

December 14, 2023

Via email: jodoms@hallandalebeachfl.gov

Jeff Odoms
Public Works Director
City of Hallandale Beach Public Works Department
630 NW 2nd Street,
Hallandale Beach, Fl 33009

RE: Proposal for the City Engineer Services

Discipline: Civil Engineering

Dear Mr. Odoms:

Please find the proposal for subject project.

SCOPE OF WORK

1. See attached scope of work and fee proposal.

This proposal, when executed, shall be incorporated in and become an integral part of the Agreement of Professional Services between the City and R. J. Behar & Company, Inc., hereafter referred to as the Agreement.

Please do not hesitate to contact me should you have any questions or require any additional information.

Sincerely,

R.J. BEHAR & COMPANY, INC.

Juan H. Vazquez, P.E., PH, BCEE

Vice President

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SCOPE OF SERVICES

Proposal For Interim City Engineer Services

Discipline: Civil Engineering Services

I. Introduction

The City of Hallandale Beach (City) will be requiring City Engineer Services on an As-needed, On-call basis for an interim period of time. The City will indicate when the services are no longer required.

The scope of services includes, but will not be limited to the following groups of tasks:

Group 1: Permits Reviews

- Review Engineering Permit Applications for all types of developments, including circulation, traffic studies, parking, paving, drainage, grading, traffic control, sidewalks, utility installations within the Right of Way, etc. in conformity with City of Hallandale Code of Ordinances and other regulatory agencies.
- Review of Capital Improvement Projects.

Group 2: Developments Review

- Review Site Plans, Minor Reviews, Community Appearance Applications, and Variance Applications for their conformity with Engineering Standards of the Land Development Regulations, as requested by the Planning & Zoning Department.
- Attend Development Review Committee meetings as requested and scheduled by the Planning & Zoning Department.
- Attend Planning & Zoning Board Meetings as requested by the Planning & Zoning Department.

Group 3: Inspections

- Perform final inspections for capital improvement projects as required for certifications of completion.
- Perform other inspections as requested by the Engineering Department.

Group 4: General Consulting Services

- Provide advice and engineering consulting services and represent the City with regulatory agencies as requested by the Engineering Department.
- Represent the City in meeting with agencies such as the Florida Department of Transportation, Broward County, etc.
- Assist with review and management of consultants performing work for the City.

II. Fees

The services will be invoiced on a time and materials basis. The following rates are expected:

Director, Engineering	\$246.00
Project Manager	\$223.00
Project Engineer	\$191.00
Engineer	\$146.00
Construction Manager Director	\$176.00
Construction Manager	\$142.00
Senior Inspector	\$106.00

Rates as established in Exhibit B – Hourly Billing Rates for Task Orders in the CCNA contract between eh City and RJ Behar.

III. Project Manager / City Engineer

Our project manager / City Engineer will be Hans Murzi, PE, CFM. His resume is attached.



EDUCATION

PROJECT MANAGER

M.S. Environmental Engineering, Florida International University, 2002

B.S. Chemical Engineering, University of Los Andes, Merida, Venezuela, 2000

YEARS OF EXPERIENCE 20 Years

YEARS WITH RJ BEHAR 2014 – Present OFFICE LOCATION
Pembroke Pines, Florida

PROFESSIONAL REGISTRATIONS P.E. Florida License No. 67767, 2008 Certified Floodplain Manager Qualified Stormwater Management Inspector

PROFESSIONAL SOCIETIES

- Tao Chi Alpha Environmental Engineers Honor Society
- Water Environment Federation
- American Society of Civil Engineers

ENGINEERING EXPERIENCE

Mr. Murzi is a water resources engineer with experience including hydrologic and hydraulic analysis and modeling of rivers and flood control systems, natural resources restoration projects and watershed management. He has extensive experience in roadway drainage design, drainage field inspections, drainage plan reviews and QA/QC of water resources models and drainage reports. His experience includes the use of several computer programs such as XPSWMM, HECRAS, AdICPR, MIKE SHE/MIKE 11, ASAD, ArcGIS. Mr. Murzi is a Certified Floodplain Manager. He is also member of the ACEC-FL Water Resources Committee. Mr. Murzi serves as one of two District Drainage Engineers for the Central Broward Water Control District.

RELEVANT EXPERIENCE

ENVIRONMENTAL ENGINEERING/UTILITY DESIGN

12 Inch Watermain Replacement at Atlantic Shores, Broward County, Florida - City of Hallandale Beach

Reference: Ms. Joselaine Pateau, Engineer I; (954) 457-1607; jpateau@hallandalebeachfl.gov

Role: Project Manager. The project objective is to design the replacement of an existing 12-in watermain to 16-inch and use PVC. The project's limits are along Atlantic Shores Boulevard between NE 14th Avenue and Tree Island Boulevard. There is a project on Atlantic Shores Boulevard between US-1 to Diplomat Parkway currently under design. That project overlaps with this one between NE 14th Avenue to Diplomat Parkway. The intent is to have the waterline replaced ahead of the Atlantic Shores Boulevard project. The length of the new line is approximately 2,600 feet.

Cost/Fees Paid: \$94,396 Construction Cost: \$1,174,600 (Estimate)

Project #: N/A Project Start: 7/28/2022 Project Complete: Ongoing

Company: R.J. Behar & Company, Inc.

Okeechobee Road 16-Inch Waterline Relocation, Miami-Dade County, Florida – City of Hialeah

Reference: Keisy Oquendo, PE, City of Hialeah Department of Public Works Engineering Department – Water and Sewer; (305) 556-3800 Ext: 2547; ko17405@hialeahfl.gov

Role: Project Manager. As part of FDOT District 6 Project # 436565-1-52-01 for improvements to Okeechobee Road at the Palmetto Expressway, there is a need to adjust and or relocate waterline services due to conflicts with the roadway project. The project includes relocation of approximately 470 ft of 16-inch DIP waterline, 60 ft of 12-inch DIP waterline, and corresponding fittings, sleeves and miscellaneous appurtenances. RJ Behar was contracted by the City of Hialeah to design the relocations, prepare waterline design plans, specifications, and cost estimates. The project will be constructed as part of the roadway construction. **Cost/Fees Paid:** \$34,500 **Construction Cost:** \$326,000 (Estimates)

Project: PO No. 2022-1229 Project Start: 1/12/2022 Project Complete: Ongoing Project Length: TBD

Company: R.J. Behar & Company, Inc.

