

## **B. Project Summary**

To prepare a National Register Multiple Property Documentation Form and National Register nomination for Chester County's through girder road bridges. Through girder road bridges in Chester County have not been documented as well as other types of road bridges, such as stone arch and metal truss road bridges, and are not as well protected as these other types of bridges; consequently, they are disappearing at an alarming rate. The Pennsylvania Department of Transportation, in their 1997-1998 statewide bridge survey, stated that there had been several thousand through girder road bridges across the state, with large numbers located in Chester County. Today, there are only approximately thirty-five left in the County. The goal of this project is to update the through girder bridge section of the Pennsylvania State bridge survey for Chester County in order to gain as accurate a count as possible of all the through girder road bridges in the County and to then nominate them under a Multiple Property Documentation Form to the National Register of Historic Places in order to secure the recognition they deserve for the role they played both in the evolution of bridge engineering technology and the role or roles they played in the development of their respective municipalities and Chester County. Placement on the National Register is the important first step in preserving as many of these little studied and oft overlooked bridges. A Multiple Property Nomination to the NPS is seen as one tool to build recognition for their significance and aid in securing their preservation, and has far reaching policy implications as well for preservation of less studied bridge types in Pennsylvania.

This project is limited to the survey and nomination of through girder road bridges only; it does not encompass through girder railroad bridges.

### **Methodology:**

Standard historic research methodology will be used. This methodology includes the use of primary source documents when available, including, but not limited to, Chester County road and bridge papers, contemporary newspaper clippings, and historic atlases and maps. Secondary sources also will be consulted, including, but not limited to, bridge surveys conducted by the Pennsylvania Department of Transportation, county and municipal historic resource inventories and surveys, and county and municipal histories as well as engineering texts. Interviews with engineers, bridge historians and other experts will also be utilized.

### **Key Historian and Principal Researcher:**

Jane E. Dorchester, Architectural Historian, Historic Preservation Consultant

### **Participants:**

Dee Durham, Executive Director, S.A.V.E.

Gwen Lacy, Executive Director, The Land Conservancy for Southern Chester County

William Ryan, Manager, Bucktoe Creek Preserve

Kennett Township and East Brandywine Township Historic Commissions

Ronald DeNadai, P.E.

Jon Morrison, P.E.

Additional volunteer participants in the preservation initiatives for Chandler Mill Bridge, Hadfield Road Bridge, and Watermark Road Bridge

### **Advisory:**

Kitty Henderson, Historic Bridge Foundation

Betsy Merritt & Walter Gallas, National Trust for Historic Preservation

## **C. Application Narrative**

### **1. Documentation of need for the Project: What is the proposed project's significance to industrial heritage? Explain how the project will contribute to historical industrial resources or to a broader public understanding of industrial heritage preservation.**

Industry and transportation are very closely linked: the engine for the Industrial Revolution was transportation. As transportation technology improved, industry was able to expand, the more rapidly transportation improved, the more rapidly industry was able to grow. Bridges represent both transportation and industry; bridge construction technology improved because the manufacturing technology for bridge construction components improved. Through girder bridges represent an important stage in the evolution of both transportation and manufacturing technologies. As a result, they also represent the burgeoning industrial revolution. Iron and steel girder bridges could not be built until the iron industry discovered a way to manufacture girders strong enough to carry heavy loads and long enough to be practical in the construction of bridges. This project will contribute to a broader public understanding of industrial heritage preservation by highlighting through girder road bridges which, until recently, have been little studied. Listing of these bridges on the National Register of Historic Places will be the first step in their preservation because listing on the National Register acts as the basis for several different kinds of preservation actions. First, once these bridges are placed on the National Register, local municipalities in Pennsylvania can choose to include them on their lists of historic resources which are generally linked to their historic preservation ordinances (under the Pennsylvania State Municipal Planning Code). Second, once these bridges are listed on the National Register, they must be considered as contributing resources in any Local Historic Districts (Pennsylvania State Act 167 Historic Districts) which municipalities can choose to enact in order to regulate the preservation of their historic resources. And third, placement on the National Register helps to insure that Section 106 of the National Historic Preservation Act will be followed for any project involving them or the roads they are located on that is Federally funded, licensed, or permitted.

At least two through girder road bridges in Chester County are now threatened with demolition by the County of Chester. Because they are not listed on the National Register and PennDOT's 1998 Statewide Bridge Survey designates them as Ineligible for the National Register, the Section 106 Review procedures have not kicked in, making it even harder to preserve these important reminders of our industrial heritage. This project's goal is to submit a Multiple Property Documentation Form and National Register Nomination to the National Park Service (Keeper of the Register's Office) in order to place as many of these bridges as possible on the National Register as quickly as possible in order to form a more solid basis for their future preservation. As an example of how placement on the National Register can positively effect the preservation of through girder road bridges in Chester County, S.A.V.E. became involved in an effort to preserve the Chandler Mill Bridge in Kennett Township, Chester County in 2006 when it learned that this County-owned through girder bridge was threatened with replacement. Pleas to the County, to the Pennsylvania Department of Transportation (PennDOT), and to the Federal Highway Administration (FHWA) that the bridge was historically significant and so Section 106 procedures should be followed fell on deaf ears because it was not considered Eligible for the National Register. In 2008, S.A.V.E. and the Chandler Mill Bridge Consortium, a collection of citizen stakeholders, professional advisors, and local conservation and preservation groups, contracted with historic preservation consulting firm Jane E. Dorchester, Architectural Historian to prepare a National Register Nomination for this bridge. In January 2010, the

National Park Service placed Chandler Mill Bridge on the National Register. As a result, the County of Chester now has to follow the proper Section 106 procedures before starting any work on the bridge and bolstering the argument for rehabilitation rather than replacement.

