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. . . Page17

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MISSION

Provide a forum for members and partners of the highway industry to promote a safe, efficient and sustainable highway system through education, innovation and fellowship.

NATIONAL HEADQUARTERS

65 Beacon Hill
Henderson, NC 27537
(919) 909-2987
ashenational@embarqmail.com

www.ashe.pro

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Table of Contents

Advertisers

ASHE National Membership Database Upgrade

ASHE is excited to roll out its new web-based membership database. Each member can access and maintain his or her own membership data. National's goal is that this database will become the common database that both National and the Sections use to maintain all membership information.

To access the database, go to www.database.ashe.pro. You must input your personal ID number which is an eight digit number located on the *SCANNER* mailing label. This will be your ASHE ID number for as long as you are a member of the Society. Your initial password is the zip code (including the dash if it is a nine-digit code) also on the mailing label. Change your password after your initial login to ensure the security of your data.

Please take your first opportunity to review and update your personal data in the database.

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President's Message

Thomas S. Morisi
ASHE National President 2013-2014

I am honored and humbled that the ASHE members have entrusted me with the leadership of this organization. I follow a long line of respected leaders who have worked hard to make ASHE what it is today, and I will continue the efforts they have made. It will be a challenge, but one that I look forward to.

I joined the Altoona Section 20 years ago on the encouragement of my good friend and your Past National President, Sandy Ivory. I was a young engineer starting a new job at a brand new company, trying to establish a Transportation Division. Through ASHE, I met friends in the industry who helped our company establish a successful Division. I learned that we're all in this together and that we can do great things. As I joined the leadership of the Section, then the Region, and now National, I learned leadership qualities that help me in my business and social life today.

My company, Keller Engineers, Inc., and I, owe much of our success to involvement in ASHE. However, the friendships from ASHE mean the most to me. With the help, encouragement, and support of Past National President Dick Prentice, I am in a position to write this article today.

Given the economic troubles of the past few years, the infrastructure of our country has suffered greatly. Hopefully, as the economy turns around our industry will too, and we can get back to the job of improving this country's infrastructure. The economic times have also affected the ASHE organization by keeping our overall membership stagnant. We have not grown, but we have not contracted either. Maintaining our membership numbers during these past few years has been difficult, but we have been successful through the hard work of our Sections.

As with any organization, there are areas in which we have done well and areas which could use a bit of help. Those successful areas include:

Improve External Communication: The improvements to the SCANNER have been amazing. This has become the keynote publication of our organization. Quarterly, it is distributed to well over 6,000 people. Also, our website has recently been overhauled, giving us an updated site that is easy to navigate. We have initiated an email blast system to quickly get information out to our database, and the Inside Lane has become both an informative weekly newsletter and a source of revenue for the organization.

Establish Strategic Alliances: We currently have agreements in place with the American Traffic Safety Services Association (ATSSA), the National Association of County Engineers (NACE), and the National Association of Women in Construction (NAWIC), and have been in discussions with all of these entities to determine ways we can work together to improve our industry and strengthen our membership. We are also looking to establish additional partnerships.

Expand and Retain Membership Strength and Viability: We have maintained steady membership during the recent economic downturn, and have refocused our efforts in advancing new Sections. Finally, we created At-Large Membership and International At-Large categories that will both help grow the organization and better identify potential areas for new Sections.

Promote Educational and Technology Transfer: Improvements have been made to our website and to the *SCANNER* in order to provide educational presentations to our memberships. Individual Sections continue to provide excellent presentations at their monthly meetings that are not only educational but provide necessary CEU's to our members. We continue to provide scholarships to young engineers. These scholarships have exceeded $1 million in total since ASHE first began tracking scholarship awards.

I would like to continue to concentrate on our first goal: Improve Internal Communication. In order to further grow and improve ASHE, I believe we need to first get our house in order. We need to make sure we have an effective line of communication from our Sections to the Region to National, and ensure the strength and viability of our Regions. In order to accomplish this, I have created the Regional Oversight Committee to work with each of our Region Boards to help them become more viable and strengthen their purpose. I will be working with that Committee to visit each Region, and determine its needs and deficiencies.

