

Hay Creek Bridge & Approaches: B-09-0380 (2010)

Client:

Wisconsin Department of Transportation ~ Northwest Region

Project Number:

#8620-02-05

Location:

Elk Mound - Bloomer
STH 40
Chippewa County, Wisconsin

Client Contact:

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**Staff Assignments:**

Matt Gundry, P.E. – Project Engineer
Donald Bertrand – Plat Development
Matt Adams – Survey Crew Chief

Project Scope:

Fleming, Andre & Associates, Inc. provided design services to replace the existing structure B-09-0006 over Hay Creek on STH 40 in Chippewa County with Structure B-09-0380, a single span concrete slab structure.

Late in the plan development cycle, this structure was selected for the State of Wisconsin's first Geosynthetic Reinforced Soil (GRS) abutment design. The GRS implementation was driven by FHWA's Every Day Counts initiative to accelerate the adoption of innovative technologies. The conventional structure plans were scrapped, and Fleming, Andre & Associates, Inc. worked closely with WisDOT's Bureau of Structures to develop superstructure plans to sit atop the WisDOT-designed GRS abutments. These final structure plans, which included unique analysis and details, were completed in under two months to allow the original project letting schedule to remain unaffected by the changes.

Services included structure survey reports, environmental documentation, soil report, design study report, preliminary and final road plans, preliminary and final structure plans, and final P.S.& E.

Constructed in the summer of 2012, this is the State of Wisconsin's first GRS abutment design and the first structure in the nation to utilize a cast-in-place slab on GRS abutments. This project received the 2013 WisDOT Excellence in Highway Design award in the Best Structure Design by WisDOT category.