Waterline Design along NE 16th Avenue, NE 146th Street, and NE 18th Avenue, Miami-Dade County, Florida – City of North Miami

Reference: Mr. Chuks Okereke, PE, City Engineer; 305.893.6511, ext. 15002; cokereke@northmiamifl.gov

Role: Project Engineer. He revised the plans and completed the bid packages for the water line plans, and specifications.

Cost/Fees Paid: \$87,600 Construction Cost: \$904,352

Project #: N/A Project Start: 08/20/2014 Project Complete: 12/2019

Company: R.J. Behar & Company, Inc.

Copans Road Wastewater Transmission System Design, Broward County, Florida – City of Coconut Creek

Reference: Mr. Dany Kabrit, Project Manager; 954-973-6786 Ext #1545; dkabrit@coconutcreek.net



R.J.Behar

Role: Deputy Project Manager/Project Engineer. He was responsible for the plan's preparation, coordination with subconsultants, coordination with utilities, cost estimates and permitting. This phase included a new force main between LS 12 and an existing metering station which conveys flows east along Sample Road to a termination point at the NRWWTP, and a rehabilitated force main from LS 12 to the connection from the Wynmoor Community, just west of the Florida Turnpike. Cost/Fees Paid: \$88,000 Construction Cost: \$2,499,998

Project #: N/A Project Start: 6/06/2017 Project Complete: 12/2020 / Under Construction Project Length: 7,190'

Company: R.J. Behar & Company, Inc.

Reclaimed Waterline Extension - City of Coconut Creek

Reference: Mr. Jean Dupuis, Assistant Director of Utilities & Engineering Department; (954) 956-1545;

JDupuis@coconutcreek.net

Role: Project Engineer. He revised the plans and completed the bid packages and permitting for the reclaimed line plans, and specifications. He also provided services during construction, conducted inspections and prepared the Record Drawings. The project consists of the design for approximately 6,900 LF of a 16" diameter reclaimed waterline for connection to a proposed City reclaimed water main (16") at the southeast corner of Lyons Road and Wiles Road for irrigation of City play fields and green areas. Cost/Fees Paid: \$119,650 Construction Cost: \$1,385,000

Project #: N/A Project Start: 02/03/2014 Project Complete: 02/28/2018

Company: R.J. Behar & Company, Inc.

SITE DESIGN / CIVIL ENGINEERING

Public Works Surface Water License Modifications and Parking Lot Design, Broward County, Florida – City of Hallandale

Reference: Mr. Peter Kunen, PE - City Engineer/ Public Works Assistant Director; (954) 457-3042; pkunen@cohb.org Role: Project Manager – The purpose of this project is for the reconfiguration of the Public Works compound (DPW) to better utilize the existing space. The City desires to fill in the area located in the northwest corner of DPW that is currently occupied by a stormwater retention pond. This area would be used for the city's sanitation fleet vehicles. The scope of services will include design of the new parking lot (geometrics, grading, drainage, lighting) and modification of the existing water surface permit/license. Cost/Fees Paid: \$66.715 Construction Cost: \$1.943.316 (Estimate)

Project: PO No. 20220856-00 Project Start: 2/4/2022 Project Complete: Ongoing Project Length: 9.58 Acres total **Company**: R.J. Behar & Company. Inc.

Revise Milling and Resurfacing for Public Works Parking Lot, Broward County, Florida - City of Coconut Creek Reference: Mr. Dany Kabrit, Senior Project Manager; (954) 973-6786 Ext. #1545; DKabrit@coconutcreek.net

Role: Project Manager responsible for the milling & resurfacing / reconstruction plans for the Public Works parking lot at 4900 W. Copans Road. The City have identified some improvements to the parking lot which includes the addition of curb to some grass islands, bollards to protect light poles, replace an existing sidewalk that is in bad condition, provide a new 8' sidewalk on a green area located on the southeast corner of the Public Works parking lot, replace the existing rubber car stops, remove all anchors from the public works parking. The proposed pavement markings will be the same as existing with the follow modifications: Public works parking lot, provide diagonal parking instead of perpendicular parking on the southeast part of the maintenance building. RJ Behar will provide construction assistance including attending the pre-

Cost/Fees Paid: \$16,907 Construction Cost: \$212,824 (Estimates)

Project: N/A Project Start: 3/2/2022 Project Complete: Ongoing Project Length: TBD

Company: R.J. Behar & Company, Inc.

Civil Engineering Services FY 21-22, Broward County, Florida – City of Pembroke Pines

Reference: Mr. Karl Kennedy, PE, CFM - City Engineer; (954) 518-9040; kkennedy@ppines.com

Role: Project Manager - The project includes the citywide pavement and marking inspections at multiple locations. The projects are miscellaneous services for pavement marking and signing, including poor reflectivity readings; lane lines; edge lines, stop bar, and turn arrows showing similar conditions of poor/inconsistent bead coverage.

Costs/Fees Paid: \$85,000 not to exceed

Project #: N/A Project Start: 9/13/2021 Project Complete: Ongoing Project Length: Varies per project

construction meeting, review shop drawings, respond to RFIs, and nine (9) field inspections during construction.

Company: R.J. Behar & Company, Inc.

Donaldson Park Parking Lot Lighting, Broward County, Florida – City of Coconut Creek

Reference:

Role: Project Manager. The project consists of replacing the existing lighting at the parking lot of Donaldson Park. Cost/Fees Paid: \$9.515 Construction Cost: TBD



Project #: N/A Project Start: 8/10/2022 Project Complete: Ongoing

Company: R.J. Behar & Company, Inc.

Hilton Road Pedestrian Path Lighting, Broward County, Florida – City of Coconut Creek Reference: Mr. Brian Rosen – Project Supervisor; 954-545-6614; brosen@coconutcreek.net

Role: Project Manager. The project consists in replacing the existing pedestrian lighting along Hilton Road, from the parking lot located at the entrance of the pedestrian path to Alexandria Boulevard. Scope of services includes plans, specifications, electrical design, utility coordination, permitting, and cost estimates.

Cost/Fees Paid: \$15,930 Construction Cost: \$69,398 (Estimates)

Project #: N/A Project Start: 6/30/2022 Project Complete: Ongoing Project Length: N/A

Company: R.J. Behar & Company, Inc.

