

# MICHIGAN Civil Engineer

Summer 2006

## Redevelopment near K-zoo is 2005 OCEA winner

An innovative redevelopment of a closed General Motors plant near Kalamazoo won the ASCE Michigan Section's Outstanding Engineering Achievement Award for 2005. In 1966, when the Kalamazoo General Motors stamping plant opened for business; it employed approximately 4,000 workers for over 30 years. The plant was a massive 45-acre heavy industrial building situated on a large parcel of 330 acres.

In July 1999 this massive plant closed. Soon after the property was vacated, Hackman Capital Partners, a developer from California, purchased the property and initially began to market the property to a single user. In 2001 Hackman realized a change in direction from the single-user mindset was necessary. They started looking at tailoring the entire site for multiple users and multiple tenants for the existing building.

Early in 2003, Hackman began a partnership with the Charter Township of Comstock and Southwest Michigan First (a local economic development organization) to investigate loan and/or grant opportunities for redeveloping the entire site and creating jobs again for the community. In November 2003 the Michigan Economic Development Corporation awarded a \$3 million Community Development Block Grant (Michigan's largest for the 2004 construction season) to Comstock Township to construct a new public road and public utilities to better serve the entire 330-acre parcel. A requirement

of the grant was that Midlink Business Park had to match the grant with \$6 million dollars in private on-site redevelopment and to create 300 jobs.

With this criterion for the grant, Midlink made a dramatic decision late in 2003 to split the enormous building in two, making the resulting space more marketable by being



more accessible for a multi tenant use. Seven acres of the building were demolished and converted to an access road, parking area and truck dock area providing access to both buildings along its entire length. This demolition, creation of the truck dock area, and the 2 miles of public roadways and public utilities were completed within the 2004 construction season. The newly created Midlink East and Midlink West and the 240 acres of remaining land has the potential of recruiting manufacturing, commercial, warehousing, logistics, and other business opportunities.

The first tenants to take advantage of Midlink Business Park moved into the newly created Midlink East (828,800 square feet) and Midlink West (761,600 square feet) in March of 2005. Soon after in June of 2005, a ribbon cutting ceremony was performed for the official opening of the public roadways at Midlink Business Park.

Midlink Business Park is located along I-94 at exit 80 in Kalamazoo County, only a three-hour drive from Chicago and two hours from Detroit. Midlink Business Park is a 330-acre, world-class business park that offers an extraordinary campus-like environment for business, industry, and commerce. It is located within one mile of the Kalamazoo Battle Creek International Airport, and has on-site rail service with

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### ASCE MICHIGAN SECTION

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indoor access. As a tax-free Renaissance Zone, its tenants enjoy virtually property tax-free operations until 2017.

The planning of the site included two major components, creating access to 330 acres of vacant land through roadways, and transforming the existing one-user building to a flexible multi-user facility for the current job market.

The road layout to access the 330 acres of land was developed by lining up the roadways with two intersections to the north on Cork Street and two intersections to the west on Sprinkle Road. Also taken into account were the consideration of proper spacing away from the existing building for truck accessibility around the entire building, and the stringent stipulation of only one public railroad crossing. During this planning process many changes were made to make the entire site ultimately flexible for future build-out and expansion conditions. For example, the railroad crossing is strategically placed to allow railroad access to the entire site without having to construct a second public railroad grade crossing.

The existing 45-acre single building was extremely difficult to market due to access issues to the center of the facility, not to mention safety concerns. Thus came the decision to split the building into two buildings and create two four sided fully functional buildings with no center users. This required the demolition of 7 acres through the center of the building ("canyon"). A large truck plaza and private road were constructed in this demolished area for truck dock access to the newly created outside walls of Midlink East and Midlink West in the canyon area.

With the preliminary plan established the design could begin on the 2 miles of public roads, private roads, the 7-acre truck loading dock area, railroad at-grade crossing, sanitary sewer, water main, storm sewer, and two major intersection upgrades, including new traffic signals.

The largest challenge of the design of the public and private roads was the existing infrastructure that had to be designed around or abandoned.

The demolition of the 7 acres of building was an extreme challenge because Midlink wanted this entire area lowered 4' in elevation to make it truck dock accessible. All of the existing utilities for the building ran directly under the existing slab. This necessitated creative redesign and

## MIDLINK BUSINESS PARK

### PROJECT TEAM

#### OWNER

Hackman Capital Partners

#### SPONSOR

Comstock Charter Township

#### ENGINEER

Prein&Newhof

#### SITE CONTRACTOR

Hoffman Brothers

#### COST

\$3,000,000

relocation of all the utilities, particularly integrating the drainage with the existing storm water management system already in place. This canyon area had to ramp up for the northerly 7 bays to avoid the relocation of a 13,800-volt electrical duct bank to Midlink East and Midlink West.

The public roadways were designed over an existing 20'x20' utility tunnel, adjacent to a Consumers Power substation, which required a setback variance from the Comstock Township Zoning Board, and through a wetland which required a permit from the Michigan Department of Environmental Quality. The design of the public roadways utilized the existing storm water infrastructure throughout much of the site. Additionally, there were many items that could not be designed around and thus were removed. These included a scrap

metal conveyor, an above ground water storage tank, a truck weigh scale, a fueling station, and a guardhouse.

The public road infrastructure contractor, Hoffman Brothers from Battle Creek, used a GPS digitally controlled grader and bulldozer on portions of the project. Prein&Newhof's survey crews established project controls, and a GPS transmitter placed on a control point sent signals to each piece of digitally controlled equipment as to the proper line and grade. This greatly reduced the amount of project staking required, and reduced the time it normally takes for field-related engineering decisions. Many unmarked and unknown private utilities were encountered during construction that was a challenge to the progress of the project. Half width construction on Sprinkle Road a main arterial north/south road through Kalamazoo was also a construction challenge.

The interconnection to this site with adjacent public roads and I-94 will result in an efficient movement of heavy truck traffic, minimizing the need for special measures to handle the volume of commerce moving through this area.

Midlink Business Park to date has committed over \$60 million to this development. The development promises to create 300 jobs initially, and eventually plans call for up to 1,000 new jobs. Local contractors performed much of the work, keeping the economic multiplier effect associated with such a large project in Michigan.