



*ProTecs' renovation of this existing warehouse and office space involved all new mixing tanks that control and contain corrosive and acidic materials.*

# PROTECS

*Evolution of design-build approach leads to a hybrid firm that greatly benefits clients*

BY LAURA WILLIAMS-TRACY

## AT A GLANCE

**HEADQUARTERS:**  
CONSHOHOCKEN, PA  
**FOUNDED:**  
2005  
**EMPLOYEES:**  
20  
**AREA OF SPECIALTY:**  
PROJECT, CONSTRUCTION, AND FACILITIES MANAGEMENT

LONG BEFORE THE TERM “HYBRID” MEANT progressive and efficient, Chris DiPaulo conceived an idea to create a crossover construction-management project-delivery formula to help high-tech customers build needed facilities while paring back financial, performance, and conformance risks. The result is ProTecs, a single-source project- and construction-management company, or what DiPaulo refers to as a “hybrid design-build firm.”

Today, headquartered in Conshohocken, Pennsylvania, just outside of Philadelphia, ProTecs provides turnkey facility-related capital projects to high-tech companies while allowing them to remain focused on their core business. “Early on, we saw this lean paradigm emerging—that owners were paring back and eliminating in-house engineering and project management and not owning the real estate they occupied,” says Chris DiPaulo, founder and president of ProTecs. “That drove a perfect storm of inexperience as neither the landlord

nor the owner has the knowledge and experience in project delivery.”

This knowledge gap created an opportunity for ProTecs, which DiPaulo started in 2005. An architectural- and civil-engineering graduate of Drexel University, DiPaulo had successfully managed large construction projects for an integrated design-builder for 15 years. But he saw an inherent defect in this model. “I really believe engineering firms with in-house construction-management capabilities have their own bias on how to deliver integrated design-build projects,” DiPaulo says. But, he adds, those approaches sometimes conceal too much cost information from the owner. “Oftentimes in this arrangement the design professionals working on the job aren’t necessarily the most skilled in the project type—just the ones who are not busy,” he says.

Without examination of costs early in the design process, the result is often an over-engineered solution that is



Because of our engineering backgrounds, we are able to focus the A/E firms to offer a more efficient design that allows for a more reliable project outcome. —Chris DiPaulo, Founder & President



unaffordable. "The old models of design-bid-build and integrated design-build are outdated and inefficient," says Bill Hunter, ProTecs vice president of life sciences real estate. "These delivery methods frequently result in too much finger pointing, conflicts of interest, and ultimately a dissatisfied customer."

ProTecs offers a hybrid of those approaches, with ProTecs assuming all of the risk for cost and performance while maximizing competitive bidding throughout all facets of the project. ProTecs acts as the point of continuity and aligns the strategic project objectives, hires the best design firms under its umbrella, and delivers the project.

The company is able to assume these risks because of its real-time, expert costing analysis during the early stages of conceptual design. ProTecs pioneered a process it calls Target Cost Construction, which works with owners and outside design professionals to define the scope of the project and maintain a realistic budget. Through Target Costing, the design basis is driven backwards from both the process requirements and the cost parameters. This allows ProTecs to identify cost drivers immediately and manage the project scope to avoid financial and schedule overruns.

ProTecs is able to provide conceptual development and programming of a project and arrive at a guaranteed maximum price for approximately one percent of the project cost. "Most companies don't have the experience to take the risk for the guaranteed price this early in the design development," says Jay McKenna, PE, LEED AP, vice president of operations.

Under this model, DiPaulo has grown the company to 20 people, including project managers and engineers, field superintendents, and administrative staff. The company has doubled revenue each year on projects ranging from \$30,000 to \$30 million. It specializes in leasehold improvements, renovations, new buildings, and additions for pharmaceutical, biotechnology, semiconductors, specialty chemical, photovoltaic, and mission-critical industries.

Currently, ProTecs is building a biological-vaccine manufacturing facility and a vivarium. Clients include Charles River Labs, medical implants company Orthovita Inc., biotech company Fraunhofer USA and semiconductor company Anadigics Inc.

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