

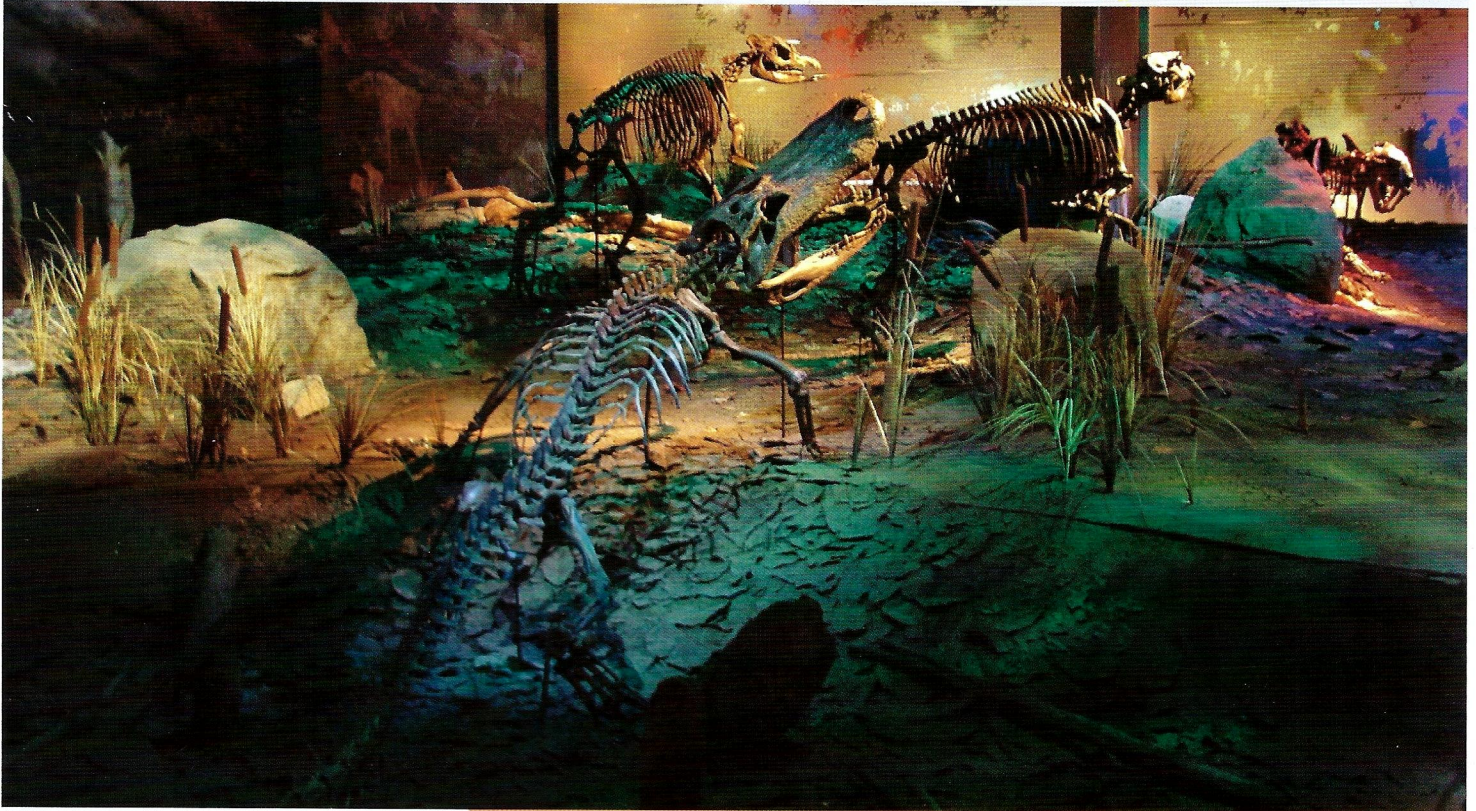


ASHE

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Looking Back...Moving Forward

ASHE
1958-2008

**ASHE 2008
National Conference
Special Center Insert**

Cover: Rare Fossils Impact ⁸ Tennessee Highway Project

*Exhibit on display at the East Tennessee
State University and General Shale Brick
Natural History Museum and Visitors Center*

Also inside...

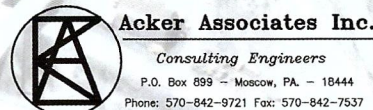
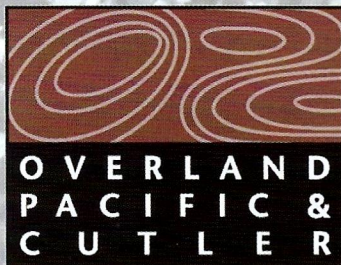
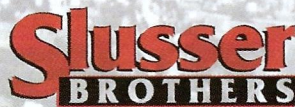
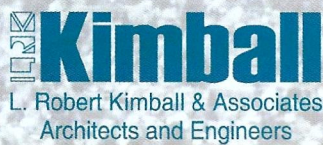
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- **Resolution of a 50-Year Impasse ¹⁴**



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Send address changes to
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Departments and Columns

President's Message	5
Redefining Context-Sensitive Design	7
Rare Fossils Impact Tennessee Highway Project	8
National Operating Manual	10
Commodore Barry Bridge	13
Cathedral Area Historic District - Resolution of a 50-Year Impasse	14
New Jersey Bridge Structures	16
Market Street Bridge, Williamsport PA	19
Morse Road Improvements, City of Columbus	21
Bridging the Past to the Future	23
ASHE National Board Member Bios	25
As the Wheel Turns	28

Advertiser Index

A.G.E.S.	28	Jones-Stuckey Ltd. Inc.	BC
A/E/P Central, LLC	30	McMahon Associates, Inc.	30
ARCADIS.....	12	Michael Baker Corporation	22
ASHE North East Penn.....	2	Oregon Dept of Transportation	18
Buchart-Horn, Inc.	22	Parsons Brinkerhoff	4
CMX	24	Pennoni Associates	18
Dawood Engineering Inc.	24	Pickering, Corts & Summerson, Inc.	20
DMJM + Harris	4	Robson Forensic Inc.	24
Erdman Anthony	6	Rummel, Klepper & Kahl, LLP	20
The Fulcrum International	29	Street Smarts	12
G.J. Berding Surveying	6	STV Inc.	12
GAI Consultants, Inc.	30	SPK Engineering, Inc.	12
Gannett Fleming	30	TBE Group, Inc.	20
Gibson-Thomas Engineering Co.	24	Traffic Planning and Design, Inc.	18
HDR Engineering, Inc.	22	Urban Engineers	BC
Herbert, Rowland and Grubic	20	URS Corp.	28
International Bridge Conference	24	Whitney, Bailey, Cox & Magnani LLP	18
Johnson, Mirmiran & Thompson, Inc.	22		

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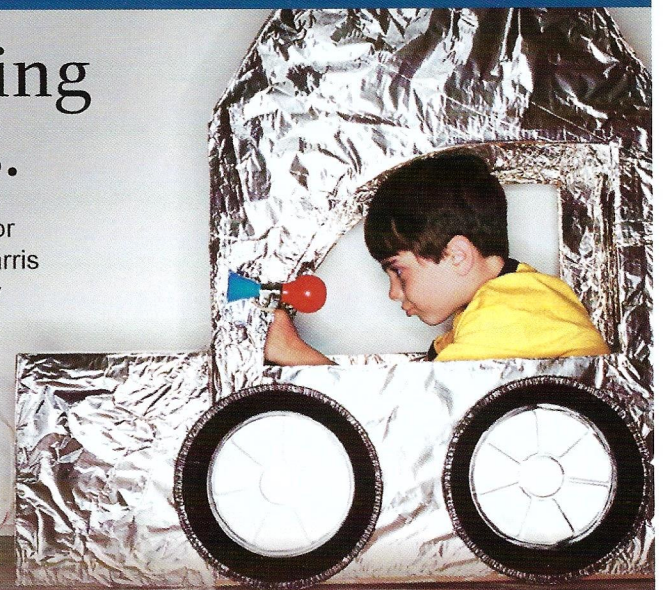
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President's Message

Perry M. Schweiss, P.E.

Greetings to all! As this is my last President's message, I wanted to share my thoughts on this past year as President and my experiences with the American Society of Highway Engineers.

I joined ASHE in 1992 and my tenure as an officer began in 1995 as secretary of the Southwest Penn Section. In the nine years I served the section in this capacity, I had the good fortune of working with many people in every facet of our industry, many of whom I consider good friends. The grass-roots-roll-up-your-sleeves-get-to-work-but-have-fun philosophy suited me just fine and together we organized technical meetings, planned social gatherings, golf outings, and in 2001 - the most rewarding experience - we hosted the ASHE National Conference.

I then became involved in the Region 3 Board in 2000. I served as Treasurer and eventually Region 3 Director. The Region Board experience expanded my knowledge of ASHE operations along with meeting many members from the other Region 3 Sections - Pittsburgh, North Central WV, and, at that time, the newly chartered Potomac Highlands Section. Involvement in technical seminars and working with our Region 3 team members was a rewarding experience.

My current position on the National Board started with my Region 3 Directorship which came with various committee chairman responsibilities including Legislative Review Committee when the last Reauthorization came due (and we all know how important this legislation is!) and the Constitution and By-Laws Committee when it was time to update these important operational documents. I had the pleasure of meeting many members from Sections across the ASHE spectrum. I've enjoyed meeting members at various sections and learning how each section

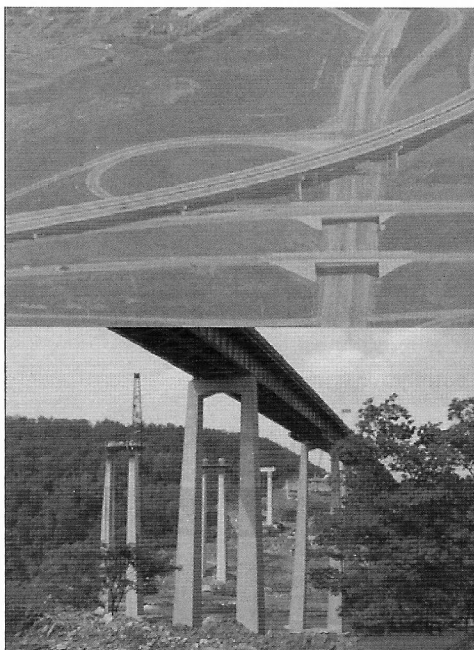
operates. I found it very interesting to see how different the composition of the sections can be. One may be predominantly government represented, one may be more construction oriented, but all have the same goal...to further the highway industry through education, innovation, and fellowship.

From the perspective of ASHE National, I have had the opportunity of seeing what we can collectively accomplish as a National organization. I reported in my last message that many of the sections offer scholarships to students in the transportation field. Since that report, I have received a summary of the scholarships awarded since 1983. I am proud to report that ASHE has awarded over \$540,000 to students in the transportation field!

Through my tenure in my home section in Southwest PA, the time in Region 3, and continuing with the National Board experience, I have experienced the camaraderie that our forefathers had in Harrisburg in 1958 when they began ASHE. The grassroots spirit that started this organization is still alive and well even after 50 years! As we take our first steps into the 51st year, I would like to wish President-elect Rich Clifton the very best during his tenure. ASHE will be in very capable hands.

I would be remiss if I didn't mention the end of an era for the Society. It has been my distinct pleasure to serve as President during the final year of two of the most prominent members of the ASHE - Mr. Robert Yeager and Mr. Terry Conner, National Treasurer for 30 years and National Secretary for 29 years respectively...and respectfully! Their knowledge, dedication, and sense of humor will be missed at the National Board meetings.

