

## Project: **HIGHMARK DATA CENTER**, Harrisburg, PA

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### **Concrete Facts**

- 81,854 SF Elevated Precast Superstructure
- 150 PSF Live Load for the data center floor
- Designed for 3-second bursts of 110 MPH wind speed
- Originally designed as a structural steel frame
- 5-week delivery/erection duration
- Exterior insulated walls (R=16) were buff mix with a light sandblast
- SPG provided MBE hauler and material supplier

### **Products Used**

- 10 ft. wide Double-Tee (24" depth) with 2" flange
- 10 ft. wide Double-Tee (32" depth) with 2" flange
- Screen Walls
- 24" x 24" Columns
- 24' x 34" Inverted Tee-Beam at Roof
- 24' x 44" Inverted Tee-Beam at Floor
- 8" Insulated Wall Panels with Architectural finish

### **Owner**

Highmark Inc.  
Corporate Headquarters: Pittsburgh, PA  
with substantial business in Central Pennsylvania

### **General Contractor**

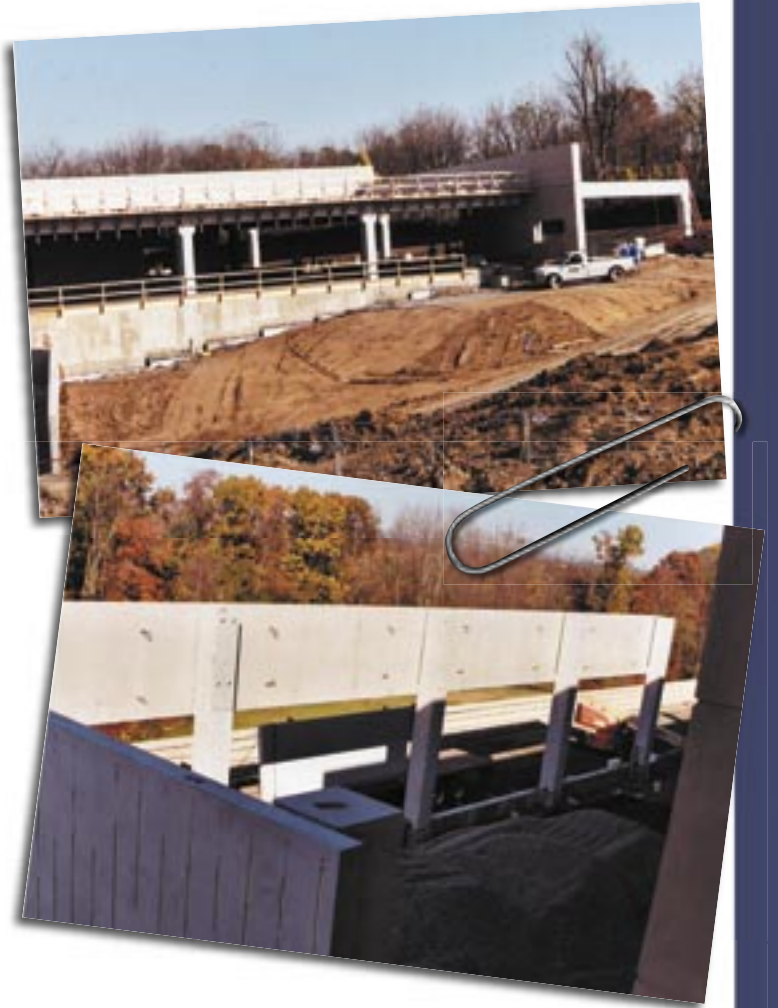
Holder Construction Company  
Reston, VA  
Jenny A. Grove-Bradshaw

### **Architectural/Engineering Firm**

RTKL Associates, Inc.  
Baltimore, MD  
Bob Knight, PE, Director of Structural Engineering

### **Precaster**

Shockey Precast Group  
Winchester, VA



**CONCRETE EVIDENCE:**

## Highmark Inc. Gets Data on Precast

How do you process and securely house millions of medical insurance documents? The question put to Highmark Inc., one of Pennsylvania's premier medical insurance providers, was not how, but where.

The company, headquartered in Pittsburgh, with substantial business and facilities in Central Pennsylvania, decided that it was necessary to replace its existing data center. Project planning began with Highmark visiting data centers around the country to glean the best construction and operational ideas from each facility. A site near Hershey, Pennsylvania was chosen for its desirability as well as its proximity to other Highmark facilities in nearby Camp Hill, Pennsylvania. Highmark's goal was to build a modern facility to meet its technology and business needs for the next ten years, and to maintain a fiscal responsibility to members.

Various structural systems were evaluated with precast being selected over other systems. Architectural/Engineering firm RTKL Associates of Baltimore, Maryland contacted several precast producers for an in-depth study on a precast option.

Holder Construction Company, of Reston, Virginia, was named General Contractor and selected Shockey Precast Group, located in Winchester, Virginia as the precast systems manufacturer. An aggressive construction timetable, significant cost savings and alternative material price volatility were major factors in the Highmark's choice of precast. Not only was the initial cost of precast attractive, but the use of precast also saved money on other aspects of construction. The precast sandwich panels came with insulation already in place. This alone saved thousands of dollars in material and labor. Highmark also saved money on fireproofing, which would have been needed to protect the structure had precast not been chosen. Extensive and expensive fireproofing along with the corresponding concerns about excessive dust in the center's high-tech environment were avoided because of the nature of precast.

Ground was broken in April 2004 and work began. Shockey fabricated the precast components in just five weeks and completed the erection work in only thirty days. Construction has since progressed at a steady pace.

When completed in the summer of 2005, the new 87,000 sq. ft. facility will be home to fifty Highmark employees and be one of the most secure data centers in the area with 100 ft. perimeter stand-off and extensive surveillance services. Highmark's customers can rest assured that their vital information is safe and secure in one of the best and most cost effective data centers anywhere— thanks to planning, prudence and precast.

