

DATA CENTER DEVELOPMENT — THE INS AND OUTS

A number of key factors must be present when selecting the site for a data center development.

Stephanie Specht

As technology becomes increasingly complex, data centers have become a critical component for a host of companies in the Northeast. However, not just any site or facility will do. Michael Pembroke, senior vice president of leasing and marketing for Hackensack, New Jersey-based Russo Development, explains that several key factors are required when choosing a site for data centers.

When choosing a site for a new data center, it is imperative to look for several specific requirements. For example, three key utility factors are needed:

- **Power:** A site must have multiple power locations, meaning multiple service locations so that the facility is served by more than one source of

power. "Power is really the primary thing that we look for. We really try to find the locations where the power is ideal from a reliability and capacity standpoint," says Pembroke.

- **Fiber Connectivity:** It is imperative to have several different fiber providers from a connectivity standpoint.

- **Water:** Water capacity and viability from a water service standpoint is also a key factor. "If you are building a large enterprise facility, a chilled water solution is the most economical way to operate the facility, but it also requires a very large capacity of water usage," notes Pembroke.

In terms of the site itself, Pembroke says that it is important to find a property that does not have environmental issues or wetland issues, and it should not be near potential hazards such as

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Russo Development recently completed a project for a global financial institution (top), as well as a speculative project for Cervalis (bottom), in northern New Jersey.

rail lines or airport flight paths. "For example, flood plains are a major hazard; the chance of flooding is something that cannot be tolerated in these types of facilities," says Pembroke. "You also want to have a good setback from the property line to your facility just to provide you with some buffer from the surrounding roadways."

Because of the large capital expenditure required for data centers and the current economic uncertainty in the market, many companies have had to think outside of the box when it comes to developing data centers. Pembroke notes that some companies are looking for a quick or temporary fix due to capital constraints, so there has been an increase in co-location. "They are not looking to build a new facility now, but they need to operate a data center somewhere. They ask a co-location provider to build out a data center and they will lease a portion of the space until they build out their own facility later on," he says.

Pembroke adds that some firms have recently asked Russo to construct a complete turnkey data center facility. "Companies are asking us to finance and construct the entire facility from start to finish — where we would not only do the shell/core and infrastructure, but we would also do the interior construction and hand them a fully completed data center facility built to their specifications," he explains. The firm would then lease that facil-

ity from Russo as an entire package, as opposed to just leasing the shell/core with the power and the fiber. "That is a big difference from what we have seen in the past, but it just goes to show you that there is not as much capital out there to finance a facility. If a firm still wants to move ahead with the project they prefer to lease the entire facility as opposed to laying out the capital themselves up front."

Russo has built and continues to own more than 1.4 million square feet of data center space in northern New Jersey, including two recent projects for global financial institutions totaling 650,000 square feet. These projects have all been greenfield developments with the shell/core and utility infrastructure all designed, built, and leased in-house by Russo. The company also recently completed a speculative 150,000-square-foot project for Cervalis, which provides IT infrastructure solutions. "Because of the time constraints of a build-to-suit property, Cervalis could not wait for a brand new facility, so we had a facility in which the shell was already up so they could come in and do their interior construction based upon the design of our shell," Pembroke explains. Currently, Russo is constructing a 400,000-square-foot enterprise level, built-to-suit facility for a major financial services firm in Mahwah, New Jersey. □