See you in Hershey for the 50th Anniversary Celebration at the ASHE National Conference! ■



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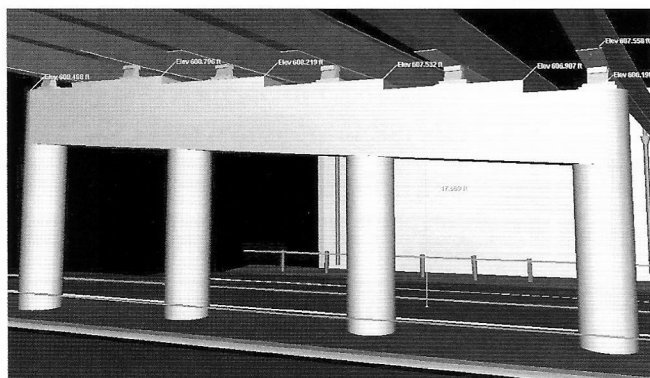
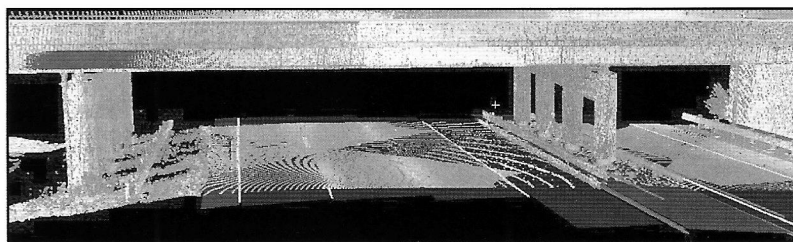
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Redefining Context-Sensitive Design: Replacement of The Hickory Street Bridge

Robert W. Bondi, P.E., Michael Baker Jr., Inc., Moon Township, Pennsylvania
Photo courtesy of Michael Baker Jr. Inc.

The Hickory Street Bridge replacement project demonstrates that it is possible to combine engineering goals with environmental sensitivity and create a cost-effective structure that is not only easily inspected and maintained, but that satisfies community expectations for aesthetics and preservation of a local landmark.

The former Hickory Street Bridge in Warren, Pennsylvania, was a four-span, earth-filled, closed spandrel concrete arch bridge approximately 500 feet long that carried S.R. 3005 over the Allegheny River. Constructed in 1917, the structure served as a major community connector.

However, the bridge had a 15-ton weight restriction, was structurally deficient and functionally obsolete, and ultimately had to be closed to all traffic in March 2003, which accelerated the replacement project.

Michael Baker Jr., Inc. (Baker) was selected by the Pennsylvania Department of Transportation, District 1-0 (PennDOT) to design a replacement structure.

The Hickory Street Bridge project presented designers with a unique challenge: the need to provide PennDOT with a safe, cost-effective structure that could be easily inspected and maintained, while satisfying residents' expectations for an arch-type bridge whose appearance would blend with the character of the community. Public input clearly indicated that the former structure was considered an icon unique to the community; residents did not want a standard, "off-the-shelf" replacement bridge. However, replacement with the same type of structure was not feasible, due to the high cost and the fact that there was very little expertise available for inspection and maintenance of a closed spandrel concrete arch structure.

Baker's innovative solution was to design a typical concrete adjacent box beam bridge comprised of four 129' spans, each 62'-6.5" wide, and, through use of façade panels and other amenities, create the appearance of a Venetian arch bridge. Baker's design included application of innovative pre-cast concrete arch façade panels affixed to the structure with stainless steel connections and also Renaissance-style concrete handrails and balusters.

A pier/span configuration similar to that of the original bridge was developed, based on environmental and vertical geometric constraints, in conjunction with community input. The arch façade panels, integral to the bridge's appearance, added an additional 310 tons of dead load, requiring designers to carefully coordinate the additional load with box beam length and depth and required clearance above the river. The arch façade panels were positioned so their lowest portion would be above the 100-year flood level, to prevent the structure from acting as a dam. Use of exposed aggregate finish on the arch

Hickory Street continued p. 31

Rare Fossils Impact Tennessee Highway Project

Who says prehistoric discoveries and modern day roads can't exist together? Tennessee not only built a highway that is functionally improved, but also saved an historically significant fossil deposit that scientists and the public will learn about for generations to come.

In May 2000, road construction crews working on a Tennessee Department of Transportation (TDOT) project unearthed soft, gray clay deposits during the widening of State Route 75 in Gray, Tennessee, a small community in upper east Tennessee. TDOT geotechnical staff were called in to examine the soft clay deposit and to make recommendations on how to mitigate the unstable material. Undercutting the material and backfilling with graded solid rock was considered along with the use of a synthetic reinforcement of the subgrade.

As construction work continued, however, bone fragments and teeth began showing up in excavated material. When animal skulls, backbones, ribs and leg bones began to appear, TDOT geologists decided it was time to stop work and assess the site in terms of a possible major fossil discovery.

A team of representatives from TDOT, Tennessee Department of Environment and Conservation's Divisions of Geology and Archeology, the University of Tennessee's Departments of Anthropology and Geology, and East Tennessee State University was formed to investigate the fossil deposit. Numerous animals were found to be represented in the deposit, including tapirs, elephants, turtles, frogs, crocodiles, as well as numerous plant leaves, lignite, and seeds. The site became known as the Gray Fossil Site.

Initially, it was thought that the deposits were of the Pleistocene age which is considered to be 1.6 million to 10,000 years old. But, fossils later identified by university specialists as being rhinoceros changed the relative date to Miocene, fossils that are at

least 4.5 to 5 million years old. Archaeologists now believe the deposits represent the remains of sediments deposited in a sinkhole or pond. This site represents the first terrestrial Miocene deposit in Tennessee along with Miocene vertebrate, invertebrate, and plant fossils.

These animal bones make up the largest deposit of its kind east of the Mississippi River thus raising the significance of the Gray Fossil Site and its 5 to 7 million year old terrestrial animal bones. The animals and plants were preserved in context, meaning that they died and were buried in the environment in which they lived. It is a scientific bonanza at the Gray Fossil Site to have not only the complete articulated animal skeletons, but also a complete assemblage of plant material including leaves, twigs, logs, nuts, and pollen preserved along with the animals. From these deposits, researchers can develop an accurate picture of the environment that existed in east Tennessee some 5 million years ago.

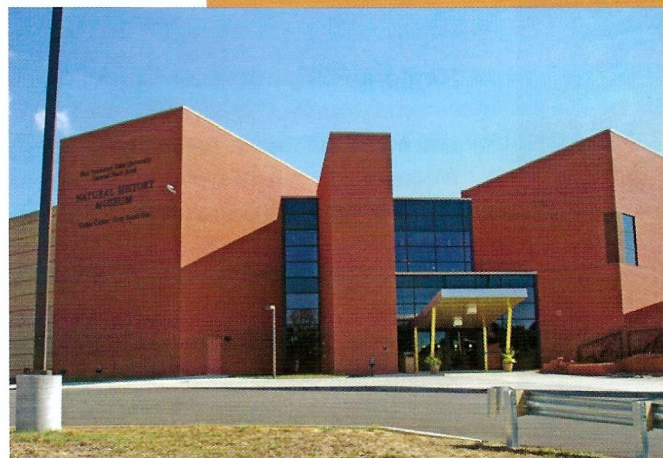
Because of the significance of the find, a dilemma developed about how the road construction project could proceed without interfering with the on-going fossil investigation. Ultimately, TDOT made the decision that the conflicting portion of the roadway would be shifted about five hundred feet to the north in order to protect the deposits and allow the fossil research to continue. The decision was unanimously supported by then-Governor Don Sundquist and other state and university leaders who recognized the value of the Gray Fossil Site.

In late August 2007, prehistory came to life in East Tennessee as one of the most significant fossil finds in recent history was officially celebrated with the opening of the East Tennessee State University and General Shale Brick Natural History Museum and Visitors Center, an educational facility at the site of the Gray Fossil Site. Doors officially opened on August 30, 2007 with a ribbon-cutting ceremony at the site, about 1.8 miles southwest of I-26 on State Route 75. Half museum and half laboratory, the 33,000-square-foot center marks the site of the significant fossil find. The center was partially funded through an \$8 million federal enhancement grant provided through TDOT.

The importance of the collaboration of state leadership, archaeologists and road builders cannot be discounted. Without their recognition of the importance of the Gray Fossil Site discovery, a part of history might have remained buried under an improved highway through Gray, Tennessee. As transportation officials across the nation have discovered, it is possible to build an improved highway facility within a community and keep its important assets intact. ■



Jawbone in the collection of fossils now housed at the East Tennessee State University and General Shale Brick Natural History Museum and Visitors Center.



The East Tennessee State University and General Shale Brick Natural History Museum and Visitors Center opened on August 30, 2007.

Sources for this article: Tennessee Department of Transportation, Tennessee Department of Environment and Conservation, and East Tennessee State University.

For additional information on this fossil site and the museum, visit the websites listed below:

<http://www.state.tn.us/environment/tdg/gray/>

<http://www.grayfossilmuseum.com/>



ASHE

National Operating Manual

Shirley Stuttler, National Operating Manual Committee Chair

ASHE National maintains a website to disseminate ASHE information to its members. The ASHE National Operating Manual can be found on www.highwayengineers.org. This document contains a wealth of information for both Section and Region Officers, as well as for the general membership. Outlined below are various documents found in the Operating Manual, which you are encouraged to review.

Regional Organization Guidelines

As a result of significant growth in membership and in the number of Sections, in 1996 ASHE added a nine region structure. It is the objective of the National Board to provide the membership of ASHE with guidelines that are consistent with the Mission Statement, Strategic Plan, and all documents governing ASHE. This section includes: Region Officers recommendations, management of the Region, financial information, meeting requirements, committee establishment, bonding, liability insurance, and IRS Tax Identification Number information.

Section Officers by Region

The current Section President, Secretary, and Treasurer are updated on a yearly basis.

Installation of Officers Ceremony

Following election of Section Officers and Directors, an installation ceremony is held. The installation document is found in this area.

National Conference Guidelines

Regions are encouraged to host the Annual National Conference. Any Region wishing to host the National Conference should submit, in writing, their interest and tentative dates and place/location, to the National President. The procedures and responsibilities for hosting the ASHE National Conference are contained in this document.

Section Secretary Duties

This area of the Operating Manual outlines submittal of new member applications and/or transfer of member from one Section to another, providing changes in member's information, annual assessments, officers' roster, and a listing of various required items and their respective due dates for both the Section and submission to National.

Section Treasurer Duties

Information regarding the FIN (Federal Identification Number) sometimes referred to as the TIN, information on IRS Forms 990 and 1099, required signatures, and various required items with their respective due dates for submission to National. ASHE is classified, by the Internal Revenue Service, as a 501(c) Tax-Exempt Organization. This tax status applies to Sections as well. Since Sections are a part of National ASHE who prepares the tax forms for the Sections, the organization must adhere strictly to IRS requirements to protect this status and its privileges.

Local Section Program Summaries

A listing of Sections' past programs/speakers provides the Section Program Chairman with future program ideas. Sections are contacted yearly to provide updated information.

SCANNER Guidelines and SCANNER Advertising Rates and Contact

The SCANNER, the official publication of ASHE, is sent to all members, and selected public transportation agency officials and legislators four times each year. Each Section is responsible for at least two articles per year, one of, which must be technical.

