 6,231 l.f. of 14-inch HDPE (slipline), 9,825 l.f. of 16" PVC, and 11,085 l.f. of 18-inch HDPE (slipline) forcemain
- Project included work within FDOT right of way, an aerial pipe crossing on a bridge, and directional drill of the force main/water main

#### Key Largo Wastewater Treatment District, Vacuum Pump Station Serving Basin A and B

- Design of the vacuum pump station (VPS) for Basins A and B.
- The VPS consists of a 2600 sq. ft. architecturally designed building that blends in with the residential nature of the area.
- Building is constructed to withstand hurricane force winds of 150 mph and storm surge.
- It includes an architectural metal roof with concrete block construction and precast concrete roof panels under the architectural roof to tie the walls, slab and ceiling into one cohesive structure.

#### Analysis and Redesign / Phase I Collection System - Islamorada, Village of Islands

- Engineering services for an analysis and subsequent redesign of three specific vacuum collection mains that are not performing to specification in the Phase I Vacuum Collection System in Islamorada.
- The three areas of concern are South Coconut Palm Avenue, Woods Avenue, and North Bougainvillea St. within the North Plantation Key Subdivision.

#### Islamorada Village Wide Wastewater System, Design, Build, Operate (DBO)

- Areas of responsibility included the design and permitting of the vacuum collection system for the Island of Upper Matecumbe Key; vacuum pumping stations for the Islands of South Plantation Key, Upper Matecumbe Key and Lower Matecumbe Key; and low pressure force main collection systems for the Island of Windley Key and portions of Upper Matecumbe Key.
- Combined the project consists of 37,410 LF of HDPE pipe ranging in size from 1 1/4-6". The team provided a complete system design including plan and profile drawings of each pipe run. The team conducted system hydraulics calculations using Sewercad. The team provided limited CEI services for this portion of the project.

## Miami Shores Village Central Business District Low Pressure Sewer System (LPSS) and Water Main Improvements

- Responsible for the engineering, design, permitting and inspection to support the construction, installation, testing and commissioning activities associated with the construction of a new Low Pressure Sewer System in the Central Business District of Miami Shores Village with discharge to a new regional Pump Station, as well as the associated grinder stations, water main
- Approximately 3,112 If of 8-inch internal diameter DIP Force Main.
- New Regional Pump Station that will consist of a wet well application with centrifugal pumps and standby generator and generator building.
- Approximately 4,300 lf of 3 -inch -4 -inch HDPE low pressure sanitary (LPS) force mains to collect the effluent from the Low Pressure Grinder Stations and convey them to the new regional pump station.
- Approximately 4,100 lf of upgraded 12 -inch water mains will replace the existing undersized mains.

#### St. Johns Parkway

- St. Johns Parkway, Phase 1 Sanford, Florida Phase 1 of this project consisted of widening existing Jewett Lane (renamed St. Johns Parkway) from the Smith Canal to approximately 400-ft west of Meisch Road, resulting in 1,650 LF of a new three lane road.
- Major construction items included construction of a 28-ft span x 7-ft rise x 72-ft long concrete arch culvert and wingwalls at the canal, curb and gutter, sidewalk, guardrail, aluminum handrail, and storm sewer (ranging in size from 15" to 48"x72").
- Utilities construction will consist of approximately 1,750 l.f of new 12" water main and 1,900 l.f. of new 8" reclaimed water main.



#### GERALD M. COX, CGC, CUC Constructability Review

SIMILAR PROJECT EXPERIENCE

#### 43 Total Years of Experience - 18 Years with CPH





Mr. Galloway has over 29 years of experience in the surveying and mapping profession, and has a Bachelor of Science of Surveying and Mapping from the University of Florida. His experience ranges from working in the field and office on small to large development projects, to serving as Party Chief/Survey CADD Technician, Project Manager and Survey Manager. Mr. Galloway has served as Principal and Director of the Surveying Division of the firm since its establishment in 2001. He has overseen the department's growth from two survey crews to managing the current seven survey crews. Additionally he has been personally involved in over 2,500 surveys while at CPH.

## **EDUCATION**

B.S. in Surveying and Mapping, University of Florida

## LICENSES / CERTIFICATIONS

Professional Surveyor & Mapper - FL (No. LS6549) NCEES Council #1291)

## **KEY STRENGTHS**

- Surveying and Management
- Highway Projects
- Land Development
- Commercial and Private Projects
- Municipal Projectsg

### THOMAS J. GALLOWAY, PSM Project Surveyor

#### 29 Total Years of Experience - 18 Years with CPH

#### SIMILAR PROJECT EXPERIENCE

#### Apple Valley Interconnect - Phase 3

- CPH performed surveying, design, permitting, bidding and construction phase services for the Apple Valley Interconnect Phase 3 project.
- Construction included approximately 2000-ft of new 6 -inch -10 -inch water main including valves, hydrants, and new water services lines between the new water main and existing meters in an existing residential neighborhood near Altamonte Springs.
- The project also included construction of a new above grade water main interconnect consisting of valves, meter, double check valve assembly, bypass pipeline and accessories at the east side of Nelson Ave. adjacent to the Rolling Hills Golf Course and the modification of two existing above grade water main interconnects.

#### Key Largo Wastewater Treatment District, Vacuum Pump Station Serving Basin A and B

- This project consisted of the design of the vacuum pump station (VPS) for Basins A and B.
- The VPS consists of a 2,600 sq. ft. architecturally designed building that blends in with the residential nature of the area.
- Housed inside the building are the vacuum tank, five 25-Hp vacuum pumps and two 75-Hp discharge pumps and all related equipment.
- CPH provided a preliminary report which compared the use of gravity collection, low pressure systems and vacuum systems.

#### Islamorada Village Wide Wastewater System, Design, Build, Operate (DBO)

- Areas of responsibility included the design and permitting of the vacuum collection system for the Island of Upper Matecumbe Key; vacuum pumping stations for the Islands of South Plantation Key, Upper Matecumbe Key and Lower Matecumbe Key; and low pressure force main collection systems for the Island of Windley Key and portions of Upper Matecumbe Key.
- Combined the project consists of 37,410 LF of HDPE pipe ranging in size from 1 1/4-6". The team provided a complete system design including plan and profile drawings of each pipe run. The team conducted system hydraulics calculations using Sewercad. The team provided limited CEI services for this portion of the project.

#### Area IV Well Outfitting and Raw Water Transmission Main- Phase 1 and 2

- Phase 1- The City of Titusville Area IV Well Outfitting and Raw Water Transmission Main project Phase 1 included the drilling of 5 water supply production wells, 3 saline water monitoring wells, outfitting of 6 production wells, and construction of approximately 72,000 l.f. of new raw water transmission main (16-20-inch diameter pipeline) from the City's Mourning Dove Water Treatment Plant to the Area IV well field.
  - Phase 2- This phase included well drilling of 8 production wells and 1 saline water monitoring well, conversion of 1 test well to a production well, and well outfitting of 9 production wells. Additionally, the project included the construction of approximately 18,975 lf of raw water transmission main from the north end of the existing Area IV Phase 1 Wellfield (near well 408) to each of the Area IV Phase 2 production wells

#### Miami Shores Village Central Business District Low Pressure Sewer System (LPSS) and Water Main Improvements

- Responsible for the engineering, design, permitting and inspection to support the construction, installation, testing and commissioning activities associated with the construction of a new Low Pressure Sewer System in the Central Business District of Miami Shores Village with discharge to a new regional Pump Station, as well as the associated grinder stations, water main
- Approximately 3,112 If of 8-inch internal diameter DIP Force Main.
- New Regional Pump Station that will consist of a wet well application with centrifugal pumps and standby generator and generator building.
- Approximately 4,300 lf of 3 -inch -4 -inch HDPE low pressure sanitary (LPS) force mains to collect the effluent from the Low Pressure Grinder Stations and convey them to the new regional pump station.
- Approximately 4,100 lf of upgraded 12 -inch water mains will replace the existing undersized mains.



# TAB 3. PAST PERFORMANCE

CPH has been delivering planning, design, and construction services to local governmental agencies for more than 38 years. We are exceedingly proud of our long-term relationships with our clients. In fact, 90% of our business is providing services for existing clients. Our team has also provided full-time construction phase services on many small to large pipeline projects. The team assigned to this project for the City of Pembroke Pines has designed and permitted utility infrastructure projects with pipe sizes ranging from 4" to 84," and has provided services for over 500 miles of pipeline projects. Through our recently completed projects, we have developed a successful approach that will be applied to the benefit of the City. In the chart below, we have outlined some of our recent relevant pipeline experience.

| PROJECT SPECIFICS  |                  |             |          |                    |            | RELE            | VANCE                          | TO SCOI                          | ÞE                |            |                         |             |
|--|------------------|-------------|----------|--------------------|------------|-----------------|--------------------------------|----------------------------------|-------------------|------------|-------------------------|-------------|
| Water Main (WM) Projects   | Diameter         | Length (LF) | Design   | Hydraulic Modeling | Permitting | Public Outreach | Construction<br>Administration | Urbanized Area /<br>Neighborhood | FDOT Coordination | Water Main | Replacement of Old Pipe | Restoration |
| City of Miramar - Huntington Wellfield and Raw Water Main 16"  |                  | 8,448       | ۲        |                    | ٢          |                 |                                |                                  |                   |            |                         |             |
| Miami-Dade Water & Sewer Dept. ACP Force Main Pipe Replacements  | 4" - 12"         | 10,736      | •        | •                  | •          |                 | •                              | •                                | •                 |            | •                       | •           |
| Miami Shores Village Central Business District Low Pressure Sewer System (LPSS) and Water Main<br>Improvements | 12"              | 4,100       | •        | •                  | •          | <b>.</b>        | •                              | <b>.</b>                         | •                 | •          |                         | •           |
| Poinciana Blvd and US-17/92 Water Main   | 24"              | 21,648      | <b>.</b> | •                  | •          | <b>.</b>        | <b>.</b>                       |                                  | <b>.</b>          | <b>.</b>   | •                       | •           |
| Highlands Gravity Sewer and Water Main   | 6" - 8"          | 8,300       | ۵        | ۵                  | ٠          | ۵               | ٠                              | ٠                                | ٠                 | ۲          | ٢                       | ٢           |
| Simpson Road 30" Water Main Project  | 30"              | 7,440       | •        | •                  | •          | •               | •                              | 6                                | •                 | •          | •                       |             |
| JEA Yellow Bluff - Marshland Dr. to Tisons Bluff Rd - 16" Water Main   | 16"              | 16,100 LF   | •        | •                  | •          | •               | •                              | •                                | •                 | •          |                         | •           |
| Orange County ESA SSA Pipeline Project   | 24" & 36"        | 39,960      | •        | •                  | •          | •               | •                              | <b>.</b>                         | •                 | •          | •                       | •           |
| S.R. 50 Utility Relocation Project, Ph I   | 12" and 16"      | 12,000      | •        | •                  | •          | •               | <b>.</b>                       | <b>.</b>                         | <b>.</b>          | •          | •                       | •           |
| S.R. 50 Utility Relocation Project, Ph II  | 6-12", and 20"   | 8,200       | •        | •                  | <b>.</b>   | <b>.</b>        | •                              | <b>.</b>                         | <b>.</b>          | •          | •                       | •           |
| S.R. 50 Utility Relocation Project, Ph III   | 8", 12", and 16" | 20,025      | ۵        | ۵                  | ۵          | ۵               | ۵                              | ۵                                | ۵                 | ۵          | ٢                       | ٢           |
| S.R. 50 Station 737+37.82 to Station 903+50 Utilities Relocation Project, Ocoee                                | 4"-12"           | 7,500       | •        | •                  | •          | •               | •                              | •                                | •                 | •          | •                       | •           |
| Pipe Bursting of Potable Water Mains Using Pre-Chlorinated Pipe  | 4" and 6"        | 40,500      | •        | •                  | •          | •               | •                              | •                                |                   | •          | •                       | •           |
| SR 15 Utility Relocations  | 4" - 24"         | 20,592      | <b>.</b> | •                  | <b>.</b>   | •               | <b>.</b>                       | <b>.</b>                         | •                 | •          | •                       | •           |
| Orange County R/R Gravity Wastewater System Improvements and Replacement                                       | 8" - 12"         | 2,337       | ۵        | ۵                  | ۵          | ۵               | ۵                              | ۵                                | ۵                 | ۵          | •                       | ٢           |
| ARRA-Funded Water System Improvements Projects (Phases I-III)  | 6" to 12"        | 217,606     | •        | •                  | •          | •               | •                              | •                                |                   | •          | •                       | •           |
| Moselle Avenue and Corrine Terrace Pump Stations and Force Main Replacements                                   | 6" - 10"         | 9,035       | •        | •                  | •          | •               | •                              |                                  | •                 | •          | •                       | •           |
| Islamorada Vilalge Wide Wastewater System, DBO   | 4" - 10"         | 43,957      | ۲        | ٢                  | ۲          | ۲               | ۲                              | ٢                                | ۲                 |            |                         | ٢           |

City of Pembroke Pines

| PROJECT SPECIFICS   |              |             |        | RELEVANCE TO SCOPE |            |                 |                                |                                  |                         |            |                         |             |
|---|--------------|-------------|--------|--------------------|------------|-----------------|--------------------------------|----------------------------------|-------------------------|------------|-------------------------|-------------|
| Water Main (WM) Projects  | Diameter     | Length (LF) | Design | Hydraulic Modeling | Permitting | Public Outreach | Construction<br>Administration | Urbanized Area /<br>Neighborhood | FDOT Coordination       | Water Main | Replacement of Old Pipe | Restoration |
| Key Largo Vacuum Pump Station Serving Basin A/B and C/D                     | 4" - 10"     | 72,681      | •      | •                  | •          | <b>.</b>        | <b>.</b>                       | <b>.</b>                         | <b>.</b>                |            |                         | •           |
| Eatonville West and East Side Wastewater Improvements                       | 8"           | 8,000       | ۵      | ٢                  | ۵          | ۵               | ۵                              | ۵                                |                         |            | ۵                       | ٢           |
| Osceola Parkway   | 24"          | 10,900      | •      | •                  | •          | •               | •                              | •                                | •                       | •          |                         | •           |
| Midway Utilities Replacement, Phase I                                       | 4" to 10"    | 10,665      | •      | •                  | •          | •               | •                              | •                                | •                       | •          | •                       | •           |
| CR 557 Water Main   | 12"          | 10,105      | •      | •                  | •          | •               | •                              | •                                | <b>.</b>                | •          |                         | •           |
| Enterprise Road Utility Relocation  | 12"          | 8,202       | •      | •                  | •          | •               | •                              | •                                | •                       | <b>.</b>   |                         | •           |
| Lake Conway East Water and Wastewater System Improvements                   | 4", 6", 8"   | 7,600       | ۵      | ۵                  | ۵          | ۵               | ۵                              | ۵                                | ٠                       | ۵          | ٢                       | ٢           |
| Lake Conway Park Water Distribution System                                  | 6" and 8"    | 6,710       | •      | •                  | ۵          | •               | •                              | •                                | •                       | ۵          | •                       | •           |
| S.R. 426 Utility Relocation Project   | 10" and 16"  | 4,000       | •      | •                  | •          | •               | •                              | •                                | •                       | •          | •                       | •           |
| International Parkway Water Main & RWM Extensions                           | 16" and 20"  | 6,100       | •      | •                  | •          | •               | •                              | •                                | •                       | •          |                         | •           |
| Lake Harriet Water Transmission Main  | 8"           | 6,100       | •      | •                  | •          | •               | •                              | •                                | •                       | •          |                         | •           |
| Tanglewood Water Main Replacements  | 4" and 6"    | 5,270       | •      | •                  | ٢          | •               | ٢                              | •                                | •                       | ۵          | •                       | •           |
| Secret Lake Road 12" Water Main   | 8", 10", 12" | 2,600       | •      | •                  | •          | ۵               | ٢                              | •                                | •                       | ۵          | •                       | •           |
| Oviedo Reclaimed Water Main Phase II  | 10" and 16"  | 7,400       | •      | •                  | •          | •               | •                              | •                                | •                       | •          |                         | •           |
| Grant Line Road and Wayside Drive Utilities Construction                    | 8-16"        | 16,600      | ٢      | ۵                  | ٢          | ۵               | ۵                              | ٢                                | ۵                       | ۵          |                         | ٢           |
| Country Club Road Utilities Relocation                                      | 24"          | Relocated   | •      | •                  | •          | •               | •                              | •                                | •                       | •          |                         | •           |
| East Lake Mary Boulevard Utility Relocations                                | 8" and 12"   | 20,000      | •      | •                  | •          | •               | •                              | •                                | •                       | •          | •                       | •           |
| Bear Gully Road and Lake Mary Boulevard Water Main Construction             | 16"          | 9,305       | •      | •                  | •          | •               | ٢                              | •                                | •                       | ۵          |                         | •           |
| Greenwood Lakes/Heathrow Water and Reclaimed Water Transmission Mains       | 16"          | 5,500       | •      | •                  | •          | •               | •                              | •                                | •                       | ۵          |                         | •           |
| Lake Standish Heights/Plymouth Dells Water Distribution System Improvements | 6" and 8"    | 5,000       | •••••• | •                  | •          | •               | •                              | •                                | •                       | <b>.</b>   | •                       | •           |
| North Orlando First Addition Water Line Improvements                        | 8"           | 8,780       | •      | •                  | •          | •               | •                              | •                                | •                       | •          | •                       | •           |
| South Shire Subdivision Water System Improvements                           | 8"           | 3,700       | •      | •                  | •          | •               | •                              | •                                | •                       | •          | •                       | •           |
| Chickasaw Trail Utility Relocations   | 16"          | 1,500       | •      | •                  | •          | •               | •                              | •                                | •                       | •          | •                       | •           |
| Chickasaw Woods Residential Development Utility Evaluations                 | 4"-8"        | 10,920      | •      | •                  | •          | •               | •                              | •                                | • • • • • • • • • • • • | •          | •                       | •           |

## PAST PERFORMANCE OF THE PROJECT MANAGER

## CITY OF MIRAMAR – HUNTINGTON WELLFIELD AND RAW WATER MAIN

The City of Miramar contracted CPH to assist in the re-development of a potable water well capped in 2003. CPH completed preliminary design and plan for re-developing the well at 4,500 gpm for approximately 60 hours to ensure it will meet the needs of the City's Water Treatment Plant (WTP). CPH performed an alternative route study to present the best options for conveying the well's raw water to the City's West WTP. The study included an in depth look at the permitting and cost associated with construction of the proposed raw water main. Based on CPH's Preliminary Design Report, the City was able to select the appropriate route to meet their needs. The route included 60% design of approximately 1.6 miles of 16" Raw Water Main, installed through open trench. The design also included a 400 linear-feet, 18-inch HDPE directional drill, and subaqueous canal crossing under South Broward Drainage District's Canal 4. During Phase 2 (100% Design), CPH will complete the design for the well site and raw water main, assist in bidding services, and coordinate construction administration efforts.