Pedestrian Bridge over the Biscayne Canal, Miami-Dade County, Florida - City of North Miami

Reference: Mohammad Ayub Zaid, Project Manager, 305.893.6511; mzaid@northmiamifl.gov

Role: Project Manager for the replacement of the existing Pedestrian Bridge over the South Florida Water Management District C-8 canal (Biscayne Canal). The new pedestrian bridge will replace the existing pedestrian bridge in its entirety. All existing abandoned utilities currently mounted to the bridge will be removed and no allowance for future utilities will be accommodated on the new bridge. Design services include roadway plans including general construction plan and profile sheets, typical sections, detail sheets, traffic control plans, erosion control details and plans. Bridge design includes to investigate two alternatives considering span configuration, material type and foundation supports for the bridge main span crossing Biscayne Canal. Select main span bridge type, aesthetics, and layout. Determine abutments, retaining walls, and approach span layout for the preferred main span configuration. Prepare preliminary and final plans for the proposed bridge. The scope of work also includes utility coordination, permitting with SFWMD, USACE, and Building Department.

Cost/Fees Paid: \$80.464 Construction Cost: \$650.500 (Estimate)

Project #: N/A Project Start: 10/2020 Project Complete: Ongoing Project Length: N/A

Company: R.J. Behar & Company, Inc.

Pedestrian Lighting Design, Broward County, Florida - City of Coconut Creek

Reference: Mr. Brian Rosen, Project Manager; (954) 973-6781; BRosen@coconutcreek.net

Role: Project Manager. Scope of services consisted of lighting design plans and specifications including field visits, MOT/TCP, lighting design plans, photometric calculations, utility coordination, Broward County permitting, specifications, cost estimate, progress meetings/phase reviews, and quality control.

Cost/Fees Paid: \$57,155 Construction Cost: \$582,000

Project #: Project Started: 3/13/2018 Project Completed: 4/22/2021

Company: R.J. Behar & Company, Inc

Milling and Resurfacing of the Fleet and Police Parking Lots, Broward County, Florida – City of Coconut Creek

Reference: Mr. Dany Kabrit, Project Manager; (954) 973-6786 Ext #1545; DKabrit@coconutcreek.net

Role: Project Manager/Engineer of Record who was responsible for plan preparation, quantities and cost estimates. The improvements to each parking lot included the addition of curb to some grass islands, bollards to protect lighting poles, replacing existing sidewalk that was in bad condition, adding root barriers to the trees in the police parking lot, extending the existing concrete ramp at the gate of the police parking lot to make it less steep, providing a new 8' sidewalk on a green area located on the south east corner of the Public Works parking lot, replacing the existing rubber car stops, removing all anchors from the public works parking. **Cost/Fees Paid:** \$18,500 **Construction Cost:** \$343,000

Project #: N/A Project Start: 11/14/2019 Project Complete: 3/30/2022 Project Length: Parking Lot

Company: R.J. Behar & Company, Inc.

S-40, S41 and S-44 Gate Replacements and Concrete Repairs, Palm Beach County, Florida – South Florida Water Management District (SFWMD)

Reference: Mr. Anthony Rosato, Project Manager; (561) 682-2604; arosato@sfwmd.gov

Role: Project Engineer for civil design and permitting packages (fill and dredge plans). The project consisted of the design, fabrication and installation of new stainless steel vertical lift roller gates and frames for coastal structures S-40, S-41 and S-44; replacing the existing hydraulic hoist systems to a new cable (rope) drum hoist system for structures S-40 and S-41; furnishing and installing riprap at the embankments for structures S-40, S-41 and S-44; and to address civil/structural/mechanical/electrical deficiencies. **Cost/Fees Paid:** \$378,400 **Construction Cost:** \$10,025,033

Project #:100853 Project Start:10/19/2015 Project Complete: 2/20/2020 (bidding) Project Length: Not Applicable

Company: R.J. Behar & Company, Inc.

Milling and Resurfacings Overlay Exhibits, Miami-Dade County, Florida - City of Doral

Reference: Mr. Eugene Collings-Bonfill, PE; (305) 593-6740 Ext. 6017; eugene.collings@cityofdoral.com



Role: Project Manager responsible for providing Milling and Resurfacing Exhibits for seven city street locations. The project is part of the City of Doral's Pavement Maintenance Program.

Cost/Fees Paid: \$12,567 Construction Cost: \$419,082 (Estimate)

Project #: WO 14 Project Start: 01/24/2018 Project Complete: 5/11/2018

Company: R.J. Behar & Company, Inc.

Garage Building Miami, Florida – Florida Department of Health

Role: Drainage Engineer for the design and construction of the drainage system. The garage was constructed on the existing parking lot the Department of Health; the drainage design consisted of modifying the existing drainage and design of the new drainage to serve the new garage.

Project Start: 2012 Project Complete: 2013 Project Length: Not applicable

Company: AECOM (2002 – 2014)

STORMWATER, DRAINAGE AND MODELING

Stormwater Management Master Plan Update, Miami-Dade County, Florida - City of Miami Gardens

Reference: Mr. Bernard Buxton-Tetteh, Assistant Public Works Director; (786) 279-1270; bbuxton-tetteh@miamigardens-fl.gov

Role: Project Manager for the City-wide stormwater management master plan (SWMMP). RJ Behar was contracted by the City of Miami Gardens to update the SWMMP. The City's geographic service area of 20 square miles has been delineated into a total of 165 sub-basins. The primary stormwater management system for the City consists of a series of interconnected canals, swales, ponds, depressional areas, storm sewer and exfiltration systems (French drain) that discharge into the C-8 (Biscayne) Canal and the C-9 (Snake Creek) Canal. Both the C-8 and C-9 Canals outfall to Biscayne Bay. **Cost/Fees Paid:** \$177,783 **Construction Cost**: N/A

Project #: N/A Project Start: 4/09/2020 Project Complete: Ongoing Project Length: N/A

Company: R.J. Behar & Company, Inc.

Stormwater Management Master Plan (SWMMP) Update, Miami-Dade County, Florida – City of North Miami

Reference: Mr. Thomas Positano, CFM, Assistant Director, 305-893-6511, TPositano@northmiamifl.gov

Role: Project Manager for the City-wide stormwater management master plan (SWMMP). RJ Behar was contracted by the City of North Miami to update the SWMMP. The City of North Miami (City), located in the Northeast region of Miami-Dade County, has a population of 61,578 people living in a 9.98 square mile area. Of the City's total land area, approximately 4% is allocated to commercial uses and approximately 3% to light industrial uses. Since its incorporation in 1926, the City has developed and maintained a Primary Stormwater Management System (PSMS) that discharges to various natural and manmade canals tributary to Biscayne Bay, which is listed as a protected Outstanding Florida Water (OFW).

