

## Take a Chance, and Don't Be Afraid to Pursue New Opportunities

**J**AMES D. VIGIL, A.M.ASCE, is a supervisory civil engineer for the federal government in Albuquerque, New Mexico. He got there not necessarily by careful planning but by pursuing opportunities as they arose and making an effort to learn and grow his career as an engineer in areas other than his primary discipline.

### What are the new responsibilities that come with this job?

I'm an administrative contracting officer and supervisory civil engineer within the Construction Branch, performing BCOES reviews (biddability, constructability, operability, environmental, and sustainability) for construction solicitations prior to award. I also support military construction programs, government agencies, and local municipalities with construction administration. I routinely participate in source selection boards to recommend the selection of contractors, and I support five resident offices with contract modifications, submittals, progress payments, and requests for information (RFIs) or contract adjustments. I generate budgets for contracts to be awarded and review and execute contract modifications prior to final submissions, and I routinely substitute for the construction branch chief when he experiences conflicting priorities or requires additional support or representation.

### How did you get to your current position?

I went to work for the federal government immediately following my graduation with a civil engineering degree, with a structural emphasis, in 2007. I considered obtaining a master's degree then, but I felt the need for real experiences that came with being an engineer. I began in the General Engineering Section, using Bentley software platforms, SpecsIntact [a government software platform], and various modeling programs to generate construction drawings and specifications. My designs varied and were applied throughout the Southwest and in Afghanistan. I also cross-trained within our agency to generate presentations for

our levee safety oversight group on existing flood-control structures. I spent a total of six years working in the Design Branch.

While there, an Air Force base announced a new \$600-million buildup of new construction. The Design Branch was responsible for approximately 16 new facilities, including airplane hangars, squadron operation facilities, dormitories, cargo pads, parachute-drying towers, runways, and all of the supporting infrastructure. As contracts transitioned from design to construction, the opportunity to travel and support the resident office became available to employees within the agency. I viewed this as an excellent opportunity to see my own designs come to life as they transitioned into construction.

I volunteered to support the resident office for 180 days as a project engineer. Each project experienced various challenges, including large modifications and aggressive schedules requiring additional oversight on the weekends. I was involved with daily quality assurance, contract modifications, RFIs, progress payments, submittals, certified payrolls, and jobsite safety. The schedules were aggressive, and oversight was desperately needed. I would travel Sunday afternoons and then return home on Friday evenings. Initially I didn't mind the travel since the work was extremely gratifying.

After supporting the resident office for approximately 15 months, with a successful turnover to the customer, I headed back to the District Office. I was fortunate to transition into a vacated Construction Branch position and continued to provide construction support and oversight throughout the state of New Mexico. The support resulted in an additional 15 months on the road, traveling to various project sites.

As I continued to manage projects, I noticed that the branch chief, who held an administrative contracting officer (ACO) warrant [similar to a license], was constantly overloaded by supporting multiple resident offices. I always enjoyed taking charge and making the final decision to maintain project schedules and execute deliverables. So I pursued my ACO warrant training to provide additional support for the branch. The training consists of five resident courses and 14 online courses with mandatory completion in two years or less. I pushed myself and completed all the training in 11 months. I then successfully passed my warrant board and was awarded my ACO war-



**James D. Vigil, A.M.ASCE**

**EMPLOYER**

Department of Defense  
Albuquerque, New Mexico

**CURRENT TITLE**

Supervisory Civil Engineer  
and Administrative  
Contracting Officer

**PREVIOUS TITLE**

Civil Engineer/  
Project Engineer

rant. I'm currently appointed as the primary or alternate ACO on 22 construction contracts.

### What personal traits or characteristics do you believe helped you win this new position?

As a project engineer working on the ground with contractors, I developed the mind-set that teamwork and communication provide great benefits to the success of any project. Team collaboration is key, and continuously maintaining an open line of communication throughout the process to identify forthcoming issues early is extremely beneficial. I try and work with everyone to the best of my ability and remind myself that we're all far from perfect; mistakes happen regardless of how you try to mitigate errors. One of my coworkers gave me the name "Sweet James."