## **CLIENT CONTACT:**

City of Miramar Evelyn Valerio Utility Engineer 2300 Civic Center Place Miramar, FL 33025 Phone: 954.883.5012 ervalerio@miramarfl.gov



SIMILARITIES Water Main Design FDEP Permitting Hydraulic Modeling

## **RELEVANCE TO SCOPE**

Design Hydraulic Modeling



#### **PERSONNEL INVOLVED**

Kyle M. Bechtelheimer. Todd H. Hendrix David E. Mahler Rocco R. Nasso Jame R. Morris, Jr.



# CROSS KEY WASTEWATER TREATMENT PLANT (WWTP)

The Cross Key WWTP project is focused on designing a central wastewater collection system for a residential community in the Florida Keys. Multiple septic tanks, as well as several wastewater-holding tanks currently serve cross Key. The wastewater holding tanks are pumped out weekly and hauled out of the Keys to a wastewater treatment plant. The Florida Keys Aqueduct Authority (FKAA) contracted CPH, Inc. to complete an assessment of the existing sanitary sewer flows within the area, and to propose feasible solutions to treat the wastewater flow.

CPH is now in design of a 40,000 Gallons per Day (Maximum Daily Flow) Wastewater Treatment Plant to serve the community. The design includes a Modified Ludzack-Ettinger process with shallow injection wells for disposal. CPH is designing the full low-pressure collection system for the community including 30 E-One Grinder Pump Stations and low-pressure force main to convey wastewater to the new WWTP. CPH performed the Survey, Ecological Assessment, and will be designing all Civil, Structural, and Architectural components of the WWTP and its accessory structures. CPH will be completing all permitting efforts, including Monroe County Major Conditional Use permit, FDEP, and FDOH permits.

## **CLIENT CONTACT:**

FKAA, Joshua Peele 1100 Kennedy Dr. Key West, FL 33040 Phone: 305.809.2739 Fax: 305.809.2636 E-mail: jpeele@fkaa.com City of Pembroke Pines

### SIMILARITIES

Water Main Design Water Meter Conversions FDEP Permitting



#### **RELEVANCE TO SCOPE**

Design Hydraulic Modeling Permitting



#### **PERSONNEL INVOLVED**

Kyle M. Bechtelheimer Todd H. Hendrix David E. Mahler Gerald M. Cox

## OTHER PAST PERFORMANCE OF THE TEAM

## MIAMI-DADE WATER & SEWER DEPARTMENT ACP FORCE MAIN PIPE REPLACEMENTS

CPH was awarded three (3) separate contracts by the Miami-Dade County Water & Sewer Department (WASD) to replace approximately 10,736 lf of asbestos cement pipe (ACP) in the areas of Kendall, Homestead Air Reserve Base, and the City of Miami Gardens. The ACP that was replaced served as the sanitary sewer force main distribution system for the listed areas, but had to be replaced with ductile iron pipe (DIP) to better serve its customers.

The Kendall replacement project routed through primarily residential roadways, and included a series of aerial canal crossings and connections. The existing 10 -inch and 12-inch ACP force mains were abandoned inplace, and replaced by 10 -inch and 12 -inch DIP force mains as per WASD Standards. The project replaced 6,623 lf of ACP.

The Homestead Air Reserve Base project is within a Federally secured property and featured an existing 8 -inch ACP which routed from WASD pump station PS1132 to a gravity manhole located NE of the project vicinity. The 8-inch DIP replacement pipe was routed along the private roadway of Bikini Blvd to an alternate gravity sewer manhole.

This manhole is located due east, just outside the secured limits of the Base. The ACP force main was abandoned in-place, and replaced by an 8 -inch DIP force main as per WASD Standards. This project replaced 2,700 lf of ACP.

The replacement project located within the City of Miami Gardens is within a residential area which features a school and city park. The replacement of the existing 4 -inch, 6 -inch and 8 -inch ACP and CI force mains connected WASD pump stations PS44 and PS45. The ACP force mains were abandoned in-place, and replaced by 6 -inch, 8 -inch, and 12 -inch DIP force mains as per WASD Standards. The route fell within the public roadway of NW 207th Street between NW 22nd Ave and NW 17th Ave. The project replaced 1,773 If of ACP.

## **CLIENT CONTACT:**

Miami-Dade County Water and Sewer Department Mr. Carlos Benavides Utility Design Section Project Manager 3575 South Le Jeune Rd Miami, FL 33146 Phone: 786.268.5285 Fax: 786-268-5147 E-Mail: cbuna01@miamidade.gov City of Pembroke Pines

#### **SIMILARITIES**

Urbanized Area / Neighborhood FDOT Coordination Replacement of Old Pipe Restoration



#### **RELEVANCE TO SCOPE**

Design Hydraulic Modeling Permitting Construction Administration

#### PERSONNEL INVOLVED

Todd H. Hendrix Kyle M. Bechtelheimer Jason L. James David E. Mahler Gerald M. Cox David A. Gierach

## MIAMI SHORES VILLAGE CENTRAL BUSINESS DISTRICT LOW PRESSURE SEWER SYSTEM (LPSS) AND WATER MAIN IMPROVEMENTS

The CPH/Layne team was selected for this Design Build project for Miami Shores Village. CPH is excited to add another new client! CPH was responsible for the engineering, design, permitting and inspection to support the construction, installation, testing and commissioning activities associated with the construction of a new Low Pressure Sewer System in the Central Business District of Miami Shores Village with discharge to a new regional Pump Station, as well as the associated grinder stations, water main upgrade, and new force mains. The design included the following elements:

- Approximately 3,112 If of 8-inch internal diameter DIP Force Main.
- New Regional Pump Station that will consist of a wet well application with centrifugal pumps and standby generator and generator building.
- Approximately 4,300 lf of 3 -inch -4 -inch HDPE low pressure sanitary (LPS) force mains to collect the effluent from the Low Pressure Grinder Stations and convey them to the new regional pump station.
- New low pressure grinder pump stations to replace existing septic systems at the existing properties.
- Approximately 4,100 lf of upgraded 12 -inch water mains will replace the existing undersized mains.
- All associated pavement restoration in the alleys and along the roadways.

## **CLIENT CONTACT:**

Reynolds Construction, LLC (Previously Layne Heavy Civil) Mr. Oscar R. Bello, P.E., DBIA 2200 Park Central Blvd. N. Suite 700 Pompano Beach, FL 33064 Phone: 954.650.0164 E-Mail: Oscar.bello@reynoldscon.com

#### **SIMILARITIES**

Urbanized Area / Neighborhood FDOT Coordination Watermain Restoration



#### **RELEVANCE TO SCOPE**

Design Hydraulic Modeling Permitting Public Outreach Construction Administration



#### **PERSONNEL INVOLVED**

David A. Gierach David E. Mahler Todd H. Hendrix Kyle M. Bechtelheimer Jason L. James Kurt R. Luman Thomas J. Galloway Gerald M. Cox



## HIGHLANDS GRAVITY SEWER AND WATER MAIN REPLACEMENT

This project included engineering and permitting services needed to replace approximately 8,300 feet each of aged gravity sewer (8") and small diameter water main [6,650 (6") and 1,750 (8")] along Coral Avenue, North Beaumont Avenue, Highland Avenue, Martina Avenue, Milton Avenue, and West Jackson Street between West Carroll Street and West Donegan Avenue. The project also included a sewer and roadway repair located in Kissimmee, FL. This project had over 240 service connections within the projects residential streets that required both new water and sewer connections. CPH provided all design services including survey and geotechnical coordination, preplanning and coordination with Osceola County, project design, permitting, bidding services, and assisted with public meetings. CPH was responsible for the reconstruction design of existing streets, including construction of stormwater inlets and storm sewers, replacement of sanitary sewers and laterals, and installation of new water mains. CPH also provided part time CEI services for sewer and water main work and full-time services for roadway restoration as required by the County.

## **CLIENT CONTACT:**

Toho Water Authority Mr. Robert Pelham, Asst. Director 951 Martin Luther King Blvd., Kissimmee, FL 34741 Phone: 407.944.5132 Fax: 407.434.4264 RPelham@tohowater.org

#### **SIMILARITIES**

Urbanized Area / Neighborhood FDOT Coordination Watermain Replacement of Old Pipe Restoration



#### **RELEVANCE TO SCOPE**

Design Hydraulic Modeling Permitting Public Outreach Construction Administration



#### **PERSONNEL INVOLVED**

David A. Gierach David E. Mahler James "Jay" R. Morris JR. Mason Gardberg Thomas J. Galloway Kurt R. Luman



## SR-50 UTILITY RELOCATION PROJECT (FDOT JPA)

CPH has provided improvements to over 13 miles of the water distribution system and wastewater collection and transmission system within the SR-50 Corridor, one of the busiest roads in Central Florida – which is being expanded from 4-lanes to 6-lanes. The utility improvements include building new facilities as well as the removal of facilities in conflict with the FDOT roadway design.

The utility improvements were constructed as part of the construction of the FDOT SR-50 projects under a joint agreement between Orange County and FDOT. The construction documents meet FDOT plan preparation standards, FDOT roadway design schedule and were coordinated with the FDOT road design and other utilities. The project included the installation of approximately 5.5 miles of 8, 12, 16, 20 and 24-inch diameter water main and 7.7 miles of 4, 8, 12, 16, 20 and 30-inch diameter force main along SR-50 from West SR-436 to Old Cheney Road (the project). Connection of existing services and lateral mains were required while maintaining service to customers.

The project also included the design of 15,000 LF of gravity collection lines ranging in size from 8-inch to 24inch in diameter; installation of approximately 83 manholes with depths to 20-ft. deep; installation a triplex pump master pump station; removal of certain sections of force main, connection of other force main systems to the gravity collection system, and a new lateral connection to the gravity sewer service on SR 50. The project included a wastewater aerial crossing of a stream, multiple HDD drills across wetlands and major roadways, multiple jack and bore crossings of major and minor roadways, addressed work within a contaminated site, required significant private utility relocations to maintain existing services impacted by the roadway project, and as noted, included significant large pressure and non-pressure pipe exceeding 16". All three phases were designed and permitted in accordance with hard deadline milestones mandated by the client and by FDOT.

## **CLIENT CONTACT:**

Orange County Mr. Jose E. Hernandez, P.E. Engineer III Orange County Utilities 9150 Curry Ford Road Orlando, FL 32825 Phone: 407.254.9718 Fax: 407.254.9610 E-Mail: Jose.Hernandez2@ocfl.net
Urbanized Area / Neighborhood FDOT Coordination Watermain Replacement of Old Pipe Restoration



### **RELEVANCE TO SCOPE**

Design Hydraulic Modeling Permitting Public Outreach Construction Administration



### **PERSONNEL INVOLVED**

David A. Gierach James "Jay" R. Morris, JR Jason L. James Rocco R. Nasso David E. Mahler Mason Gardberg Kurt R. Luman Gerald M. Cox Thomas J. Galloway



# SIMPSON ROAD 30" WATER MAIN PROJECT

TWA needed to extend a 30" water main from their Parkway Water Treatment Plant north along Simpson Road to just south of Boggy Creek Road. The water main route had significant crossings of both US Highway 192 and the Florida Turnpike. The route had very limited County right-of-way along portions of Simpson Road, so it required close coordination between TOHO, Osceola County, FDOT/Turnpike Authority and the property owners along the route.

This phase of the Project consisted of approximately 5,300 l.f of conventionally installed Ductile Iron 30" water main Right of way, 1,080 l.f. of 30" fusible PVC installed within 1,060 l.f of directionally drilled 36" fusible PVC casing pipe across the Florida Turnpike. All work was performed in and along the rights of way of Osceola County and the FDOT.

This project was similar to the currently advertised project in that it involved working with multiple roadway jurisdictions, requires crossing of a limited access highway and included large diameter mains with connections to existing active mains.

## **CLIENT CONTACT:**

Toho Water Authority Ms. Lan Zhou 951 Martin Luther King Blvd., Kissimmee, FL 34741 Phone: 407.944.5027 Fax: 407.343.4264 LZhou@Tohowater.com

Urbanized Area / Neighborhood FDOT Coordination Watermain Replacement of Old Pipe Restoration



## **RELEVANCE TO SCOPE**

Design Hydraulic Modeling Permitting Public Outreach Construction Administration

## **PERSONNEL INVOLVED**

David A. Gierach David E. Mahler James "Jay" R. Morris, JR. Mason Gardberg Thomas J. Galloway Kurt R. Luman

# JEA YELLOW BLUFF -MARSHLAND DR TO TISONS BLUFF RD - 16" WATER MAIN

The Yellow Bluff 16-inch Water Main (WM) project spanned from Tisons Bluff Road to Marshland Drive approximately 16,100 linear feet (LF). The primary purpose of this project was to increase the water pressure at a nearby subdivision. The project was located in north Duval County east of I-95. The route of the new main was located in the City of Jacksonville right-of-way (ROW). The project included the design of approximately 16,100 LF of new 16-inch ductile iron potable water transmission main. The proposed construction method was open cut along the entire corridor.

The new 16-inch water main connected to an existing 12-inch WM south of Tisons Bluff Road on the west side of Yellow Bluff Road. The main continued south along the west side of Yellow Bluff approximately 910 LF then crossed Yellow Bluff Road south of Eagle Bend Boulevard. The main then extended south along the east side of Yellow Bluff Road for the remainder of the corridor. The new WM connected to an existing 16-inch stub just north of Marshland Drive.

This project involved coordination with multiple jurisdictions and permitting agencies, not only for the installation of the 16-inch WM but also for crossings of wetlands. The project also involved the permitting and relocation of gopher tortoises.

## **CLIENT CONTACT:**

JEA

Arthur Bides, Project Manager 21 W. Church Street Jacksonville, FL 32202 Phone: 904.665.8515 Fax: 904.665.4457 Email: bidear@jea.com

Urbanized Area / Neighborhood FDOT Coordination Watermain Restoration



#### **RELEVANCE TO SCOPE**

Design Hydraulic Modeling Permitting Public Outreach Construction Administration

### **PERSONNEL INVOLVED**

David E. Mahler Thomas J. Galloway Kurt R. Luman

# ORANGE COUNTY UTILITIES - SSA-ESA 36" WATER MAIN AND 24" RECLAIMED WATER MAIN PROJECT

This project included engineering and permitting services needed to replace approximately 8,300 feet each of aged gravity sewer (8") and small diameter water main [6,650 (6") and 1,750 (8")] along Coral Avenue, North Beaumont Avenue, Highland Avenue, Martina Avenue, Milton Avenue, and West Jackson Street between West Carroll Street and West Donegan Avenue. The project also included a sewer and roadway repair located in Kissimmee, FL. This project had over 240 service connections within the projects residential streets that required both new water and sewer connections. CPH provided all design services including survey and geotechnical coordination, preplanning and coordination with Osceola County, project design, permitting, bidding services, and assisted with public meetings. CPH was responsible for the reconstruction design of existing streets, including construction of stormwater inlets and storm sewers, replacement of sanitary sewers and laterals, and installation of new water mains. CPH also provided part time CEI services for sewer and water main work and full-time services for roadway restoration as required by the County.

## **CLIENT CONTACT:**

Toho Water Authority Mr. Robert Pelham, Asst. Director 951 Martin Luther King Blvd., Kissimmee, FL 34741 Phone: 407.944.5132 Fax: 407.434.4264 RPelham@tohowater.org



Urbanized Area / Neighborhood FDOT Coordination Watermain Replacement of Old Pipe Restoration

## **RELEVANCE TO SCOPE**

Design Hydraulic Modeling Permitting Public Outreach Construction Administration





### **PERSONNEL INVOLVED**

David A. Gierach James "Jay" R. Morris, JR Jason L. James Rocco R. Nasso David E. Mahler Mason Gardberg Kurt R. Luman Gerald M. Cox Thomas J. Galloway

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# SANFORD - PIPE BURSTING OF POTABLE WATER MAINS USING PRE-CHLORINATED PIPE

CPH provided construction phase services to the City of Sanford for the Pipe Bursting of Potable Water Mains Using Pre-Chlorinated Pipe project. The project consisted of bursting approximately 17,500 LF of 4-inch water main and approximately 23,000 LF of 6-inch water main within 4 different residential neighborhoods in Sanford. The project was a federal economic stimulus project funded under the State Revolving Fund Loan program administered through the Florida Department of Environmental Protection (FDEP) using American Recovery and Reinvestment Act (ARRA) fund. The construction phase services included inspections, conducting labor standards interviews during construction for documentation of compliance with Davis Bacon prevailing wage requirements, preparing monthly Davis Bacon compliance certifications, and review of the weekly certified payrolls for compliance with prevailing wage requirements based on classifications of the workers, hours worked on the project, overtime pay, and other fringe benefits as applicable. Additionally, CPH reviewed payment applications, prepared change orders, and prepared disbursement requests for the SRF funding.

