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# Becoming the First Female ACI Certified Nozzleman

(AND WHAT IT TOOK TO GET THERE)

By Cathy Burkert

I must have recognized early on that I had an aptitude for leadership and management, because when my kindergarten teacher asked us what we wanted to be when we grew up, I quickly proclaimed “Taco Bell manager.” I seemed to intuitively know that my straight-forward nature and organizational skills were going to be my greatest assets in achieving future goals. These traits naturally led me toward acquiring a degree in business administration and propelling me toward owning my own company.

## GETTING STARTED

My story began in April of 2005, when I started working at a heavy-highway concrete construction company that specialized in the use of wet-mix shotcrete placement for structural bridge repairs. I didn’t realize at the time how consequential this choice would be in my professional journey, or that one day I would manage, purchase, grow, and eventually sell this company. However, the story of my rise to success in the shotcrete industry would be incomplete without an honest recognition of the barriers I had to break down in its pursuit.

I had to start at the bottom as a union labor apprentice and work my way up, like everyone else. The laborer apprenticeship program was comprised almost entirely of male laborers — I can only recall one other women apprentice during the time I attended, and unsurprisingly no female instructors.

So, I had to forge my path among a sea of male

instructors who often made no secret about their disdain for women working in the construction field. I can recall one instructor who seemed to make it his mission to insult and embarrass me in front of the male apprentices. I hesitated to report his behavior, unfortunately, due to the power structures that existed within the union. While this was, and is, a common scenario that women face in all professions dominated by men, it was especially challenging in the construction industry.

## MOVING UP

After 2 years in the apprenticeship program, I graduated to the next level, a union journeyman, and began training to be a nozzleman (recently renamed ‘shotcreter’). At the same time, I was moving up in the ranks at the concrete company and started running my own crews. Soon after that I earned the title of Field Office Coordinator and was managing projects from start to finish, building relationships, and cementing my own reputation in the concrete construction field.

Transitioning from being in the trenches with other laborers to overseeing projects and crews came with an additional set of challenges and obstacles. In this managerial role, I had to communicate with people from all aspects of the job, including laborers, project managers,



2008 Outstanding Shotcrete Project Award Winner for Infrastructure Project, the Abraham Lincoln Memorial Bridge in LaSalle, IL



2010 Outstanding Shotcrete Project Award Winner for Infrastructure Project, the Dan Ryan Expressway in Chicago, IL



*2014 Outstanding Shotcrete Project Award Winner for Repair & Rehabilitation Project, the 606-Bloomingdale Trail viaduct repairs*

inspectors and engineers. As a woman in this role, I often had to wear a mask and imitate the behaviors of my male colleagues to garner acceptance and respect. Walking into a room full of male colleagues was both intimidating and exhilarating — I knew that I was opening doors for myself, as well as future women in this profession.

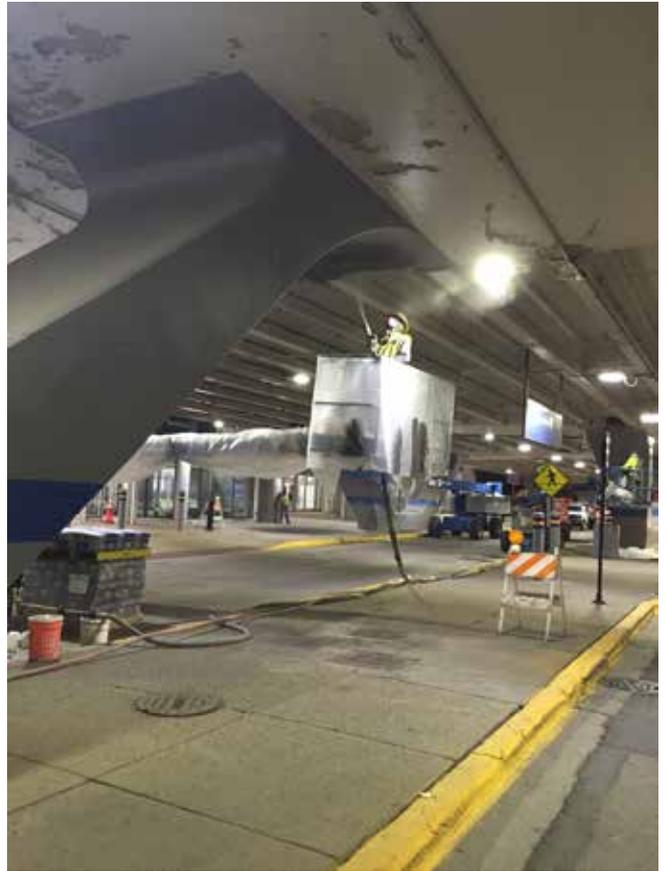
While working my way through the apprenticeship program and gaining experience in the field, I had the opportunity to attend the 2006 World of Concrete convention in Las Vegas. It was here that I met many active members of the American Shotcrete Association (ASA) while attending their committee meetings and their annual banquet to celebrate outstanding shotcrete projects and award winners.

I felt supported among members of the ASA, and I was excited to meet and network with other businesswomen who were also fighting the silent uphill battle to make a name for themselves in the shotcrete industry. Their stories and passion inspired me, and I finally felt a sense of ease about my career path. Following this event, I quickly immersed myself in ASA activities by volunteering on numerous committees and writing articles for their quarterly magazine.

By March 2009, I became the first female ACI-Certified Nozzleman for the wet-mix, vertical, and overhead processes after training with the company's nozzleman for many years. One of my mentors used to say, "The shotcrete industry is not for everyone; it takes a certain kind of crazy to do this job." He was speaking of the challenging and creative nature of the work, but I also faced the added pressures of navigating this terrain as a woman among many men who did not want to see me succeed, viewing me as a quota to fulfill rather than an experienced and reputable colleague. Despite this tumultuous environment, I persisted.

