EDUCATION

B.S., Civil Engineering, University of South Florida

TRAINING/OTHER QUALIFICATIONS

Certified Project Manager
NABCEP Energy Professional
OSHA Certification
Energy Efficiency
LEED Green Associate (pending)

EMPLOYMENT

J3 Engineering Consultants, Inc.
Project Manager
Dec 2014 – Present

Earth Energy Solutions
Managing Engineer
May 2010 – Dec 2014

Boyle Engineering/AECOM
Project Manager/Sr. Engineer
Aug 2006 – Nov 2009

CDM
Sr. Engineer
Mar 2004 – Aug 2006

Parsons Brinckerhoff
Project Manager
Jul 2001 – Mar 2004

URS Corporation
Staff Engineer-Sr. Engineer
Feb 1989 – Jul 2001

Donna E. Barrentine

Project Manager

Ms. Barrentine is a seasoned project manager with more than 20 years of project management, civil design, water, and wastewater engineering consulting. Donna has a Bachelor of Science in Civil Engineering and has obtained professional engineering registrations in both Colorado and Florida. Her experience includes general civil design and management of small- and large-scale, private, and public-sector projects. She also has experience in master planning, due diligence analyses, utility studies, reclaimed water use and design and energy efficiency. Her key strengths exemplify our company focus in strong leadership, quality work and superior client service.

Ms. Barrentine's private sector work experience includes master planned developments with single-family and multi-family homes, golf course and recreational facilities, commercial properties, and park and open space areas. Public sector work includes regional roadway improvements, water, sanitary and stormwater piping and pump station design and hydraulic analyses.

Ms. Barrentine has excellent working relationships with various local municipalities and is focused on collaborative projects through proactive communication and consensus building. In addition, Ms. Barrentine works closely with the design team to ensure communication is carried through for successful project completion and quality assurance throughout the process, all with a client first mentality.

Recent Engineering Project Examples:

Gaylord Rockies Hotel and Convention Center Offsite Roadway Improvements – Aurora, CO: This state-of the-art hotel and conference resort included nearly 3 miles of off-site regional improvements, such as arterial roadway extensions, drainage improvements, sanitary sewer system infrastructure and regional water main extensions. Ms. Barrentine was the project manager for the infrastructure design and stormwater management for this high-profile project. The project included two large water quality detention ponds, and significant outfall structure to West Fork of Second Creek and various erosion control plans, reports, and full construction drawings preparation. The utility infrastructure ranged in size from 12-inch to 15-inch for the sanitary pipelines, which were evaluated and identified for increasing the capacity. The regional water network was analyzed to determine serviceability for initial and final project phases and optimized based on future development opportunities surrounding the site. The water mains range from 16-inch to 24-inch to serve not only the hotel and conference center, but also future development expected in the High Point at DIA area. Ms. Barrentine was responsible for

contractor and subconsultant communication, review of Construction Contractor Guaranteed Maximum Pricing (GMP), construction administration services including shop drawing review and RFI support and coordination amongst the team.

Holiday Inn Hotel – City of Centennial, CO: Provided civil design services, construction document preparation and obtained necessary permit approvals for development on the first hotel in the City of Centennial. This project included civil infrastructure design for the 100-unit facility, with 120 associated parking spaces, sanitary sewer and water main extensions, roadway access, drainage and grading work. This project also included abandonment of previously constructed water quality detention facilities.

J3 Engineering worked with the client and contractor to design the site infrastructure. Challenges included resurrecting previously approved construction documents that had to be updated for the new hotel development since construction ceased 8 years ago on the former hotel due to the economic downturn. All new construction documents, stormwater management plans, and related documents were necessary including utility modifications to ensure compliance with current local codes and design standards.

Lincoln Creek Village, Lot 1 – Parker, CO: Managed the civil plans and reports preparation the development of this 5-acre, 60-unit single family townhome development for national home builder, Cardel Homes. This community has some unique challenges and design requirements due to its location and tight site constraints to ensure new patios and onsite utilities did not encroach into the restricted 115 KV electric power transmission corridor adjacent to the site. Onsite electric facilities required relocation and coordination with the local electric utility company. Regional infrastructure improvements included local roadway extensions, trunk utility mains, stormwater management and onsite water quality attenuation ponds. **J3** led the design and processing for all civil design on this project, including subconsultant coordination for survey, traffic impact analyses, replatting and easement document preparation.

