Hueston Woods
Covered Bridge
**Project Overview**

**Location:** Camden-College Corner Road, Hueston Woods State Park

**Truss Type:** Burr-Arch

**Owner:** Preble County Engineer

**Contractor:** Brumbaugh Construction

**Design Team:** Palmer Engineering- Roadway/Substructure  
Smolen Engineering, Ltd.- Superstructure

**Engineer’s Estimate:** $1,893,750  
**Construction Cost:** $1,795,444

**Total Cost including Engineering:** $1,977,500
**Project Intent**

- To preserve and enhance the park setting
- Design Loading: HL93 and Pedestrian Live Load

**Site Design Concerns**

- Horizontal Alignment
- Intersection Sight Distance at Hedge Row Road
- Multi-Use Traffic: Motor Vehicles, Pedestrians, and Cyclists
The Burr-Arch Truss design was chosen as an homage to the Roberts Covered Bridge which was closed to traffic in 1986 due to arson.
Preliminary Design Concept

Hueston Woods Covered Bridge

Preble County Engineer
J. Stephen Simmons P.E., P.S.

KRAMER
Structural NEEC.

Preliminary Design Concept
Design Concepts
Structural Design Concerns

- Wearing Surface
- Tension Connection of Verticals
- Beam Cantilevers
- Arch Thrust and Horizontal Deflection
Epoxy Wearing Surface
Traditional King-Post Joinery

Splice Plate Connection
Burr-Arch Truss