Glued-Laminated Timber Bridge Installation Videos

This project will provide documentation, through video and still photographs, of the correct construction practices and sequence for glued-laminated timber bridges, including girder, longitudinal deck, and stress-laminated deck systems. This documentation will be a key learning tool for government agencies, contractors, and the public in the proper way to construct glued-laminated timber bridges.

Background
In the United States, the need for cost-effective bridge structures is increasing and becoming more important with shrinking municipal budgets. Timber bridges are fulfilling this need. Yet, with increased use, owners, contractors, and municipalities are looking to maximize their construction budgets, minimize costs, and still follow effective and proper installation techniques.

Objective
This project will provide to any prospective user of glued-laminated timber bridge systems a clear and concise sequence of proper installation techniques and provide a sense of the types and magnitude of equipment that would be required for a successful installation project.

Approach
The development of this project is divided into several key steps:

- Location filming of glued-laminated stringer, longitudinal, and stress-laminated deck systems
- Nonlinear computer editing to create a 10-minute installation video for each referenced glued-laminated timber bridge deck system indicated.
- Creating DVD master and outputs for web-based format downloading and streaming

Expected Outcomes
The primary output from this project will be concise, narrated videos explaining proper installation techniques for the glued-laminated bridge structures. They will be made available through a variety of formats easily accessible by prospective owners and installers. Videos will be available through the National Center for Wood Transportation Structures (woodcenter.org) website. Other proposed distribution media include web downloading and streaming and DVDs.

Timeline
This project commenced in August 2010 and is scheduled for completion in March 2012. Factors such as bridge type availability and construction scheduling are variables that may affect this time frame. Editing of segments will take place as soon as images are captured.
Cooperators
USDA Forest Service, Forest Products Laboratory
TRAKK Productions

Contact Information
Karen L. Martinson
USDA Forest Service, Forest Products Laboratory
Madison, Wisconsin
(608) 231-9450; klmartinson@fs.fed.us

Matthew Smith
TRAKK Productions
1 Graystone Drive
Elmira, New York
(607) 857-6265; matt@trakkpro.com