It will be a challenging year, but one I look forward to. I'm anxious to meet new friends, see old friends, and make this a strong organization that is poised for success and growth in the future. ■

A Different Approach to Sustainable Stormwater Best Management Practice

Jenni E. Woodworth, PE, CPESC, CPSWQ

Water is our single most precious natural resource and it is everyone's responsibility to help protect that resource for future generations. Our stormwater drainage system is a pathway for every drop of water to find its way into streams, rivers, and lakes. Therefore, we must think about how to protect our natural resources from pollution. Every action we take that has an effect on our water.

By definition, stormwater runoff is precipitation that cannot soak into impervious areas such as paved streets, parking lots, and building rooftops during rainfall events. Because it cannot soak into the ground, it "runs off" the land into neighboring waterways. Stormwater runoff often contains pollutants in quantities that adversely affect water quality. Stormwater pollution is a challenging water quality problem. Unlike pollution from industry or sewage treatment facilities, which is caused by a discrete number of sources, stormwater pollution is caused by the daily activities of people everywhere. Rainwater runs off streets, lawns, farms, as well as construction and industrial sites. It then picks up fertilizers, dirt, sediment, pesticides, oil and grease, and many other pollutants on the way to nearby bodies of water. Stormwater runoff is the most common cause of water pollution.

Sustainable stormwater management is the process of changing land-use practices in the built landscape in order to maintain the quality, quantity, and rate of runoff as close to the predevelopment condition as possible. This includes reducing runoff at the source by minimizing the amount of hard surfaces; providing areas to detain water and slow its progress toward the streams; amending soils in order to absorb more water; constructing filtration areas with vegetation to filter water as it moves across the land; and practicing good housekeeping, both day-to-day and on construction sites.

The primary barriers that exist for transitioning to sustainable stormwater management from traditional urban runoff practices are socio-institutional rather than technological. We have found that community members are often not included in the decision-making process, and thus not informed or empowered to meaninfully participate. Any program seeking to achieve change in the area of sustainable urban water management must first consider the local residents. When community members understand the purpose of sustainable stormwater management Best Management Practices (BMPs), they are active participants in keeping the facility operating properly. What is done today to keep our streams clean and our ground water table supplied drastically affects our future and our children's future.

Why should any local resident be involved in such a technical subject as sustainable stormwater management? There is widespread demand for involvement and participation in environmental matters at all levels of society. When the community participates in the development of a stormwater management strategy, studies have shown that there is an overall decrease in construction and maintenance costs. By using local input, designers are able to precisely design structural BMP's that are tailored toward soil, groundwater and ground cover conditions. This site specific design ensures that the sustainable stormwater management BMP's that are chosen have a higher success rate in pollution reduction. The education of community members brings awareness to the purpose and use of sustainable stormwater management, which ultimately helps keep maintenance costs down.

There are many Sustainable Stormwater Management Best Management Practices, but the most important, often overlooked, is the participation of the local community. For more information on how to involve your community, contact me at jwoodworth@admarble.com. We have the resources to effectively guide a community; through education and training, on the benefits and advantages of sustainable stormwater management. ■

Full Depth Reclamation (FDR) with Cement Provides All-Season Benefits

David Cannon, LEED AP

Winter Weather Plays Havoc with Pennsylvania Roads

Pennsylvania has the unenviable distinction of leading the United States in the number of annual freeze-thaw cycles. Its northern tier is largely comprised of silty subgrade soils which are highly susceptible to frost heave. The region also receives the type of weather that can cause serious pavement damage.

Frigid temperatures and significant snowfall amounts in the winter months, followed in spring by warmer weather and melting conditions can result in serious road deterioration. Movement within pavement from frost heaves, coupled with significant heavy truck traffic from the Marcellus Shale gas industry, can lead to extensive cracking, rutting, and loss of roadway service. These pavement failures can prove disruptive to local residents and businesses, and lead to the interruption of drilling and gas production.