CEU Guidelines

ASHE is an authorized CEU provider accredited by the International Association for Continuing Education and Training. National maintains a copy of all CEU records and copies of all Section and Region records of CEU credits, issued to members at ASHE sponsored technical sessions during the year. This information must be submitted to the National CEU Coordinator.

Guidelines for ASHE Exposure Funding Reimbursement

The National Board has allocated a set amount of funds from the National Treasury to be used to publicize ASHE by participation in important highway industry related activities. A Region wishing to utilize these funds must submit the proper request form to the National Board.

Exhibit Display Policy

Standard, professional, and conference display booths are available to Sections. The request form, information and shipping cost can be found in this section.

Website Guidelines Link Procedures and Advertisement

National encourages Sections to develop a website, as a convenience to members, and to advance the goals of ASHE. Section Websites provide a centralized location for members to effectively communicate and to promote ASHE. This area outlines the process for obtaining National approval and linking to the National Website.

Section Organization

Includes start up procedures and requirements, as well as the Section's responsibility to their Region. Section responsibilities to National includes information on roster changes, FIN (Federal Tax Identification Number), annual roster of officers, IRS Form 990, new member application, annual National Membership Assessment, various SCANNER information, Section website, purchase information for a banner, availability of National Display Booth, and CEU records.

Section Activities

This area contains information on various Section Meetings, communication tools, various award recommendations, and Student Section Sponsorship.

Section Leadership

Officers and terms, election procedures and required qualifications, officers' duties, and recommended committees may be found in this write up. ■

Administrative Reference

Forms Available in the Operating Manual:

- IRS 990
- CEU Credit
- Exhibit Display Request
- Membership or Transfer or Reinstatement Application
- Region Reimbursement for Exposure Funds
- Revision to Membership Directory Information
- Example Dues Invoice
- Questionnaire

Other items of interest:

- National Constitution and By-Laws
- Code of Ethics
- National Officers and Directors
- Regional Directors
- National Officer Nomination Guidelines
- New Section Start-Up Procedures
- Section Committee Responsibilities
- Student Membership Guidelines
- 2006-2009 Strategic Plan

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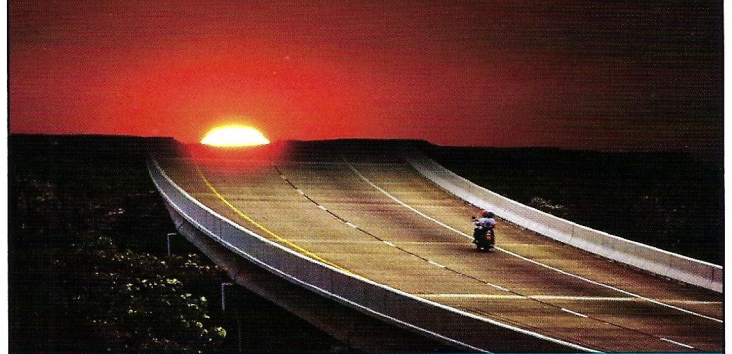
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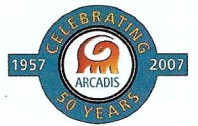


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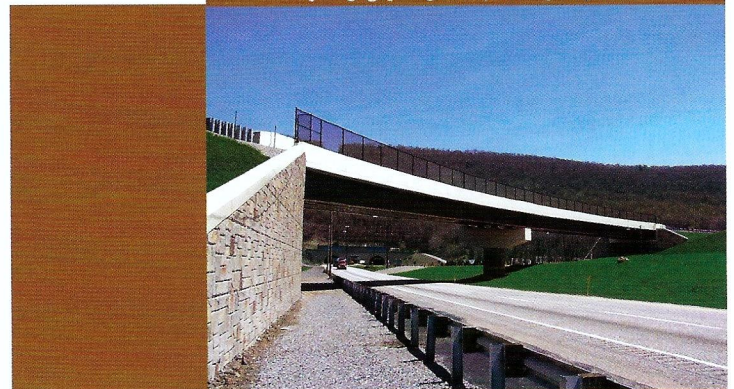
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Commodore Barry Bridge

Chester City Access Project

Michael A. Maholick, P.E.



In January 2001, the Delaware Valley Regional Planning Commission (DVRPC) prepared a Conceptual Access Plan for the City of Chester. The city's future economic development depended on improved, efficient access between the region's highway network, I-95, I-476 and U.S. 322, to the Chester waterfront and central business district. The waterfront has sizable parcels of land that are slated for development, including housing and destination attractions such as a waterfront park, soccer stadium, marina, and gaming facilities. The waterfront continues to be an active industrial area with several large employers who use Chester roadways to transport their goods.

The Chester City Access Project is located in the City of Chester, Delaware County in the area adjacent to the Commodore Barry Bridge (US 322) and the Chester Waterfront. The project provides direct access from eastbound US 322 & I-95 to PA 291 (Second Street via a new off ramp from the Commodore Barry Bridge. A new on ramp to the Commodore Barry Bridge from PA 291 (Second Street) will provide access to US 322 westbound & I-95 from the Chester waterfront.

Following the initial evaluation of the land use of the project area, McCormick Taylor, Inc. prepared preliminary designs, obtained environmental clearance, and provided an extensive public involvement program for these access improvements. Based on the preferred alternative, McCormick Taylor provided final design for the construction of two curved girder ramps connecting with the existing

Commodore Barry Bridge with PA 291. The project also included associated roadway improvements in the City of Chester.

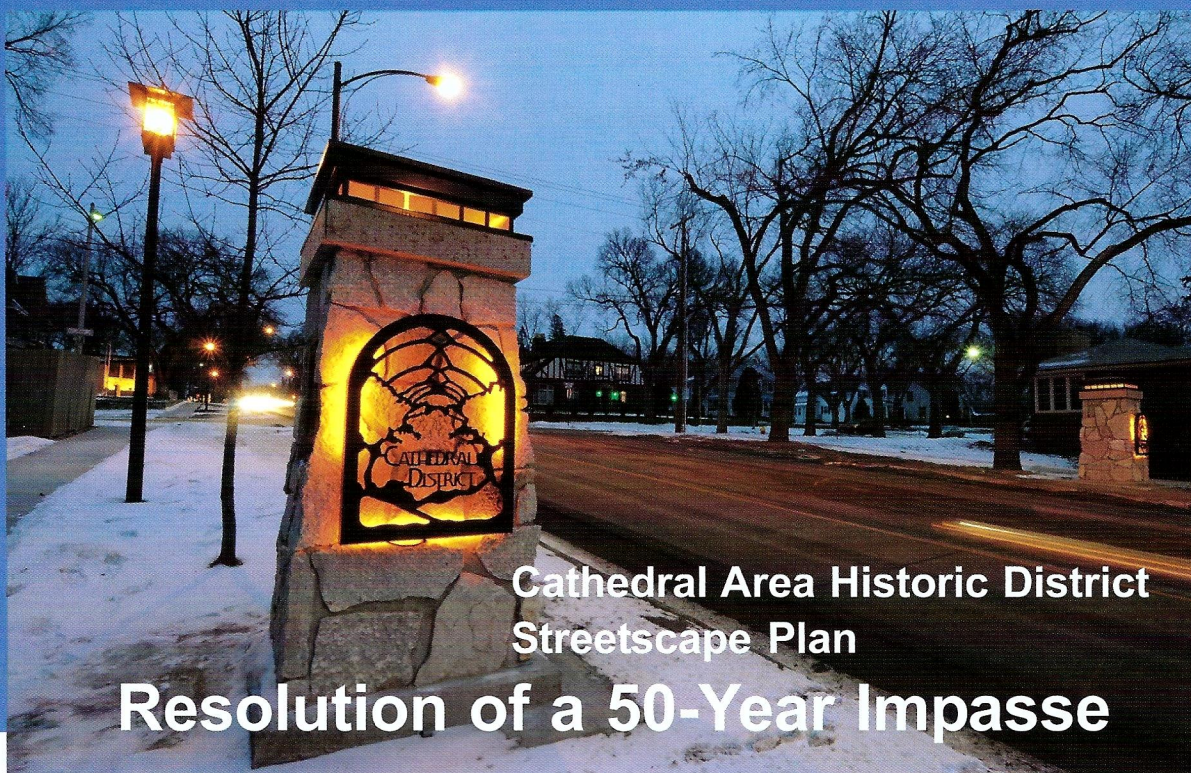
Detailed environmental studies were undertaken for noise analysis, historic resources evaluation, and determination of eligibility and effects, archaeological studies, wetland surveys, and socioeconomic evaluations. A Programmatic Agreement (PA) was prepared for the project as part of the historical studies which included mitigation measures to the Ruth L. Bennett Home which was determined eligible for the National Register of Historic Places. The PA stipulated the development of educational materials for the local community and schools which discussed the historical significance of the property as a boarding home for minority women and children in temporary or emergency situations. The Pennsylvania Department of Transportation has also committed to the restoration of the Ruth L. Bennett Home for the continued use of the property as a community center. These measures were incorporated to address environmental justice and special planning measures were undertaken for those directly and indirectly affected by the project.

McCormick Taylor performed final design services including line and grade, design field view plans, roadside development, utility coordination, railroad activities, right-of-way plans, signing, traffic control, hazardous waste mitigation plan, TS&L studies, structure borings, foundation design and final structure plans.

Structure design included steel curved girder design of the proposed ramps, comprising 8 to 10 spans totaling 1360 feet to 1470 feet, and widening 14 approach spans (1603 linear feet) of the Commodore Barry Bridge on the Pennsylvania side. Detailed structural design included three dimensional finite element analysis, replacement of bridge bearings, replacement of bridge deck joints, superstructure widening, widening and rehabilitation of bridge piers and reconstruction of maintenance catwalks. Rigorous seismic analyses were conducted since these are major and complex structures. The structure work requires approximately nine million pounds of structural steel.

Other project features include installation of new Amtrak catenaries to accommodate the Commodore Barry Bridge widening over Amtrak, installation of a new DELCORA combined sewer outfall to the Delaware River and replacement of the two overhead sign gantries on the Commodore Barry Bridge.

The project involved extensive coordination among the numerous agency stakeholders that successfully partnered on the project. These stakeholders included PennDOT, DRPA, FHWA, City of Chester, Amtrak, NJDOT, DelDOT and DELCORA. Cooperative efforts fostered by McCormick Taylor and PennDOT among these agencies resolved complicated design, constructability and maintenance and protection of traffic issues and allowed the project to be advertised in November 2007. Construction is anticipated to begin in the spring of 2008. ■



Cathedral Area Historic District Streetscape Plan Resolution of a 50-Year Impasse

Washington Street is the longest, and one of the oldest, north-south arterial streets serving Bismarck, North Dakota. The street is a five-lane section at the north and south ends of town, but narrowed to a 30-foot wide two-lane street through the Cathedral Area Historic District (CAHD). Over 50 years ago, the Bismarck City Engineering Department designed an improvement project to widen the road through the historic district; yet repeated attempts to construct an improvement project in one form or another failed.

Bob Shannon, P.E., Kadrmas, Lee & Jackson, Inc.
ASHE Member, Central Dacotah Section
Jennifer Turnbow, Environmental Planner, Kadrmas, Lee & Jackson, Inc.
ASHE Member, Central Dacotah Section

History

The CAHD lies at the center of the city of Bismarck's political and social history. The protected hilltop location in the early 20th century provided homeowners with a panoramic view of the Missouri River valley. The CAHD, listed on the National Register of Historic Places, is defined by its eclectic architectural styles; elm tree-lined streets; and pedestrian-friendly nature. The significance of the CAHD is two-fold: first, the variety of architectural styles and the overall remaining integrity of the buildings; and secondly, the CAHD served as the area of residence for many of the most prominent and influential figures of early Bismarck.