## **CLIENT CONTACT:**

City of Sanford Bilal Iftikhar, P.E. Public Works Director P.O. Box 1788 Sanford, FL 32772-1788 Phone: 407.688.5000, Ext. 5085 E-Mail: bilal.iftikhar@sanfordfl.gov City of Pembroke Pines

#### SIMILARITIES

Urbanized Area / Neighborhood Watermain Replacement of Old Pipe Restoration



#### **RELEVANCE TO SCOPE**

Design Hydraulic Modeling Permitting Public Outreach Construction Administration

### PERSONNEL INVOLVED

David A. Gierach Rocco R. Nasso David E. Mahler Thomas J. Galloway

# SR 15 - UTILITY RELOCATIONS (FDOT JPA)

The completed utility project involved the relocation of utilities along approximately 3.9 miles of the densely developed roadway of SR 15 from Conway Rd to Lee Vista Blvd. The utility relocations and replacements were necessary to accommodate roadway widening and storm improvements by the DOT. This project included two plans sets that were bid and built in conjunction with the FDOT roadway plans. This project was completed within the hard deadline needed by the client to meet FDOT's rigid schedule. Given the build-out of the surrounding area, this project included crossings of major and minor roadways. The overall project included the installation of 870 LF of 4-inch force main, 8130 LF of 6-inch force main, and 9,000 LF of 8-inch force main as well as 200 LF of 6-inch water main, 1,000 LF of 8-inch water main, 1,000 LF of 12-inch water main, 10,400 LF of 16-inch water main, and 3,700 LF of 24-inch water main. This project included a 600 LF 8" HDD under a major roadway. The design was predicated on the need to maintain customer services, relocate existing mains while keeping existing mains in service and the need to be phased in conjunction with DOT maintenance of traffic phasing. In addition to the main relocation there were several residential and commercial water and sewer services along the route that required relocation and phasing considerations with roadway construction to minimize service interruptions. This project did have an area of groundwater contamination and was addressed with the design. Our CPH team provided all preliminary investigations, plan preparation, required FDEP and FDOT permits, bidding assistance as well as provided part-time construction observation services.

## **CLIENT CONTACT:**

Orange County Mr. Jose E. Hernandez, P.E. Engineer III Orange County Utilities 9150 Curry Ford Road Orlando, FL 32825 Phone: 407.254.9718 Fax: 407.254.9610 E-Mail: Jose.Hernandez2@ocfl.net

Urbanized Area / Neighborhood FDOT Coordination Watermain Replacement of Old Pipe Restoration



### **RELEVANCE TO SCOPE**

Design Hydraulic Modeling Permitting Public Outreach Construction Administration



### **PERSONNEL INVOLVED**

Todd H. Hendrix Kyle M, Bechtelheimer Mason Gardberg David E. Mahler James "Jay" R. Morris, JR



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# POINCIANA BLVD AND US-17/92 WATER MAIN

CPH provided planning, design, permitting, bid services, and full time CEI services for approximately 4.1 miles of 24-inch diameter water main along FDOT and Osceola County rights-of-way. The project had 6-30-inch HDPE directional drills for a total 3,600 lf throughout the project. Additionally 2-42-inch jack and bores were designed for a total of 380 lf which occurred within FDOT and CSX right-of-way. CPH collected data from the TWA, Osceola, County, FDEP, CSX, FDOT, other utility companies, and performed site visits to evaluate existing site conditions that affected the placement of the new lines. Based upon the gathered information, CPH prepared a route study, preliminary layout of the new main and a cost estimate. CPH also researched planned roadway improvements and designed the project to avoid future line relocations well into the future.

## **CLIENT CONTACT:**

Toho Water Authority Mr. Edwin Matos, P.E. Engineering 951 Martin Luther King Blvd. Kissimmee, FL 34741 Phone: 407.944.5024 Fax: 407.343.4264, EMATOS@tohowater.org

#### **UNIQUE CHALLENGES**

FDOT Coordination Watermain Replacement of Old Pipe Restoration



### **RELEVANCE TO SCOPE**

Design Hydraulic Modeling Permitting Public Outreach Construction Administration



### **PERSONNEL INVOLVED**

David E. Mahler James "Jay" R. Morris JR. Mason Gardberg Thomas J. Galloway Kurt R. Luman



# ARRA-FUNDED WATER SYSTEM IMPROVEMENTS PROJECTS

In early 2009, in response to the passage of the American Recovery and Revitalization Act of 2009 (ARRA, or Stimulus Act), the City of Casselberry requested that CPH assist with preparation of the necessary documentation to receive ARRA funds from the Florida Department of Environmental Protection, administered through the FDEP State Revolving Fund (SRF) Loan Program.

The projected construction was for pipe bursting of existing 2-inch diameter galvanized through 12-inch asbestos cement (AC) pipe using high density polyethylene pipe (HDPE). The 6-inch and above AC pipe was to be replaced due to frequent fracturing resulting in lost water and time. Pipes less than 6-inches in diameter were replaced in order to provide fire protection.

CPH prepared the necessary planning documentation to secure the funding with the City. Following award of funds and of the construction contract, CPH performed construction engineering inspection (CEI) and administration as well as assuring SRF and Davis-Bacon Act conformance and reporting.

In late 2009, the City was awarded a \$2,255,000 grant along with a \$450,000 low interest loan to replace approximately 43,300-ft of asbestos cement (AC) pipe in six project areas (Phase 1). The following year, the City was awarded \$2,000,000 in grants and \$1,076,923 in an SRF loan for an additional 117,300-ft of AC pipe replacement for six additional project areas (Phase 2). In 2011, the FDEP issued a change order to the current loan agreement to the City for an additional \$6,709,296 in low-interest loans for pipe bursting with 57,006-ft of AC pipe in ten additional project areas (Phase 3).

CPH had an additional Supplemental Agreement with Casselberry to prepare planning documentation to apply for AC main replacement in an additional 38 project areas (Phase 4).

## **CLIENT CONTACT:**

City of Casselberry Tara Lamoureux, P.E 95 Triplet Lake Drive Casselberry, FL 32707 Phone: 407.262.7725 Ext. 1228 Mobile:954.802.8712 Fax: 407.262.7767 tlamoureux@casselberrry.org

Urbanized Area / Neighborhood Watermain Replacement of Old Pipe Restoration



### **RELEVANCE TO SCOPE**

Design Hydraulic Modeling Permitting Public Outreach Construction Administration





David E. Mahler James "Jay" R. Morris, JR



# HIGHLANDS GRAVITY SEWER AND WATER MAIN REPLACEMENT

This project included engineering and permitting services needed to replace approximately 8,300 feet each of aged gravity sewer (8") and small diameter water main [6,650 (6") and 1,750 (8")] along Coral Avenue, North Beaumont Avenue, Highland Avenue, Martina Avenue, Milton Avenue, and West Jackson Street between West Carroll Street and West Donegan Avenue. The project also included a sewer and roadway repair located in Kissimmee, FL. This project had over 240 service connections within the projects residential streets that required both new water and sewer connections. CPH provided all design services including survey and geotechnical coordination, preplanning and coordination with Osceola County, project design, permitting, bidding services, and assisted with public meetings. CPH was responsible for the reconstruction design of existing streets, including construction of stormwater inlets and storm sewers, replacement of sanitary sewers and laterals, and installation of new water mains. CPH also provided part time CEI services for sewer and water main work and full-time services for roadway restoration as required by the County.

## **CLIENT CONTACT:**

Toho Water Authority Mr. Robert Pelham, Asst. Director 951 Martin Luther King Blvd., Kissimmee, FL 34741 Phone: 407.944.5132 Fax: 407.434.4264 RPelham@tohowater.org

Urbanized Area / Neighborhood FDOT Coordination Watermain Replacement of Old Pipe Restoration



### **RELEVANCE TO SCOPE**

Design Hydraulic Modeling Permitting Public Outreach Construction Administration



### **PERSONNEL INVOLVED**

David A. Gierach David E. Mahler James "Jay" R. Morris JR. Mason Gardberg Thomas J. Galloway Kurt R. Luman



# ORANGE COUNTY - R/R GRAVITY WASTEWATER SYSTEM IMPROVEMENTS AND REPLACEMENT PACKAGE 1

This project consists of Gravity Repair and Rehabilitation of gravity systems located in ten (10) subareas as determined by the County. CPH, Inc. performed the design for this project that consists of the replacement of + 2,275 LF of 8-inch, and + 62 LF of 12-inch gravity main, sealing and coating four manholes, removal and replacement of eight manholes, removal of one manhole, grout and abandonment of three manholes, installation of nine new manholes, and installation of seventeen sewer laterals and twenty-two sewer laterals on private property. This project includes the removal and replacement of a wooden deck, asphalt pavement, curbing, and sidewalk. It also includes landscape restoration.

## **CLIENT CONTACT:**

Orange County Utilities Engineering Paul Nielsen, P.E. 9150 Curry Ford Road Orlando, FL 32825 Phone: 407-254-9716 E-mail: Paul.Nielsen@ocfl.net

Urbanized Area / Neighborhood FDOT Coordination Watermain Replacement of Old Pipe Restoration



### **RELEVANCE TO SCOPE**

Design Hydraulic Modeling Permitting Public Outreach Construction Administration

### PERSONNEL INVOLVED

Todd H. Hendrix Kyle M, Bechtelheimer Mason Gardberg David E. Mahler James "Jay" R. Morris, JR

# MOSELLE AVENUE AND CORRINE TERRACE PUMP STATIONS AND FORCE MAIN REPLACEMENTS

CPH was responsible for the construction of approximately 7,470 LF of 8 and 10-inch PVC gravity sewer, 28 sanitary manholes, reconnection of 99 service laterals, 5,165 LF of 6-inch force main, two new duplex pump stations and site plans, two existing pump stations abandonments, existing sewer removal or abandonments, and easement acquisitions. The project work involved working within a residential neighborhood within the Rights-Of-Way of Orange County.

CPH collected and reviewed available data from the County and other jurisdictional agencies that had a bearing on the project. CPH had a closed circuit television (CCTV) inspection performed on the gravity collection system. Based upon the gathered information CPH prepared a preliminary layout of the proposed alignment of the new gravity sewer and presented the repair and replacement methods for the sanitary sewer system as well as any other pertinent information for the County's evaluation. A preliminary estimate of probable construction costs was prepared and included in the Design Memorandum. The preliminary design included locating potential sites for two new pump stations and coordinating future utility easements.

CPH coordinated the survey, geotechnical and CCTV investigations which were used for the final design of the project. CPH provided specifications and plans for bidding of the project. Beyond general design issues, CPH prepared a general phasing of work as needed to take into consideration maintaining service to all customers in the work area and minimizing impacts. To assist the County with public awareness, CPH assisted County staff at a public meeting and reviewed the scope of the work with residents impacted by the project.

CPH was responsible for completing applications and obtaining a wastewater collection system permit. Additionally, CPH also obtained the Orange County Building permits for the pump station sites. CPH also coordinated with the Orange County Public Works to facilitate the successful completion of needed project easements.

During construction, CPH provided part time project observations, attended monthly meetings, reviewed shop drawings, replied to requests for information, and reviewed change orders as needed. During construction CPH maintained a close relationship with the County's inspectors and we were able to quickly assist with construction issues as they arose which helped the construction team maintain the schedule for the project.

## **CLIENT CONTACT:**

Orange County Mr. Pierre Cadely Orange County Utilities Division 9150 Curry Ford Road Orlando, FL 32825 Phone: 407.254.9733 Fax: 407.254.9999 E-Mail: Pierre.cadely@ocfl.net

Urbanized Area / Neighborhood FDOT Coordination Watermain Replacement of Old Pipe Restoration



### **RELEVANCE TO SCOPE**

Design Hydraulic Modeling Permitting Public Outreach Construction Administration

### PERSONNEL INVOLVED

Todd H. Hendrix Kyle M, Bechtelheimer Mason Gardberg David E. Mahler James "Jay" R. Morris, JR

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# ISLAMORADA VILLAGE WIDE WASTEWATER SYSTEM, DESIGN, BUILD, OPERATE (DBO)

CPH's areas of responsibility included the design and permitting of the vacuum collection system for the Island of Upper Matecumbe Key; vacuum pumping stations for the Islands of South Plantation Key, Upper Matecumbe Key and Lower Matecumbe Key; and low pressure force main collection systems for the Island of Windley Key and portions of Upper Matecumbe Key.

CPH provided input data and documentation associated with areas of responsibility incorporated into the Preliminary Design Report for the overall project. This work included an analysis of flow data that incorporated FKEC water consumption information, review of existing package wastewater plants, and survey/analysis provided within the project solicitation documents in order to properly project anticipated wastewater flows for system design.

Vacuum pump station designs were based on vacuum equipment provided by AirVac. CPH provided design for two general use vacuum pumping stations and one vacuum pumping station that also incorporated a force main re-pumping station within the structure. Architectural design of the buildings incorporated aspects of the respective individual site locations in order to blend within the neighborhood. All buildings were designed to withstand hurricane force winds of 150 mph and associated storm surge. Individual pumping stations included AirVac vacuum equipment sized for the specific basins being collected. The vacuum collection system for Upper Matecumbe Key incorporated connections for approximately 986 equivalent dwelling units (EDU).

The system provides service along both sides of Overseas Highway in Upper Matecumbe using a conventional saw-tooth profile as generally recommended by AirVac. The project consisted of 43,957 lf of PVC pipe ranging in size from 4-10 -inch. The low pressure force main collection systems for Upper Matecumbe Key and Windley Key incorporated connections for approximately 1,755 (UMK) and 678 (WK) equivalent dwelling units (EDU). The systems provide service along both sides of Overseas Highway using a combination of conventional and trenchless technology. Combined the project consists of 37,410 lf of HDPE pipe ranging in size from 1 1/4-6 -inch. CPH provided a complete system design including plan and profile drawings of each pipe run. CPH conducted system hydraulics calculations using Sewercad. CPH provided limited CEI services for this portion of the project.

## **CLIENT CONTACT:**

Village of Islamorada Maria Bassett Director of Finance / Deputy Village Manager 86800 Overseas Highway Islamorada, FL 33036 Phone: 305.664.6445 Fax: 305.664.6465 maria.bassett@islamorada.fl.us City of Pembroke Pines

#### SIMILARITIES

Urbanized Area / Neighborhood FDOT Coordination Restoration



### **RELEVANCE TO SCOPE**

Design Hydraulic Design Permitting Public Outreach Construction Administration





# KEY MAP - OVERALL PROJECT

### PERSONNEL INVOLVED

Todd H. Hendrix Kyle M. Bechtelheimer David A. Gierach James "Jay" R. Morris, JR Jason L. James Rocco R. Nasso David E. Mahler Mason Gardberg Kurt R. Luman Gerald M. Cox Thomas J. Galloway

# KEY LARGO VACUUM PUMP STATION SERVING BASIN A/B AND C/D AND BASIN A AND D

This project consisted of the design of the AIRVAC equipped vacuum pump station (VPS) for Basins A and B as well as one to serve Basins C and D. This project also consisted of the design of collection Basin A as well as Basin D by the use of a vacuum sewer collection system.

Basin A consists of 39,031 lf of PVC pipe, and Basin D consists of 33,650 lf of PVC pipe ranging in size from 4-inch to 10-inch. Both VPS' consist of a 2,600 sq. ft. architecturally designed building that blends in with the residential nature of the areas. The buildings are constructed to withstand hurricane force winds of 150 mph and storm surge. They include an architectural metal roof with concrete block construction and precast concrete roof panels under the architectural roof to tie the walls, slab and ceiling into one cohesive structure. The structures were considered an essential building. Housed inside each building are a vacuum tank, five 25-Hp vacuum pumps, two 75-Hp discharge pumps and all related equipment, all based on AIRVAC design standards. Since these are essential buildings, an emergency generator and fuel supply system is housed inside each building. An odor control system is also contained within the building to minimize objectionable odors in the area from the discharge of the vacuum pumps.

CPH provided a preliminary report which compared the use of gravity collection, low pressure systems and vacuum systems. CPH provided assistance with site selection and a full survey of the VPS Sites, as well as the neighborhoods for the collection system. The survey was used as the base for the design drawings.

Our design team provided 30%, 60%, 90% and final design submittals. CPH provided design specifications that were utilized throughout the project. CPH provided all documentation for the permitting of the projects. A design report was required to document flows and other data utilized in the design. The VPS' were originally permitted as "dry line" because the wastewater treatment plant was not yet constructed to accept flow from the collection system. The permitting included FDEP and FDOT for the forcemain connection work within US-1.

## **CLIENT CONTACT:**

Reynolds Construction, LLC (Previously Layne Heavy Civil) Mr. Oscar R. Bello, P.E., DBIA 2200 Park Central Blvd. N. Suite 700 Pompano Beach, FL 33064 Phone: 954.650.0164 E-Mail: Oscar.bello@reynoldscon.com City of Pembroke Pines

### SIMILARITIES

Urbanized Area / Neighborhood FDOT Coordination Restoration



### **RELEVANCE TO SCOPE**

Design Hydraulic Design Permitting Public Outreach Construction Administration



### PERSONNEL INVOLVED

Todd H. Hendrix Kyle M. Bechtelheimer David A. Gierach James "Jay" R. Morris, JR Jason L. James Rocco R. Nasso David E. Mahler Mason Gardberg Kurt R. Luman Gerald M. Cox Thomas J. Galloway



# ANALYSIS AND REDESIGN / PHASE I COLLECTION SYSTEM NORTHERN PLANTATION KEY

CPH provided engineering services to Islamorada, Village of Islands, for an analysis and subsequent redesign of three specific vacuum collection mains that were not performing to specification in the Phase I Vacuum Collection System in Islamorada. The three areas of concern were South Coconut Palm Avenue, Woods Avenue, and North Bougainvillea St. within the North Plantation Key Subdivision.

CPH was tasked with analyzing the existing vacuum mains within the subject areas which included calculating static and friction losses within the collection system, verification of existing vacuum main profiles where possible, collection of vacuum loss trending data, and an analysis of flow and ancillary functions that contributed to the operation of the vacuum system.

CPH compared the collected data with industry standard design criteria for vacuum systems and provided summary recommendations for improving the operational characteristics of the subject vacuum mains. Recommendations included replacing and re-profiling segments of the existing vacuum main with larger piping in order to bring the subject portions of the collection system up to industry design standards. An analysis of the existing vacuum station was also completed in order to verify the capacity of the current design. The Village accepted the recommendations and CPH completed the redesign of the subject areas incorporating the recommendations. The redesign included not only the improvements to the subject areas but also included the development of a replacement and removal plan in order to minimize the impact on existing customers within the service areas.

