

Corridor H Design-Build

Randolph and Tucker Counties, West Virginia

CLIENT

Kokosing Construction Co.
6235 Westerville Road
Westerville, OH 43081
Kevin Ohl
(614) 228-1029

OWNER

WV Dept. of Transportation
1900 Kanawha Boulevard E
Building 5
Charleston, WV 25305

COMPLETION DATE

June 2018 (Design – Est.)
Oct. 2019 (Construction – Est.)

PROJECT COST

\$8.5 M (Design – Est.)
\$209.7 M (Construction – Est.)

E.L. ROBINSON'S ROLE

Prime Consultant
Roadway Design
Bridge Design
Hydraulic Design

PROJECT MANAGER

Scott LeRose, PE

KEY STAFF

Brent Downing, PE
Kevin White, PE
Barry Logan, PE
Erik Brokamp, PE
Matt Cornett, PE
Dave Traini, PE
Grant Whittaker, PE



E.L. Robinson Engineering (ELR) partnered with Kokosing Construction Company to successfully win the Corridor H Design-Build project in West Virginia. This section of Corridor H is a new 7.6-mile rural divided arterial with two (2) 12-foot wide lanes in each direction. ELR's project responsibilities included the roadway and drainage design, design of five (5) bridges, slope stability analysis, foundation design, and construction inspection. The drainage design consisted of 26 culverts, some with up to 200 feet of fill, and approximately 30,000 feet of storm sewer. The five steel plate girder bridges varied in length from 560 feet to 1200 feet. The most cost-efficient girder configuration was five girders at 12'-8" spacing. Two of the structures are on horizontally curved alignments. The substructures include full-height abutments designed in FEA software as well as piers exceeding 200 feet in height. Pier configurations consisted of two-column piers, multi-column piers, and hollow box piers. Working with Kokosing, ELR adjusted the horizontal and vertical alignment to minimize the cost to win the job. The proposed alignment cut through the mountainous terrain with 270 feet tall cuts and 200 feet tall embankments. The project utilized DOH rock fall catchment criteria, and ELR designed the backslopes that varied from 0.5:1 to 1.1:1 slopes with benches at various heights based on the rock conditions. The massive earthwork project moved over 21,600,000 cubic yards of earth, in which ELR was able to carefully balance the excavation and embankment to minimize the cost to the contractor.