Over the years, local agencies have tried numerous rehabilitation techniques to extend the life of roads. Part of the problem is that most rehabilitation techniques are only effective if they are applied at the appropriate time, which usually does not coincide with funding availability or construction schedules. Consequently, these rehabilitation measures often result in a "pie-crust effect," which is layers of chip-seals and/or thin asphalt overlays with little structural integrity, rarely survive the planned design life and accelerate maintenance and rehabilitation issues.

A Proven Alternative

Full Depth Reclamation (FDR) with Cement can provide the benefits of complete reconstruction in an accelerated timeframe, without substantial costs and environmental concerns. This procedure pulverizes existing asphalt and blends it with a pre-determined portion of any underlying base, subbase, and/or subgrade materials. It is then mixed with cement and compacted to provide a new stabilized base. The FDR process results in a reconstructed cement-treated base, which greatly increases the strength of the pavement structure and does not weaken during seasonal changes or under heavy loading.

Conventional design or reconstruction methods, such as the use of synthetic fabrics or grids, often require a significant aggregate overlay (typically 12"-18" or more). This methodology results not only in changing the road cross-section, but the need to build up the adjoining shoulder as well. While often impractical due to both right-of-way restrictions and limited space, this practice proves quite expensive due to the additional material and construction costs

Existing pavement is uniformly pulverized and mixed with cement to eliminate defects and strengthen base materials

associated with changing a pavement cross-section. It could lead to fatal roll-overs if vehicles veer too close to the shoulder.

Throughout Pennsylvania, FDR with Cement has been used to rehabilitate failed pavements with over 300 miles for Marcellus Shale projects alone. The FDR process allows the project owner to utilize the existing in-place roadway materials, which have already been bought-and-paid-for once with tax dollars, to strengthen subgrade and subbase materials, while eliminating the need to raise roadway elevation and infringe on right-of-ways. By recycling the roadway in-situ, FDR with Cement typically costs 25% to 50% less than the removal or replacement of the old pavement. FDR roads provide dramatic life-cycle savings with reduced maintenance costs for years to come.

Adding Soil-Cement to the Pavement Structure

Adding soil-cement to pavement eliminates rutting and distributes loads. Rutting is caused by weak subbase material. Adding an asphalt overlay will not fix the problem, but only mask it. FDR with Cement adds strength and stiffness to the new base course. Typically, FDR with Cement results in a compressive strength of 250-450 psi. This increased rigidity and flexural strength reduces the point loads and is able to distribute stresses over a greater area, resulting in the elimination of rutting in the stabilized base by acting as a load-carrying element of the pavement system.

This process also reduces moisture problems. Cement-treated bases are designed to be virtually impermeable; this keeps water out of the base so that even under frost conditions no frost lenses can form in the base layer. With a granular material, if poor drainage exists or groundwater rises, the base can easily become saturated. When this happens in an unbound material, significant strength losses occur. The cement-stabilized layer, being a bound material, will maintain significant strength even in the unlikely event it does become saturated.

Soil-cement reduces deflection. The higher stiffness of cement-treated bases will lead to lower pavement deflections and lower asphalt strains. This will result in longer fatigue life for the asphalt surface as compared to an asphalt pavement with a granular base, which will have higher deflections and strains.