Cost/Fees Paid: \$192,469 Construction Cost: N/A

Project #: N/A Project Start: 5/18/2021 Project Complete: Ongoing Project Length: Not applicable

Company: R.J. Behar & Company, Inc.

Storm Water Quality Report MS4 Cycle 4, Miami-Dade County, Florida - City of Miami Gardens

Reference: Mr. Bernard Buxton-Tetteh, Assistant Public Works Director; 786-279-1270

bbuxton-tetteh@miamigardens-fl.gov

Role: Project Manager for Cycle 4 NPDES Year 4 Stormwater Water Quality Report, period January 1, 2021, through December 31, 2021. This is a requirement of the city's MS4 NPDES permit. The data for the assessment has been collected by Miami-Dade County as part of the Interlocal Agreement with the city.

Cost/Fees Paid: \$8,964 Construction Cost: N/A

Project #: N/A Project Started: 5/31/2022 Project Completed: Ongoing

Company: R.J. Behar & Company, Inc.

Stormwater 20 Year Needs/FDEP Audit Report Corrections, Miami-Dade County, Florida - City of Hialeah

Reference: Mr. Jose Sanchez, Director, Streets Division; (305) 687-2611; josanchez@hialeahfl.gov

Role: Project Engineer - As part of the 2021 regular session, the Legislature recognized the need for a long-term planning process for stormwater and wastewater. Section 403.9302, Florida Statutes, requires a 20-year needs analysis from the local governments providing stormwater services. The City of Hialeah (City) operates a stormwater management program and system under the MS4 Permit issued by the Florida Department of Environmental Protection (FDEP). RJ Behar prepared the Stormwater Needs Analysis, which included the following: Data collection (census data, city maps, current and projected costs for stormwater of services, useful life of major components, annual contributions, other financial information, list of proposed projects, stormwater atlases, etc.); Description of the City's stormwater management system and its facilities; Provide Growth Rate Schedules spreadsheet (using the Office of Economic & Demographic Research) to



estimate the number of current and projected residents served by the stormwater management system and calculate the projections in 5- year increments; Complete the Stormwater Needs Analysis and provide all the backup documentation methodology and supporting data; and prepared a report for the City.

Cost/Fees Paid: \$22,981 Construction Cost: N/A

Project: FLS000023-004 Project Start: 4/15/2022 Project Complete: Ongoing Project Length: TBD

Company: R.J. Behar & Company, Inc.

NW 49th Avenue Drainage Improvement Project, Broward County, Florida – City of Lauderdale Lakes

Reference: Mr. Ronald Desbrunes, P.E., Director of Public Works, 954-535-2778, ronaldd@lauderdalelakes.org

Role: Project Manager/EOR for the study and design improvements at NW 49th Avenue. Scope of services includes roadway design with all necessary components of roadway, parking, and swale restoration. The intent of this project is to alleviate and address the flooding issues. Services include bidding, award, and limited services during construction.

Cost/Fees Paid: \$102,585 Construction Cost: \$964,215 (Estimates)

Project #: N/A Project Start: 11/2021 Project Complete: Ongoing Project Length: 3,200 ft

Company: R.J. Behar & Company, Inc.

NE 3rd Street Drainage Mitigation, Broward County, Florida – City of Hallandale Beach

Reference: Jameka Thompson, Project Manager, 954-457-3030, ithompson@cohb.org

Role: Project Manager to provide roadway and drainage design services for drainage flooding mitigation. The scope of work consisted of constructing new stormwater improvements for NE 1st Avenue and NE 2nd Avenue to improve the flooding problems. The improvements consist of a new collection system, new French drains, milling and resurfacing, paving markings, driveway reconstruction and regrading and sodding of swales. Project scope includes field reviews, data collection, drainage analysis, plans preparation, estimates, specifications, utility coordination, and permitting.

Cost/Fees Paid: \$44,223 Construction Cost: \$974,400 (Estimate)

Project #: N/A Project Start: 10/2021 Project Complete: Ongoing Project Length:

Company: R.J. Behar & Company, Inc.

48-Year Community Block Grant Development Improvements, NW 9th Street between NE 2nd Avenue and N. Dixie Highway, Broward County, Florida – City of Hallandale Beach

Reference: Ms. Joselaine Pateau, Project Manager, 954-457-1607, jpateau@hallandalebeachfl.gov

Role: Project Manager/EOR for the roadway and drainage design. The scope included drainage improvements, milling and resurfacing, swale regrading, sodding and other miscellaneous improvements. RJ Behar performed the data collection, project management, utility coordination, permitting, drainage design, and plans production of the project.

Cost/Fees Paid: \$47,600 Construction Cost: \$184,000 (Estimate)

Project PO#: 20210904-00 **Project Start**: 11/2021 **Project Complete**: On-going **Project Length**: Not applicable **Company**: R.J. Behar & Company, Inc

Design of Stormwater Drainage at NW 151st Terrace, Miami-Dade County, Florida – City of Miami Gardens

Reference: Mr. Bernard Buxton-Tetteh, Assistant Public Works Director; 786-279-1270; bbuxton-tetteh@miamigardens-fl-gov

Role: Project Manager/EOR. The project includes the design and preparation of construction documents to improve the drainage system on along portions NW 151st Terrace, NW 34th Avenue and NW 33rd Place. The objective is to provide design services for an effective drainage system that may include the re-use of existing structures (if appropriate), installation of new structures, new exfiltration trenches and new drain piping as required. The use of permeable pavement over existing swales will be explored in addition to the French drain to try to further mitigate the flooding issues.

Cost/Fees Paid: \$43,000 Construction Cost: \$759,131 (Estimates)

Project #: N/A Project Start: 4/5/2021 Project Complete: Ongoing Project Length: 1,700 ft

Company: R.J. Behar & Company, Inc.

Stormwater Improvements Area West of Hiatus Road Phase II – Town of Davie, Florida

Reference: Mr. Osdel Fernandez-Larrea - Public Works & Capital Projects Director; (954) 797-2086; osdel fernandez-larrea@davie-fl.gov

Role: Project Manager – The project scope consists of the design for the stormwater to improve the flooding conditions within the project area. The services include drainage design for the improvements, field visits, utility coordination, and permitting. **Cost/Fees Paid:** \$143,789 **Construction Cost:** \$4,940,000

Project #: Project Start: 10/07/2020 Project Complete: Ongoing Project Length: N/A

Company: R.J. Behar & Company, Inc.

