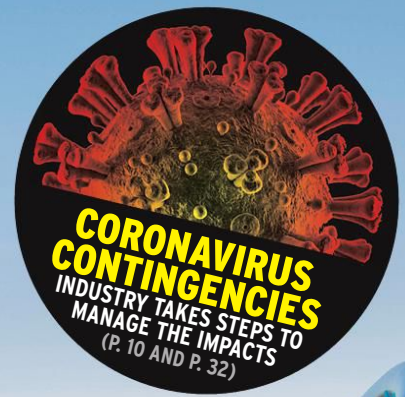


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BEST OF THE BEST
WINNING PROJECTS OF 2019

LINK TO THE LAKE

**PROJECT OF
THE YEAR**
41st Street
Pedestrian
Arch Bridge
over Lake
Shore Drive

SERPENTINE APPROACHES HELP
SOUTH CHICAGO BRIDGE CONNECT
A COMMUNITY TO ITS PARK
(P. 56)

ALSO INSIDE:
FIRST QUARTERLY
COST REPORT
(P. 30)



Speed and Efficiency Drive NYC's Chief School Builder

With a robust five-year building plan and stakeholder support, the School Construction Authority and CEO Lorraine Grillo are Owner of the Year **BY EYDIE CUBARRUBBIA**

DIGGING DEEPER
 NYC Schools
 Chancellor
 Richard Carranza
 (left), NYC School
 Construction
 Authority
 President and
 CEO Lorraine
 Grillo and New
 York Mayor Bill
 de Blasio break
 ground for a
 pre-K at the New
 York Science Hall.

Lorraine Grillo runs New York City's School Construction Authority projects and immerses herself in the tiniest details. During an in-depth conversation at the agency's office in Queens, SCA's president and CEO and several top members of her team discuss her ground-level involvement.

"Architects come up and make sure the colors we're using meet my standards," Grillo says as others around the table call out, "No orange!" The leader explains that past trends dictated bright colors to make schools cheery, which may be "beautiful, but you might have an autistic student or a student with special needs" whose

neurological condition makes them easily overstimulated. "You can't overload them with those colors."

The care that Grillo and her top executives exude for all their projects obviously has had a trickle-down effect. "We have not had a school open late in the last 10 years," she says.

That's an impressive feat, considering that Dodge Analytics lists 396 projects that the agency started in 2019, ranging from the smallest boiler replacements to the largest new learning facilities. These include two school buildings that placed on ENR New York's list of regional Top Starts (*see p. NYNE8*). Combined



with a five-year, \$18.7-billion capital plan that began last July, the momentum from that spending plan helped secure the agency's selection as ENR New York's Owner of the Year.

Grillo, who also holds a dual role as commissioner of the city's Dept. of Design and Construction, joined SCA in 1994. She credits her immediate predecessor in the top job, Sharon Greenberger, with laying the groundwork and "making sure we cut through all the nonsense very quickly."

That means streamlined processes—such as moving feasibility studies in-house and taking a fraction of the time, and the paper, to do them. This also includes making sure projects are managed in-house rather than through an outside CM as in the past, since Grillo says stakeholders "want to know that the person managing the project has a real investment in doing it right." Also key is using "automation not to replace staff, but to do our work smarter and better," executive vice president Steven W. Lawitts says, noting SCA's smoother tracking of contracts and resources.

The changes also mean "surrounding myself with great people," Grillo says, citing as her key strength



STEAM-CENTRIC
The pre-K being built at the Science Hall will focus on STEAM, or science, technology, engineering, arts and mathematics.



OPEN SPACES
Staten Island's New Hungerford School, aka IS/HS 86R Intermediate and High School, is No. 46 on the Top Starts list. Its location enables a much bigger footprint than in other boroughs.

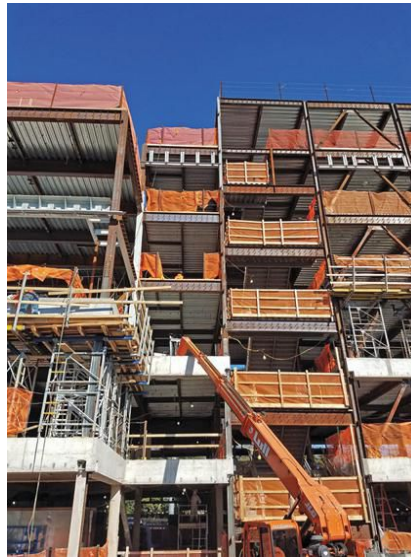
the ability to "find the best people to do the job." She's also generous in praising the knowledge, skills and work ethic of her support staff. "I think the important thing to note is that if we call Gordon on a Wednesday at 3 a.m. he would answer the phone, and he would answer the phone from a jobsite," she says, referring to Gordon Tung, vice president of construction management. "That's the kind of commitment that the folks here have."

