Many developers believe that consultants early on in the planning process will help ensure that the project will sail forward. These consultants will help streamline the development process from the start. Once on board, an engineer can guide owners and developers through the challenging sequence of reviews and inspections.

Give Engineers an Early Start

It’s imperative in any development project to involve the civil engineer early on in the planning process. A licensed engineer will help to ensure that the project will meet all required codes (beyond the requirements of the New York City Department of Buildings) while minimizing potential problems that may involve costly retrofits and adjustments later on in the process.

A common example involves compliance with ADA requirements. Consultation with an experienced civil engineer will ensure that building entrances and lobbies are designed at an appropriate elevation and will coordinate with the existing profile of city streets and sidewalks. Too often, developers and their architects find that designs must be retrofitted or building aesthetics compromised with costly ramps and other measures because ADA requirements weren’t addressed early on.

Opt for Agency Experience

A critical area of consulting expertise—often overlooked by developers as they form their design teams—begins with experience in working with New York City agencies. Many developers believe that once the Builders Pavement Plan has been approved by the NYC Department of Buildings, their project will sail forward. These plans must also meet multiple codes involving other city agencies, however. Consultants that can help navigate the process of working with these agencies may be instrumental in keeping project costs and schedules to a minimum.

Engineers that have worked closely with agencies such as the New York City Department of Transportation (NYCDOT), the New York City Department of Environmental Protection, the New York City Department of Parks and Recreation, MTA New York City Transit, and the New York City Fire Department can provide valuable input regarding the issues and challenges that may arise with each of these reviews.

Many of these issues come into play with the development of the Builders Pavement Plan. Knowledge of NYCDOT requirements, for example, will avoid potential problems in meeting the agency’s criteria for driveway configurations, curbs, sidewalks, traffic signals, and lighting. If the project merits special permission for a non-standard driveway design, which requires pre-approval from the agency (one of the most frequent ‘surprises’ that developers and design consultants often overlook), a civil engineer with a good working relationship with NYCDOT will recognize this step and may be able to help expedite the approval process.

Similar issues may arise with existing fire hydrants and emergency pull boxes on the site. Plans for driveway installations should avoid these features, or, if they must be relocated, early coordination with the city’s Department of Environmental Protection and the Fire Department will be important.

Existing street trees may also pose a challenge. Often, developers become painfully aware of the NYC Department of Parks and Recreation’s stringent regulations regarding existing trees when they must pay to replace mature specimens elsewhere on the property, or on adjacent property as may be required. This consideration should clearly impact preliminary decision-making regarding the location of a driveway or other site development features.

Explore What Lies Beneath

One additional agency may weigh in when it comes to approvals for development projects: MTA New York City Transit. Unfortunately, too many projects move forward in the planning and design process with inadequate site survey information—a situation that may result in a major surprise and costly delays down the road. Development and design teams should be certain that site surveys reflect not only topographic and utility information, but transit infrastructure as well. A major subway line that could be impacted by surface development is certain to hold up progress on a project if not addressed early on.

Selecting a civil engineer with solid expertise and good working relationships with key city agencies will help streamline the development process from the start. Once on board, an engineer can play a vital role in keeping projects on time and on track.

Orlando Miquel Jr., PE, is director of transportation engineering for Dewberry, New York, N.Y.