This project is, in fact, just one component in S.A.V.E.'s strategy to promote more preservation oriented bridge policies in Pennsylvania. S.A.V.E. has already been instrumental in persuading PennDOT to adopt its "Baby Bridge Policy" for smaller, low volume bridges. Together with Henry Rowan and the Institute for Community Preservation (<http://www.preservationist.net/>), S.A.V.E. was instrumental in initiating (and participated on) PennDOT's Task Force for Historic Bridges in 2008 which resulted in a pilot project being launched in Chester and Bucks Counties in 2010 aimed at deepening public participation and preservation of smaller locally significant historic bridges. Documenting through girder road bridges with a Multiple Property Documentation Form will assist us in our on-going efforts to preserve these little studied and oft overlooked bridges that, nevertheless, provide a vital link in our understanding of the evolution of bridge technology and consequently of the role bridges played in the industrial revolution.

**2. What research methods will you employ? Explain how research or other activities will be conducted. Cover methods, objectives, tools, and a timetable.**

Standard historic research methodology will be used. This methodology includes the use of primary source documents when available, including, but not limited to, Chester County road and bridge papers, contemporary newspaper clippings, and historic atlases and maps. Secondary sources also will be consulted, including, but not limited to, bridge surveys conducted by the Pennsylvania Department of Transportation, county and municipal historic resource inventories and surveys, and county and municipal histories as well as engineering texts. Interviews with engineers, bridge historians and other experts will also be utilized.

The objective of the project is to conduct research to the highest standard and as required in order to complete a Multiple Property Documentation Form for through girder road bridges in Chester County. A Multiple Property nomination to the National Register requires that each resource nominated under the Multiple Property Form have its own National Register Nomination Form. It is not financially feasible to complete 35 National Register Nomination Forms all at once, so we will be completing the Multiple Property Documentation Form and one National Register Form for one through girder bridge. The other nominations will follow as finances permit.

Timetable

July 2011	Begin research and documentation
October 2011	Submit 1st Draft, Multiple Property Form and Nomination
January 2012	Submit Final Draft, Multiple Property Form and Nomination
April 2012	Pennsylvania Preservation Review Board review
June 2012	Placement on National Register of Historic Places

### 3. Who is responsible for your project?

Jane E. Dorchester, Architectural Historian, Historic Preservation Consultant

Jane E. Dorchester has been working in the preservation field for over 27 years. She has experience in a wide range of preservation projects, but specializes in National Register of Historic Places nominations. Since 2006, Jane has been only one of two historic preservation consultants in Southeastern Pennsylvania to successfully nominate historic resources to the National Register. She successfully nominated three resources in 2010. [Full CV attached]

Dee Durham, Executive Director, S.A.V.E.

Since October 2002, Dee has served as the Executive Director of S.A.V.E., a non-profit conservation organization based in Chester County, Pennsylvania that focuses on the transportation issues and its impact on historic and natural resources, and community character. Prior to joining S.A.V.E., Dee served for eight years as Executive Director of the statewide organization Preservation Delaware, Inc. She currently serves on the boards of the Friends of Auburn Heights Preserve and Old Brandywine Village. Dee served on Governor-Elect Jack Markell's infrastructure transition team as well as former Governor Ruth Ann Minner's Livable Delaware Task Force and the boards of Wilmington Friends School, the Friends of Brandywine Parks, and Preservation Action. Dee was a co-founder of Greater Brandywine Village Revitalization, Inc. and served on its board for many years.

### 4. What tangible products do you expect to produce with this project?

The end product of this project will be a completed National Register Multiple Property Documentation Form with an attached National Register of Historic Places Nomination Form for one through girder road bridge located in Chester County. The end product will include photographs of the nominated bridge, a USGS map showing the location of the nominated bridge, a site plan of the bridge, and other support documentation as required by the National Park Service, Keeper of the Register's Office. Two copies of all materials will be submitted to the IHPG program. A paper describing the purpose and results of the project will be drafted for publication by the SIA and will be published in print and web form by the Sponsoring organizations.

#### **D. Budget**

##### **INCOME:**

SIA Industrial Heritage Preservation Grant	\$2,500
Starrett Foundation (anticipated)	\$5,000
Other grants and donations	\$4,750
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TOTAL	\$12,250

##### **EXPENSES:**

Historian Fees (includes local travel):	\$11,250
Photography & Map Fees:	\$1,000
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TOTAL:	\$12,250

Does not include time and other direct or indirect expenditures covered by Sponsoring and Co-Sponsoring organizations which are considered an in-kind contribution to this project.