Tung credits the agency's fast turnaround on projects to the mindset Grillo has established at SCA. "I found it different from other agencies because people actually communicate with you, and you can usually solve a problem in one meeting," he says. "We make the decision right then and there. That's why we're successful. We don't waste a lot of time."

Dominick DeAngelis, vice president of architecture and engineering, points out this mindset applies whether it's an \$80-million school built from scratch or comparatively small-ticket upgrades at one facility. In his department, "there's almost 300 professionals in four different studios who do ... not just additions and new schools but ... boiler replacements or roofs or skin replacements. It's an incredible volume of work that ... would make any A&E firm absolutely jealous."

Indeed, Nina Kubota, vice president of capital planning and contract management, points out that "what's most important is that we keep our buildings watertight and safe." That includes a lot of exterior work on buildings, particularly the 200 structures under SCA's purview that are more than 100 years old, and upgrading things such as fire alarm systems, lighting fixtures and ADA accessibility; the latter accounts for \$750 million of the capital plan.

OLD AND NEW
PS 46X
 exemplifies how
 the SCA builds
 new structures
 and attaches
 them to old ones.



TOP START Intermediate School 419 in Flushing is No. 57 on ENR New York's Top Starts list.

demand for schools. But the extremely dense area makes it challenging to find places to put those schools. He praises solutions like the 450-seat school being built in the tower that replaces the old Syms clothing store at 77 Greenwich St. In this instance, the SCA purchased the space; sometimes the agency leases school space.

“SCA and the city have become creative in working with for-profit developers to open public schools to serve the community,” Pfeffer says. “I would safely say it’s

Another important improvement initiative is to “come off fuel oil No. 4 by 2030, which is a DEP [city Dept. of Environmental Protection] mandate,” Kubota says. To that end, the agency did 100 boiler replacements in the last five-year capital plan that ended last June and is on track to do the same in the new plan.

The current capital plan also includes adding “57,000 new classroom seats” to the school system, “and that can be in the form of additions or brand-new, ground-up” schools, Kubota says. This does not include pre-kindergartens, or pre-Ks—one of Mayor Bill de Blasio’s education priorities.

“We found sites, negotiated leases and designed and built-out 35 new pre-Ks in less than nine months,” Grillo recalls after de Blasio took office in 2014. Tung adds: “We work so rapidly that we do a quick design, and then we build. Almost in nine months we [create] a brand new space that meets all the criteria.”

Enthusiastic words and smiles abound when the conversation turns to one particular pre-K that broke ground last fall at the New York Hall of Science property in Corona Park in Flushing Queens. The \$42.4-million school will be the first city pre-K to focus on STEAM—science, technology, engineering, art and math—education. The team will have “roughly 18 months” to build the center adjacent to the science museum “from the ground up,” Tung notes.

That facility exemplifies the alternative real estate that SCA has pursued in building new schools, which DeAngelis calls “an exciting process” that “speaks to the amount of creativity ... in trying to find places and get deals and get these schools into places that work.”

One outside observer agrees. Attorney David Pfeffer, a partner at law firm Tarter Krinsky & Drogin who primarily represents developers and project owners, notes that lower Manhattan’s Battery Park has become increasingly residential since 9/11, which means more

not common anywhere in the country to have public schools placed in for-profit buildings.”

School-use spaces are usually excluded from floor area ratio calculations used to determine what can be built on a site, though developers at times can receive benefits for including public use space in projects.

Another option is to attach new structures to existing old school buildings, such as at **PS 46X** in the Bronx. Sal Novello, vice president of construction at **DeMatteis**, the project’s contractor, explains that the team erected a 78,000-sq-ft new addition, did structural modifications to join the old and new buildings and renovated the existing structure. Challenges included removing “a large section of exterior masonry stone facade,” says Novello, whose firm has eight ongoing SCA projects worth up to \$77.8 million, adding that the “invasive structural and selective demolition work were being done while the school was occupied.” Work was completed last year.

DeAngelis says joining old and new buildings is a good way to add accessibility, since new structures can include elevators, allowing both structures to “link up.” No matter how new classroom seats are provided, he adds, his department is continually evolving designs based on the board of education’s changing pedagogy and the use of information technology by teachers and librarians.

“We try to leverage” what’s been learned on past projects “and keep an active standard studio so that we’re not reinventing the wheel with each project,” he says. “We’re working with educators to ensure we’re building the right spaces for 50 years into the future.”

That future is also shaped by changing and varied lot sizes. Grillo remembers when a typical school footprint was 25,000 sq ft. Now it’s common to build one in 15,000 sq ft in the more constrained boroughs—requiring designs that include rooftop playgrounds and gyms.