### CONTINUED GROWTH

For the next few years, I managed several types of projects including bridges, tunnels, buildings, and repairs. During this time, I also learned the administrative side of the business, including estimating, job costing, and



*2016 Outstanding Shotcrete Project Award Winner for Repair & Rehabilitation Project, a shotcrete segment of O'Hare and Midway reconstruction project*

forecasting. Since the company was often a subcontractor to the same general contractors, I also worked with many of the same project managers.

Due to the company's long-standing reputation and the personal relationships I had cultivated, it expanded in size and scope under my leadership. In addition, I participated in a group (with other reputable ASA members) that helped the State of Illinois accept shotcrete as an acceptable alternative to traditional concrete methods and assisted in rewriting their shotcrete specification.

While I noticed in various meetings that men seemed to think differently than women, we were generally able to collaborate and create blended perspectives. Most of these networking events were round-table and inclusive — but some of them immediately felt like a 'boys club'. A lot of important conversations in this industry are held outside of round table meetings (occurring on golf courses or at dinner), and I had one unfortunate experience in Las Vegas when an all-male group planned to visit a strip club to continue conversations. With events such as this, I sometimes felt it necessary to substitute my presence with one of my male employees.

As the company expanded into additional markets, we began networking in non-traditional groups to expand the market for our product. Finally, in 2013, the opportunity to purchase the company presented itself. I felt prepared to

take over the business that I had helped grow over the last eight years, but the decade that followed really altered my perspective on how internalized gender bias has shaped the industry.

### OWNERSHIP MEETS AWARENESS

My time as a small business owner came with unique challenges. While it had its perks, it also involved significant risk and tremendous amounts of stress. Being in charge of the entire company showed me a level of burden that is unfelt by lower-level employees, and the decisions I made every day affected everyone in the company. My body was constantly in fight or flight mode, with the demand of this role slowly damaging my nervous system. In addition, I began to experience imposter syndrome as a female in the industry, often feeling inadequate despite all of my hard work and contributions to the shotcrete industry.

As my perspective began to shift, I began to really take notice of the barriers I faced in this industry. For instance, a couple of our previous customers decided to use their own internal crews for shotcrete repairs. This kind of inexperienced competition incentivized me to be part of the team that created the ASA Contractor Qualification Program (CQP). I also faced a project manager who, much like my former laborer apprentice instructor, made his views on women in construction very clear. His unprofessional and illegal comments were so offensive, they caused me to file a complaint to his company president.

I began to realize that without the existing DEI programs, I would not have reached my level of success. I also struggled with other businesses being incorrectly certified under those same programs, which led me to become more involved with the certifying agencies and their personnel to help strengthen their policies.

### A NEW DIRECTION AND A NEW PERSPECTIVE

In 2022, I accepted an opportunity to sell the company I had grown. I remained active while the new ownership transitioned but soon found myself drifting away from the shotcrete industry. It felt like I was grieving a loss — I had worked in the shotcrete industry for almost half my life — working my way through all the emotions and bearing all its weight for nearly two decades.

I've done a ton of reflection in the years since leaving my ownership role. I faced many challenges, and received a lot of support and mentoring yet the feeling of a room made up of a majority of men is still much different than a room made up of women. When I'm in a room full of women, we are engaging in conversation that feels genuine and emotional. We listen to each other and feel eager to collaborate. It feels more inclusive, supportive, and safe. Given the political climate we are currently facing, I feel it is necessary for all to remember that uniting as a team and making a safe place for

all to grow is how we will all be successful.

For me, it is now time to embrace the unexpected and be open to the infinite possibilities that lie ahead. I was thrilled to learn that *Shotcrete* magazine had followed through on my suggestion and planned a 'Women in Shotcrete' issue to highlight the impact women have on the shotcrete industry. I was also excited to learn that the term 'nozzleman' was replaced with 'shotcreter' — a more acceptable, gender-neutral title.

### MY TIME IN THE ASA

Throughout my career I was an active member of ASA. I sat on all the committees and served as chair for the marketing and membership committees. I was involved with four award-winning ASA infrastructure projects:

- The Abraham Lincoln Memorial Bridge in 2008
- The Dan Ryan Expressway in 2009
- The 606-Bloomington Trail Viaduct Repairs in 2014
- Shotcrete Segment of the O'Hare and Midway Reconstruction Project in 2016

I served on the team that created the ASA Contractor Qualification (CQ) Program, which establishes a shotcrete contractor's qualifications through peer review of the contractor's work, participating on review task groups for CQ applicants. I was elected onto ASA's Board of Directors, then again onto the Executive Committee in 2013, before being elected as ASA's President in 2019.

I am so thankful to my mentor and the ASA for creating a safe space where others in the shotcrete industry could openly share ideas, advice, and memories. I encourage anyone looking to be part of a shotcrete family to get involved with ASA.



**Cathy Burkert** earned a degree in business management and started her career as a union laborer apprenticed to learn the intricate details of the concrete industry. Having trained along the field crew and nozzle men for many years, she became the first female ACI certified shotcreter and, soon after, led the company as project manager on numerous ASA outstanding projects of the year. Cathy became owner of the same company in 2013. In 2022, she sold the company and is now fully focused on her family, while mentoring other female entrepreneurs. Throughout her career, Cathy has spent a great deal of time helping ASA grow, educate, and promote the use of the shotcrete process for concrete placement. She was committee chair for marketing and membership committees, member of the Board of Directors, and on the Executive Committee before finally serving as ASA President in 2019.