In addition Layne Heavy Civil, CPH's Design Build Partner, requested a change order to include a hydraulic analysis of the entire Island. CPH developed a hydraulic model using Bentley SewerCAD to model approximately 16 miles of force main, from Lower Matecumbe Key to Plantation Key. The model consisted of approximately 600 lift stations being modeled to simulate future conditions.

## **CLIENT CONTACT:**

Village of Islamorada Maria Bassett Director of Finance / Deputy Village Manager 86800 Overseas Highway Islamorada, FL 33036 Phone: 305.664.6445 Fax: 305.664.6465 maria.bassett@islamorada.fl.us City of Pembroke Pines

SIMILARITIES

Urbanized Area / Neighborhood Restoration



#### **RELEVANCE TO SCOPE**

Design Hydraulic Modeling Permitting

### **PERSONNEL INVOLVED**

David E. Mahler Gerald M. Cox Kyle M. Bechtelheimer Todd H. Hendrix David A. Gierach

# EATONVILLE WEST AND EAST SIDE WASTEWATER IMPROVEMENTS

The project included replacement of portions of the Town's existing sanitary sewer system because of sewer backups and overflow issues. It was believed that the main cause of the problem was because the sanitary sewer pipes and manholes were constructed very shallow and had less than minimum slopes. In addition, much of the collection system was constructed in the 1940s and early 1950s of vitrified clay pipe, and were susceptible to cracks and breaks. The project was undertaken to correct these problems.

Specifically, the project included replacement of gravity sanitary sewer lines, service laterals and manholes, replacement and relocation of an existing lift station, abandonment of an existing force main and the elimination of an existing lift station, and all road replacement and/or restoration necessary to complete the project. The project was bid in two phases, with the West Side Phase started initially, and the East Side Phase started next.

The West Side Project included the replacement and relocation of the Campus View Lift Station, add new force main to reconnect to the existing force main, and replacement and abandonment all of the tributary gravity collection system. The total project length of the 8-inch gravity sewer was approximately 4,500 linear feet. Because of the relocation of the Katherine Avenue lift station the flows had to be re-routed to the new Campus View Lift Station. This allowed the old Katherine Lift Station to be demolished.

The East Side Project included portions of the sanitary gravity sewer in the northeast section of the Town that discharges into the existing Eaton Street Lift Station, and a new generator. The total project length of the 8-inch gravity sewer was approximately 3,500 linear feet. In addition, the project included provisions to connect four existing homes on the east end of Eaton Street that were being served by grinder pumps pumping out of previously installed septic systems.

The project was funded by FDEP SRF Loan (with  $\sim$ 67% of capital forgiveness) and a \$700,000 grant from the CDBG.

CPH served as full time resident project representative for the West and East Side Wastewater Improvements.

# **CLIENT CONTACT:**

Village of Islamorada Maria Bassett Director of Finance / Deputy Village Manager 86800 Overseas Highway Islamorada, FL 33036 Phone: 305.664.6445 Fax: 305.664.6465 maria.bassett@islamorada.fl.us

Urbanized Area / Neighborhood Replacement of Old Pipe Restoration



### **RELEVANCE TO SCOPE**

Design Hydraulic Modeling Permitting Public Outreach Construction Administration



## **PERSONNEL INVOLVED**

David E. Mahler James "Jay" R. Morris, JR Thomas J. Galloway Kurt R. Luman



# TITUSVILLE AREA IV WELL OUTFITTING AND RAW WATER TRANSMISSION MAIN PHASE I

The City of Titusville Area IV Well Outfitting and Raw Water Transmission Main project Phase 1 included the drilling of 5 water supply production wells, 3 saline water monitoring wells, outfitting of 6 production wells, and construction of approximately 72,000 LF of new raw water transmission main (16-20-inch diameter pipeline) from the City's Mourning Dove Water Treatment Plant to the Area IV well field. CPH was selected by the City to perform design and permitting phase services that included civil engineering, survey, and environmental services. CPH also provided Bid Phase and Construction Phase Services. Design phase services included hydraulic modeling of the Phase 1 well field and future Phase 2 well field, stormwater pre-development and post-development analysis of stormwater quality and attenuation, 100-year flood zone compensating storage, and assisting the City with approvals of the design through the State Revolving Loan Fund (SRF) program. Permits secured for the project included permits from FDEP (ERP, transmission main, and well equipping and outfitting), ACOE, Brevard County, and FDOT. The environmental services included environmental studies and assessments of the project corridor which traversed a diverse mosaic of wetlands and uplands within rural and developed areas, and included wetland delineation, habitat and land use mapping, and assisting the City with mitigation of wetland impacts.

Bid Phase Services included attending the pre-bid meeting and preparing meeting notes and providing the City with written responses to bidder questions. CPH had in its original construction contract CEI services including limited inspection and assistance provided to the City during construction. Prior to the start of construction, the City asked CPH to expand its services due to the funding that was secured through the SRF loan program. Through the SRF program, the project became an American Recovery and Reinvestment Act (ARRA) project. CPH developed and tracked for the City Buy American certifications, and provided de-minimis calculations and tracking to document compliance with the Buy American requirements of the construction. CPH also conducted labor standards interviews during construction for documentation of compliance with Davis Bacon prevailing wage requirements and reviewed all of the weekly certified payrolls submitted by the Contractor and subcontractors for compliance with prevailing wage requirements. CPH also reviewed the construction payment applications, change order requests, and tracked costs throughout construction, and prepared for the City monthly Disbursement Requests for the SRF loan.

## **CLIENT CONTACT:**

City of Titusville John Peterson Project Manager, Water Resources Department 2036 Garden Street Titusville, FL 32796 Phone: 321.383.5863 Fax: 321.383.5653 john.peterson@titusville.com

Design Hydraulic Modeling Permitting Public Outreach Construction Administration



#### **RELEVANCE TO SCOPE**

FDOT Coordination Water Main Restoration



### **PERSONNEL INVOLVED**

David A. Gierach N. Katriina Bowman Rocco R. Nasso Kurt R. Luman Gerald M. Cox David E. Mahler Thomas J Galloway



# TITUSVILLE AREA IV WELL OUTFITTING AND RAW WATER TRANSMISSION MAIN PHASE II

CPH performed design, surveying, permitting, bidding and construction phase services for Phase 2 of the Titusville Wellfield for TIFA LLC. The design and permitting phase services included civil engineering, survey, and environmental services and included hydraulic modeling of the wellfield, stormwater pre-development and post-development analysis of stormwater quality and attenuation, 100 year flood zone compensating storage. This phase included well drilling of 8 production wells and 1 saline water monitoring well, conversion of 1 test well to a production well, and well outfitting of 9 production wells. Additionally, the project included the construction of approximately 18,975 lf of raw water transmission main from the north end of the existing Area IV Phase 1 Wellfield (near well 408) to each of the Area IV Phase 2 production wells (Wells WR-1 through WR-9). CPH was responsible for permitting through FDEP (ERP, transmission main, and well equipping and outfitting), ACOE, and Brevard County. All permits were applied for and received in a timely manner and there were no unexpected design changes resulting from the permitting process.

Bid Phase Services included preparing the Pre-bid meeting agenda and meeting notes and providing the Owner with written responses to bidder questions. CPH also reviewed the construction payment applications, change order requests, and tracked costs throughout construction, and prepared for the City monthly Disbursement Requests for the SRF loan. Construction Phase services included preparing the preconstruction meeting agenda and meeting notes, review of submittals and shop drawings, coordination with the Owner and Contractor during construction, inspections, review of payment applications, and preparation of final closeout documents and certifications.

# **CLIENT CONTACT:**

TIFA LLC

Sean Stauffer Water Resources Director 2836 Garden Street Titusville, FL 32796 Phone: 321.383.5650 Fax: 321.383.5653 sean.stauffer@titusville.com City of Pembroke Pines

#### **SIMILARITIES**

Design Hydraulic Modeling Permitting Public Outreach Construction Administration



### **RELEVANCE TO SCOPE**

FDOT Coordination Water Main Restoration



### **PERSONNEL INVOLVED**

David A. Gierach N. Katriina Bowman Rocco R. Nasso Kurt R. Luman Gerald M. Cox David E. Mahler Thomas J Galloway



# PALM COAST WELL FIELD PHASES I AND II

CPH provided design, permitting and construction administrative services for shallow aquifer wells for the City of Palm Coast.

The wells fields furnish raw water to the City's Water Plant 3, a Low Pressure Reverse Osmosis Facility. Design included drilling test wells to determine potential yields within the well field, modeling the well field potential, and developing a raw water well location plan. Permitting was through the Saint Johns River Water Management District. Each well site incorporated a future lower Floridian well also.

The well fields were split into two phases:

Phase I--Completed and in service

- 6 Wells, gravel packed, 100 ft. deep +/-, Capacity of 1.5 MGD
- Stainless Steel submersible well pumps and motors
- Pump control valves that maintain a constant downstream pressure
- 3 stand-by generators ( 2 wells for each generator)
- 12,000 If of PVC raw water piping ranging in size from 8-inch to 16-inch
- Radio telemetry from each well to the water plant to control pump operation and receive flow information

Phase II--Designed, waiting for award of construction contract

- 12 Wells, gravel packed, 100 ft. deep +/-, Projected capacity of 3.0 MGD
- Stainless Steel submersible well pumps and motors
- Pump control valves that maintain a constant downstream pressure
- 6 stand-by generators, ( 2 wells for each generator)
- 35,000 If of PVC raw water piping ranging in size from 8-inch to 24-inch
- Radio telemetry from each well to the water plant to control pump operation and receive flow information.

# **CLIENT CONTACT:**

City of Palm Coast Mr. Richard Adams Public Works/Utility Director 2 Utility Drive Palm Coast, FL 32137 Phone: 386.986.2350 Fax: 386.986.2390 E-Mail: radams@palmcoastgov.com

Design Hydraulic Modeling Permitting Public Outreach Construction Administration



### **RELEVANCE TO SCOPE**

Urbanized Area / Neighborhood FDOT Coordination Water Main Restoration



### **PERSONNEL INVOLVED**

David A. Gierach N. Katriina Bowman Rocco R. Nasso Kurt R. Luman Gerald M. Cox David E. Mahler Thomas J Galloway


# TAB 4. WILLINGNESS TOMEET TIME & BUDGETREQUIREMENTS

#### TIME, BUDGET AND QA/QC

CPH has ample staff available to perform this project on time and within budget for the City of Pembroke Pines. The team has extensive in-house capabilities to take on this project, and we are committed to providing the services as outlined in our attached schedule.

#### Methods and Controls to be Utilized to Balance and Maintain Quality, Schedule and Budget

The team will be led by Todd H. Hendrix, P.E., CGC, and Kyle M. Bechtelheimer, P.E. They will serve as the City's immediate contacts, and will coordinate all projects and activities as the primary liaisons for the City and CPH.

The team, located at our Miami office, includes engineers, designers, surveyors, environmental scientists and administrative personnel. CPH is currently finishing design services for other clients, but is actively seeking work for our Miami Office staff. As a result, our staff is available and has the capacity to perform projects as they are assigned, and CPH is committed to meeting budget and schedule requirements. Keys to the success of projects include:

- Open lines of Communication
- Knowledgeable Team Members
- Local and Available Staff
- Monthly Project Meetings
- Weekly Internal Meetings with Project Manager and Design Teams.
- Technical Review Committee that will assist in quality assurance and control

CPH's design services are carefully budgeted at the beginning of the project. We attempt to divide the job into its various tasks and estimate amounts of labor and expenses needed for each. We have an in-house computerized cost control system capable of providing the Project Manager with current job costs, as obtained through entry of weekly time sheets. The original budget is used as a guide to determine progress and efficiency by checking hours expended versus hours budgeted. The budget is also used to plan the needed level of manpower to complete the job on time.

In addition to engineers and construction personnel, the team has the added value of having on-staff licensed general and utility contractors that can review projects from various perspectives. With experienced personnel that have provided construction services for over 30 years, this enables us to review the project from a constructability and/or mean and methods view point. In addition, the licensed on staff contractors review projects and provide "real-time" cost estimates throughout the duration of the project. This construction experience allows the team to view these projects through the eyes of a contractor with the ability to identify intangible cost factors/elements such as restricted site conditions, specialized equipment requirements, excessive material and labor costs, impacts on schedules, etc. that may not be apparent to the design engineer.

#### Pembroke Pines Raw Water Supply Liine & 30" Force Main Relocation

|    | Activity Name   | Duration  | <sup>1</sup> Start | Start Finish |   |    | y 20 |    |   | Ju | n 20 |    |    | Jul 20 |    |    | Jul 20 |   |    | Aug 20 |    | Aug 20 |   |    |    | S  | ept 2 | 0  |    |    | Oct 2 | 20 |  |
|----|---|-----------|--------------------|--------------|---|----|------|----|---|----|------|----|----|--------|----|----|--------|---|----|--------|----|--------|---|----|----|----|-------|----|----|----|-------|----|--|
|    |   |           | Date               | Date         | 4 | 11 | 18   | 25 | 1 | 8  | 15   | 22 | 29 | 6      | 13 | 20 | 27     | 3 | 10 | 17     | 24 | 31     | 7 | 14 | 21 | 28 | 5     | 12 | 19 | 26 |       |    |  |
| 1  | Conduct Survey, Prepare Base<br>Drawings                                  | 8         | 3 5/11/20          | 7/3/20       | < |    |      |    |   |    |      |    |    |        |    |    |        |   |    |        |    |        |   |    |    |    |       |    |    |    |       |    |  |
| 2  | Prepare 30% Plans and PDR   | 2         | 2 7/6/20           | 7/17/20      |   |    |      |    |   |    |      |    | ×  |        |    |    |        |   |    |        |    |        |   |    |    |    |       |    |    |    |       |    |  |
| 3  | Submit 30% Plans and PDR to City  | 0         | 0 7/17/20          | 7/17/20      |   |    |      |    |   |    |      |    |    |        |    |    |        |   |    |        |    |        |   |    |    |    |       |    |    |    |       |    |  |
| 4  | City Review Phase, Review 30% Plans<br>and PDR w/ City                    | 1         | 7/20/20            | 7/24/20      |   |    |      |    |   |    |      |    |    |        |    |    |        |   |    |        |    |        |   |    |    |    |       |    |    |    |       |    |  |
| 5  | Prepare 60% Plans, Specifications,<br>Quantities                          | 8         | 3 7/27/20          | 9/18/20      |   |    |      |    |   |    |      |    |    |        |    |    |        |   |    |        |    |        |   |    | 1  |    |       |    |    |    |       |    |  |
| 6  | Submit 60% Plans, Specs, Quantities to City                               | C         | 9/18/20            | 9/18/20      |   |    |      |    |   |    |      |    |    |        |    |    |        |   |    |        |    |        |   | •  |    |    |       |    |    |    |       |    |  |
| 7  | City Review Phase, Review 60%<br>Submittal w/ City                        | 2         | 2 9/21/20          | 10/2/20      |   |    |      |    |   |    |      |    |    |        |    |    |        |   |    |        |    |        |   |    |    |    | 1     |    |    |    |       |    |  |
| 8  | Prepare 90% Plans, Specifications,<br>Quantities                          | 4         | 10/5/20            | 10/30/20     |   |    |      |    |   |    |      |    |    |        |    |    |        |   |    |        |    |        |   |    |    |    |       |    |    |    |       |    |  |
| 9  | Submit 90% Plans, Specs, Quantities to City                               | C         | 10/30/20           | 10/30/20     |   |    |      |    |   |    |      |    |    |        |    |    |        |   |    |        |    |        |   |    |    |    |       |    |    |    |       |    |  |
| 10 | City Review Phase, Review 90%<br>Submittal w/ City                        | 2         | 2 11/2/20          | 11/13/20     |   |    |      |    |   |    |      |    |    |        |    |    |        |   |    |        |    |        |   |    |    |    |       |    |    |    |       |    |  |
| 11 | Prepare Permit Applications, Submit to FDEP, FDOT, ROW                    | 1         | 11/16/20           | 11/20/20     |   |    |      |    |   |    |      |    |    |        |    |    |        |   |    |        |    |        |   |    |    |    |       |    |    |    |       |    |  |
| 12 | Permit Review Phase   | 6         | 6 11/23/20         | 1/1/21       |   |    |      |    |   |    |      |    |    |        |    |    |        |   |    |        |    |        |   |    |    |    |       |    |    |    |       |    |  |
| 13 | Prepare 100% Plans, Specs,<br>Quantities Per Permits and City<br>Comments | 2         | 2 1/4/21           | 1/18/21      |   |    |      |    |   |    |      |    |    |        |    |    |        |   |    |        |    |        |   |    |    |    |       |    |    |    |       |    |  |
| 14 | Submit 100% Plans, Specs, Quantities to City                              | 0         | 0 1/18/21          | 1/18/21      |   |    |      |    |   |    |      |    |    |        |    |    |        |   |    |        |    |        |   |    |    |    |       |    |    |    |       |    |  |
|    |   | Total: 36 | 3                  |              | 4 | 11 | 18   | 25 | 1 | 8  | 15   | 22 | 29 | 6      | 13 | 20 | 27     | 3 | 10 | 17     | 24 | 31     | 7 | 14 | 21 | 28 | 5     | 12 | 19 | 26 |       |    |  |

NOTE: Timing shown on this schedule is approximate and is for planning purposes only (survey start is approx. 2 weeks after NTP, assumed to be issued by 4/1/19). The timing of a number of the items is outside the control of CPH, and as such, the timing shown is not guaranteed.