In more spacious Staten Island, SCA built the award-winning, net-zero-energy Kathleen Grimm School, “which actually produces energy for the community,” Grillo says. “You can do all these photovoltaic arrays and other things” to create electricity that powers the school and can be put into the grid, she says of the larger lot.

Site differences across boroughs aren’t just due to space. Jack Hagen, vice president of education for EW Howell, a regular SCA contractor since the 1990s, note: “Manhattan is nearly all rock. Brooklyn and Queens, you’re driving piles to be able to support the building. The center part of Queens, you get nice soil. ... Parts of Staten Island are half rock, half dirt. The closer you get to the water, the more mischief is underneath the surface.”

Still, there are some trends common to SCA projects. Tung says the authority started using precast panels extensively about three years ago, when it started looking into precast masonry on concrete panels and



developed school design standards that use concrete. The decision was “because of the tight labor market,” when it was hard to get masonry contractors to “do the job in the speed that we wanted.”

That speed, of course, is SCA’s primary focus. Hagen notes “schedules are tighter” and have become “more demanding” in the past 10 years, though the authority also “turns around the money like clockwork,” a boon for contractors.

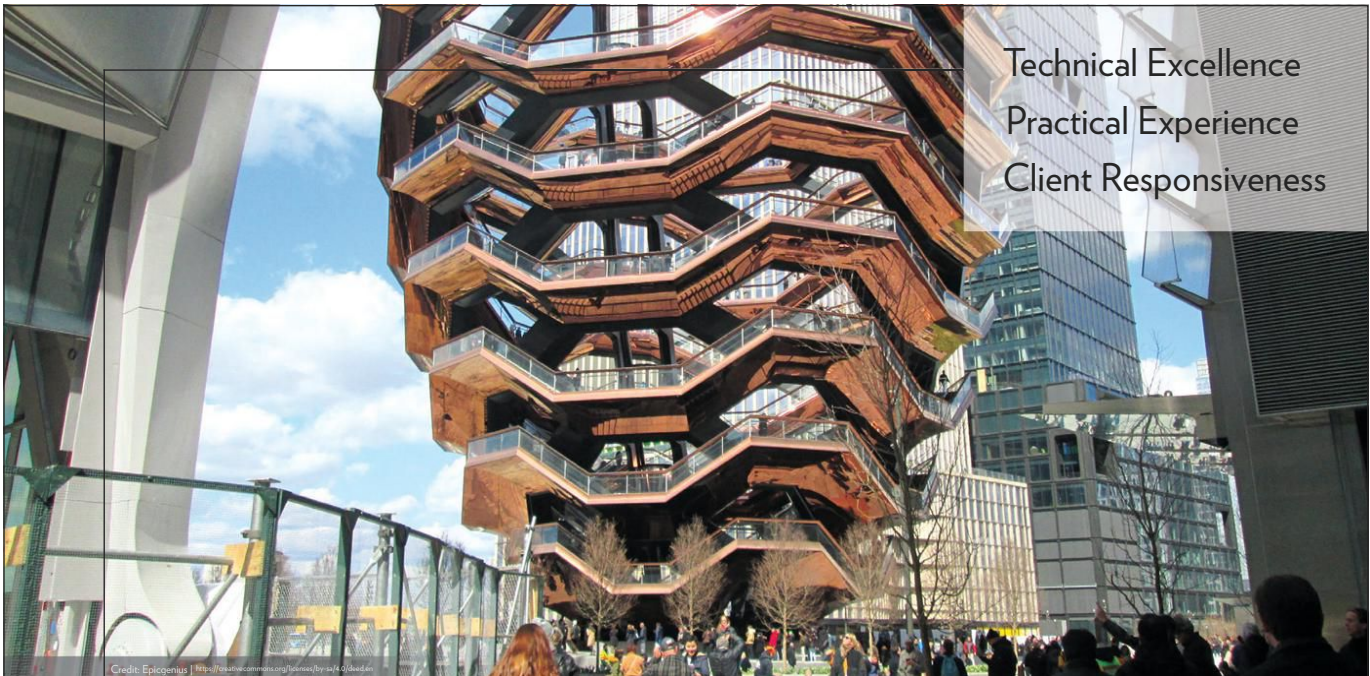
Schedules are planned to facilitate speed, he says, with a “non-access period” in the first four months, during which time SCA finalizes contracts. “And then boom—you start out on the jobsite and get a jump-start on things. It improves the delivery time,” he says.

The extensive planning and challenging schedules are ultimately worth it, according to Grillo and her agency executives. “There’s something very special about being at a school opening day, when you see the looks on the [faces of the kids and the parents],” she says. “It’s very exciting and rewarding.” ■

SCA LEADER
 “There’s something very special about being at a school opening day, when you see the looks on the [faces of the kids and the parents],” Grillo says.

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