A New Approach Emerges

Prior to the streetscape project, the Bismarck City Commission formed the Washington Street Working Group. The commission strove to find solutions that worked for the overall community and the CAHD neighborhood. The problem was trying to balance the reconstruction of Washington Street while maintaining the sense of place in the CAHD. From the commission's proactive community-based approach, the streetscape project was born.

Seek to Understand, Then to be Understood

In order to keep the momentum moving with the community, the team of Kadrmas, Lee & Jackson, and RDG Planning & Design planned a cohesive and open communication public involvement program. This element proved to be the key to success. The team listened to neighborhood residents and to the community before any design concepts were created. In fact, the design team participated in a walking

tour of the CAHD and toured prominent homes. The public involvement process included four public input meetings, a design charrette, and a Stakeholder Advisory Committee (SAC).

The design charrette was a creative, collaborative, three-day process that brought representatives from the city, interested organizations, the neighborhood, and the public together to work on design concepts.

A Public Streetscape Survey was also developed and used to gauge public input on potential project design items. The survey responses helped the design team with concepts at the design charrette.

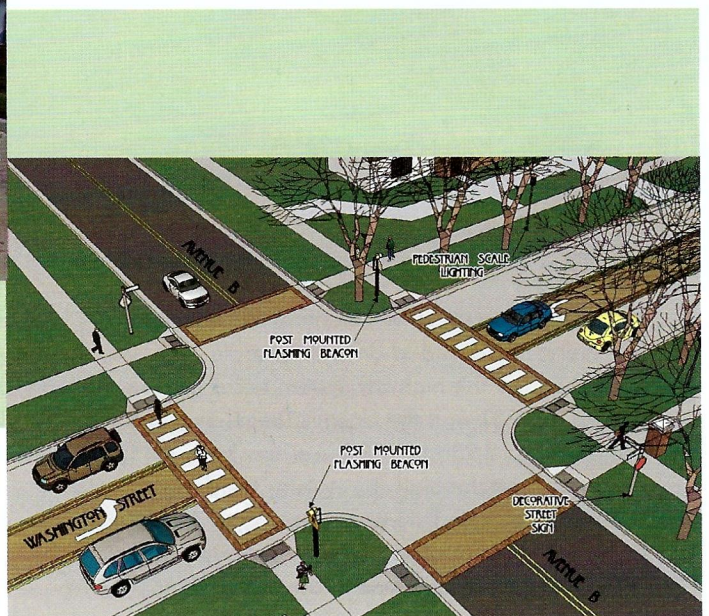
The SAC was comprised of neighborhood representatives and various stakeholders. This committee was an effective and useful tool to build trust and lasting relationships between everyone involved. The SAC worked closely with the design team to make recommendations regarding the aesthetic qualities of the design elements throughout the corridor. SAC members also actively participated in outreach efforts and served as a liaison between the neighborhood and concerned citizens of the area and the design team.

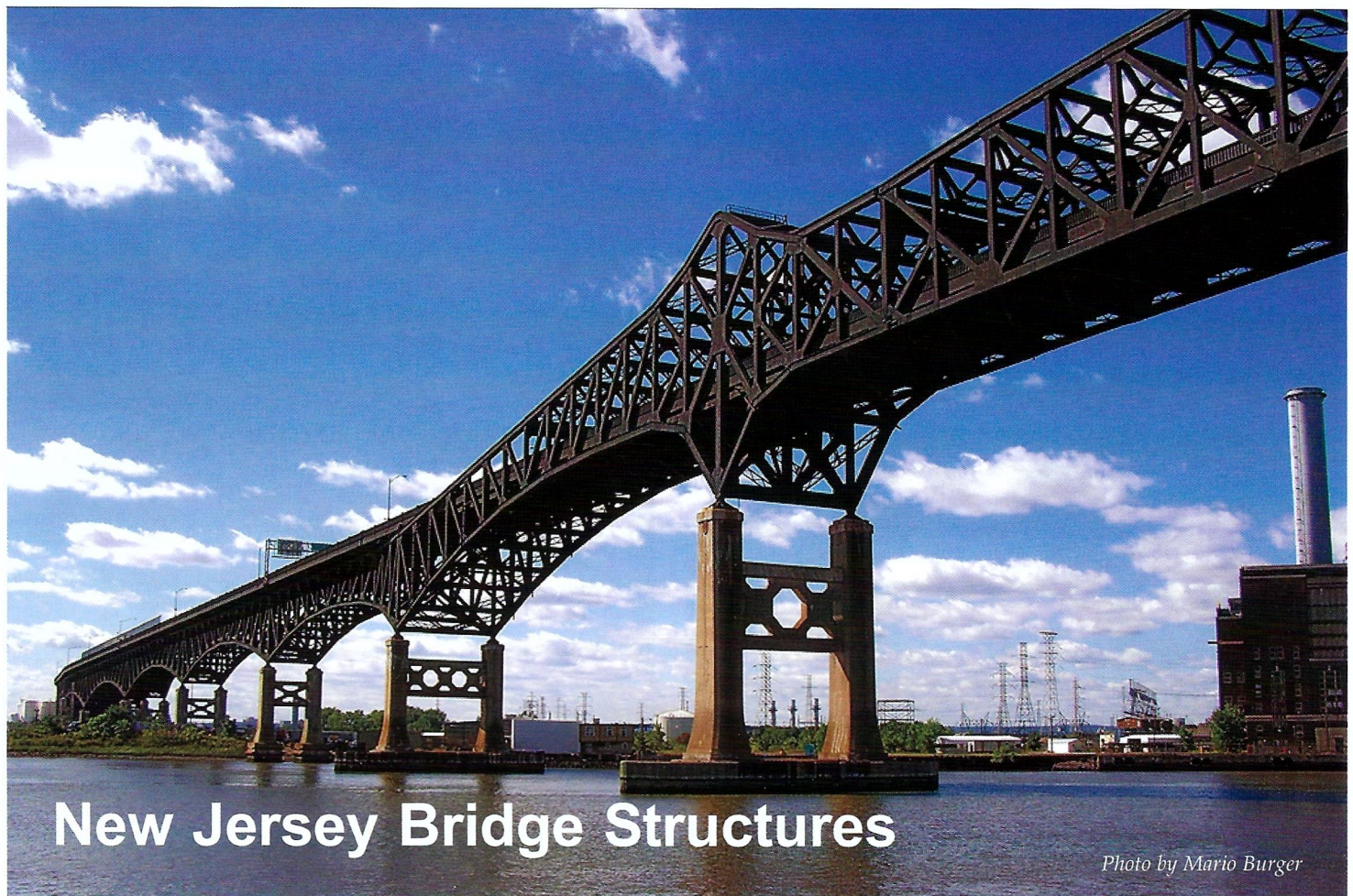
Throughout this public involvement process, the design team was able to listen; thus, able to capture the views of the CAHD neighborhood. The team implemented the neighborhood's character and then expressed the inherent characteristics throughout the streetscape design.

The Solutions

Washington Street now showcases a three-lane roadway with a two-way left-turn lane that has a unique pavement design and colored, textured concrete. Other notable features include: pedestrian lighting reflecting the prairie-style architecture; colored, textured concrete for the crosswalks; white street signs, with black lettering; and primary and secondary monument piers. The primary monument piers are located at the approximate entrances of the CAHD; and the secondary piers are located at one intersection. These monuments include tiles which display eight different historical buildings and four architectural styles within the CAHD.

The design team was able to effectively balance the needs of the community, the CAHD neighborhood, and the needs of the future with preservation of the past. The 50-year impasse was broken with listening and effective communication between all major stakeholders. The city of Bismarck is proud of the enhanced Washington Street and being able to preserve the heart of the city's history. ■





New Jersey Bridge Structures

Photo by Mario Burger

New Jersey's bridge inventory records contain over 6400 records of highway carrying bridge structures. Among these is the Pulaski Skyway bridge structure, whose construction, began in 1930. It was constructed to provide a high level crossing of the Hackensack Meadowlands between Jersey City and Newark and to channel traffic into the Lincoln Tunnel.

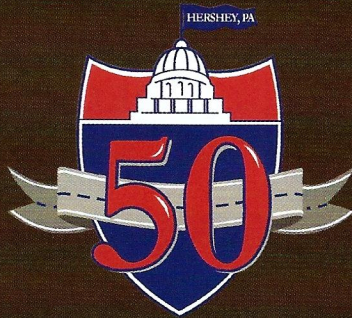
*Jose A. Lopez, Supervising Engineer
New Jersey DOT, Bureau of Structural Engineering*

While the Pulaski Skyway bridge structure continues to be in the forefront of today's news as a bridge in need of repairs, the history of how bridge construction began in New Jersey becomes an interesting topic. The transportation system that was developed and, to a large extent exists today, was initiated for the primary purpose of establishing roadways between New York and Philadelphia. In the 1820's, New Jersey joined the nation in building canals as modes of transportation. The two foremost are the Morris Canal and the Delaware and Raritan Canal systems.

As the production of automobiles grew, people's fascination with automobiles took hold. Everyone wanted to own a car and everyone wanted to drive. It became necessary to improve the highway network. During the years of 1922 to 1942, construction of the highway system occurred. The Holland Tunnel was completed in 1927. The George Washington Bridge opened in 1931 and the Lincoln Tunnel was completed in 1945. With the work that was done under the Interstate Highway Program from 1956 to 1996, we now have the highway network system that is in place today.

To support the highway system, the design and construction of different type bridge structures began. Early bridge types in the State included stone arches and timber bridges. This was followed by brick arch structures, an example of which is shown in Figure 1. Also, during this period, use of trusses and girder type bridges initiated. Girder and stringer bridges are still the primary bridge type in use today, as seen in Figure 2. Use of precast prestressed concrete girders (Figure 3) initiated in the late 1960's. Use of concrete is desirable because it is less costly to maintain over the bridge design service life years.