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Feb 21, 2020



## **TEAM WORKLOAD**

|  | 2020 |                  |       |      |       |     |     |  |  |  |  |  |
|--|------|------------------|-------|------|-------|-----|-----|--|--|--|--|--|
|  |      | FEB              | MAR   | APR  | MAY   | JUN | JUL |  |  |  |  |  |
| Esplanade at Aventura -<br>Aventura Mall Redevelopment | U    | NDER             | CON   | STRU | CTION | l   |     |  |  |  |  |  |
| Westfield Broward Mall - Sears<br>Redevelopment        | U    | NDER             | CON   | STRU | CTIO  | J   |     |  |  |  |  |  |
| Village of Islamorada Founder's<br>Park Breakwater     |      |                  |       |      |       |     |     |  |  |  |  |  |
| Monroe CountyHarry Harris<br>Park Jetty                |      |                  |       |      |       |     |     |  |  |  |  |  |
| FKAA Big Coppitt Disk Filters                          |      | OUT <sup>.</sup> | to Bi | D    |       |     |     |  |  |  |  |  |
| FKAA Cross Key WWTP                                    |      |                  |       | ΟυΊ  | TOB   | ID  |     |  |  |  |  |  |



## TAB 5. LOCATION

CPH has ten (10) offices in the State of Florida with support of approximately 240 personnel throughout the company to assist in the projects for the City of Pembroke Pines. **The City will have the direct commitment of the CPH Miami Office, located at 1992 SW 1st Street, Miami, FL 33135.** The CPH Miami office is staffed with employees that include registered personnel, administrative staff, and owners of the firm to accomplish the projects on time and within budget.



| OFFICE LOCATION | APPROXIMATE DISTANCE FROM CITY OFFICES |
|-----------------|--|
| CPH Miami       | 21.2 Miles (28 Minutes)                |



## TAB 6. RECENT, CURRENT, AND PROJECTED WORKLOADS OF THE FIRM

## CURRENT WORKLOAD AND DAILY AVAILABILITY TO HANDLE SCOPE OF SERVICES

CPH has reviewed the scope of services and has developed ideas for staffing the projects. Based on our recent experience, and our project manager's experience, we feel comfortable in meeting the scope requirements. The Miami staff is available to complete the Pines Village Water Main Improvements Phase II & Septic Tank Conversion project as outlined in the scope of work. CPH has the personnel and resources immediately available to carry this project to successful completion. The firm's Miami office can provide approximately 1,200 manhours per month and CPH's corporate monthly availability is approximately 56,000 manhours a month. The CPH Miami office has more than adequate personnel and availability to provide the services to the City of Pembroke Pines.

#### **Corporate Workload / Availability**

The current and projected workload of our team is such that we can provide responsive service to the City of Pembroke Pines. We are well-staffed, equipped with our nearby location, and believe that we and our team members can provide a high quality, professional service to the City that is completely responsive and cost effective. The graph below depicts our current contracted backlog with no consideration for any additional work. The current workload will spread over 13 months. Our current production capability is \$4,500,000 per month. With that capacity, there are more than adequate personnel hours to cover the workload.



#### **Staffing Availability Matrix**

The team proposed to provide services to the City of Pembroke Pines has adequate time available to dedicate to the successful completion of the Raw Water Supply Line and 30-Inch Force Main Relocation Project.

| STAFF AVAILABILITY                                 |                     |  |     |              |  |  |  |  |  |  |  |
|--|---------------------|--|-----|--------------|--|--|--|--|--|--|--|
| TEAM MEMBER  | ROLE                | CURRENT PROJECTS                         |     |              |  |  |  |  |  |  |  |
|  |                     | Skilkon Wawa Trinity Luthoran            |     | AVAILADILITT |  |  |  |  |  |  |  |
| Todd H. Hendrix D.E. C.C.C.                        | Principal.in-Charge | Monroe-Higgs Beach Seawall Renair        | 84% | 75%          |  |  |  |  |  |  |  |
|  | i mcipal-m-onarge   | Murphy- Deerfield Bch Powerline Bd 19103 | 94% | 1370         |  |  |  |  |  |  |  |
|  |                     | FKAA-Boca Chica Fira Pumping Station     | 33% |              |  |  |  |  |  |  |  |
| Kyle M. Bechtelheimer. P.E.                        | Project Manager     | FKAA-Cross Key Wastewater Connection     | 68% | 75%          |  |  |  |  |  |  |  |
| ·· <b>·</b> , ····                                 |                     | Big Pine Key: PH II Rear Parking Mods    | 94% |              |  |  |  |  |  |  |  |
|  |                     | Sanford - SNWRF Master Lift Station      | 85% |              |  |  |  |  |  |  |  |
| David A. Gierach. P.E., CGC                        | QA/QC               | Sanford- NWRF FDEP Operation Permit Rnwl | 91% | 70%          |  |  |  |  |  |  |  |
|  |                     | Sanford - Main WTP- Design, Permitting   | 98% | 10,0         |  |  |  |  |  |  |  |
|  |                     | Miami Aviation-FCD Assessment FOG Device | 9%  |              |  |  |  |  |  |  |  |
| Jason L. James PF                                  | Project Engineer    | Miami Dade- Home Chemical Collections    | 79% | 60%          |  |  |  |  |  |  |  |
|  |                     | Seritage/Sears Plantation                | 83% | 0070         |  |  |  |  |  |  |  |
|  |                     | Lake Mary, WTP Enhancement Project       | 4%  |              |  |  |  |  |  |  |  |
| Rocco R. Nasso, P.F.                               | Project Engineer    | Davtona - Division Street Improvement    | 43% | 55%          |  |  |  |  |  |  |  |
| 10000 N. Hubbo, H.E.                               |                     | New Smyrna-Alonzo Babe James Splash Pad  | 91% | 0070         |  |  |  |  |  |  |  |
|  |                     | Sanford - SNWRE Master Lift Station      | 85% |              |  |  |  |  |  |  |  |
| N. Katriina Bowman, P.E.,                          | Project Engineer    | Sanford- NWRE EDEP Operation Permit Rowl | 91% | 55%          |  |  |  |  |  |  |  |
| CCS  |                     | Sanford - Main WTP- Design Permitting    | 98% | 0070         |  |  |  |  |  |  |  |
|  |                     | Reedy-Gravity Sanitary Main Rehab        | 51% |              |  |  |  |  |  |  |  |
| Mason Gardberg, P.E.                               | Proiect Engineer    | Utilities-EE Williamson Water Main       | 70% | 70%          |  |  |  |  |  |  |  |
|  |                     | Toho (Cypress WRF) 8" FM Connection      | 90% |              |  |  |  |  |  |  |  |
|  |                     | Imperial Pump Station Modification       | 36% |              |  |  |  |  |  |  |  |
| Alvssa Filippi, P.E.                               | Proiect Engineer    | Utilities-EE Williamson Water Main       | 70% | 65%          |  |  |  |  |  |  |  |
| · · <b>, · · ·</b> · · · · · · · · · · · · · · · · |                     | Toho (Cypress WRF) 8" FM Connection      | 90% |              |  |  |  |  |  |  |  |
|  |                     | Callaway-Multi-Use Path Boat Race Rd.    | 44% |              |  |  |  |  |  |  |  |
| Kurt R. Luman, Jr., P.E.                           | Project Engineer    | Palm Coast-Citation Parkway Improvements | 78% | 50%          |  |  |  |  |  |  |  |
|  |                     | Haines City-Peninsular Drive Improvement | 30% |              |  |  |  |  |  |  |  |
|  |                     | Sanford-Tertiary Filtration              | 30% |              |  |  |  |  |  |  |  |
| Gerald M. Cox, CGC, CUC                            | Project Engineer    | Kiewit - Construction Svcs Largo WWTP    | 61% | 50%          |  |  |  |  |  |  |  |
|  |                     | Sanford- North WRF Front Entrance Wall   | 75% |              |  |  |  |  |  |  |  |
|  |                     | Utilities-Task No. 2- General Survey     | 40% |              |  |  |  |  |  |  |  |
| Thomas J. Galloway, PSM                            | Project Surveyor    | FW&A-Topographic Survey- New Smyrna      | 71% | 75%          |  |  |  |  |  |  |  |
|  |                     | Singhofen-Ironbark Flood Abatement       | 97% |              |  |  |  |  |  |  |  |

## TAB 7. FIRM'S UNDERSTANDINGAND APPROACH TO THE WORK

CPH has developed a proven and successful approach to implementing projects such as the one requested by the City of Pembroke Pines. We have provided design, permit, and complete post design for raw water supply lines and rerouting of sewer force mains projects identical to the services requested by the City of Pembroke Pines. CPH has some of the most in depth expertise related to pipeline projects in the State of Florida. CPH has recently assisted the City of Miramar in preliminary design and routing of a 16-inch raw water main, along with testing and designing a wellhead for a capped well. CPH has also recently completed design, permit, and construction phase services for Miami Dade County, replacing existing ACP sanitary force main, with a cumulative construction value of approximately \$2,400,000, consisting of over 11,000 linear feet of force main replacement. CPH has performed services similar to those expected by the City of Pembroke Pines for our utility clients for over three decades.

We understand the City's objective very clearly and can provide timely services for completion of the Raw Water Supply Line and 30-inch Force Main Relocation project along Johnson St. This project will required the proper abandonment, demolition or grout and fill the existing 30" FM, design and permitting a new 30" DIP sewer main, along with design and permitting of the new raw water main along Johnson St. from the Eastern Wellfield.

The exhibit below demonstrates our understanding of the specific area for the City of Pembroke Pines' Raw Water Supply Line Improvements and 30" Force Main Relocation Project. This area is approximately 3.50 acres, mostly along Johnson St., surrounded by different zoning types including Agricultural Utility (A-3), Limited Agricultural (A-1), Community Business (B-2), and Government Use District (GU), with the great majority being varied Residential zonings. The Johnson St. right of way (ROW) is owned and maintained by both the City of Hollywood (East of 76th Ave.) and the City of Pembroke Pines (west of 76th Ave.). Since the project will be located within both cities, permitting and coordination will be required with each. Based on our review of the RFQ, our team's field visit, extensive research of current conditions, and past history working within the City; we have developed an in depth understanding of this area. CPH has a complete understanding of the project's intent, key project issues, **and most importantly, the expertise to complete this project.** 



## **CITY OF PEMBROKE PINES**

RFQ# PSUT-20-01 | RAW WATER SUPPLY LINE (BETWEEN WTP & EASTERN WELLFIELD) & 30" FORCE MAIN RELOCATION

#### SITE UNDERSTANDING















| 1. | EXIS |
|----|------|
| 2. | RAV  |
| 3. | RAV  |
| 4. | RAV  |
| 5. | EXIS |
| 6. | FM/I |
| 7. | EXIS |
| 1  |      |

#### CPH = THE TEAM FOR SUCCESS. p. 227

STING WELLFIELD *N* WATERMAIN ROUTE WWATERMAIN ROUTE W WATERMAIN ROUTE STING SEWER FM ELEC CONFLICT MH STING 30" FM AND VALVE





#### **PROJECT APPROACH**

CPH has performed a preliminary site review, has completed an extensive amount of research on the project, reviewed current City of Pembroke Pines' standards, has a complete understanding of the required permitting criteria, and has an in depth understanding of the project's needs.

Based on our review, there are several key items requiring attention in order to have a successful project. The key issues that will affect the project include:

- Correct sizing of Raw Water Main
- Piping Layout to maximize Right of Way (ROW) use and maintaining FDEP Separation
- Maintaining and Restoring ROW during and post-construction
- Minimizing Impact to Residents and Businesses along ROW
- Maintenance of Traffic
- Overall Construction Cost and Budget
- Proper Abandonment/Disposal of current sewer FM
- Raw Water By-Pass Design
- Proper design location for Pigging Stations, Air Relief Valves and Isolation Valves
- Methods of Construction

#### **PRELIMINARY DESIGN PHASE**

The key project issues identified above are typical of many raw water main projects and sewer main rerouting projects, especially with the many existing utilities within the ROW. This project will demand special consideration to correct routing and methods of construction of the raw water main. The existing ROW has multiple sanitary force mains, potable and raw water mains, along with gas and telecommunication lines. **Our proven approach for resolving these issues is <u>early and continuous communication</u> with City staff, affected utilities, and permitting agencies.** 

CPH starts the design process by meeting with City staff prior to start of work for a kick-off meeting. After the meeting, CPH will perform another detailed walk-through of the project to investigate all aspects of the area. Once the foundation is established, CPH will prepare a raw water supply plan and sewer relocation plan for the project. The preliminary plan will evaluate the best methods of design, construction, and potential cost saving measures. In the preliminary phase, CPH will complete all due diligence, site investigation, and data collection to expedite design and permitting. Pre-application meetings with each permitting agency will be held to decrease review times and number of RFIs. CPH will compile a **Preliminary Design Report (PDR)** specific to the project's needs to supply to the City of Pembroke Pines for review. This report will give an in depth look of the evolving project and allow the City to provide guidance on the any design considerations during the Preliminary Design review meeting.

#### SURVEY

Upon completion of the initial kick-off meeting, the CPH Project Manager will provide direction to our in-house Surveying team based on the City's needs for this project.

**The CPH survey department has the unique, cost-saving capability to provide "High-Definition Laser Surveying".** The equipment is state of the art in surveying technology, which allows for a more efficient, detailed, and cost efficient surveying product. Our survey team is fully staffed and equipped to perform high definition survey, which provides precise data of a site's existing topography. The laser scanner not only collects ground data, but also collects all aerial information, including overhead utilities, mast arms, signs, etc., which is very important when considering methods of construction and potential issues which could arise in the field. The laser scan procedure is supplemented with conventional survey for the underground data collection, and compiled into a standard AutoCAD drawing meeting the horizontal, vertical, and state plane requirements for this project. Since the scan picks up the entirety of the area, if more information on a specific area is required during design or construction, the scan will typically contain the needed information already. This can prevent needing multiple surveys or more visits to the site, and instead, CPH can simply pull the data from the existing scan.

#### **GEOTECHNICAL ENGINEERING**

CPH will coordinate and utilize sub-consultant Universal Engineering Sciences, Inc. to perform the necessary Geotechnical work. Universal will obtain strategic core bores based on CPH's guidance, in order to determine Seasonal High Water Level (SHWL), hydraulic conductivity, and to assess the permeability of the soils at several points along the proposed project area. Universal will prepare a report to include in CPH's 30% Design Submittal, which will include this data along with recommendations for backfill, asphalt repair, and Horizontal Directional Drilling (HDD) soil characteristics.

#### **DESIGN/PERMITTING PHASE**

The Design/Permitting Phase main tasks are to prepare the contract documents, including plans and specifications, cost estimates, value engineering, QA/QC, utility coordination, and perform various levels of public involvement. CPH's approach to this project will include draft document submittal at the 30%, 60%, 90%, and 100% stages. We will meet with the City's Project Manager after each submittal to provide an update on the work as well as answer any questions or concerns. The plans will be prepared in accordance with the City of Pembroke Pines, City of Hollywood, and Broward County's Standards. Where applicable, precedence will be given to any City standards that are more stringent than other agencies. Foreseen permitting agencies to submit and obtain permits from are listed below:

- City of Pembroke Pines
- City of Hollywood
- Broward County Development and Environmental Review
- Florida Department of Environmental Protection (FDEP)

#### **RAW WATER SUPPLY LINE DESIGN**

CPH will design the proposed raw water supply line to fit the needs of the City, with constructability, maintenance, and minimizing restoration of the ROW in mind. The raw water main will be approximately 5,200 LF running through Johnsons St. from the Eastern Wellfield to the City's Water Treatment Plant. CPH has already completed preliminary sizing calculations and hydraulic modeling in Bentley WaterCAD to determine the required pipe size. These upfront calculations will allow the project to progress quickly through the initial stages of development.

CPH's staff has significant experience in water modeling, ROW utility routing, while utilizing WTP and wellfield discharge data to create extremely accurate models. Exhibit 2 below shows a preliminary model of the current conditions of the raw water main and the proposed raw water main. The preliminary model was designed with the current flow conditions of the 4 wells in the Eastern Wellfield. It was estimated that the total flow capacity was 10,580 GPM with Well No. 6 pumping at 1580 GPM and Wells No. 9, 10 and 11 pumping at 3,000 GPM. CPH's in depth knowledge of the existing wells, raw water main, and the preliminary model created will lead to an expedited and precise design of the proposed supply system. The ROW of Johnson St. will be utilized to place the new water main that will run parallel to the current one to limit conflicts with existing and future utilities, as well as reduce restoration efforts and impact to residents and business owners.

City of Pembroke Pines



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The biggest hurdle with the proposed raw water main will be routing it efficiently and economically. The two best methods of construction for this new raw water main are open cut and HDD, or a combination of both. The Johnson St. ROW has many existing utilities within its limits, including: ACP Potable Water Main, Raw Water Main, multiple Sanitary Sewer Force Mains, Gas, and Telecommunications. The two mentioned methods of construction each have their strengths and weaknesses which can impact: cost, MOT required, effect on residents/businesses, and hydraulics.

During the initial design and PDR phase, CPH will give each option with different considerations for the City to review and give direction on. CPH will provide an opinion of probable construction costs (OPCC) with the PDR to help when deciding the best method of construction.

Based on preliminary calculations and the hydraulic model, the new Raw Water Main should be designed as a 24-inch DIP main if Open Cut is the chosen method, or 30-inch DR 11 HDPE for horizontal directional drilling. HDD would minimize restoration to residential driveways, roadways, sidewalks, etc., however may be higher in material costs than that of 24-inch DIP.

Exhibit 3 below shows a preliminary design of the 4,800 LF of raw water main system to supply water to the Pembroke WTP. CPH will carefully consider the location of the pigging stations to facilitate and improve maintenance of the new Raw Water Main with easy access for City's Staff. The proposed water main will increase the redundancy of the current water supply system with the installation of Bypass Valves that will allow the independent or combined use of the existing and the new mains. CPH will design air relief valves long the main, especially if HDD is the selected method of construction. Since sand appears to be an issue from the existing wells, CPH can include **flushing ports** at the new gate valves to ensure no sand build-up occurs in the valve seat.



#### **EXHIBIT 3 - PRELIMINARY WATER MODEL**

#### RAW WATER SUPPLY LINE DESIGN

CPH's has completed a thorough site walk of the area around the City's WTP, reviewed the available sewer atlas, and has a full understanding of the City's needs for re-routing the existing 30-inch force main. CPH will design the relocation and abandonment of a 30-inch PVC force main, keeping the new main within the City's property, while minimizing impacts to the WTP. Exhibit 4 below shows the preliminary design of the 30" sanitary sewer force main. At the City's direction, CPH will specify to either demolish and remove, abandon in place, or grout fill the old sewer force main.



