

### Client:

Elzinga & Volkers

### Project:

Spectrum Health is the largest not-for-profit health care system in West Michigan. With seven hospitals and a multitude of prevention, diagnosis, treatment and recovery services, it is recognized as one of the nation's top integrated health care delivery systems. The need for continual and reliable source of electrical power is a critical component of health care delivery. As such, Spectrum Health entrusted Elzinga & Volkers, one of the Midwest's most recognized Construction and Construction Management companies, to upgrade the Power Generating Facility for the Butterworth Hospital Campus—Spectrum's largest facility.

### Plan:

Because of the complexity of the project Diamond's plan called for the use of Ground Penetrating Radar (GPR), Slab Sawing, Robotic Demolition and Concrete and Slurry-By Product Removal.

### Process:

The work had to be completed without a shutdown of the facility. In addition, because of the need to protect existing drain and electrical runs below, and within a ten inch concrete slab, Diamond used Ground Penetrating Radar to map out the entire sawing area prior to the start of cutting and demolition. All drain and electrical runs were clearly identified and their locations marked on top of the slab. Diamond then used high-powered diesel saws to cut over 1400 feet of concrete into smaller pieces to facilitate removal. In the areas where service critical conduit was embedded or directly below the slab Diamond used a Brokk Robotic Demolition unit to rubbleize the slab into pieces. By breaking the concrete in these critical areas it was able to preserve the integrity of the embedded conduit and create pieces which could be removed by hand. All of this took place while safeguarding the dust-free integrity of the Power House air intake system. All the slurry, a by-product of the cutting, was contained in 55 gallon drums and removed from the site.



## Outcomes:

“If a concrete cutting job can be described as delicate—this was one of them. Because the need to protect the electrical and drain runs, all the cutting, demolition and removal had to be done in a very careful and controlled manner,” said John Parker, project manager for Elzinga & Volkers. “Diamond knows how to do just that. Their capability and innovativeness in bringing together different disciplines to complete the job is one of the things that makes them unique. They developed a plan and carried it through with expected results.”

For over 30 years Diamond Concrete Sawing has been at the forefront of the concrete sawing industry. As a “customer-first” company, Diamond provides a wide array of technologically advanced concrete sawing, demolition and ground penetrating radar (GPR) services to satisfy the needs of knowledgeable customers who demand immediate solutions, within budget, and on-time.

For more information on how Diamond can meet all of your concrete sawing, demolition and ground scanning (GPR) needs call 1.800.968.3745 or email [info@diamondconcretesawing.com](mailto:info@diamondconcretesawing.com)

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