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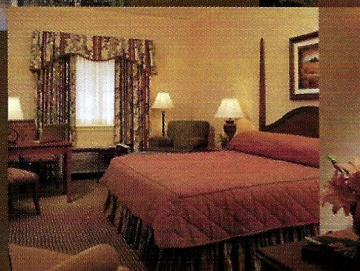
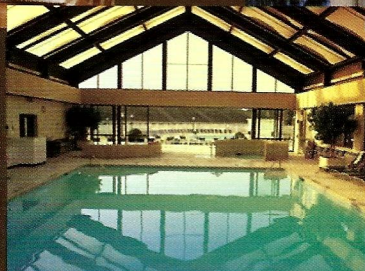
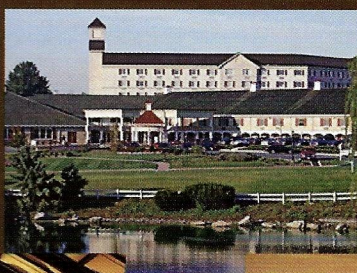
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<input type="checkbox"/> GOVERNMENT EMPLOYEE				\$50	\$75	\$
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	+
ACTIVITIES REGISTRATION SUBTOTAL	\$
	+
GOLF REGISTRATION SUBTOTAL	\$
	=
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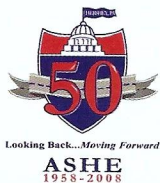
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Activities REGISTRATION FORM

THURSDAY, JUNE 12

Time	Event	Cost	No. attending	Total Cost
6:30 am - 8:00 am	Breakfast in Exhibit Hall	N/C		N/C
11:00 am - 3:00 pm	Shopping at Donneckers/Elegant Lunch on Your Own	\$10		
10:00 am - 3:00 pm	Harrisburg Capitol Tour/Lunch on Your Own	\$10		
8:30 am - 3:00 pm	Golf	See golf registration form		
7:00 pm - 10:00 pm	Anniversary Celebration Icebreaker in Exhibit Hall	N/C		N/C

FRIDAY, JUNE 13

Time	Event	Cost	No. attending	Total Cost
7:00 am - 8:45 am	Breakfast in Exhibit Hall	N/C		N/C
8:45 am - 10:00 am	Opening Session	N/C		N/C
10:00 am - 2:00 pm	Harley Davidson Tour (ages 18 and up) includes Lunch	\$20		
10:00 am - 4:00 pm	Strasburg Railroad Tour and Museum includes Lunch - Adult	\$35		
	Strasburg Railroad Tour and Museum includes Lunch - Child (12 and under)	\$25		
10:00 am - 2:30 pm	Nissley Vineyards Tour, Tasting & Bube's Brewery Luncheon	\$40		
10:00 am - 10:30 am	Morning break in Exhibit Hall	N/C		N/C
10:30 am - 11:30 am	Technical Session 1 (Select one)			
	F1 Highway Driven/Industry Driven	N/C		N/C
	F2 Railway Influence on Roadways	N/C		N/C
12:00 pm - 1:30 pm	Past Presidents Lunch	\$35		
	(No charge for past National Presidents, current National President, Pearson Award Recipient and their spouses)			
2:00 pm - 5:00 pm	Technical Session 2			
	F3 Transportation Legislatively Speaking	N/C		N/C
3:15 pm - 3:45 pm	Afternoon break in Exhibit Hall	N/C		N/C
6:00 pm - 7:30 pm	Cruise Through Time/Dinner	\$55		
7:30 pm - 11:00 pm	Dessert/Entertainment			

SATURDAY, JUNE 14

Time	Event	Cost	No. attending	Total Cost
7:00 am - 8:45 am	Breakfast	N/C		N/C
9:00 am - 4:30 pm	Gettysburg Guided Tour and Lunch on Your Own	\$30		
10:00 am - 2:30 pm	Susquehanna Kayak Tour includes Lunch	\$90		
9:00 am - 4:30 pm	Amish Family Farm includes Lunch - Adult	\$50		
	Amish Family Farm includes Lunch - Child (4 to 12)	\$30		
9:00 am - 12:00 pm	Technical Tour			
	S1 Historic Rockville Bridge and Enola Rail Yard	\$10		
5:30 pm - 6:30 pm	Red Carpet Reception	\$60		
6:30 pm - 11:00 pm	Gala Banquet/Entertainment			

SUNDAY, JUNE 15

Time	Event	Cost	No. attending	Total Cost
7:00 am - 8:45 am	Breakfast	N/C		N/C

▼ SUBTOTAL \$

▼ Transfer subtotal to the Conference Registration Form



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GOLFER 2

CLUB RENTAL? Y ☐ N ☐

TRANSPORTATION TO COURSE? Y ☐ N ☐

LAST NAME FIRST NAME COMPANY

STREET ADDRESS CITY STATE ZIP CODE

DAYTIME PHONE CELL PHONE EMAIL ADDRESS

GOLFER 3

CLUB RENTAL? Y ☐ N ☐

TRANSPORTATION TO COURSE? Y ☐ N ☐

LAST NAME FIRST NAME COMPANY

STREET ADDRESS CITY STATE ZIP CODE

DAYTIME PHONE CELL PHONE EMAIL ADDRESS

GOLFER 4

CLUB RENTAL? Y ☐ N ☐

TRANSPORTATION TO COURSE? Y ☐ N ☐

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DRESS CODE: Acceptable club attire includes collard shirts, slacks and Bermuda length shorts. Denim of any kind, t-shirts, tank tops, cut-offs, tennis, running or athletic attire are inappropriate forms of dress for both the clubhouse and the golf course. Any person not properly attired will not be allowed to play or participate in the event until her/his dress meets the club's dress codes standards. The use of non-metal spikes is required on the golf course at all times.

REFUND POLICY: Refund requests received in written form on or prior to May 30th will be honored; however will be subject to a \$25 administrative fee. NO REFUNDS AFTER MAY 30th.

LUNCH: Golf Registration fee includes lunch. Lunch will be served immediately following play.

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NUMBER OF GOLF REGISTRATIONS	<input type="text"/>	X	\$120	\$150
NUMBER OF CLUB RENTALS	<input type="text"/>	X	\$60	
GOLF CORPORATE SPONSOR	<input type="text"/>	X	\$2,000	
GOLF LUNCH SPONSOR	<input type="text"/>	X	\$1,000	
GOLF TEE SPONSOR	<input type="text"/>	X	\$300	
▼▼ GOLF SUBTOTAL				\$

For questions, contact:

Golf Committee Chair-

Drew Bitner

Work: (717) 774-5260

Cell: (717) 319-0009

bitner@veengineeringinc.com

▼▼ Conference Registration is not required to register for golf. Transfer subtotal to the Conference Registration form or if registering for golf only, submit this form and payment to the address shown on the Conference Registration form.

This history has brought us to a point where the condition of New Jersey's bridge infrastructure is in dire need of attention. The New Jersey Section of the American Society of Civil Engineers (ASCE) assembled an Infrastructure Report Card Committee to review available records and assess the condition of the State's critical components. One infrastructure category that ASCE assessed was the State transportation system. On the specific area of "bridge" assessment, a grade of "D" was given. A "D" grade is defined as that of a Poor condition. The desired outcome of ASCE's report card grading is to raise awareness of this condition. Legislators must be made aware of the "poor" condition so that serious discussions begin to establish funding at levels that can realistically be used for future planning on repairing or replacing bridge structures. The State's population growth will continue. This will add to the continual burden on the State's highway network and to everyone's overall quality of life with living and working in the State.

A report released by the New Jersey Department of Transportation revealed that out of approximately 6400 bridge structures, more than 2000 of them were found to be either functionally obsolete or structurally deficient. At present, 15% of State owned, 31% of County/Municipal owned, 59% of NJ Transit owned and 38% of those privately owned are older than 75 years. The average age of bridge structures was found to be 49 years.

As funding is established, its distribution must be based on achieving design service life year expectations and wise use of the funding. Current AASHTO Specifications establish parameters for a design service life of 75 years. Use of enhanced material such as high performance steel, can be used to increase the design service life expectation. Wise use of funding should involve the use of Prefabricated Bridge Systems. Prefabricated Bridge Systems offer significant advantages over onsite cast in place construction. Among these advantages are a reduction in onsite time that is required to construct or rehabilitate a bridge and improved safety due to less worker exposure time in a work zone.

The construction of the Route 35 over the Raritan River (Victory Bridge) bridge replacement was New Jersey's first use of the precast concrete segmental bridge type. This can be taken as an example of good service life design and wise use of available funding. Although the precast segmental units may initially cost more than conventional precast/prestressed girders or steel girders, the plant production process of the precast segments and the construction techniques utilized to construct a segmental bridge provide assurance of the bridge achieving its design service life.

Today's and future bridge engineers are faced with the task of providing bridge designs that will assure New Jersey's traveling public that what is constructed is safe and serviceable.

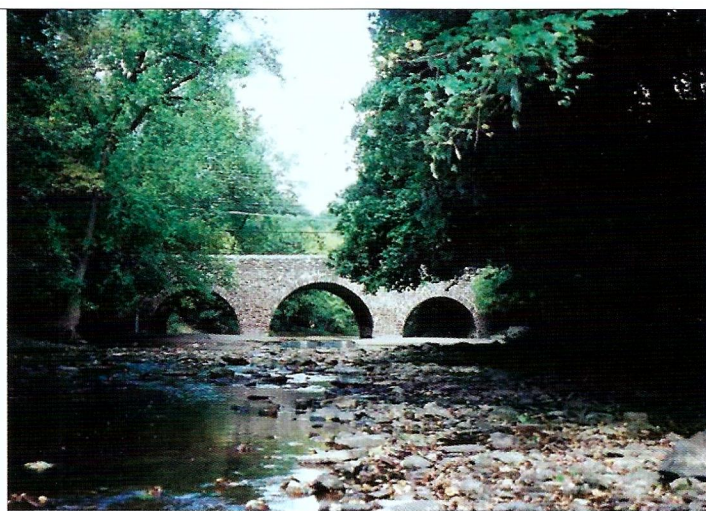


Figure 1: brick arch structure



Figure 2: welded plate girder bridge structure.

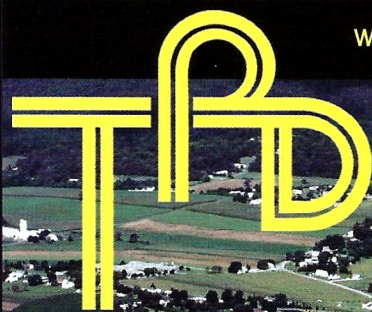


Figure 3: precast prestressed concrete girder

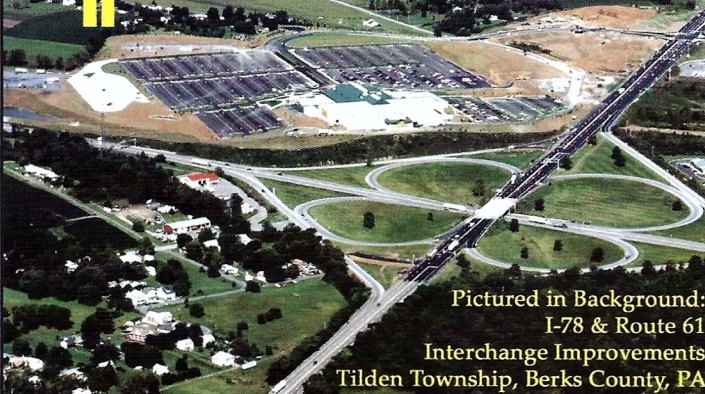
As this writer's career in the structurally engineering profession winds down, the baton is passed on to others who hopefully will carry on the willingness to facilitate good engineering decision making and not produce work that is shortsighted and based solely on being expedient. ■

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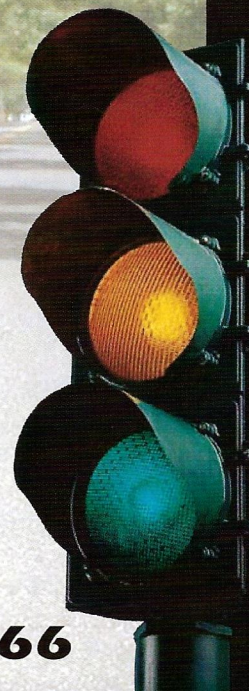
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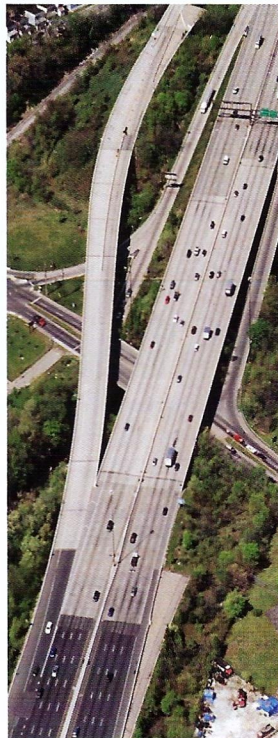
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Market Street Bridge

Williamsport, PA

*David Wise
PennDOT Engineering District 3-0*

The first bridge across the Susquehanna River in this location opened in July 1849. The new Market Street Bridge, carrying approximately 27,700 vehicles a day, is the seventh bridge with a total project cost of \$67 million. The old, recently demolished bridge was opened to traffic in 1951. After 50 years of service the steel bridge was becoming functionally obsolete and structurally deficient. Some of the highlights of the new Market Street Bridge Project include the construction of a direct connection from US 15 to I-180, three roundabouts along Via Bella, pedestrian/bike access from the river levees, numerous Mechanically Stabilized Earth (MSE) walls, period style lighting, and aesthetically shaped piers.

