

BALANCING URBAN DESIGN & PUBLIC SAFETY



By Barbara A. Nadel, FAIA

Counterterrorism expert and former NYPD Deputy Commissioner Michael Sheehan advises building owners, architects, and design professionals on how to approach urban design and building security

M **AIN**TAINING THE QUALITY OF LIFE IN URBAN ENVIRONMENTS and advancing design excellence may not be what most building industry professionals would expect to hear from a counterterrorism official and seasoned military officer tasked with critical infrastructure protection, but these values are precisely what Michael Sheehan advocated in his role as New York Police Department (NYPD) Deputy Commissioner for Counter Terrorism.

While serving within the highest levels of the U.S. Government, the White House, United Nations, and U.S. Army Special Forces, Sheehan was deployed on many dangerous missions, from Korea, El Salvador, Somalia, and Haiti to Bosnia and other global hotspots. Today, Sheehan's work on critical infrastructure protection within the urban landscape is less life-threatening, but he knows that protecting cities from terrorism is challenging and important to national security.

In this article, Sheehan reveals why the original design for the Freedom Tower, a 1,776-foot high-rise at Lower Manhattan's Ground Zero (on the site of the World Trade Center) was initially rejected by NYPD as undefendable, how New York City's highly acclaimed counterterrorism operations approach commercial building security, and what the NYPD tells building owners concerned about security design on their properties.

BARBARA A. NADEL: *What is a major challenge you encountered as NYPD Deputy Commissioner for Counter Terrorism?*

MICHAEL SHEEHAN: The main issue in New York City, and many urban environments concerned with terrorism, is to find the balance between security and critical

infrastructure while maintaining a welcoming environment for business, residential, investment, tourism, and residences.

BN: *How does the NYPD approach security for building owners and tenants, and what they should be doing to keep their properties safe?*

MS: The NYPD conducts threat assessments while updating and prioritizing major targets in New York City. It has researched Al Qaeda, its history, current and anticipated thinking, and key targets. This has caused the NYPD to harden potential targets as a deterrent to future attacks, such as financial centers, transportation hubs, and venues with large concentrations of people, such as sports facilities and major public venues.

The goal is to protect New York's strategic assets. We reached out to key sites, worked in close partnership with owners and managers, and developed strategies to help mitigate the risks against them.

BN: *What were some of the strategies that the NYPD used when addressing counterterrorism under your watch?*

MS: The strategies included intelligence investigations against organizations that may target New York City, such as Al Qaeda or other groups. We had patrol deployments of uniformed police in the City, and also worked with building owners of special buildings on installing bollards for maximizing standoff, which is a setback from the street. Maximizing standoff is critical to mitigating the impact of a vehicle bomb.

I advocated blast mitigation for curtainwalls and load-bearing columns, implementing overall security operations, procedures, and technology, such as adding

additional guards, lights, and locks. Other operational measures include screening vehicles and people going in and out of buildings.

I prefer a multilayered approach to securing critical infrastructure. We tried to minimize the employment of white concrete Jersey barriers and other streetscape elements that don't measurably contribute to security and are an eyesore. We tried to minimize the look of an armed camp in New York City (like Washington, D.C.) and seek the balance between security and openness.

As Deputy Commissioner, I told most building owners not to worry—they didn't need more security. I rejected proposals for surrounding most buildings with Jersey barriers. More often than not, I recall telling some owners to just "chill out," stay alert, and give us a call if [they] see something, but [they] can take down most of the post-9/11 barriers; however, for others at key sites and critical infrastructure, we told owners that they needed to do more. It's just not reasonable to place concrete barriers around every building in Manhattan. I undertook this overall approach and related security initiatives with the full support of Mayor Michael Bloomberg and NYPD Commissioner Ray Kelly.

