

Strengthening Structures | Protecting Lives Worldwide.











Transportation

Buildings

Pipelines

Waterfront

Industry



Project: Indiana DOT Bridge Widening

Location: Indiana, USA

Client: Dept. of Transportation

Indiana

Concrete repair of Indiana DOT Bridge Widening, Indiana, USA

The Indiana DOT had a bridge in Dearborn County that was to be substantially widened. The existing deck was removed and replaced and 4 new steel beams added to widen the bridge. During the construction, the rest of the structure was given an overhaul. This included the columns at 3 pier locations.

The concrete was in good shape and required only minor concrete repairs. Our design involved 1 layer of carbon over the entire height of 10 columns (two columns were completely replaced as they were damaged during the demolition phase).

INDOT is convinced that the application of glass FRP over a newly placed concrete repair will enhance the service life of the repair. University research has shown that the application of FRP over repairs of corrosion damaged columns significantly slows the rate of corrosion by as much as 90%. The wrapping has a profound effect on the ingress of oxygen and moisture – effectively sealing the concrete surface. The Indiana DOT routinely wraps all their concrete repairs.

This project ended up with a superior finish and level of aesthetics.

Scope of Works:

 Enhancement of service life of concrete repairs