The new bridge is actually comprised of three separate bridge designs from near abutment to far abutment. Beginning in South Williamsport, spanning a relocated local road and the Norfolk Southern Rail Road is a two span concrete spread box beam bridge. The main river crossing is an eight span pre-stressed concrete I – beam bridge. And crossing the Lycoming Valley Railroad, Interstate 180 and Via Bella is a three-span continuous steel I beam Single Point Urban Interchange (SPUI) Bridge.

The new SPUI bridge design improves and simplifies the connection of US 15 with I-180, while reducing congestion for the traveling public. Prior to this bridge, the connection used a series of local roads for the interchange. The direct connect capability and resulting reduced local traffic allows Via Bella to be reduced to a two lane local road from the four lane previous condition. Three signalized intersections will be replaced with roundabouts. Local revitalization projects in downtown Williamsport have included new period style architectural lighting and this project continues that theme with period style lights at the roundabouts and on local roads. A local riverwalk project to be let in 2008 will construct pedestrian/bike paths on both the North and South side levees and will connect directly to the new Market Street Bridge by two bridges built as part of this project. MSE walls were utilized throughout the project for both space and aesthetic reasons.

Construction of the Market Street Bridge Replacement project began in June of 2004 and is scheduled for completion in July 2008. The river bridge construction used a three phase causeway as well as multiple traffic control phases. The Structure work is now mainly complete with only the pedestrian/bike bridges to be finalized. Other work scheduled for the 2008 construction season includes the reconstruction of Via Bella including the roundabouts and adjoining roads, milling and overlay of I-180 and final wearing course paving of all of the roadways. ■

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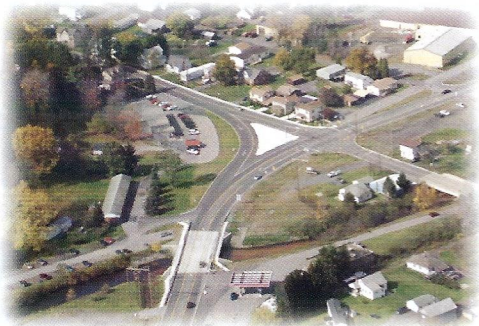


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Morse Road Improvements - Phase 1

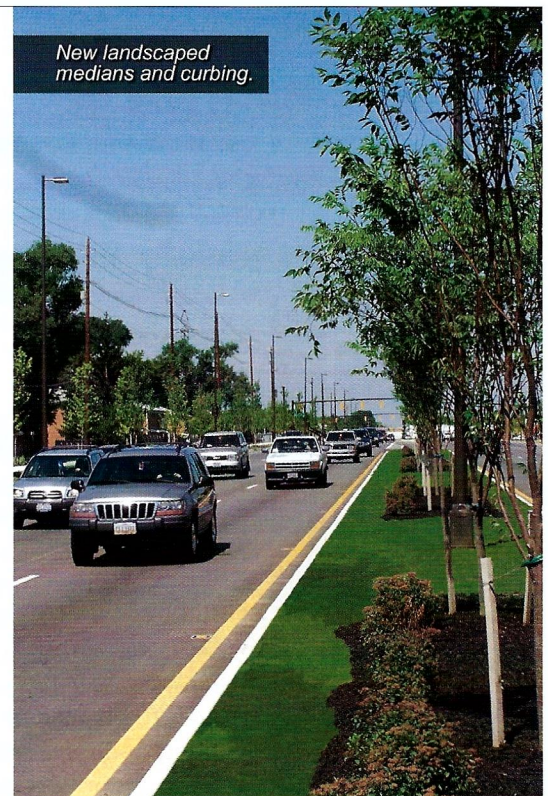
City of Columbus – Transportation Division
Columbus, Ohio

The Morse Road corridor has been a major retail and residential center for the City of Columbus, Ohio since the 1960s. A highly-traveled artery through the Northland community, Morse Road's configuration did not meet existing traffic demands, was a regular site of drainage problems, and created an unfriendly and potentially dangerous environment for pedestrians. The former Northland Mall was built in 1964 along the corridor and was an anchor for the community until its closure in 2003. This once thriving area in northern Columbus has experienced significant changes over the years leading to a decline in its popularity among businesses, consumers, tenants and homeowners. The area suffered as newer, more elaborate shopping malls were built in surrounding areas and suburbs.

Columbus commissioned the Morse Road Design Study in 1999 to evaluate the corridor and recommend roadway, traffic, pedestrian, utility and aesthetic improvement concepts. Beginning in 2001, a design team led by ms consultants, inc. was selected to prepare a preliminary engineering study followed by a detailed design and construction plans. The improvements along Morse Road extend from Indianola Avenue to Karl Road, a distance of approximately 1.4 miles. The plans included the construction of a raised and landscaped median, curbing, a new stormwater drainage system, pedestrian and bicycle facilities, turning lanes, new lighting fixtures, synchronized mast arm traffic signal installations, utility relocations and landscaping. The public involvement process was an essential component to the preliminary engineering work. ms consultants led public meetings interacting with adjacent property owners, area residents, and local businesses to

develop an understanding of public opinions and exchange ideas with the many stakeholders that would be affected by the project in some way. Design for the roadway and related improvements continued through the end of 2004 and in early 2005, the contract for the construction of the project was awarded to Complete General Construction Company. The total cost of the project was \$10 million and construction was completed in November 2006.

This project was originally conceived by the City as a way to show their leadership and commitment for the Northland community. There was recognition by the City that the area was in economic decline and that specific reinvestment for infrastructure improvements could provide a catalyst for the area to recover and grow. There has also been a wealth of community involvement and commitment to support this project. Local business and residence groups have led the establishment of a Special Improvement District (SID) that will assess an additional tax to pay for maintenance of some of the newly constructed improvements. This was no small task to convince area land owners to reach a consensus to tax themselves, but it shows a real commitment by the community for the long term success of the project. The successful establishment of this SID is now being used as a model for other communities throughout Columbus as an effective way to reorganize and re-energize a community for the benefit of businesses and residents alike. The City has also developed a graphics overlay for signage control and a utility district to regulate utility placement. These additional planning controls will help protect and propagate



the improvements as future development occurs along Morse Road.

A great effort has been made with this project to include aesthetic enhancements. Some of the aesthetic details include decorative walls to provide an appealing entryway to the area, colored and stamped concrete, coordinated utility relocations to minimize the clutter of overhead lines and landscaping in the medians and along the sidewalks to create an inviting and pleasant streetscape. The investment in these details is providing more reasons for new businesses to move into the area.

The actual cost savings and benefits of this project are ones that will be realized over time as the economy of the Northland area is reestablished. Benefits will not only be realized by the City as construction dollars saved but as an increased tax base, jobs, new businesses and increased retail and commercial activity. The Community leaders, business operators and the City have all recognized the importance of these improvements and have demonstrated a commitment to maintaining them so that the benefits will be realized long into the future. ■

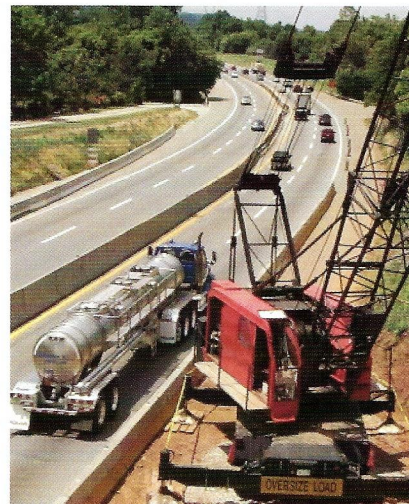
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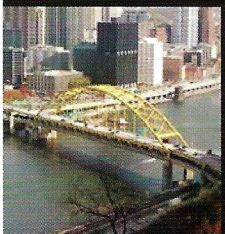
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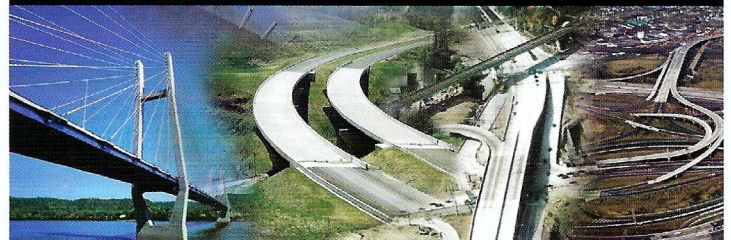
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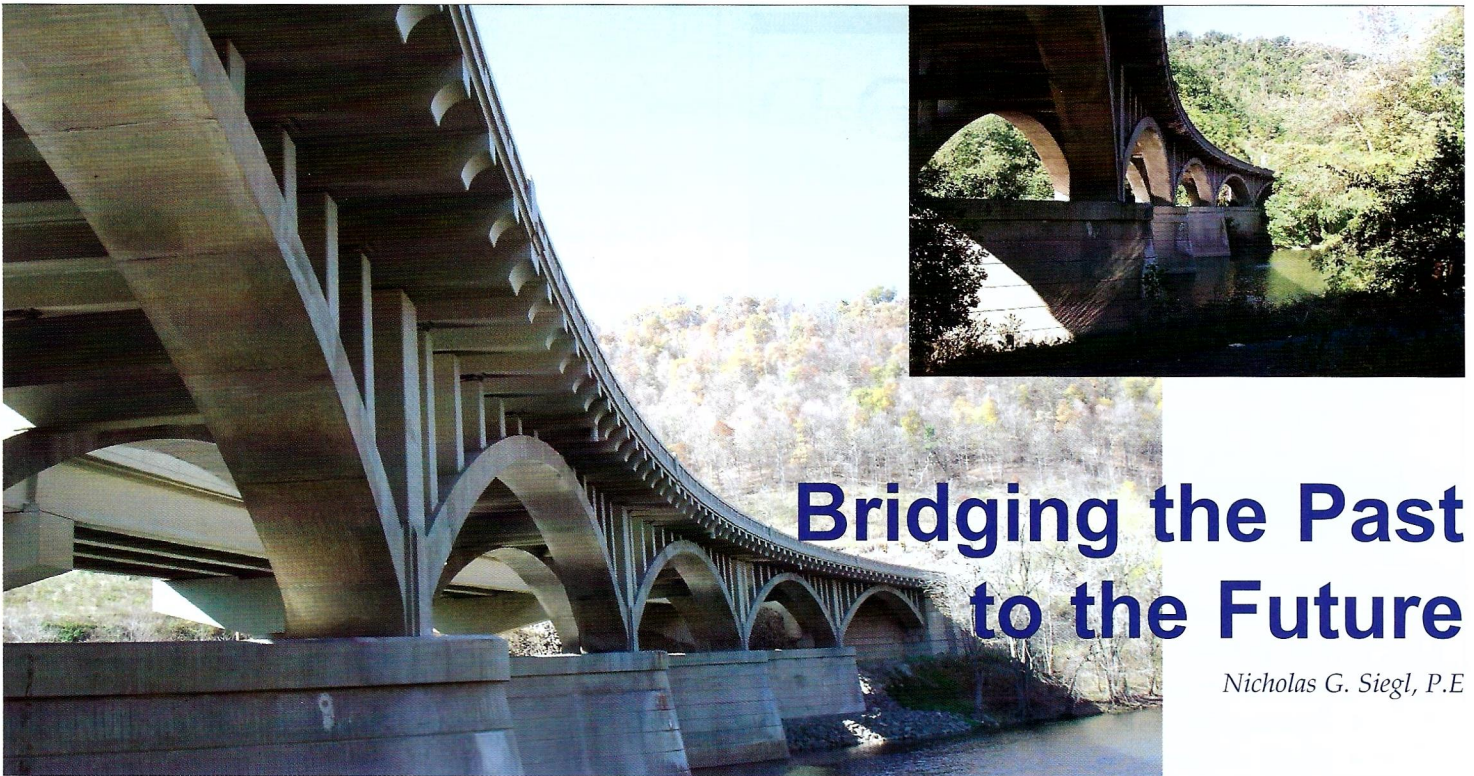


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Bridging the Past to the Future

Nicholas G. Siegl, P.E

The U.S. Route 30 Narrows Bridge, recently rehabilitated by the Pennsylvania Department of Transportation (PennDOT), District 9-0, is the focal point of Bedford County's 4.7-mile, \$67.7 million U.S. Route 30 Transportation Improvement Project. The Narrows Bridge carries U.S. Route 30 (Lincoln Highway) over the Raystown Branch of the Juniata River.