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#### **VALUE ENGINEERING**

CPH will prepare Preliminary Opinion of Construction Costs (OPCC) during 30% design phase to include in the PDR. This estimate will update the City on the proposed construction costs based on the most recent cost data from FDOT and CPH's recent construction projects in South Florida. CPH will review methods of construction and propose open cut along with the best alternative construction method for the City to review with the PDR.

#### DEWATERING

Depending on the water level displayed in the geotechnical report, and the selected method of construction, CPH is available to assist in obtaining a Broward County dewatering permit if needed. If the water table in this area is high, it is recommended the raw water main be installed by HDD to minimize any dewatering which may be needed. Otherwise, standard stormwater pollution prevention best practices will be maintained throughout the project area.

#### MAINTENANCE OF TRAFFIC

Maintenance of Traffic (MOT) will be a very important design element to ensure residential/business access throughout the life of the project. Access to each road and driveway will need to be maintained at all times during construction. CPH's transportation division includes four licensed Professional Engineers who maintain the FDOT Advanced MOT certification. Detailed MOT plans, with specific public notification and property owner coordination requirements will be critical to administer prior to and during construction to prevent any grievances with the residents. The MOT plan will be phased accordingly with construction plans and will be updated throughout construction of the phases to ensure no residential concerns arise.

#### RESTORATION

A critical aspect of any construction project within a City ROW is to minimize damage during construction to driveways, vegetation, and the roadway. As part of design, CPH will incorporate these components to minimize impacts, as well as include notations on plan to restore the landscape/hardscape of the area to like/better conditions. CPH is available to attend public outreach meetings to determine and address neighborhood concerns. CPH's in-house landscape architects are available, if needed, to create landscape restoration plans to meet the needs of the project. During the PDR review meeting with the City, CPH will discuss the different methods of repaving and restoration to include in the remaining design.

#### QA/QC

All projects are reviewed throughout the design phase and prior to each submittal to the City. QA/QC will be led by Gerald M. Cox, CGC, CUC who has over 38 years of experience. After the design team is assembled, an internal meeting will be held with Mr. Cox and one of CPH's Sr. CEI Engineers. The design team presents the project to QA/QC team members prior to their evaluation. Following the review, a follow-up meeting with the design team is set to discuss any project concerns, design questions, and subsequent redlines outlining required edits. These edits are incorporated into the design set and submitted to the City as a quality submittal.

#### **POST-DESIGN SERVICES**

After design and permit is complete, CPH will be available to assist the City throughout the Bidding, Construction, and Certification of Completion of the project. CPH's approach to Construction, Engineering, and Inspection (CEI) services, is to have a dedicated Sr. Inspector and Construction Manager assigned to the project. CPH assumes CEI services will include but not be limited to:

- Conduct Pre-Construction Meeting
- Review and Approve Shop Drawings
- Review RFI's and Potential Change Orders
- Conduct Progress Meetings
- Review Pay Applications
- On-Site Inspections for 20 Hours Per Week
- Perform Substantial Inspections
- Review As-Builts
- Final Punch-List Walks
- Permit Close-Out and Certification of Final Completion

The Inspection and Construction Manager will give the EOR/Project Manager updates at the beginning of each week, indicating any lapses in schedule, unforeseen conditions, or potential critical path delays. The EOR will update the City's Project Manager immediately if any potential delays or lapses in the schedule are noticed.

All construction documents, permits, and stamped plans are logged and filed electronically for easy access during construction.

#### **PROJECT SCHEDULE**

CPH will develop a project schedule during the 30% design phase. The schedule will include full design, permitting, and construction time-line. The schedule will be reviewed with the City to ensure it will meet the needs of the project. CPH currently estimates a design schedule of 6 months for data collection and 100% design, depending on if additional survey is required. Permitting will take approximately 4 months. We envision this schedule being reduced by making early contact with the permitting agencies to review concerns and if required, early submittal of the FDEP permit application at the 60% completion stage in order to start the permitting as soon as possible. CPH will evaluate the project after the 60% design meeting with the City to determine if permitting can be further expedited by submitting the ROW permits as soon as possible. How we ensure the schedule is met is to develop a schedule at the start of the project, containing specific submittal dates to the City, permitting agencies, and a commitment of CPH personnel working on the project in order to ensure the submittal dates are met. The schedule with dates would be provided to the City, and we would communicate status to the City throughout the project to keep the Project Manager apprised of upcoming submittal dates and our status. With over 220 employees in our local offices, we have the manpower available to meet the submittal dates that we commit to in our schedule. CPH's team for this project has the availability to meet this schedule, along with the City's other potential utility projects. Our upfront, in-depth knowledge of each project will ensure we maintain our schedule and meet the envisioned milestone dates.

#### CONCLUSION

As a multi-discipline engineering, surveying, and architectural firm, CPH has the experience to complete the raw water supply line and sewer main design to meet and exceed the City's expectations and needs, all with budget and long-term maintenance in mind. Our in-house Civil, Environmental, and Transportation engineers and landscape architects have been working together for over 15 years and have an unsurpassed amount of experience with similar projects.



## TAB 8. ADDITIONAL INFORMATION



City of Casselberry

Public Works Director

95 Triplet Lake Drive, Casselberry, Florida 32707 • Telephone (407) 262-7725, Ext. 1234 Fax (407) 262-7767 • Email mgisclar@casselberry.org

December 9, 2013

David A. Gierach, PE, CGC President CPH Engineers, Inc. 500 West Fulton Street Sanford, FL 33807

Dear David,

The City of Casselberry is nearing completion of the largest potable water distribution pipe replacement projects it has ever undertaken, the Casselberry Water Quality Improvement Project. This project is the largest asbestos cement (AC) pipe bursting project of its kind in the country, replacing thirty five (35) miles of AC pipe with HDPE pipe through pipe bursting. The City initially approached this project with the concept of minimizing the design work at the beginning of the project and maximizing the use of construction engineering inspection during actual construction of the project. The trenchless technology, pipe bursting, allows the project concept to be accomplished successfully but someone even more integral to the success of the project has been one of your staff, Lawrence Pultz.

CPH Engineers started its involvement in the Casselberry Water Quality Improvement Project as a sub-contractor to another engineering firm that performed the majority of the project. Lawrence's initial role was to perform short duration services when the primary inspector could not perform the services. Lawrence inherited complete ownership of the Casselberry Water Quality Improvement projects in the middle of the project and has fully embraced overseeing every aspect of the project.

Lawrence is one of the most dedicated individuals I have had the pleasure of working with. On many occasions, the contractors work forces were unable to perform the work required for the project during normal working hours and the crews were stuck on the job site well into the late evening and early mornings. On every occasion, Lawrence worked directly with the crews to ensure the highest level of construction quality and safety on the project. This dedication establishes a working relationship with everyone on the project that is genuine and directly leads to considerable project success.

www.casselberry.org

Since Lawrence is fluent in Spanish as well as English, his direct communication with the construction crew far supersedes the contractor's foreman and superintendents. This communication ensures every member of the construction team performs the highest quality work possible on the project and no short cuts are taken by any individuals on the construction team. It also enables Lawrence to have a direct influence on every detail of the project, from minute construction details to overall project management and performance.

Lawrence has so successfully managed construction of the Casselberry Water Quality Improvement Projects that the City realized an incredible opportunity of having Lawrence provide construction oversight for several other projects with similar scope being performed by the same contractor during the same schedule and approximate location of the Casselberry Water Quality Improvement Project. Lawrence easily juggled the additional projects with the same dedication he maintains with all his work.

The characteristics Lawrence has displayed while working for the City of Casselberry speaks directly to his character, integrity and person. Not only has Lawrence been successful at performing his engineering and inspection duties, he has done so with a personal touch that makes a direct connection with everyone on the project. These traits clearly outline why Lawrence has been integral in the success of the Casselberry Water Quality Improvement Project.

The City truly appreciates working with CPH Engineers and Lawrence Pultz on a very successful unique project and look forward to continued success on many more projects in the future.

Sincerely,

Mark DJGisclar Public Works Director

Cc: Randy Newlon, City Manager Edward Alan Ambler, P.E., Water Resources Manager Dave Lankford, Utility Infrastructure Superintendent Lawrence Pultz, P.E.

www.casselberry.org

21 West Church Street Jacksonville, Florida 32202-3139

January 20, 2017

Re: CPH, Inc.



ELECTRIC

WATER

SEWER

To Whom-It-May-Concern:

It is my pleasure to provide CPH, Inc. (CPH) with this letter of recommendation. CPH provided engineering services to JEA for the Ponce de Leon Water Treatment Plant (WTP) Pump Building and Reservoir Replacement project, which was constructed in 2016.

The Ponce De Leon WTP is located near the Atlantic Ocean in St. Johns County; its abovegrade metallic tank, equipment and piping had subsequently corroded due to the marine environment. The facility had a permitted capacity of 0.865 MGD and the project included replacement of a 500,000 gallon ground storage tank with aerator, three high service pumps and a new sodium hypochlorite system along with a new building and associated piping and electrical equipment. The new equipment was specified with materials suitable for the marine environment.

CPH has also developed a Project Definition, which included the background, justification, scope, cost, and schedule for upgrading the existing Otter Run Water Treatment Plant in Nassau County. CPH is currently designing the plant's upgrades, including removal and replacement of the high service pumps, above-ground storage tanks, aerator, sodium hypochlorite system, building and electrical equipment.

The CPH team is professional, innovative, resourceful, and responsive. Their designs have been efficient, effective and delivered on-time. JEA welcomes the opportunity to work with CPH on future projects.

Please feel free to contact me at (904) 665-4028 or <u>vuhx@jea.com</u> if you would like to discuss any of the above information.

Sincerely,

Alai V. Vn

JEA Hai X. Vu, P.E. Manager, Water Plants Engineering and Construction



January 13, 2017

RE: CPH, Inc.

To Whom It May Concern:

The City of Palm Coast has used the services of CPH, Inc. (CPH) since before our incorporation in 1981, and can attest to the firm's high standards for innovative and functional designs, responsive services and a steadfast commitment to quality projects. They have designed both water and wastewater facilities throughout the City and they have provided exceptional project management services for the majority of the City's large-scale utility projects.

CPH completed the design in 2015 for the City of Palm Coast WWTP No. 2. The WWTP No. 2 provides advanced treatment of wastewater (AWT) using the Membrane Bioreactor (MBR) technology. The process includes pre-treatment, flow equalization basins, anaerobic basins, pre-anoxic basins, aeration basins, post anoxic basins, MBR basins, disinfection basins, and sludge dewatering. The plant is rated at an initial capacity of 2.0 MGD expandable to 6.0 MGD. CPH assisted the City in obtaining a SRF loan of **\$30.1 Million at an interest rate of 0.67% for the construction of the WWTF No. 2, the associated sewage force main/pump station, and the reclaimed water backup discharge system.** CPH designed and permitted a wetlands discharge system for backup and wet weather disposal along with a regional reclaimed water system serving throughout the City.

In addition to the WWTP No. 2 improvements, CPH recently completed the Water Treatment Plant No. 2 Nanofiltration Concentrate Discharge AO Compliance Study. FDEP issued an AO requesting the Palm Coast devise alternative disposal methods replacing and terminating the existing discharge to the Royal Palm Canal. CPH assisted the City and evaluated 12 options to develop the Zero Liquid Discharge (ZLD) process.

Through our extensive working relationship with CPH, we have found that they have given us excellent, prompt and timely services with sensitivity to construction budgets and schedules. The City has been pleased with the efforts of CPH in all the projects they have undertaken. I have complete confidence that our experience with CPH is reflective of the level of service and satisfaction others can expect.

Should you like to discuss any of the information above please do not hesitate to contact me.

Sincerely,

Richard Adams Utility Director

2 Utility Drive • Palm Coast, FL 32137 • TEL: (386) 986.2350 • FAX: (386) 986.2391

BidSync

PSUT-20-01

January 13, 2017

City of Sanford/City Hall 300 North Park Avenue Sanford, FL 32771-1244

To Whom It May Concern:

It is my pleasure to provide CPH, Inc. (CPH) with this letter of recommendation. CPH has worked with the City of Sanford since 1958 and has retained the distinction of being the City's consulting utility engineer. The staff is innovative, professional, reliable, resourceful, and responsive. CPH has worked alongside the City in anticipating future growth and building the utility infrastructure to accommodate that growth. They have designed both water and wastewater facilities throughout the City and they have provided exceptional project management services for the majority of the City's large-scale utility projects. In addition, CPH has provided us with extensive consulting and engineering services for projects that include landscape architecture, roadway, streetscape design, drainage, recreational facility projects and many other projects involving our municipal buildings and facilities.

CPH completed the design in 2016 of the Sanford North WRF - Biological Nutrient Removal Expansion (BNR) project. The Sanford North WRF IFAS BNR improvements consisted of the following infrastructure: (1) new RAS/WAS pumping systems; (2) primary anoxic basins (2-stage); (3) wastewater step-feed process; (4) aerobic basins; (5) deoxygenation basins; (6) secondary anoxic basins; (7) reaeration basins; (8) turbo blowers (5 units); (9) chemical and supplemental carbon storage/handling facilities; (10) aerobic digestion system improvements; (11) internal recycle systems; and (12) various buildings. The facility meets all TN and TP mandated effluent limitations.

CPH also recently provided design improvements to the City of Sanford's Water Treatment Plant No. 2. The improvements were designed to remove the organics from the raw water, which were identified as precursors of disinfection by-products (TTHM's). The project was constructed in 2014. The improvements were part of an overall project being funded through FDEP # DW590120, to comply with the stage 2 of the Disinfection By-Products Rule.

CPH provided master planning and design services for the City of Sanford's regional water/wastewater/reclaimed master plan. CPH was pivotal in forming the business model for the regional reclaimed system, and drafting the agreements and reaching consensus among the parties.

In addition, CPH upgraded biosolids treatment to include thermaer system followed by solar dryer to produce a marketable product. This is a new cost-effective biosolids disposal method that reduces cost and potentially increases revenue.

City officials and staff members have been pleased with the cost, quality, timeliness and responsiveness from the principals and staff members of CPH. The City of Sanford has a strong commitment to CPH and will continue to rely on the firm as the City continues to grow. We highly recommend CPH for any engineering services you might require.

Should have any specific questions about the information above please do not hesitate to contact me.

Sincerely,

Bila Iftikhar, P.E./Public Works Director



Michael Parker Public Works Director 220 North Tubb Street P.O. Box 98 Oakland, Florida 34760-0098 T > 407.427.8835 F > 407.656.2940 E > <u>publicworks@oaktownusa.com</u>

January 9, 2014

Re: Oakland Water System Improvements

To Whom It May Concern:

It is my pleasure to provide CPH, Inc. (CPH) with this letter of recommendation. The staff is innovative, professional, reliable, resourceful, and responsive. We can attest to the firm's high standards for functional designs and a steadfast commitment to quality projects.

The Town of Oakland retained the services of CPH for the design of the Town's Water System Improvements Project. The improvements include installing a 0.500 million gallon ground storage tank and high service pumps to increase the water pressure in the distribution system and provide additional storage for fire flow needs. The project also includes replacement of the raw water main from the off-site well, on-site piping, a 350 square-foot electrical/pump building, and SCADA upgrade and improvements. CPH was able to obtain a FDEP SRF loan for \$1.973 Million to install the water system improvements.

In addition, because the project was located at an existing Town park, public involvement was an important part to the success of the project. In a public meeting, CPH was able to present park renderings that showed extensive landscape architecture around the tank to help screen it from the public as much as possible, and showed the existing passive park as an active park, including a future splash pad. The Town Commission approved the concept that night with public input, and CPH has since designed, permitted, and bid the project for the Town. The project is currently in the construction phase.

1 am confident that our favorable experience with CPH is reflective of the level of service and satisfaction that others can expect, and I highly recommend them to fulfill your project needs. If you have any questions please do not hesitate to contact me.

Sincerely

Mike Parker Public Works Director

#### Supplier: CPH, Inc.

#### **CONTACT INFORMATION FORM**

IN ACCORDANCE WITH "PSUT-20-01" titled "Design & Post Design Services: Raw Water Supply Line (Between Water Treatment Plant and Eastern Wellfield) & 30" Force Main Relocation" attached hereto as a part hereof, the undersigned submits the following:

#### **A) Contact Information**

The Contact information form shall be electronically signed by one duly authorized to do so, and in case signed by a deputy or subordinate, the principal's properly written authority to such deputy or subordinate must accompany the proposal. This form must be completed and submitted through www.bidsync.com as part of the bidder's submittal. The vendor must provide their pricing through the designated lines items listed on the BidSync website.

#### **COMPANY INFORMATION:**

COMPANY: CPH, Inc.

