

## Profile in Construction and Design

# Father and son team up to take Manhattan

So you want to be a structural engineer? You graduate from a first rate school with Bachelors AND Masters degrees and you re smart enough (and fortunate enough) to get a job with a highly regarded, large firm in New York City.

You spend seven years working hard learning and building your expertise, on whatever projects they throw your way, always hoping the next one will be the big high rise in Times Square ...and you actually get the opportunity to be the project engineer on a brand new building, designed by a nationally known architecture firm, owned by a worldwide owner/developer firm... in Times Square!

And then .... you take a risk. You join a new, small firm whose principal is .... your father?

This is not an unfamiliar story. The draw for Marco Shmerykowsky, PE, however, was the fact that his father had worked on even bigger and better buildings over his thirty years as a structural engineer and partner for another well known firm in New York, Weiskopf & Pickworth Consulting Engineers, before starting his own business in 1996. Together John and Marco form a strong team that produces a level of work and

responsiveness not always found in a large structural firm.

“We are totally committed to addressing our clients needs and doing the job right,” says Marco on the philosophy of the firm. They are guided by the fundamental principle of quality and innovation, dictating the development of effective solutions that satisfy the unique



needs of owners, developers and architects.

Personally, the principals of SCE have expertise in projects ranging from the structural design of high rise office buildings such as 33 Maiden Lane, 750 Seventh Avenue and 5 Times Square, as well as institutional structures such as museums and theaters, to extensive work in the renovation, rehabilitation, and expansion of existing structures.

They are currently the building engineers for a number of New York City high rises such as 100

Wall Street, 1185 Avenue of the Americas, 1515 Broadway, 1166 Avenue of the Americas, and 1 Chase Manhattan Plaza. In 2001, the firm was called in by their financial clients to investigate the structural stability of a number of buildings in Lower Manhattan after the 9/11 tragedy.

Their current practice has been described as a “boutique firm” as Marco, John and their young engineers take on projects that require a certain amount of “hand-holding” and an incredible amount of attention to detail.

One example of this is a project currently in construction for The Winter Organization on West 55th Street. It involves a radical demolition and reconstruction of the front of a 1928 building, creating a large, two story marble and glass enclosed lobby where once there was none (with construction managers, Tishman).

Due to the fact that the sidewalk grade slopes downward from east to west, the enlarged lobby floor had to be lowered to street level, requiring the reconstruction of the floor. Additionally, the existing brick façade of the lobby is being replaced by glass curtain wall.

As the existing brick was self supporting, the full height of the

building, and sitting directly on the foundation wall, the remaining façade loads above the second floor had to be appropriately supported and transferred to the steel columns.

*“One of the special challenges of this project centers around modification of the curtain wall at the lobby. We performed multiple probes and determined that the brick façade was self supporting. Since the installation of the new glass curtain wall would essentially create a hole at the base of the brick structure, we needed to develop new structural framing which would provide adequate support to the brick structure above while transferring loads to the structure below.”*

A different set of challenges, including project management, was required for one of the largest signage projects in Times Square. SCE designed 24,000 sq. ft. of signage on their glass enclosed Times Square Tower on 42nd Street for Boston Properties. The primary concern was to build a cost effective signage structure that would be easy to modify, easy to construct and would meet the stringent 42nd Street Development Corp. criteria, and to accommodate both spectacular and flex face signage on the building. The project also came with a super fast track, two month design schedule.

*“One of the client’s primary concerns was maximum visibility to vehicular and pedestrian traffic,” says Marco Shmerykowsky. “As each sign varied in width, height and distance from the face of the building, as well as orientation to the façade, we designed the signs to cantilever out on various angles for greatest effect. We had to take into account wind load pressures as well. As that part of 42nd Street can become a wind tunnel due to the canyon effect of the buildings, previous studies of the area were looked at to create the safest and most durable structures possible.”*

Another example of the firm’s work was for Marsh & McLennan companies at 1166 Avenue of the Americas.

The project involved the transformation of the entire second floor of the office tower from standard office space to a corporate cafeteria.

Structural elements of the project included the design of a new mezzanine and mechanical platform within the space, and a new raised floor to accommodate mechanical and plumbing layout for the 2nd floor cafeteria.

*“The raised floor was required because the various retail occupancies at the ground floor precluded the possibility of routing the needed plumbing*

*and mechanical lines below the cafeteria floor”* says John Shmerykowsky. *“The solution here was to design and construct a new secondary structural slab above the existing second floor structural slab which would create a cavity for the routing of the required mechanical lines.”*

This year Shmerykowsky Consulting Engineers has begun to grow the firm, taking a long hard look at markets and demographics.

As high rise structures are in their blood, John and Marco are working out an agreement with a large, worldwide structural group to retain projects together, lending their expertise and history of projects in New York City to a highly effective team.

The gamble Marco took in joining his father was no gamble at all.

They have just been informed about an award the firm will be receiving in December and are negotiating for a new, more spacious office enabling them to grow the firm and take on the projects that require their unique style of personal and intelligent service to the owners, designers and construction managers.