Constructed in 1935, the bridge is listed on the National Register of Historic Places and is part of the Lincoln Highway Heritage Corridor. The bridge's 125 columns and five double-rib arches appear slender and light above the four massive tapered shaft masonry piers. Its open-spandrel arch form is a legacy of early 20th-century bridge engineering when cast-in-place, reinforced-concrete was widely used for bridge building. Although far more complicated to design and build than masonry or closed-spandrel arches, it is strong and relatively light.

Gannett Fleming, Inc. was the prime consultant selected by PennDOT to perform the final design and construction services of the U.S. Route 30 Transportation Improvement Project. Gannett Fleming is pleased to have had a lead role in engineering the successful rehabilitation and preservation of this elegant and enduring landmark.

The Narrows Bridge rehabilitation is a triumph of historic bridge preservation and a unique example of PennDOT's dedication to bridge maintenance and preservation. Maintaining more than 25,000 bridges, PennDOT has the third largest inventory of bridges in the nation.

Project Need: In recent years, an in-depth inspection and traffic study revealed that the curved, 605-foot, five-span, open-spandrel arch bridge was deteriorating and could no longer sustain the high traffic volumes on the mainline. The rehabilitation effort included the design of a new five-span, prestressed concrete bridge built adjacent to the existing Narrows Bridge to carry traffic during construction. As a result of the project, the rehabilitated structure carries two lanes of westbound traffic and a turning lane, while the new structure carries eastbound traffic. The rehabilitation effort required replacing the deck, floorbeams, and spandrel columns, while retaining the historic arch ribs and substructure elements of the original bridge.

Challenges: Complications during the rehabilitation were magnified and multiplied by the bridge's intricate geometry and curvature. The curve creates centrifugal forces that induce bi-axial bending in the arch ribs and causes the ribs on the outside to be five feet longer than the ribs on the inside. Additionally, the pier orientation relative to the curve sharply skews the west abutment, further complicating the framing of the last six floor beams. Constrained by the river, the new bridge, Evitts Mountain, and the Turnpike, the work area around the bridge was very restrictive.

Sustaining History: PennDOT worked closely with the Pennsylvania Historical and Museum Commission in preserving the antiquity and grace of the original design. The rehabilitation resulted in a finished product that closely matches the appearance of the original construction. The architectural treatment on the outsides of the new barrier shape parapets echoes the original balustrades, and the new precast floor beams feature the same end coping on the original beams.

Awards: The Narrows Bridge Rehabilitation won a 2007 American Road & Transportation Builders Association Globe Award and the 2007 Association for Bridge Construction and Design (ABCD), Susquehanna Chapter Award in the Rehabilitated Bridge category. ■

Nicholas G. Siegl, P.E., is a project highway engineer with Gannett Fleming and can be contacted at nsiegl@gfnet.com.



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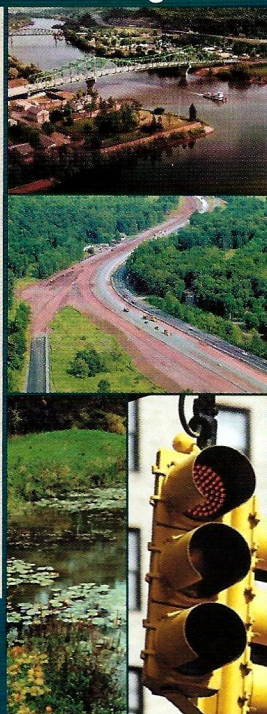
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ASHE National Board Member Bios 2007-2008

Frank O'Hare, P.E., P.S. *Region 1 Director*

Frank has been a member of the Central Ohio Section since 1985 and served as the Section President in 1995-1996. He was the first Region 1 President, and also served on the 1992 and 2004 National Conference Committees.

He received his BSCE Degree in 1974 from Purdue University where he worked in the Civil Engineering Testing Lab as a technician.

Frank has 31 years of diverse engineering experience and is employed as a Senior Project Manager for CT Consultants, located in Columbus, Ohio. He has worked extensively with local, state, and federal clients in the areas of project management, preliminary and final design, corridor studies and project planning, development of design criteria, contract management, and construction administration. His diverse background also includes serving as project manager for large civil projects including dams and locks, bridges, and highways. He is a Registered Professional Engineer in Ohio, Indiana, Michigan, Kentucky, and West Virginia. Frank is also a Professional Surveyor in Ohio and Land Surveyor in Indiana.

He is presently the Vice President of the City of Gahanna Planning Commission.

Frank has been a member of the American Society of Civil Engineers since 1975, Columbus Engineer's Club since 1985, Society of American Military Engineers, and the American Council of Engineering Companies of Ohio where he has been Past Chairman of the Transportation Committee.

Frank and his wife, Kathleen has been married for 32 years and reside in Gahanna, OH. Kathleen is a kindergarten teacher for Columbus Public Schools. Their only daughter, Molly, is married and is also a teacher in Columbus. The family pet is a cat named Duesenberg, which was named after the classic cars that were built in his and his wife's home town, Auburn, Indiana. During the winter, Frank and Kathy can be found cheering on the Columbus Blue Jackets Hockey Team. Frank enjoys boating, fishing, and

traveling. He also is a collector and operator of Lionel trains.

Gerald J. Pitzer, P. E., P. L. S. *Region 3 Director*

Jerry joined the Pittsburgh Section of ASHE in 1984 and became a member of the Section's Board of Directors the following year. He has been a member of the Board ever since serving as Chair of various committees and Section President from 1998-1999. He currently serves as the Section's Treasurer, a position he has held for seven years.

He served as the Exhibits Chair for the 1995 ASHE National Conference and Co-General Chair for the 2005 ASHE National Conference.

Jerry received his BSCE in Civil Engineering from Carnegie Mellon University. He went on to receive his MSCE in Civil Engineering from West Virginia University and an MBA in finance from the University of Pittsburgh.

Currently, Jerry is an Engineering Manager with GAI Consultants Inc., in the firm's Pittsburgh Office where he manages bridge, highway, and transportation projects. He has also served as the firm's officer in charge of risk management, QA/QC, and training. In addition to engineering assignments, he served on the committee which created the firm's ESOP and, for thirteen years, served on the ESOP Committee and as a trustee of the ESOP. He also serves as a Plan Administrator for the firm's 401(k) program.

Highlights of his engineering career include the Williamstown-Marietta Bridge, a 1,200-foot, two-span continuous, through truss over the Ohio River and the Fayette Station Bridge, the reconstruction of a 400-foot long, through truss over the New River. The reconstructed pin truss incorporated many of the wrought iron components of the 70+ year old bridge it replaced. Both of these projects received numerous awards, including the Gold Award in ACEC/WV's annual design competition.

In addition to his ASHE activities, for twenty years Jerry has been a member of the Executive Committee of the International Bridge Conference. This three day annual conference draws over

"National Board" continued p. 26

"National Board" continued from p. 25

1,200 attendees from around the world. While on the Executive Committee, he has been the Chair of various subcommittees and served as the General Chair of the International Bridge Conference in 1998.

His outside interests include golfing, skiing, and traveling. His travels have carried him to almost all of the (50) states and three continents. He is active in the Pittsburgh Ski Club, a 1,000+ member organization, where he has served on the Board of Directors for the past eight years, including president in 2005-2006 and two terms as treasurer. He also spent twenty five years as an advisor to the Carnegie Mellon chapter of the Delta Tau Delta fraternity.

Jerry is a Registered Professional Engineer in Pennsylvania, West Virginia, Florida, Maryland, and North Carolina and a Registered Land Surveyor in Pennsylvania and West Virginia.

Richard S. Prentice *Immediate Past National President*

Dick has been a member of the Delaware Valley Section for 35 years. Elected to the Section Board of Directors in 1984, he held the positions of Director, 2nd Vice President, 1st Vice President, and President. He still sits on the Section Board as their senior advisor. Dick was named as the Region 6 Director for the Delaware Valley Section when the National Board re-organization in 1995. While on the Region 6 Board of Directors, he held the positions of Director, Secretary, and President. Dick was a motivating force in starting the Region 6 Seminars, which are now offered every October. In 2001 he was elected as the Region 6 Director on the National Board of Directors, where he chaired various committees. Dick was instrumental in getting our IACET re-certification and still chairs the Education/CEU Committee. In 2002 the Delaware Valley Section named him the ASHE Person of the Year, in 2003 the First State Section named Dick an Honorary Member, and at the 2004 National Conference, he received the President's Award for his significant contributions to ASHE. Dick was elected as a National Officer, serving as the 2nd Vice President, 1st Vice President, and President. As National President, he traveled to numerous states representing ASHE in areas where the Organization was known and in areas where it was unknown. He wrote several articles that were published nationally, regionally, and locally. Dick was just elected as a Director on

the First State Section Board of Directors in May 2007. He was also involved in the ASHE 1985 and 1997 National Conferences hosted by the Delaware Valley Section, and the 2007 National Conference hosted by Region 6.

Dick has a B.S. in Structural Engineering and a M.S. in Civil Engineering from Drexel University. He also holds a degree in Architecture from Temple University. Dick began his engineering career in 1968 with Pennsylvania Department of Transportation. During his 36 year tenure with Engineering District 6-0, Dick worked at various levels of design and management in the Bridge Design Unit, Project Management Unit, and Traffic Unit. Dick retired from Pennsylvania DOT in 2004 and immediately moved into the private sector. He accepted a position with McMahon Associates, Inc. in Fort Washington, PA, where his talents, diversity and experience in structures, highways, and traffic engineering fit extremely well with the needs of the firm.

Dick is active in other engineering organizations. He is a member of the Delaware Valley Engineers Council for 27 years, the Institute of Transportation Engineers for 9 years, and the Engineers Club of Philadelphia for 5 years.

Dick, a widower, resides in Mont Clare, PA. He was married for 28 years, and is the proud father of two adult daughters. Jessica, a chemical engineer, lives in New York where she is employed as a research engineer at Regeneron Pharmaceuticals, and Kristen is pursuing a Masters and PhD in Physical Therapy at Temple University. Dick is an active member of Saint Andrew's Lutheran Church. He served on the Church Council for 6 years, taught 7th Grade Sunday School for 15 years, and has been Chair of the Church Property Committee for the last 21 years. In his spare time he likes to travel and read.