Lincoln Creek Village, Lot 14 – Parker, CO: Coordinated civil document preparation, provided client contact, managed schedules and budget, and all coordination with agencies for necessary approvals for the 9-acre, 97-unit single family townhome development for Cardel Homes. This project included significant grading challenges due to topographical variations and the coordination with an adjacent property owner for impacts of their own improvements and to this project's drainage plan. This project incorporated extension of a regional trail and open space park area dedicated to the County. Regional infrastructure improvements included local roadway extensions, utility mains, and stormwater management.

Lincoln Creek Village, Lots 4, 5, 6 – Parker, CO: Managed the development of a 16-acre, 120 residential lot single family development in Parker, Colorado. This project included design and construction of two offsite roadways and connection to the existing Lincoln Avenue north of the project site. Also included was a 3 ac-ft stormwater detention pond serving this project and the neighboring Lot 3 development. Challenges occurred with grading the site to balance all earthwork and to prevent excessive offsite hauling of material which saved the client significant costs. Other challenges overcome were water and stormwater connections from the neighboring development and roadway tie-in elevations for smooth transition between the connecting roadways.

Allison St Townhomes – Arvada, CO: Supervised and managed the design development of four multi-family buildings for a total of 20 townhome units built on just under 1.0 acre in the City of Arvada. The development posed significant challenges in providing the 100-year detention volume required on such a small site with very limited differential contours making for an innovative drainage system design. The east side of the site was raised so both the east and west ends of the site drained to the center, where a small water quality pond was installed. Beneath the water quality pond, underlying the drive isle and two parking stalls, laid an underground detention system for storage of runoff from storm events greater than the 100-year storm. The underground detention consisted of three 54-inch diameter aluminum corrugated metal pipes connected by a large manifold pipe. Flows released from the underground storage system discharged to a connected 60-inch regional storm culvert system within the City.

Past Engineering Project Examples:

Atoka Pump Station Rehabilitation – Oklahoma City, OK: Conducted project management and lead design team on preparation of detailed design drawings and technical specifications for major pump station improvements to upgrade six 90-MGD pump stations, which supplied 80 percent of the City's drinking water. The water facilities extended over 100 miles from Lake Atoka to Water Treatment Facility. Prior to detailed design, significant engineering analysis was conducted on the hydraulics of the system, including hydraulic modeling of the pump stations, surge tanks and 60-inch diameter conveyance system. A prequalification's process and preparation of contract documents for pre-purchase of the major equipment: 4 vertical turbine pumps, 20 horizontal centrifugal pumps, VFDs and more than 139 large diameter valves were also included. Significant upfront planning was performed to reduce pump station downtime during construction. This project included high level management with consistent communication with of the multi-office, multi-discipline design team throughout the southwestern region of the United States.

Seawater Desalination Facility Design/Build – Tampa, FL: Provided bid selection, design review, and project management support for a large 25 million gallon per day (mgd) seawater desalination facility that utilized high pressure reverse osmosis treatment to provide high quality drinking water to the municipal regional water supplier. This was a design build project that required high level communication with the water authority board, construction contractor, and numerous members of the design team of engineers and scientists. Public speaking and board presentations on the overall project and construction progress were performed monthly.

Master Sanitary Pump Station Upgrades – Tampa, FL: As a project engineer on this project, detail design, hydraulic modeling, and construction drawing preparation was performed for this 15 mgd municipal sanitary pump station for the City.

MacArthur Foundation Master Plan – Palm Beach County, FL: Provided feasibility and technical analysis, permitting and coordination of a master plan at five mixed use residential and commercial developments with golf course recreational facilities. This project included system design and storage in onsite stormwater ponds prior to irrigation of golf courses, residential common areas, and commercial green spaces. Conducted computerized modeling analysis to evaluate surface water quality requirements for commingling effluent in the onsite stormwater system. The project included interconnection between two private utilities.

South/Central County Master Plan – Hillsborough County, FL: Prepared a master plan that identified potential reclaimed water reuse sites, estimated demands, identified capital improvement projects and costs, and recommended project phasing for a 20-year planning period. Potential sites included residential lawn irrigation, agriculture, golf courses and reuse in industrial processes. Used Geographic Information System (GIS) technology to assess demands and graphically present the 5-, 10-,15- and 20-year growth in the county's service area. Used hydraulic modeling to determine the appropriate design for reclaimed water transmission mains. Cost estimates were developed and capital improvement project planning was conducted to assist the County in implementation of this important regional project.

Water Reuse Program – City of Sanibel, FL: Prepared an island-wide reclaimed water reuse program. Identified up to 5 MGD of potential reuse through irrigation of golf courses, single-family residential developments and hotel and condominium properties and open space recreational areas. Evaluated balance of supply and demand and considered aquifer storage and recovery for storage of excess reclaimed water available in the winter months due to changes in seasonal population.