SR 710/Beeline Highway Widening from Northlake Boulevard to SR 708/Blue Heron Boulevard, Palm Beach County, Florida – Florida Department of Transportation (FDOT), District 4



Reference: Mr. Donovan Pessoa, PE, FDOT Project Manager, (954) 777-4442; Donovan.Pessoa@dot.state.fl.us

Role: Assisted with the preparation of the drainage report for the project. The project is to accommodate the widening of SR710 and the Florida Turnpike bridge over SR710 has to be replaced. RJ Behar designed the roadway elements for widening the Turnpike from 6 to 10-lanes. **Cost/Fees Paid:** \$804,000 **Construction Cost:** \$66.4 Million (Estimate)

Project #: 419251-1-32-01 Project Start: 06/04/2015 Project Complete: Ongoing Project Length: 3.142 miles

Company: R.J. Behar & Company, Inc.

Oakhill Culvert Replacement, Broward County, Florida – Town of Davie

Reference: Osdel Larrea, Public Works & Capital Projects Director; (954) 797-2086; olarrea@davie-fl.gov

Role: Project Engineer during design and Project Manager during construction. He was responsible for the design, including quantities and cost estimates. The project consisted of the coordination, design, permitting, and bidding assistance for the replacement of a culvert bridge in the Oakhill neighborhood.

Cost/Fees Paid: \$29.953 Construction Cost: \$90.000 (Estimate)

Project #: 2019-00000234 Project Start: 12/2018 Project Complete: 5/2019 Project Length: Not applicable

Company: R.J. Behar & Company, Inc.

Little Country Estates Stormwater Improvements, Broward County, Florida - Town of Davie

Reference: Osdel Larrea, Public Works & Capital Projects Director; (954) 797-2086; olarrea@davie-fl.gov

Role: Project Manager/Lead Engineer for the report preparation and design.

Cost/Fees Paid: \$61,256 Construction Cost: \$3,500,000

Project #: 2019-00000511 Project Start: 2/06/2019 Project Complete: 11/05/2020 Project Length: 175 acres

Company: R.J. Behar & Company, Inc.

Municipal Separate Storm Sewer System (MS4), National Pollutant Discharge Elimination System (NPDES), Stormwater Assessment Program, Miami-Dade County, Florida – City of Hialeah

Reference: Mr. Jose Sanchez, Director, Streets Division; (305) 687-2611; josanchez@hialeahfl.gov

Role: Project Engineer who was responsible for preparing the City Assessment Program Annual Report. This permit covers all areas located within the political boundary of the City of Hialeah that is served by the MS4 owned or operated by the City. The purpose of this assessment program is to provide information for the City of Hialeah to determine the overall effectiveness of its Stormwater Management Program (SWMP) in reducing stormwater pollutant loadings from its Municipal Separate Storm Sewer System (MS4) to receiving water bodies.

Cost/Fees Paid: \$9.772 Construction Cost: N/A

Project #: N/A Project Start: 12/27/2017 Project Complete: 6/30/2018 Project Length: N/A

Company: R.J. Behar & Company, Inc.

Alhambra Place Drainage Improvements Study, Palm Beach County, Florida – City of West Palm Beach

Reference: Ms. Hong Xu, PE, Project Manager; (305) 761-6991; jxu@wpb.org

Role: Project Manager/Engineer of Record who was responsible for the field visits, data collection, evaluation of existing conditions, evaluation of possible alternatives to mitigate flooding conditions, and preparing a report with the summary of findings and recommendations. Among the alternatives studied were the use of French drains, adding additional inlets and increasing the size of existing outfalls. **Cost/Fees Paid:** \$12,150 **Construction Cost:** \$228,000

Project #: N/A Project Start: 11/01/2019 Project Complete: 6/30/2020 Project Length: 0.26 miles

Company: R.J. Behar & Company, Inc.

Cypress Weir 1 (Gold4A) Relocation Design, Collier County, Florida – South Florida Water Management District

Reference: Mr. Ashie Akpoji, PhD, PE, Project Manager (DPM), (561) 682-2571, aakpoji@sfwmd.gov

Role: Hydraulics Engineer. He performed the HEC-Ras Modeling of the new structure, the riprap design and the site drainage calculations. The project is to relocate Cypress Canal Weir #1 (GOLD4A), in Naples, FL. The new project will include the construction of a new locally and remotely operated water control structure in the new alignment of Cypress Canal, approximately 2000 ft east of the existing weir. The new structure includes a bridge over the Cypress Canal, new gates, control buildings, stilling well platforms on concrete piles and miscellaneous appurtenances.

Cost/Fees Paid: \$366,700 Construction Cost: \$3,450,000 (Estimate)

Project #:4600003087-WO14 **Project Start**: 2/06/2019 **Project Complete**: 1/04/2021 **Project Length**: Not Applicable **Company**: R.J. Behar & Company, Inc.

Seawall Design at Tobie Wilson Park, Miami-Dade County, Florida – Town of Medley

Reference: Mr. Jorge E. Corzo PE, Town Engineer/Director, (305) 887-9541 Ext.143; jcorzo@townofmedley.com

Role: Project Engineer responsible for preparing the fill and dredge plans and permitting packages for SFWMD (ERP and ROW) and USACE (Sections 404 and 408). The scope of work included design of approximately 850 feet of a new bulkhead wall located along the south bank of the Miami Canal.



Cost/Fees Paid: \$112,000 CEI Fees Paid: \$168,948 Construction Cost: \$1,394,664

Project #: PR-1302 Project Start: 9/9/2016 Project Complete: 6/2020 Project Length: 850'

Company: R.J. Behar & Company, Inc.

Booster Stations Seawall Repair #1, Miami-Dade County, Florida - Town of Medley

Reference: Mr. Jorge E. Corzo PE, Town Engineer/Director, (305) 887-9541 Ext.143; jcorzo@townofmedley.com

Role: Project Engineer responsible for preparing the fill and dredge plans and permitting packages for SFWMD (ERP and ROW) and USACE (Sections 404 and 408). The project included repair of damaged seawalls after hurricane Irma.

Cost/Fees Paid: \$41,961 Construction Cost: \$134,248

Project CIP #: WS-0135 Project Start: 04/06/2017 Project Complete: 1/2019 Project Length: 32'+/-

Company: R.J. Behar & Company, Inc.