Shirley Stuttler *President's Assistant*

Shirley has been a member of the Franklin Section for 27 years and has served as the Section Secretary for 22 years. She has the distinction of being the first woman President of the Franklin Section. Shirley served as a National Director from 1996 to 2002, and at which time she was appointed as the National President's Assistant. She also serves on the National Board as Chair of the Section Operating Manual Committee and serves as a member of the National Conference and the Society History Committees.

Shirley retired in March 2005 from PennDOT Engineering District 1-0 after 35 years service and continues to perform her ASHE duties for the Franklin Section and National Board from the comforts of her home.

She and her husband John have been married for 20 years and reside in Cochran, PA. They have three children; David age 37 who resides in Raleigh, NC; Jay age 32 who is presently serving with the Army in Iraq while his wife Christy is manning their home in Girard, PA; and Jim age 30 who resides in Erie, PA along with his wife Katie. They are also the proud grandparents of three grandchildren; Adam age 6, Ethan age 5 months, and Jordan age 5.

In past years, Shirley participated in both indoor and outdoor archery competition, where she won several State Medals in the Woman Class 'A' Division for compound bow.

Shirley and John enjoy traveling and taking cruises with their friends. Many of their summer weekends are spent at the family cottage located along the Allegheny River where they enjoy riding in the hovercraft, which John built.

Paul R. Trapp, Jr. *Region 7 Director*

Paul is a charter member of the Old Dominion Section and has been active since its founding in 1990. He has served in various capacities, including two terms as President from 1997 through 1999, and currently represents Region 7 on the National Board of Directors. He was involved in the planning and organization of the 2006 National Conference in Williamsburg, serving as the Entertainment Chair and on the Executive Committee.

He is the Managing Principal for Infrastructure & Environmental Services at Timmons Group, a Richmond-based consulting engineering firm with nine offices in Virginia and North Carolina. He has 24 years of experience in transportation planning, engineering, permitting, and construction. Paul has been the project manager on many projects for state and local governments, as well as industrial and other private sector clients. His areas of expertise include roadway design, corridor studies, and traffic impact analyses.

Paul earned his BS in Civil Engineering in 1983 at Rensselaer Polytechnic Institute in Troy, New York. He worked for the New York State Department of Transportation for five years before relocating to Virginia in 1988. While working for NYSDOT, he

obtained his MBA at the State University of New York at Albany.

He is a 2002 graduate of Leadership Metro Richmond and served a three-year term on the Engineering Leadership Committee for the Virginia Road and Transportation Builders Association (now the Virginia Transportation Construction Alliance).

Paul was active in the Virginia Section of ITE (VASITE) for over 10 years and recently made a presentation on "Internal Trip Capture for Mixed-Use Developments" at VASITE's fall meeting.

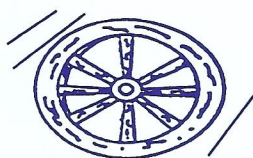
In addition to transportation, Paul's other passion is education. He is currently President of the Board of Trustees for the Chesterfield Public Education Foundation and has served as County Council representative for the Robious Elementary and Middle School PTA's.

Paul and his wife Jill are the proud parents of three boys (ages 17, 14, and 11) and an 11 year-old daughter that they adopted from Russia in 1998. Paul and his family live in Midlothian, Virginia, are members of St. Edward's Church, and are involved in many youth sports and school-related activities.

Robert E. Yeager, PLS *National Treasurer 1975-2008*

Bob is a member of the Altoona Section in Region 4. Joining ASHE in 1963, he was a Board Member and President of the Altoona Section. Bob then served on the National Board and became National President in 1974. He has been our National Treasurer since 1975. With several years of dedicated service to the ASHE Organization, the National Board granted him an Honorary Membership on April 17, 1998.

Bob earned his B.S. in Civil Engineering from Pennsylvania State University in 1959. He later continued his education at Cornell University in Construction Engineering. Bob began his career as a field engineer with the Harrison Construction Company and then with the S. J. Groves Construction Company. Over the next 23 years, he continued to refine his construction skills with Vipond & Vipond, Incorporated, earning promotions from Supervisor to Project Manager, to Vice President of Construction. Bob switched to the I. A. Construction Company where he worked for ten years as their District Manager. From 1995 to 1997 Bob was the owner of R. E. Yeager Consulting, Incorporated. He retired in 1997 after working more than 38 years in the construction industry. Bob has an E.I.T and is a Professional Land Surveyor in Pennsylvania. ■



As the Wheel Turns



SAI Consulting Engineers, Inc. is pleased to announce the promotion of **James J. Lombardi, P.E.** from Vice President – Construction Services to Executive Vice President in their Pittsburgh, Pennsylvania, office.

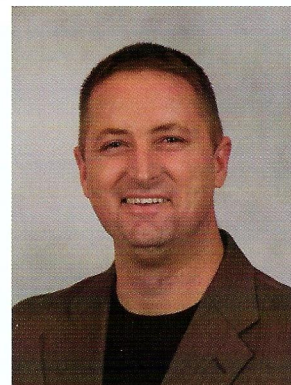
For over 26 years, Mr. Lombardi, who is a registered Professional Engineer in Pennsylvania and Florida, has been an integral part of SAI and responsible for the growth and

overall success of their Construction Services Group. He began his career as a design engineer in 1972 with the New Jersey Department of Transportation. In 1973 he joined the Pennsylvania Department of Transportation, Engineering District 11-0 as a civil engineer in their Construction Unit; he has also worked for the Allegheny County Department of Engineering and Construction.

A graduate of the University of Pittsburgh School of Engineering, Mr. Lombardi was recently selected to receive the Civil Engineering Department's Distinguished Alumni Award.

For over 40 years, the University of Pittsburgh has honored the outstanding achievements of its graduates with this award; Mr. Lombardi is one of the few distinguished professionals' in the civil engineering industry to have received this prestigious honor.

David Wilhite, PE, of Barge Waggoner Sumner & Cannon, Inc., (BWSC) has been promoted to Lieutenant Commander in the U.S. Naval Reserves. His 23 years in the military includes three years active duty in the Army, ten years in the Army Reserve, and ten years as a commissioned officer in the Naval Reserve Civil Engineer Corps. He is currently serving as the Regimental Equipment Officer for the 3rd Naval Construction Regiment, Marietta, GA.



Wilhite is a Senior Project Manager with BWSC, and has worked for the firm since 2006. His responsibilities include bridge design efforts throughout the southeastern United States, TDOT bridge inspection and repair contracts, managing TDOT level highway and interstate roadway design contracts, marketing, proposals, contracts negotiation, programming, budgeting, scheduling, and supervising engineering design work for government and private sector clients.

Past civilian employment includes NAVFAC Washington, NAVFAC Southwest and TDOT Structures Division. Past reserve assignments include Naval Mobile Construction Battalions 23 and 24, the 1st Naval Construction Regiment and U.S. Navy Central Command.

Wilhite holds a Master of Science Degree in Civil Engineering from the University of Tennessee, and a Bachelor of Science Degree in Civil Engineering from Tennessee Technological University. He is a registered Professional Civil Engineer in the states of Tennessee, Georgia, Ohio, Kentucky, Mississippi, and Alabama. He is active in the Society of American Military Engineers, and the American Society of Highway Engineers. Wilhite and his family live in Spring Hill.



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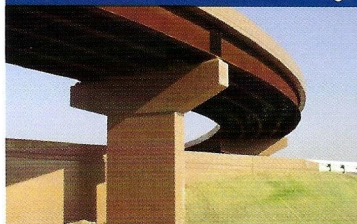
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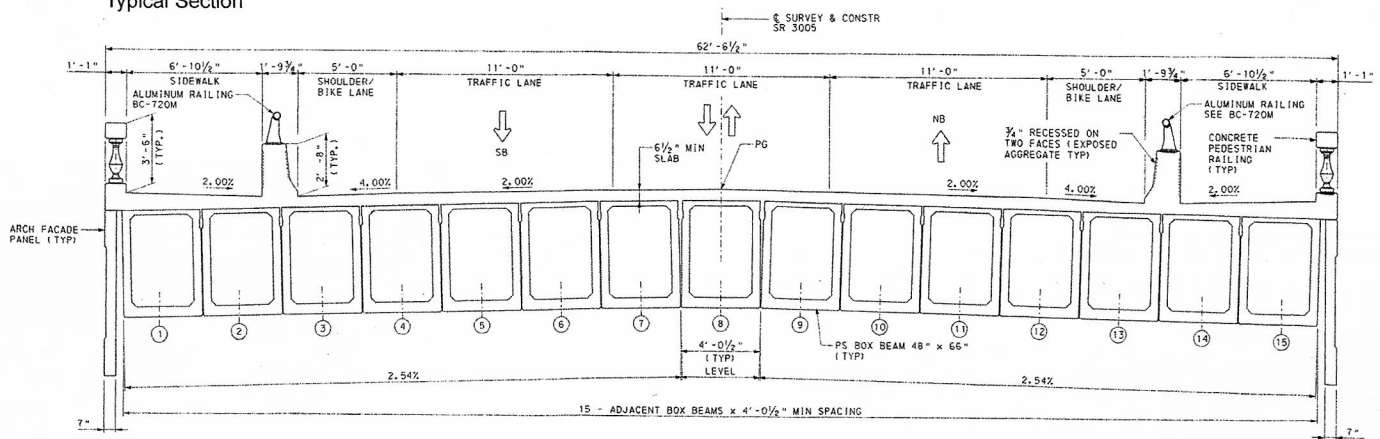
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Typical Section



Rendering courtesy of Michael Baker Jr. Inc.

"Hickory Street" continued from p. 7 panels and an arch reveal feature on the façade panels helped to make the arch dimension more pronounced and completed the Venetian effect.

Considering the Hickory Bridge's structural type and the impacts of the swiftly moving Allegheny River, the conventional choice for the pier foundations would be either spread footings founded on rock or vertical and inclined steel H piles driven into bedrock. Either option would require construction of costly cofferdams. However, the engineers chose a different approach, new to PennDOT at the time. Their design called for caisson pier foundations constructed by driving steel casings into the riverbed and filling them with concrete, since caisson foundations could withstand greater lateral loads than steel H-piles and permitted vertical

construction. Cofferdams were not required for pier construction, reducing the foundation cost by approximately 30 percent, and lessening environmental impacts. Wall-type piers were constructed atop of the caissons, without caps or footing. The piers incorporated bathtub-type forms so that the caissons would not be visible during low-water events. Since the caisson foundations were socketed into bedrock, the piers did not need to be extended to the bedrock, thereby allowing unobstructed passage of water and reducing scour potential.

Circular alcoves designed at each of the three piers enable pedestrians to enjoy beautiful vistas of the Allegheny River. Aesthetic lighting, which includes light fixtures matching those of the adjacent historic district and soft, indirect accent lights positioned below the alcoves to enhance the character of the arch

panels, creates a captivating nighttime appearance.

Early identification of major issues streamlined the design process since it provided designers with the maximum amount of time to address community concerns.

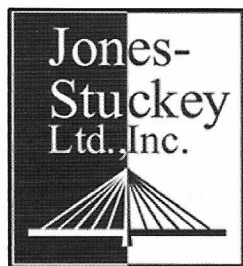
The new Hickory Street Bridge is a striking, graceful structure that meets community mobility needs and truly captures the historic character of the City of Warren. As testimony to the community's enthusiastic reception to this project, PennDOT received a standing ovation at the public meeting when the design concepts for the award-winning bridge were introduced. ■

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