STREET ADDRESS: 1992 SW 1st Street

CITY, STATE & ZIP CODE: Miami, FL 33135

#### PRIMARY CONTACT FOR THE PROJECT:

NAME: Todd H. Hendrix, P.E., CGC TITLE: Sr. Vice President

E-MAIL: info@cphcorp.com

TELEPHONE: 305.274.4805 FAX: 305.274.4807

#### **AUTHORIZED APPROVER:**

NAME: Nikhel Jindal TITLE: Vice President / Associate

E-MAIL: info@cphcorp.com

TELEPHONE: 407.322.6841 FAX: 407.330.0639

SIGNATURE: Nikhel Jindal

#### B) Proposal Checklist

1) Did you make sure to submit the following items, as stated in section 1.6 "Proposal Requirements" of the bid package?

| Part A   |       |
|--|-------|
| Title Page   | Yes 🗹 |
| Tab 1 - Letter of Interest, signed by a corporate officer.     | Yes 🗸 |
| Part B   | L     |
| Tab 2 – Standard Form 330 (Parts I and II)                     | Yes 🗌 |
| Tab 3 – Certified Minority Business Enterprise                 | Yes 🗌 |
| Tab 4 - Other Completed Documents                              | Yes 🗌 |
| 1. Attachment A - Contact Information Form                     | Yes 🗹 |
| 2. Attachment B - Non-Collusive Affidavit                      | Yes 🗹 |
| 3. Attachment C - Proposer's Qualification Statement           |       |
| 4. Attachment F - References Form                              | Yes 🗌 |
| Tab 5 – Professional Registration Certificates                 | Yes 🗌 |
| Part C   |       |
| Tab 6 – Ability of Professional Personnel                      | Yes 🗹 |
| Tab 7 – Past Performance                                       | Yes 🗹 |
| Tab 8 – Willingness to meet time and budget requirements       | Yes 🗹 |
| Tab 9 – Location   | Yes 🗹 |
| Tab 10 – Recent, current, and projected workloads of the firms | Yes 🗹 |
| Tab 11 – Firm's Understanding and Approach to the Work         | Yes 🗹 |

2) Did you make sure to update the following documents found under the "Vendor Registration" group of "Qualifications" on the BidSync website for the City of Pembroke Pines?

| Vendor Information Form                               | Yes 🗹 |
|---|-------|
| Form W-9 (Rev. October 2018)                          | Yes 🗹 |
| Sworn Statement on Public Entity Crimes Form          | Yes 🗹 |
| Local Vendor Preference Certification                 | Yes 🗹 |
| Local Business Tax Receipts                           | Yes 🗹 |
| Veteran Owned Small Business Preference Certification | Yes 🗹 |
| Equal Benefits Certification Form                     | Yes 🗹 |
| Vendor Drug-Free Workplace Certification Form         | Yes 🗹 |
| Scrutinized Company Certification                     | Yes 🗹 |

#### Supplier: CPH, Inc.



Attachment B

#### **NON-COLLUSIVE AFFIDAVIT**

#### BIDDER is the Vice President / Associate,

(Owner, Partner, Officer, Representative or Agent)

BIDDER is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;

Such Bid is genuine and is not a collusive or sham Bid;

- Neither the said BIDDER nor any of its officers, partners, owners, agents, representative, employees or parties in interest, including this affidavit, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other BIDDER, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted; or to refrain from bidding in connection with such Contract; or have in any manner, directly or indirectly, sought by agreement or collusion, or communications, or conference with any BIDDER, firm, or person to fix the price or prices in the attached Bid or any other BIDDER, or to fix any overhead, profit, or cost element of the Bid Price or the Bid Price of any other BIDDER, or to secure through any collusion conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Contract;
- The price of items quoted in the attached Bid are fair and proper and are not tainted by collusion, conspiracy, connivance, or unlawful agreement on the part of the BIDDER or any other of its agents, representatives, owners, employees or parties in interest, including this affidavit.

Printed Name/Signature Nikhel Jindal, GCC

Title Vice President / Associate

Name of Company CPH, Inc.

#### Supplier: CPH, Inc.



Attachment C

#### PROPOSER'S QUALIFICATIONS STATEMENT

PROPOSER shall furnish the following information. Failure to comply with this requirement will render Bid non - responsive and shall cause its rejection. Additional sheets shall be attached as required.

PROPOSER'S Name and Principal Address:CPH, Inc.500 West Fulton Street, Sanford, FL 32771

PROPOSER'S License Number: CA3215 (Please attach certificate of status, competency, and/or state registration.)

Number of years your organization has been in business 38

State the number of years your firm has been in business under your present business name 6

State the number of years your firm has been in business in the work specific to this solicitation: 38

Names and titles of all officers, partners or individuals doing business under trade name: **President / Principal / Controlling Shareholder / Co-Treasurer David A. Gierach, P.E., CGC** 

Chief Executive Officer / Principal/Controlling Shareholder / Co-Treasurer Kamran Khosravani, P.E.

Executive Vice President/Associate Peter-John F. Sutch, P.E., LEED AP

Sr. Vice Presidents/Associates Jeffrey M. Satfield, P.E. Carlos J. Sanchez, P.E. David E. Mahler, P.E. Todd H. Hendrix, P.E. Brett Markovitz Wade P. Olszewski, P.E. Thomas J. Galloway, PSM Jason L. Toole, P.E., LEED AP

Vice Presidents/Associates James K. Winter, RLA, CLARB Javier E. Omana, CNU-a N. Katriina Bowman, P.E., CCS Leopoldo J. Ayala, P.E. David A. Terwilleger, P.E., CGC **Benjamin M. Fries** H. Lawrence Wray, P.E. Alan R. Carpenter, P.E. Amy E. Daly, LEED AP Ben C. Buencamino Scott A. Breitenstein, P.E. Gerald M. Cox, CGC, CUC **Randall L. Roberts, PSM** John A. Baer, AIA, NCARB, LEED AP, BD+C, GGP Carlos L. Gonzalez, P.E. Kurt R. Luman, Jr., P.E. Josh A. Bryant, P.E., LEED AP Nicole E. Cianchetti, P.E. Nikhel Jindal, GCC Jeremiah D. Owens, P.E., CFM James R. Morris, Jr., P.E. Ismail Ilker Uzun, AIA, LEED AP BD+C Jose M. Ortiz, MCE, P.E. Rocco R. Nasso, P.E. Yinhui (Lucida) Xu, Ph.D., P.E., BCEE

### IF USING A FICTITIOUS NAME, SUBMIT EVIDENCE OF COMPLIANCE WITH FLORIDA FICTITIOUS NAME STATUTE.

Under what former name has your business operated? Include a description of the business. Failure to include such information shall be deemed to be intentional misrepresentation by the City and shall render the proposer non-responsive.

CPH Engineers, Inc. (1998-2013) Conklin, Porter, & Holmes (1981-1998)

At what address was that business located? 500 West Fulton Street, Sanford, FL 32771

Name, address, and telephone number of surety company and agent who will provide the required bonds on this contract:

#### Mark E. Jackson 2208 Hillcrest Street, Orlando, FL 32803 Phone: 321.445.1117

Have you ever failed to complete work awarded to you. If so, when, where and why? **No** 

Have you personally inspected the proposed WORK and do you have a complete plan for its performance?

Yes

Will you subcontract any part of this WORK? If so, give details including a list of each sub-contractor(s) that will perform work in excess of ten percent (10%) of the contract amount and the work that will be performed by each subcontractor(s).

## CPH does not anticipate, at this time, to utilize subcontractors that will perform in excess of 10% of the contact amount.

The foregoing list of subcontractor(s) may not be amended after award of the contract without the prior written approval of the Contract Administrator, whose approval shall not be reasonably withheld.

List and describe all bankruptcy petitions (voluntary or involuntary) which have been filed by or against the Proposer, its parent or subsidiaries or predecessor organizations during the past five (5) years. Include in the description the disposition of each such petition.

N/A

List and describe all successful Bond claims made to your surety (ies) during the last five (5) years. The list and descriptions should include claims against the bond of the Proposer and its predecessor organization(s).

N/A

List all claims, arbitrations, administrative hearings and lawsuits brought by or against the Proposer or its predecessor organizations(s) during the last (10) years. The list shall include all case names; case, arbitration or hearing identification numbers; the name of the project over which the dispute arose; and a description of the subject matter of the dispute.

The following case is still in process:

City of Fernandina Beach vs. CPH Engineers, Inc. et al Case No. 2014-CA-343 Division: CA; Policy No. RDP0018939

**Origination Date – December 2014** 

The City of Fernandina Beach filed suit in relation to a subdivision which had two streets having groundwater flowing over the curb and draining into the street for a distance of about fifty yards on each street. The subdivision was designed by another engineer and CPH assisted the developer during construction. The project was built eight years ago and only recently has the problem occurred. CPH is investigating the matter and it appears a new pond was built in the area and the outfall of the storm system is not functioning correctly. We are working with the City to resolve the issue; however, CPH was not the original Design Engineer nor did this issue occur until many years after project completion; therefore, CPH does not feel that we are liable on either of these counts and the City has agreed and a release is being prepared.

The following cases have all been settled:

Oceanside at Beverly Beach Condominium Association, Inc. vs. CPH Engineers, Inc. et al Case No. 2012-CA-001020 WEMED No. 08662-02316; Policy No. USS 10 20263 Origination Date - August 2010 Settlement Date - September 2013 CPH Engineers, Inc. was named as one of twenty defendants in a suit by Oceanside at Beverly Beach Condominium Association, Inc. The Developers went into bankruptcy and the project was never completed. The Developers owed in excess of \$1 million to the General Contractor, subcontractors, and consultants including CPH Engineers, Inc. The suit is for damages in excess of \$1,005,000. All damages claimed are related to the lack of maintenance for an ocean front condominium or punch list items not completed due to lack of payment to all Defendants. In order to avoid defense costs and in order to obtain a future full indemnity, this case was settled in September 2013 and CPH paid \$45,000 as part of an overall settlement. In addition, the Condominium Association has agreed to indemnify CPH from any future claims from any parties.

Posen Construction Inc. vs. Lee County, CPH, et al. – Liberty File No. AESPC002759 Origination Date - November 2011 Settlement Date - May 2013

CPH was one of the parties being sued by Posen Construction, Inc. for negligence. CPH provided the utility relocation design plans for Lee County along Summerlin Road between Cypress Lake Drive and Boy Scout Road. The plans were developed using the survey and roadway design plans provided by Lee County. CPH used this information to determine utility conflict information and, in coordination with Lee County Utilities, design new facilities that were not in conflict with the proposed roadway improvements. As part of the installation of the new facilities, the existing pipelines were to be either abandoned in place or removed as called out on the design plans. Posen's assertion of negligence is hinged on encountering asbestos cement pipe. CPH was not responsible for any survey or field investigation to verify piping materials. This information was provided to CPH by the County. According to the Plans and Specifications, the Contractor, Posen, was responsible for the verification of the pipe and notification of any issues to the County. Accordingly, CPH filed to have the suit dismissed based on this fact. This case was dismissed in May 2013.

Rivera v. CPH, et.al. B&A File No. 287-023 (WAL-MART) Case No. 10CA3325AN Origination Date - May 2010 Settlement Date - June 2011

CPH was sued by Sasha D. Rivera for defects in the design of a parking lot and intersection at a Wal-Mart store located in Osceola County. The plaintiff alleges that a stop sign obstructed by a tree was the cause of a car accident in which her mother was a passenger and who died due to injuries sustained in the accident. The driver of the vehicle was convicted of vehicular homicide due to the fact that she was operating the vehicle while intoxicated and under the influence from snorting computer aerosol spray. The design of the parking lot is not the proximate cause of the accident; therefore, CPH had no liability. This case was settled for \$10,000 to avoid the cost of litigation.

List and describe all criminal proceedings or hearings concerning business related offenses in which the

Proposer, its principals or officers or predecessor organization(s) were defendants.

N/A

Are you an Original provider sales representative distributor, broker, manufacturer other, of the commodities/services proposed upon? If other than the original provider, explain below. **Original Provider** 

Have you ever been debarred or suspended from doing business with any governmental agency? If yes, please explain:

No

Describe the firm's local experience/nature of service with contracts of similar size and complexity, it the previous three (3) years:

CPH has provided services for the following similar contracts in the last three (3) years: City of Miramar – Huntington Wellfield and Raw Water Main (2018-Ongoing); Cross Key Wastewater Treatment Plant (2019 – Ongoing).

The PROPOSER acknowledges and understands that the information contained in response to this Qualification Statement shall be relied upon by CITY in awarding the contract and such information is warranted by PROPOSER to be true. The discovery of any omission or misstatement that materially affects the PROPOSER's qualifications to perform under the contract shall cause the CITY to reject the Bid, and if after the award, to cancel and terminate the award and/or contract.

#### CPH, Inc.

(Company Name)

Nikhel Jindal, GCC (Printed Name/Signature)

#### Supplier: CPH, Inc.

#### **REFERENCES FORM**

Provide specific examples of similar contracts. References should be capable of explaining and confirming your firm's capacity to successfully complete the scope of work outlined herein. <u>This form should be duplicated for each reference and any additional information that would be helpful can be attached.</u>

#### **Reference Contact Information:**

Name of Firm, City, County or Agency:

Address:

City/State/Zip:

Contact Name: Title:

E-Mail Address:

Telephone: Fax:

#### **Project Information:**

Name of Contractor Performing the work:

Name and location of the project:

Nature of the firm's responsibility on the project:

Project duration: Completion (Anticipated) Date:

Size of project: Cost of project:

Work for which staff was responsible:

Contract Type:

The results/deliverables of the project:

#### **REFERENCES FORM**

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Name and location of the project:
Nature of the firm's responsibility on the project:

Project duration: Completion (Anticipated) Date:

Size of project: Cost of project:

Work for which staff was responsible:

Contract Type:

The results/deliverables of the project:

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Name of Firm, City, County or Agency:

Address:

City/State/Zip:

Contact Name: Title:

E-Mail Address:

Telephone: Fax:

## **Project Information:**

Name of Contractor Performing the work:

Name and location of the project:

Nature of the firm's responsibility on the project:

Project duration: Completion (Anticipated) Date:

Size of project: Cost of project:

Work for which staff was responsible:

Contract Type:

The results/deliverables of the project:



# VENDOR DRUG-FREE WORKPLACE CERTIFICATION FORM

### SECTION 1 GENERAL TERM

Preference may be given to vendors submitting a certification with their bid/proposal certifying they have a drug-free workplace in accordance with Section 287.087, Florida Statutes. This requirement affects all public entities of the State and becomes effective January 1, 1991. The special condition is as follows:

**IDENTICAL TIE BIDS** - Preference may be given to businesses with drug-free workplace programs. Whenever two or more bids that 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 drugfree workplace program shall be given preference in the award process. Established procedures for processing tie bids 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 employees 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 each 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 this section.

## SECTION 2 AFFIRMATION

Place a check mark here only if affirming bidder **<u>complies fully</u>** with the above requirements for a Drug-Free Workplace.

Place a check mark here only if affirming bidder does not meet the requirements for a Drug-Free Workplace.

Failure to complete this certification at this time (by checking either of the boxes above) shall render the vendor ineligible for Drug-Free Workplace Preference. This form must be completed by/for the proposer; the proposer <u>WILL NOT</u> qualify for Drug-Free Workplace Preference based on their sub-contractors' qualifications.

CPH. Inc.

Company Name

David A. Gierach, P.E., CGC

Authorized Signature

Authorized Signer Name



## EQUAL BENEFITS CERTIFICATION FORM FOR DOMESTIC PARTNERS AND ALL MARRIED COUPLES

Except where federal or state law mandates to the contrary, a Contractor awarded a Contract pursuant to a competitive solicitation shall provide benefits to Domestic Partners and spouses of its employees, irrespective of gender, on the same basis as it provides benefits to employees' spouses in traditional marriages.

The Contractor shall provide the City and/or the City Manager or his/her designee, access to its records for the purpose of audits and/or investigations to ascertain compliance with the provisions of this section, and upon request shall provide evidence that the Contractor is in compliance with the provisions of this section upon each new bid, contract renewal, or when the City Manager has received a complaint or has reason to believe the Contractor may not be in compliance with the provisions of this section. Records shall include but not be limited to providing the City and/or the City Manager or his/her designee with certified copies of the Contractor's records pertaining to its benefits policies and its employment policies and practices.

The Contractor must conspicuously make available to all employees and applicants for employment the following statement:

"During the performance of a contract with the City of Pembroke Pines, Florida, the Contractor will provide Equal Benefits to its employees with spouses, as defined by Section 35.39 of the City's Code of Ordinances, and its employees with Domestic Partners and all Married Couples".

The posted statement must also include a City contact telephone number and email address which will be provided to each contractor when a covered contract is executed.

## **SECTION 1 DEFINITIONS**

- Benefits means the following plan, program or policy provided or offered by a contractor to its employees as part of the employer's total compensation package which may include but is not limited to sick leave, bereavement leave, family medical leave, and health benefits.
- 2. Cash Equivalent mean the amount of money paid to an employee with a domestic partner or spouse in lieu of providing benefits to the employee's domestic partner or spouse. The cash equivalent is equal to the employer's direct expense of providing benefits to an employee for his or her spouse from a traditional marriage.
- **3.** Covered Contract means a contract between the City and a contractor awarded subsequent to the date when this section becomes effective valued at over \$25,000 or the threshold amount required for competitive bids as required in section 35.18(A) of the Procurement Code.
- 4. Domestic Partner shall mean any two (2) adults of the same or different sex who have registered as domestic partners with a governmental body pursuant to state or local law authorizing such registration, or with an internal registry maintained by the employer of at



least one of the domestic partners. A contractor may institute an internal registry to allow for the provision of equal benefits to employees with domestic partners who do not register their partnerships pursuant to a governmental body authorizing such registration, or who are located in a jurisdiction where no such governmental domestic partnership registry exists. A contractor that institutes such registry shall not impose criteria for registration that are more stringent than those required for domestic partnership registration by the City of Pembroke Pines.

- 5. Equal benefits means the equality of benefits between employees with spouses and/or dependents of spouses and employees with domestic partners and/or dependents of domestic partners, and/or between spouses of employees and/or dependents of spouses and domestic partners of employees and/or dependents of domestic partners.
- 6. Spouse means one member of a married pair legally married under the laws of any state within the United States of America or any other jurisdiction under which such marriage is legally recognized, irrespective of gender.
- 7. Traditional marriage means a marriage between one man and one woman.

## SECTION 2 CERTIFICATION OF CONTRACTOR

The firm providing a response, by virtue of the signature below, certifies that it is aware of the requirements of Section 35.39 "City Contractors providing Equal Benefits for Domestic Partners and all Married Couples" of the City's Code of Ordinances, and certifies the following (**Check only one box below**):

- A. Contractor currently complies with the requirements of this section; or
- **B.** Contractor will comply with the conditions of this section at the time of contract award; or
- **C.** Contractor will not comply with the conditions of this section at the time of contract award: or
- D. Contractor does not comply with the conditions of this section because of the following allowable exemption (Check only one box below):

**1.** The Contractor does not provide benefits to employees' spouses in traditional marriages;

**2.** The Contractor provides an employee the cash equivalent of benefits because the Contractor is unable to provide benefits to employees' Domestic Partners or spouses despite making reasonable efforts to provide them. To meet this exception, the Contractor shall provide a notarized affidavit that it has made reasonable efforts to provide such benefits. The affidavit shall state the efforts taken to provide such benefits and the amount of the cash equivalent. Cash equivalent means the amount of money paid to an employee with a Domestic Partner or spouse rather than providing benefits to the employee's Domestic Partner or spouse. The cash equivalent is equal to the employer's direct expense of providing benefits to an employee's spouse;



City of Pembroke Pines

**3.** The Contractor is a religious organization, association, society, or any non-profit charitable or educational institution or organization operated supervised or controlled by or in conjunction with a religious organization, association, or society;

**4.** The Contractor is a governmental agency;

The certification shall be signed by an authorized officer of the Contractor. Failure to provide such certification (by checking the appropriate boxes above along with completing the information below) shall result in a Contractor being deemed non-responsive.