### What technical skills helped you achieve this position?

Starting in the Design Branch provided the experience of project acquisition and transitions through both the design and construction phases. Working with the customer during charrettes to capture design requirements was also pivotal. Understanding the amount of effort required to work proficiently in various AutoCAD software programs while editing technical specifications was extremely challenging. Managing levels, layers, reference files, clash detection, and AutoCAD libraries is a true profession. I have tremendous respect for the Design Branch and the efforts they put forth on a daily basis to complete full design packages.

### What nontechnical skills helped you achieve this position?

To be completely honest, I think it was my willingness to try something new that I was genuinely interested in. When you're passionate about something, it often shows up in the quality of the work. I grew up swinging a hammer on the weekends with my parents, and as I've progressed through my career, that passion for construction has become much more noticeable.

### How did your education—formal or informal—help you prepare for a position like this?

My undergraduate degree in civil engineering taught me the fundamentals of fluid mechanics, dynamics, and structural analysis, along with the advanced math and science topics. And the way I was raised, working on different projects with my family, provided valuable real-life experiences. My parents built their own house, working weekends and evenings to maximize cost efficiency. We spent weekends digging foundations, pouring concrete, framing, placing stucco, welding, laying adobes, hanging drywall, and all the miscellaneous [tasks] in between.

When I started working, I assumed I would never take another exam—how completely misinformed I was! Shortly after my wife and I got married, she decided to pursue her master's degree in dental hygiene, and I'm thankful for her drive and determination. By working full time as a dental hygienist and pursuing her degree at the same time, she motivated me to push further with my own education and pursue my own advanced degree.

### What role did mentors, advisers, or your network play in your achievement?

My parents served as huge mentors to our family and taught us that sports and academics were gifts. My father served in the U.S. Air Force during the Vietnam War and later pursued an associate's degree in drafting, which led to a 33-year career. My mother is a self-taught botanist, starting in her teens, and still runs her own business today. My sister excelled exponentially in academics from an early age and is a nuclear engineer. She continues to be an outstanding role model and inspiration for our entire family.

Outside of my family I've had the privilege of working with tremendous professionals over the years who aided my career progress. I really enjoy learning other disciplines within engineering and constantly strive to grasp new concepts. Our team has a vast amount of construction experience, and we're always learning from each other on a

routine basis. I love coming to work, and it's a great team environment anyone can appreciate.

### What do you hope to accomplish in this new position?

I hope to contribute immensely and become a reliable resource for the resident offices we support. I'm striving to constantly maintain knowledge of new technology while working proactively to avoid costly delays, executing modifications, and being as efficient as possible for our customers. We have a tremendous workload coming throughout the state and region, which will provide valuable career opportunities.

### What would you like to do next in your career?

I'm unsure where my career will transition to in the future. I've always enjoyed teaching and sharing knowledge, but construction is so diverse, there's always room to further escalate your knowledge/experience. For volunteer work I mentor senior-level civil engineering students at the University of New Mexico, which I've truly enjoyed. It's always gratifying to meet a group of future graduates motivated and excited to enter the workplace.

### What advice do you have for other younger engineers?

Always have an open mind and be the type of professional you would want to interact with. In my opinion, any type of job experience can contribute to professional growth. Embrace opportunities for cross-training within the industry and vigilantly learn from all experiences. Maintain your software proficiency and always push for progress while remaining humble.

And definitely pursue additional certifications and graduate-level education as you become more discipline-focused throughout your career. The more job announcements I evaluate, the more I've learned that a master's degree is becoming a standard requirement by employers. —LAURIE A. SHUSTER

*Are you a younger member who has recently taken the next step in your career? We'd like to hear from you. Email [cemag@asce.org](mailto:cemag@asce.org) using the subject line "Next Step."*