Stormwater Master Plan Implementation for NW 29th Street and NW 31st Street, Miami-Dade County, Florida – City of Doral

Reference: Mr. Carlos Arroyo, CFM, Public Works Director; (305) 593-6740 Ext. 6009; <u>Carlos.Arroyo@CityofDoral.com</u> **Role:** Project Manager responsible for providing drainage improvements to two (2) specific locations identified in the City's master plan as sub basin D-3. He is providing the design of the drainage improvements, permitting, French drains.

Design Cost/Fees Paid: \$32,600 **CEI Cost/Fees Paid:** \$66,436 **Construction Cost:** \$425,000 – Completed Ahead of Schedule and Within Budget

Project #: TWO 9 Project Start: 06/10/2016 Project Complete: 11/20/2017 Project Length: 0.5 miles +/-

Company: R. J. Behar & Company, Inc.

Turnpike Widening from Johnson Street to Griffin Road, Broward County, Florida – Florida Turnpike Enterprises Reference: Mr. Andrew Nunes, PE – Project Manager American Consulting Professionals; (561) 253-9570; anunes@acp-fl.com

Role: Drainage Engineer responsible for the stormwater management design, AdICR modeling and Pond Siting Report for the project. RJ Behar is responsible for the Location Hydraulics Technical Memorandum, Stormwater Management Concepts Report, Pond Siting Report/Stormwater Management Alternatives Report and Stormwater Management Design Report. **Cost/Fees Paid:** \$130,223 **Construction Cost:** \$100MM

Project #: 406095-4-32-01 Project Start: 8/21/2017 Project Complete: Ongoing Project Length: 2.3 miles

Company: R. J. Behar & Company, Inc.

I-95 at 6th Avenue Interchange PD&E, Lake Worth, Florida, Florida Department of Transportation (FDOT), District 4

Reference: Mr. Henry Oaikhena, PE, Section Leader; (954) 777-4445; henryoaikhena@dot.state.fl.us **Role:** Project Engineer resposible for preparation of the Conceptual Drainage Report as part of the PD&E study of the

Interchange Improvements. RJ Behar scope includes preparation of the Interchange Modification Report, Public Involvement, all engineering analyses, Contamination Assessment Report, cost estimates, and preparation of the Preliminary Engineering Report and the Class of Action (Categorical Exclusion Type II) documents.

Cost/Fees Paid: \$786,766 Construction Cost: \$14,000,000 (Estimate)

Project #: 436963-1-22-01 Project Start: 10/19/2015 Project Complete: 05/15/2018 Project Length: 1.4 miles

Company: R. J. Behar & Company, Inc.

Miscellaneous Drainage Projects, City of Doral, Florida

Reference: Mr. Carlos Arroyo, CFM – Public Works Director; (305) 593-6740 Ext. 6000; <u>carlos.arroyo@cityofdoral.com</u> **Role:** Drainage Engineer/Engineer of Record: He was responsible for design of drainage improvements at several locations, supervising the preparation of plans and permitting of the improvements.

Cost/Fees Paid: \$21,395 Construction Cost: \$177,539

Project Started: 9/11/2014 Project Completed: 2/28/2017 Project Length: Varied

Company: R. J. Behar & Company, Inc.

Districtwide In-House Consultant Plans Review/Support Services, Fort Lauderdale, Florida – FDOT D4 Reference: Zoryana Fedyushko, Quality Assurance Coordinator FDOT D4 Program Management; (954) 777-4329; Zoryana.fedyushko@dot.state.fl.us

Role: Drainage Engineer: He was responsible for reviewing the drainage plans. The project included reviews for compliance with FDOT criteria, construction time estimate preparation/review, review of computation booklets, specification packages, cost estimates, etc. The deliverables included review comments in the ERC database, marked-up plans, design exception variation reports, contract time estimates, traffic control plan review/constructability, quantity computations with pay item verifications, utility conflicts, right-of-way encroachments, etc.

Cost/Fees Paid: \$1,500,000 Construction Cost: N/A

Project #: 230088-7-32-01 Project Start: 03/2015 Project Complete: 2020 Project Length: N/A



Company: R.J. Behar & Company, Inc.

SR-5/US-1 Lateral Ditch Restoration, Indian River County, Florida – FDOT, District 4

Reference: Fernando Morales, PE, FDOT Project Manager

Role: Project Engineer: He assisted with the permit package and with the plan's preparation. The permitting included evaluation of impacts to endangered species, mangroves, sea grasses, and oyster reefs. RJ Behar prepared the permit packages and the fill and dredge sketches for permitting of the project.

Cost/Fees Paid: \$336,540 Construction Cost: \$1,100,000 (Estimated)

Project #: 431152-1-52-01 Project Start: 4/15/2013 Project Complete: 8/31/2016 Project Length: Not Applicable

Company: R. J. Behar & Company, Inc.

Lyons Park Neighborhood Improvement Project, Pompano Beach, Florida – City of Pompano Beach

Reference: Mr. John Sfiropoulos, PE - City Engineer; (954) 545-7009; John.Sfiropoulos@copbfl.com

Role: Assistant Project Manager: He was responsible for the preparation of the stormwater design of the proposed improvements. The project area suffers from flooding problems as documented in the City Stormwater Master Plan (SWMP). This project intends to improve the drainage systems within the project area.

Cost/Fees Paid: \$66,179 BODR Construction Cost: \$10,800,000 (Estimate)

Project #: 20140815 Project Start: 4/21/2014 Project Complete: 8/31/2015 Project Length: Neighborhood

Company: R. J. Behar & Company, Inc.

NW 87th Avenue, Miami-Dade County, Florida – FDOT, District 6 Reference: Ms. Ana Arvelo, PE. FDOT Project Manager – Retired

Role: Project Engineer responsible for revisions to the drainage design. He prepared the dewatering plan and permit

package for the SFWMD dewatering permit. *Cost/Fees Paid:* \$2,994,823 *Construction Cost:* \$33,515,000 **Project #:** 405615-3-52-01 **Project Start:** 4/28/2005 **Project Complete:** 10/12/2016; 09/2019 (Construction)

Project Length: 2 miles

Company: R.J. Behar & Company, Inc. (2014 – Present)

Central Broward Water Control District (CBWCD) Engineer Services – Broward County, Florida

Reference: Mike Crowley, District Engineer, (954) 432-5110; districtmanager@centralbrowardwcd.org

Role: District Engineer responsible for the reviewing plat submittals, paving and grading plans and as-built plans for development permits in the CBWCD. Responsibilities include ensuring that all site plans comply with CBWCD engineering criteria, review and evaluate requests for variances, provide technical support to CBWCD Board during public hearings for variances request. Site visits are performed as necessary as well as coordination with CBWCD staff in order to ensure that site development requirements are met.

Cost/Fees Paid: \$661.400 as of 12/05/22 Construction Cost: Not Applicable

Project #: Not Applicable Project Start: 4/24/2007 Project Complete: Ongoing Project Length: Varies

Company: R.J. Behar & Company, Inc. (2014 – Present)

SR-50 Project, Orlando, Florida – FDOT District 5

Role: Project Engineer responsible for optimizing the preliminary drainage design in ASAD of basins 1, 2, and 3 of SR-50, and the modeling the proposed conditions in AdICPR.

Project Start: 2013 Project Complete: 2014

Company: AECOM (2002 – 2014)

I-4 Ultimate Project, Orlando, Florida – FDOT District 5

Role: Deputy Drainage Lead for the Central Segment of the I-4 ultimate conceptual drainage design. The I-4 Ultimate Project is over 21 miles from West of Kirkman Road to West of SR-434; it will include 56 new bridges, 71 bridge replacements, and reconstruction of 15 major interchanges.

Project Start: 2013 Project Complete: 2014

Company: AECOM (2002 – 2014)

Naples Beach Outfalls Hydrologic and Hydraulic Modeling, Collier County, Florida - City of Naples

Role: Lead modeler in XP-SWMM of the existing conditions and different potential alternatives to eliminate the City of Naples Beach outfalls. Project is located within Basin II, with an approximate contributing area of 395 acres.

Project Start: 2012 Project Complete: 2013 Project Length: Not applicable

Company: AECOM (2002 – 2014)

Sarasota County Watershed Model Maintenance and GIS Update Lemon Bay Model – Sarasota County, Florida

Reference: Mr. Salvatore G. DePaolis, P.E./Technical Specialist, (941) 861-0917, sdepaoli@scgov.net



Role: Project Engineer responsible to update the Lemon Bay watershed model. The Lemon Bay AdICPR Model was updated to incorporate the as-built conditions of new subdivisions. The Sarasota County GIS database was updated based on the revisions made to the model along with development of 100 year 24 hour floodplain delineation maps.

Project Start: 2012 Project Complete: 2014 Project Length: Not applicable

Company: AECOM (2002 – 2014)

Florida Fish and Wildlife Conservation Commission – FWC, USA Fodderstack Slough Weir

Role: Project. Project engineer assisting in the HEC-RAS modeling of the Fodderstack Slough Weir, located at the Lake

Marian outlet and Fodderstack Slough.

Project Start: 2013 Project Complete: 2013 Project Length: Not applicable

Company: AECOM (2002 – 2014)

Kingdom of Saudi Arabia, Jeddah Stormwater Drainage Program, Southern Channel Outfall, Jeddah, Saudi Arabia

Reference: Mr. Ahmed Aredhi, Program Manager

Role: Project engineer for design of the southern channel outfall, a drainage channel in the southeastern portion of the city carrying runoff southwest towards the Red Sea. The project consisted of improvements needed to increase the capacity of the channel to convey the 100-year storm event. The project included rehabilitation to the existing channel for approximately seven miles; construction of two detention basins of total area of approximately 990 acres; widening sections of the existing channel for approximately two miles; replacing one box culvert bridge and four bridges; demolish one service bridge and four pedestrian bridges; rehabilitation of existing sections of channel damaged as a result of the recent storm events or that have failed due to local conditions (including cleaning the existing channel and removal of debris). The channel was modeled in HEC-RAS.

Project Start: 2011 Project Complete: 2012 Project Length: Not applicable

Company: AECOM (2002 – 2014)

Broward County Floodplain Mapping Efforts – Broward County/FEMA, Florida

Role: Drainage Modeler responsible for managing the overall aspects of the project that included data collection and development, GIS data acquisition and analysis, modeling, and development of the final report. The project area encompasses the complete Broward County with some portions of Dade County on the north and Palm Beach County on the south. Scope of services included modification of MIKE SHE/MIKE 11 model for the entire Broward County with new LIDAR based DEM and new Land Use data, calibration and verification of the model using known Hurricane storm events by modifying Structure/Gate openings, Tidal boundaries and Boundary Conditions, simulating the calibrated model for several design storm event scenarios and development of final report.

Project Start: 2010 Project Complete: 2011 Project Length: Not applicable

Company: AECOM (2002 – 2014)

North New River Hydraulic Modeling, I-595 Corridor Improvements, Fort Lauderdale, Florida – FDOT District 4

Role: Project engineer assisting in the HEC-RAS modeling of the North New River Canal (NNRC). The NNRC Basin covers an area of about 19,000 acres in eastern Broward County. The NNRC provides flood protection and drainage for the NNRC Basin, and water supply to the basin during periods of low natural flow. The NNRC was modeled for the existing conditions, and calibrated against historical storms, and then several scenarios were modeled to analyze different alternatives to keep the channel capacity due to the SR-84 expansion that required filling of a portion of the channel. More than 14 miles of channel were modeled in HEC-RAS.

Project Start: 2008 Project Complete: 2010 Project Length: 14 miles +

Company: AECOM (2002 – 2014)

I-595 Corridor Improvements, Fort Lauderdale, Florida – FDOT District 4

Reference: Mr. Paul Lampley, PE, FDOT Project Manager, (954) 845-9550, Paul.Lampley@dot.state.fl.us.

Role: Deputy Drainage Lead for the drainage design of 14 miles of corridor improvements. This project is a Public Private Partnership between the Florida of Transportation and ACS Group. The construction value is \$1.362 billion and is expected to be completed by summer 2014. The project covers 14 miles of roadway improvements along I-595 and a portion of Florida's Turnpike. The improvements include the addition of 3 reversible tolled express lanes, widening of the six lane Interstate, reconstruction of the four-lane divided arterial (SR-84), 68 bridge structures, and improvements to the North New River Canal. Key design components include 8 braided ramp structures, directional connectors between the express lanes and Florida's Turnpike and improvements to three major interchanges.