COMPANY NAME: CPH, Inc.

AUTHORIZED OFFICER NAME / SIGNATURE:

David A. Gierach, P.E., CGC, President



# LOCAL VENDOR PREFERENCE CERTIFICATION

### SECTION 1 GENERAL TERM

### LOCAL PREFERENCE

The evaluation of competitive bids is subject to section 35.36 of the City's Procurement Procedures which, except where contrary to federal and state law, or any other funding source requirements, provides that preference be given to local businesses. To satisfy this requirement, the vendor shall affirm in writing its compliance with either of the following objective criteria as of the bid or proposal submission date stated in the solicitation. A local business shall be defined as:

- 1. "Local Pembroke Pines Vendor" shall mean a business entity which has maintained a permanent place of business with full-time employees within the City limits for a minimum of one (1) year prior to the date of issuance of a bid or proposal solicitation. The permanent place of business may not be a post office box. The business location must actually distribute goods or services from that location. In addition, the business must have a current business tax receipt from the City of Pembroke Pines.
- OR;
- 2. "Local Broward County Vendor" shall mean or business entity which has maintained a permanent place of business with full-time employees within the Broward County limits for a minimum of one (1) year prior to the date of issuance of a bid or proposal solicitation. The permanent place of business may not be a post office box. The business location must actually distribute goods or services from that location. In addition, the business must have a current business tax receipt from the Broward County or the city within Broward County where the business resides.

A preference of five percent (5%) of the total evaluation point, or five percent (5%) of the total price, shall be given to the **Local Pembroke Pines Vendor(s)**; A preference of two and a half percent (2.5%) of the total evaluation point for local, or two and a half percent (2.5%) of the total price, shall be given to the **Local Broward County Vendor(s)**.

### **COMPARISON OF QUALIFICATIONS**

The preferences established in no way prohibit the right of the City to compare quality of supplies or services for purchase and to compare qualifications, character, responsibility and fitness of all persons, firms or corporations submitting bids or proposals. Further, the preference established in no way prohibit the right of the city from giving any other preference permitted by law instead of the preferences granted, nor prohibit the city to select the bid or proposal which is the most responsible and in the best interests of the city.

## **SECTION 2 AFFIRMATION**

### LOCAL PREFERENCE CERTIFICATION:

- Place a check mark here only if affirming bidder meets requirements above as a Local Pembroke Pines Vendor. In addition, the business must attach a current business tax receipt from the City of Pembroke Pines along with any previous business tax receipts to indicate that the business entity has maintained a permanent place of business for a minimum of one (1) year.
- Place a check mark here only if affirming bidder meets requirements above as a Local Broward County Vendor. In addition, the business must attach a current business tax receipt from the Broward County or the city within Broward County where the business resides along with any previous business tax receipts to indicate that the business entity has maintained a permanent place of business for a minimum of one (1) year.

Version Place a check mark here only if affirming bidder does not meet the requirements above as a Local Vendor.

Failure to complete this certification at this time (by checking either of the boxes above) shall render the vendor ineligible for Local Preference. This form must be completed by/for the proposer; the proposer <u>WILL NOT</u> qualify for Local Vendor Preference based on their sub-contractors' qualifications.

COMPANY NAME: CPH, Inc.

PRINTED NAME / AUTHORIZED SIGNATURE:

and Then

007428



Employee(s)

1

This Local Business Tax Receipt only confirms payment of the Local Business Tax. The Receipt is not a license, permit, or a certification of the holder's qualifications, to do business. Holder must comply with any governmental or nongovernmental regulatory laws and requirements which apply to the business.

The RECEIPT NO. above must be displayed on all commercial vehicles - Miami-Dade Code Sec 8a-276.

\$45.00 07/17/2019 CHECK21-19-062337

For more information, visit www.miamidade.gov/taxcollector



2.

# SWORN STATEMENT ON PUBLIC ENTITY CRIMES UNDER FLORIDA STATUTES CHAPTER 287.133(3)(a).

This sworn statement is submitted CPH, Inc. (name of entity submitting sworn statement) 1.

whose business address is 1992 SW 1st Street, Miami, FL 33135

and (if applicable) its Federal Employer Identification Number (FEIN) is

59-2068806 . (If the entity has no FEIN, include the Social Security

Number of the individual signing this sworn statement: \_\_\_\_\_\_.)

My name is David A. Gierach, P.E., CGC and my (Please print name of individual signing)

relationship to the entity named above is President

- I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida 3. Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid, proposal, reply, or contract for goods or services, any lease for real property, or any contract for the construction or repair of a public building or public work, involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.
- I understand that a "convicted" or "conviction" as defined in Paragraph 287.133(1)(b), 4. Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any 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.
- I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, 5. means:
  - A predecessor or successor of a person convicted of a public entity crime: or 1.
  - An entity under the control of any natural person who is active in the management 2. 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 Cityship 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.

- 6. I understand that a "person" as defined in Paragraph 287.133(1)(e), <u>Florida Statutes</u>, 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, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.
- 7. 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.)

 $\checkmark$  A) Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.

B) The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989, <u>AND</u> (Please indicate which additional statement applies.)

B1) There has been a proceeding concerning the conviction before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order.)

B2) The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order.)

B3) The person or affiliate has not been placed on the convicted vendor list. (Please describe any action taken by or pending with the Department of General Services.)

CPH, Inc.

Bidder's Name

12/12/2019

Signature

CPH, Inc.

Company Name

Date



# SCRUTINIZED COMPANY CERTIFICATION PURSUANT TO FLORIDA STATUTE § 287.135.

| I. David A. Gierach, P.E., CGC, on behalf | <sub>of</sub> CPH, Inc. |   |
|---|-------------------------|---|
| Print Name and Title                      | Company Name            |   |
| certify that CPH, Inc.                    |                         | : |

Company Name

- 1. Does not participate in a boycott of Israel; and
- 2. Is not on the Scrutinized Companies that Boycott Israel list; and
- 3. Is not on the Scrutinized Companies with Activities in Sudan List; and
- 4. Is not on the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List; and
- 5. Has not engaged in business operations in Syria.

Submitting a false certification shall be deemed a material breach of contract. The City shall provide notice, in writing, to the Contractor of the City's determination concerning the false certification. The Contractor shall have ninety (90) days following receipt of the notice to respond in writing and demonstrate that the determination of false certification was made in error. If the Contractor does not demonstrate that the City's determination of false certification was made in error then the City shall have the right to terminate the contract and seek civil remedies pursuant to Florida Statute § 287.135.

Section 287.135, Florida Statutes, prohibits the City from: 1) Contracting with companies for goods or services in any amount if at the time of bidding on, submitting a proposal for, or entering into or renewing a contract if the company is on the Scrutinized Companies that Boycott Israel List, created pursuant to Section 215.4725, F.S. or is engaged in a boycott of Israel; and 2) Contracting with companies, for goods or services over \$1,000,000.00 that are on either the Scrutinized Companies with activities in the Iran Petroleum Energy Sector list, created pursuant to s. 215.473, or are engaged in business operations in Syria.

As the person authorized to sign on behalf of the Contractor, I hereby certify that the company identified above in the section entitled "Contractor Name" does not participate in any boycott of Israel, is not listed on the Scrutinized Companies that Boycott Israel List, is not listed on either the Scrutinized Companies with activities in the Iran Petroleum Energy Sector List, and is not engaged in business operations in Syria. I understand that pursuant to section 287.135, Florida Statutes, the submission of a false certification may subject the company to civil penalties, attorney's fees, and/or costs. I further understand that any contract with the City for goods or services may be terminated at the option of the City if the company is found to have submitted a false certification or has been placed on the Scrutinized Companies with Activities in Sudan list or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List.

David A. Gierach, P.E., CGC

Print Name / Title

and In Signature

CPH, Inc.

Company Name

(OFFICE USE ONLY) Vendor number:



# **Vendor Information Form**

| <b>Operating Name</b> (Payee)            | CPH, Inc.                   |        |                |  |
|--|-----------------------------|--------|----------------|--|
| Legal Name (as filed with IRS)           | CPH, Inc.                   |        |                |  |
| Remit-to Address (For Payments)          | 500 West Fulton Street      |        |                |  |
|  | Sanford, FL 32771           |        |                |  |
|  |                             |        |                |  |
| Remit-to Contact Name:                   | David A. Gierach, P.E., CGC | Title: | President      |  |
| Email Address:                           | info@cphcorp.com            |        |                |  |
| Phone #:                                 | (407) 322-6841              | Fax #  | (407) 330-0639 |  |
| Order-from Address (For purchase orders) | 500 West Fulton Street      |        |                |  |
|  | Sanford, FL 32771           |        |                |  |
| Order-from Contact Name:                 | David A. Gierach, P.E., CGC | Title: | President      |  |
| Email Address:                           | info@cphcorp.com            |        |                |  |
| Phone #:                                 | (407) 322-6841              | Fax #  | (407) 330-0639 |  |
| Return-to Address (For product returns)  | 500 West Fulton Street      |        |                |  |
|  | Sanford, FL 32771           |        |                |  |
| Return-to Contact Name                   | David A. Gierach, P.E., CGC | Title: | President      |  |
| Email Address:                           | info@cphcorp.com            |        |                |  |
| Phone #:                                 | (407) 322-6841              | Fax #  | (407) 330-0639 |  |
| Payment Terms:                           | Net 30                      |        |                |  |

Type of Business (please check one and provide Federal Tax identification or social security Number)

| Corporation   | Federal ID Number:   | 59-2068806   |
|---|----------------------|--------------|
| Sole Proprietorship/Individual                      | Social Security No.: |              |
| □ Partnership                                       |                      |              |
| Health Care Service Provider                        |                      |              |
| LLC – C (C corporation) – S (S corporation) –       | - P (partnership)    |              |
| Other (Specify):                                    |                      |              |
| No. 5 THE CARDING A Gerach P.F. (                   | CGC / President      |              |
| Name & Title of Applicant David A. Olciadi, F.E., C |                      |              |
| Signature of Applicant                              | Date Date            | e 12/12/2019 |
|   |                      |              |



# VETERAN OWNED SMALL BUSINESS (VOSB) PREFERENCE CERTIFICATION

### SECTION 1 GENERAL TERM

### VETERAN OWNED SMALL BUSINESS (VOSB) PREFEREENCE

The evaluation of competitive bids is subject to section 35.37 of the City's Procurement Procedures which, except where contrary to federal and state law, or any other funding source requirements, provides that preference be given to veteran owned small businesses. To satisfy this requirement, the vendor shall affirm in writing its compliance with the following objective criteria as of the bid or proposal submission date stated in the solicitation. A veteran owned small business shall be defined as:

 "Veteran Owned Small Business" shall mean a business entity which has received a "Determination Letter" from the United States Department of Veteran Affairs Center for Verification and Evaluation notifying the business that they have been approved as a Veteran Owned Small Business (VOSB).

A preference of two and a half percent (2.5%) of the total evaluation point, or two and a half percent (2.5%) of the total price, shall be given to the **Veteran Owned Small Business (VOSB)**. This shall mean that if a **VOSB** submits a bid/quote that is within 2.5% of the lowest price submitted by any vendor, the **VOSB** shall have an option to submit another bid which is at least 1% lower than the lowest responsive bid/quote. If the **VOSB** submits a bid which is at least 1% lower than that lowest responsive bid/quote. If the **VOSB**. If not, the award will be made to the vendor that submits the lowest responsive bid/quote. If the lowest responsive and responsible bidder IS a **"Local Pembroke Pines Vendor" (LPPV)** or a **"Local Broward County Vendor" (LBCV)** as established in Section 35.36 of the City's Code of Ordinances, entitled "Local Vendor Preference", then the award will be made to that vendor and no other bidders will be given an opportunity to submit additional bids as described herein.

If there is a LPPV, a LBCV, and a VOSB participating in the same bid solicitation and all three vendors qualify to submit a second bid, the LPPV will be given first option. If the LPPV cannot beat the lowest bid received by at least 1%, an opportunity will be given to the LBCV. If the LBCV cannot beat the lowest bid by at least 1%, an opportunity will be given to the VOSB. If the VOSB cannot beat the lowest bid by at least 1%, then the bid will be awarded to the lowest bidder.

If multiple **VOSBs** submit bids/quotes which are within 2.5% of the lowest bid/quote and there are no **LPPV** or **LBCV** as described in Section 35.36 of the City's Code of Ordinance, entitled "Local Vendor Preference", then all **VOSBs** will be asked to submit a **Best and Final Offer (BAFO)**. The award will be made to the **VOSB** submitting the lowest **BAFO** providing that that **BAFO** is at least 1% lower than the lowest bid/quote received in the original solicitation. If no **VOSB** can beat the lowest bid/quote by at least 1%, then the award will be made to the lowest responsive bidder.

### **COMPARISON OF QUALIFICATIONS**

The preferences established in no way prohibit the right of the City to compare quality of supplies or services for purchase and to compare qualifications, character, responsibility and fitness of all persons, firms or corporations submitting bids or proposals. Further, the preference established in no way prohibit the right of the city from giving any other preference permitted by law instead of the preferences granted, nor prohibit the city to select the bid or proposal which is the most responsible and in the best interests of the city.

### **SECTION 2 AFFIRMATION**

### VETERAN OWNED SMALL BUSINESS (VOSB) PREFEREENCE CERTIFICATION:

Place a check mark here only if affirming bidder meets requirements above as a Veteran Owned Small Business. In addition, the bidder must attach the "Determination Letter" from the U.S. Dept. of Veteran Affairs Center.

Place a check mark here only if affirming bidder does not meet the requirements above as a VOSB.

Failure to complete this certification at this time (by checking either of the boxes above) shall render the vendor ineligible for VOSB Preference. This form must be completed by/for the proposer; the proposer <u>WILL NOT</u> qualify for VOSB Preference based on their sub-contractors' qualifications.

|               | C | Ρ | Н | , | In | C |
|---------------|---|---|---|---|----|---|
| COMPANY NAME: |   |   |   | ' |    |   |

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PRINTED NAME / AUTHORIZED SIGNATURE: David A. Gierach, P.E., CGC

7

| Form <b>W-9</b>  |
|--|
| (Rev. October 2018)                                    |
| Department of the Treasury<br>Internal Revenue Service |

# Request for Taxpayer Identification Number and Certification

► Go to www.irs.gov/FormW9 for instructions and the latest information.

| morna                      |   |   |   |  |  |  |
|----------------------------|---|---|---|--|--|--|
|                            | 1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank  | κ.  |   |  |  |  |
|                            | CPH, Inc.   |   |   |  |  |  |
|                            | 2 Business name/disregarded entity name, if different from above  |   |   |  |  |  |
|                            |   |   |   |  |  |  |
| page 3.                    | 3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Cl following seven boxes.   | 4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): |   |  |  |  |
| e.<br>ns on                | Individual/sole proprietor or C Corporation S Corporation Partnership single-member LLC   | Trust/estate  | Exempt payee code (if any)                        |  |  |  |
| typ<br>tio                 | Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partne   | ership) ▶   |   |  |  |  |
| ruo n                      | Note: Check the appropriate box in the line above for the tax classification of the single-member of  | Exemption from FATCA reporting  |   |  |  |  |
| Print<br>ic Inst           | LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the<br>another LLC that is <b>not</b> disregarded from the owner for U.S. federal tax purposes. Otherwise, a sin<br>is disregarded from the owner should check the appropriate box for the tax classification of its ow | at code (if any)  |   |  |  |  |
| ecif                       | Other (see instructions) ►  |   | (Applies to accounts maintained outside the U.S.) |  |  |  |
| Spe                        | 5 Address (number, street, and apt. or suite no.) See instructions.   | Requester's name a  | and address (optional)                            |  |  |  |
| ee                         | 500 West Fulton Street  |   |   |  |  |  |
| 0                          | 6 City, state, and ZIP code   |   |   |  |  |  |
|                            | Sanford, FL 32771   |   |   |  |  |  |
|                            | 7 List account number(s) here (optional)  |   |   |  |  |  |
|                            |   |   |   |  |  |  |
| Par                        | t I Taxpayer Identification Number (TIN)  |   |   |  |  |  |
| Enter                      | your TIN in the appropriate box. The TIN provided must match the name given on line 1 to a  | void Social sec   | curity number                                     |  |  |  |
| backu<br>reside<br>entitie | p withholding. For individuals, this is generally your social security number (SSN). However,<br>nt alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other<br>is, it is your employer identification number (EIN). If you do not have a number, see How to g                | for a let a   |   |  |  |  |
| TIN, la                    | ater.   | or  |   |  |  |  |
| Note:                      | If the account is in more than one name, see the instructions for line 1. Also see What Name  | e and Employer  | identification number                             |  |  |  |
| Numb                       | er To Give the Requester for guidelines on whose number to enter.   | 59  | - 2 0 6 8 8 0 6                                   |  |  |  |
|                            |   |   |   |  |  |  |

### Part II Certification

Under penalties of perjury, I certify that:

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

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

|              |                               | 11        |                  |  |
|--------------|-------------------------------|-----------|------------------|--|
| Sign<br>Here | Signature of<br>U.S. person ► | Mail Thin | Date ▶12/12/2019 |  |

later.

# **General Instructions**

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

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

### **Purpose of Form**

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

• Form 1099-INT (interest earned or paid)

• Form 1099-DIV (dividends, including those from stocks or mutual funds)

• Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)

• Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)

- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest),
- 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)
  Use Form W-9 only if you are a U.S. person (including a resident)

alien), to provide your correct TIN. If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding,