ABC Project Highlights

Project Name: I-80; EB/WB over Weber River at Echo Junction
Project#/PIN#: F-I80-4(124)169 / 7262
Year Constructed: 2011
ABC Element(s): Precast Superstructures
Placement Method: Slide-in
Contracting Method: Design-Build

Project Description: This design-build project, designed by Stanley Consultants, includes the entire removal and replacement of the east and west bound bridges (approximately 180 feet long). The bridges are located over the Weber River on I-80. The new bridges are wider (62 feet) to accommodate acceleration and deceleration lanes and improve the curve geometry from east bound I-84 to west bound I-80. The bridge replacements will employ Accelerated Bridge Construction (ABC) methods, using Hilman Rollers to move the new bridges into place. The replacement bridges will be constructed adjacent to the existing structures and then moved into place after the existing bridges are demolished. As required by the USACE, each existing bridge will be demolished without any debris entering the Weber River and the new bridges will be moved into place in a maximum of 12 hours. The 12-hour closures include the reconstruction of 200 feet of interstate highway, and the addition of acceleration and deceleration lanes for the system interchange. Environmental design issues included the need to provide large and small game crossing on both sides of the river. Additional design features included vein weirs within the Weber River to mitigate stream impacts, reconstruction of safety of pertinences, lighting, signing, and scour mitigation.