Project #: 406094-4-52-01 Project Start: 2008 Project Complete: 2010 Project Length: 14 miles

Company: AECOM (2002 – 2014)

Development/Redevelopment Plan Conformance, Broward County, Florida - Central Broward Water Control District



Reference: Michael Crowley, Central Broward Water Control District Manager. Phone: (954) 432-5110

Role: Project Engineer for review of plats, paving and drainage plans, as-built drawings, and all drainage related reports for all developments and redevelopments for conformance with the regulation, standards, procedures and design criteria of the CBWCD. Processing an average of 70 plans annually, including Griffin Road Expansion; and the Turnpike Expressway expansion from Johnson Street to I-595; CBWCD covers a 43.5-square-mile area that includes unincorporated Broward County, Cooper City, the Seminole Indian Reservation; and communities of Davie, Hollywood, Sunrise, and Pembroke Pines. Provided services related to regulation, permitting, infrastructure improvements, and the operation and maintenance of more than 100 miles of secondary canals serving 150,000 residents. Participated in the annual revisions of the design criteria manual and conducted site inspections.

Project Start: 2003 Project Complete: 2007 Project Length: Not applicable

Company: AECOM (2002 – 2014)

Kissimmee Basin Hydrologic Assessment, Modeling, and Operations Planning, Florida – South Florida Water Management District

Reference: Mr. Chris Carlson, Project Manager, (561) 682-6143

Role: Project Engineer for an assessment of how existing operating criteria for the water control structures in the Kissimmee Basin can be modified to achieve a more acceptable balance among flood control, water supply, aquatic plant management, and natural resource water management objectives, while also balancing impacts across ecosystems including Lake Okeechobee and the estuaries. This project includes the implementation of an integrated surface-ground water model (MIKE SHE/MIKE 11), use of screening tools like OASIS, application of Heuristic Wrappers, development of performance measures, and development and application of performance measures evaluation tool.

Project Start: 2006 Project Complete: 2007 Project Length: Not applicable

Company: AECOM (2002 – 2014)

Eastern C-11 Basin Facilities Report Update, Central Broward County, Florida – Central Broward Water Control District

Reference: Mr. Michael Crowley, Central Broward Water Control District Manager, (954) 432-5110

Role: Lead Modeler in facilities report update. Creating a 1500-node XP-SWMM model to analyze the entire secondary canal system in the Eastern C-11 Basin. The C-11 flows from west to east during flood conditions canal and is controlled at its eastern border by Structure S-13, which separates the portion of the canal that is subject to tide. Stage-storage and infiltration parameters were estimated based on GIS information. Flooding areas are to be identified and its flooding problems alleviated through proposed control measures.

Project Start: 2004 Project Complete: 2006 Project Length: Not applicable

Company: AECOM (2002 – 2014)

C6 Basin, Stormwater Management Master Planning, Miami, Florida – Miami - Dade County, DERM, Stormwater Division

Reference: Mr. Victor Martin/Ms. Marcia Steelman, Stormwater Planning & Design Section Engineer, (305) 372-6992 **Role:** Project Engineer for development of a stormwater management master plan, which will identify the main water quantity and quality problems and will implement strategies for reducing existing impacts. The plan will estimate the effects of existing and future land uses on flood protection and water quality and identify infrastructure and management strategies to accommodate those uses. Assisted in the data collection, data manipulation, AutoCAD drawings, and GIS

Project Start: 2004 Project Complete: 2005 Project Length: Not applicable

Company: AECOM (2002 – 2014)

related tasks.

Department of Environmental Resources Management, Federal Emergency Management Agency DORM, Miami, Florida

Role: Project Engineer for drainage design of a 2-square-mile section of Miami's Westchester area. Project is funded by FEMA due to major flooding in the area. Proposed drainage improvements include the design of exfiltration trenches to meet the five-year stormwater quality criteria set by DERM. Performed design calculations, review of as-built drawings, prepared AutoCAD designs, cost estimates, reports, bid documents, and assembled packages.

Project Start: 2002 Project Complete: 2003 Project Length: Not applicable

Company: AECOM (2002 – 2014)

CONSTRUCTION MANAGEMENT

Lyons Park Neighborhood Improvement Project, Construction Management Services, Broward County, Florida – City of Pompano Beach



Reference: Mr. Matthew Kudrna, PMP, Engineering Project Manager II; (954)786-4023; Matthew.Kudrna@copbfl.com Role: Project Manager. This project includes the design for the relocation of the sewers to the street's right-of-way and new lateral services. The project also includes design of water line relocations in areas where there are conflicts with other improvements. As part of the project all the streets will be reconstructed, with new pavement markings, and completely new stormsewer system, sanitary sewer system, and regraded swales. The design included structural design of seawall repairs for new outfalls. Contractor: Giannetti Contracting Corp. Cost/Fees Paid: \$327,700 Construction Cost: \$17,659,000 Project #: N/A Project Start: 8/3/2021 Project Complete: Ongoing Project Length: Neighborhood Company: R.J. Behar & Company, Inc.

C-44 Reservoir STA Project – South Florida Water Management District (SFWMD)

Reference: Ms. Camille Dominguez, PE, MBA, Vice President; (305) 514-3158; camille.dominguez@wsp.com

Role: Deputy Construction Project Manager during the construction of the project as part of the Construction Management Team. He assisted the Lead Construction Manager with the review and processing of Requests for Information (RFIs), Requests for Proposals (RFPs), Value Engineering (VE) proposals and substitutions received from the Contractor.

Cost/Fees Paid: \$231,870.00 **Construction Cost:** \$60,000,000 (Estimate)

Project #: N/A Project Start: 2/20/2015 Project Complete: 05/06/2016 Project Length: 3,400 acres

Company: R. J. Behar & Company, Inc.

TRAINING AND CERTIFICATIONS

Designing Complex Stormwater Projects, 2022

- Making Green Storm Water Infrastructure a Success in Urban and Suburban Settings, 2022
- Modular Precast Concrete Stormwater Systems, 2022
- Improved Energy Infrastructure Resilience, 2022
- Runoff as a Resource: How it Can Bring Watershed Benefits, 2022
- Cost Effective Solutions for Buried Bridges and Large Culverts, 2022
- Integrated Urban Drainage Modeling: Rising to the Challenge of 21st Century Urban Flood Risk, 2022
- Innovative Outfall Treatment Retrofits and New Construction, 2022
- Modern Designing of Stormwater Channels Using GEOWEB, 2021
- Innovative Solutions for Managing Stormwater & Wastewater, 2021
- Coastal & Inland Waterway Protection Using Hard Armor Solutions, 2021
- Nature-Based Approaches in Lake Michigan Coastal Restoration
- Advances in Testing Stormwater Management Measures, 2022
- XPSWMM Workshop
- Introduction to Integrated Surface Water and Groundwater Modeling using MIKE SHE
- ASAD Online Training Series

WORK HISTORY

AECOM 2002-2014