BN: *Describe your involvement with the NYPD's security review of the initial Freedom Tower design in Lower Manhattan.*

MS: These various security issues came to a head with the Freedom Tower, the new high-rise building (under construction) at Ground Zero, on the site of the World Trade Center. The original security design submitted to us for review was rejected by NYPD as undefendable. The World Trade

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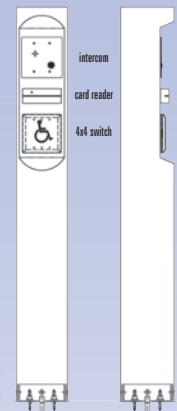
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Center site had already been attacked twice, in 1993 and 2001.

During the review, I saw a high-profile historic target with a glass curtainwall, 12 feet away from a six-lane highway (West Street). There was insufficient standoff and building protection. Based on our review, the building was subsequently redesigned. We matched the necessary security design criteria for what was needed at that building and site.

Our recommendations were developed by the NYPD, in consultation with industry experts: architects, engineers, and blast mitigation specialists, with the full support of the Mayor and the Police Commissioner.

BN: *What advice would you give to building owners and real estate and design professionals concerned about security on their properties?*

MS: Look at each building for its threat profile. Most building owners don't need to do anything new. Other buildings with higher profiles or iconic status may require further measures.

BN: *While at the NYPD, who did you advise and work with regarding building security and critical infrastructure?*

MS: I worked mostly with private-sector owners at commercial buildings and some private partnerships. I also worked with people who own or operate stadiums, train stations, and courthouses, so that includes both public and private owners. We didn't address federal buildings as much, as the federal government addresses security needs for its properties.

BN: *Any final thoughts you'd like to share about security in the built environment?*

MS: There is a threat out there, and [there are] various ways to approach

it. Owners and project teams should do a realistic threat assessment that considers the national and international environment. Some areas or buildings have a low threat level; others have higher threat to define.

This is important because the threat drives the mitigation standards, design criteria, and solutions, especially regarding standoff. For many structures, police, guards, screening of vehicles, and people may be all that's needed most of the time. It is important to use a layered and integrated approach to security design.

Finally, don't sacrifice the aesthetics of what you can achieve. Early collaboration and trust among owners, architects, engineers, and security professionals can create a secure building and still retain the desired aesthetics and design qualities.

About Michael Sheehan

Michael Sheehan is an internationally known expert on global terrorism who has 30 years of distinguished leadership positions within the U.S. Army, the White House, U.S. State Department, the United Nations, and the New York Police Department (NYPD). From 2003 to 2006, he was NYPD Deputy Commissioner for Counter Terrorism, responsible for counter terrorism investigations (with the FBI) and critical infrastructure protection in the City of New York. His primary experience is in counterterrorism, counter insurgency, and international peacekeeping.

A 1977 graduate of the United States Military Academy at West Point, Sheehan has served in many courageous capacities, including as a Commander of a hostage rescue in Panama, an infantryman on the DMZ in South Korea, and as a counter

insurgency advisor in El Salvador. Sheehan was a career Army officer in a variety of Infantry and Special Forces assignments. He has worked with Congress, Federal, New York State, and New York City elected officials, and the media. Currently, Sheehan is a terrorism analyst for NBC News and a private-sector security consultant.

Sheehan's background includes all aspects of security plans and programs, threat analysis, risk assessment, architectural and engineering design features to mitigate against terrorist threats, physical security and guard programs, command post management, continuity of operations, response planning, and integration of private security functions with city, state, federal and international security agencies. He has managed large organizations, including their training, operations, logistics, personnel, and budgets.

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Michael Sheehan has contributed to books and journals, including:

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About the Author: Barbara A. Nadel, FAIA, specializes in planning and design of justice, healthcare, and institutional facilities. Since founding Barbara Nadel Architect (BNA) in 1992, she has provided programming, master planning, design, pre-construction, operational analysis, value engineering, expert witness, and editorial services to clients nationwide and in Puerto Rico. She can be reached at Barbara@BarbaraNadelArchitect.com