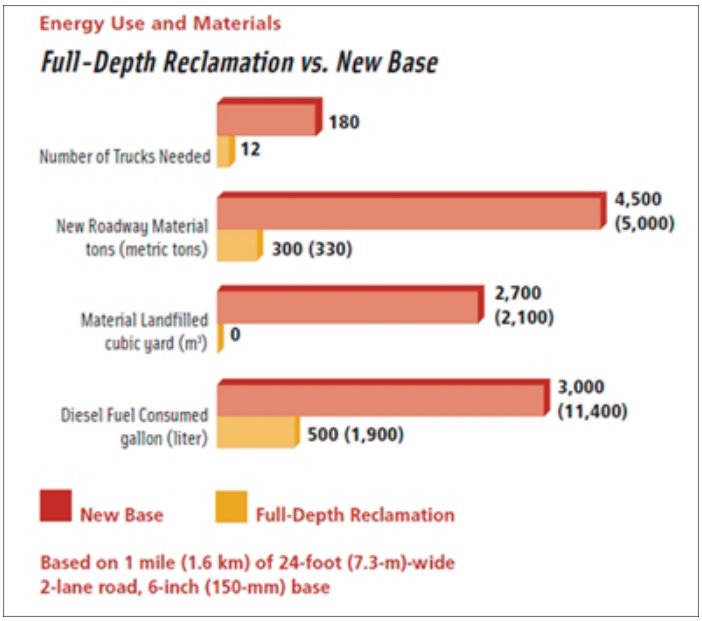
There are also several noteworthy environmental advantages to the FDR with Cement process:

* Conservation of new aggregates that must be quarried and transported to the site

* Conservation of land areas that would otherwise be used to dispose of asphalt/base materials from failed pavements, and

* Reduced air pollution and fuel consumption, traffic congestion and damage to adjacent roadways resulting from hauling/ disposal truck traffic.

Full Depth Reclamation (FDR) with Cement has been tested under the harshest conditions in Pennsylvania and has stood the test of time. It now provides owner agencies with a strong, cost-effective, safe, long-lasting tool to extend the life of pavements and improve the conditions of the roadway network. ■



FDR significantly reduces the impact on the environment by eliminating the need to landfill or stockpile materials while conserving fuel and reducing greenhouse gas emissions.

FDR with Cement gives the owner agency a stronger, impermeable, all-season base course which will reduce future maintenance cost

Framed superstructure with grid deck set on October 16, 2012 adjacent to the existing bridge

Montour Run Bridge No. 6 and All the Fixings

Mark J. Pavlick, P.E., HDR Engineering, Inc.
ASHE Southwest Penn Board Member,
ASHE Pittsburgh Section Member

Southwestern Pennsylvania

While most people were preparing for their Thanksgiving 2012 weekend, thinking of turkey, stuffing, pumpkin pie and football, a construction crew from Joseph B. Fay had nothing on their minds but accelerated bridge construction (ABC), precast bridge elements, a super-pick, and liquidated damages.

HDR designed the Montour Run Bridge No. 6 (MT06) replacement bridge for the Allegheny County Department of Public Works. The replaced bridge was an adjacent box beam bridge set on masonry stone abutments. (The replaced superstructure was similar to the Lakeview Bridge located over Interstate 70 in Washington County, PA. In December 2005, an exterior beam failed without warning.) For the MT06 Bridge, in addition to the deterioration of the pre-stressed concrete box beams, the west fascia beam was separated from the other six beams, which leads to the assumption that all the beams were acting independently. This assumption resulted in low live load ratings.

Project Direction

The replaced MT06 Bridge was a vital link for five businesses that use the bridge, as it was the only means of access to the properties. Widening of the new bridge was initially proposed with an 11′-0″ lane through the staged construction. During the project plans display in preliminary design, one of the business ownders notified Allegheny County that they regularly have 15′-0″ wide permit loads to move rental equipment to and from the facilities. The need to move these wide loads across Montour Run at this location made staged construction impractical. The new bridge width was restricted by a pumping station located on the east side and a sewer line interceptor manhole, a power line, and a business located on the west side of the bridge. In discussions with the affected businesses, the original structure width met their needs, but the businesses needed access throughout construction of the new bridge. Per the request of Allegheny County, HDR investigated replacement of the bridge using accelerated bridge construction (ABC) technique.

Wellness Monitoring

Prior to the superstructure replacement, it was proposed that the existing superstructure be monitored, given the low live load ratings. Four of the seven pre-stressed concrete box beams were monitored using linear displacement gauges at the center of the beams. The monitoring proved that six of the seven beams were "sharing" live load and thus the live load ratings were higher than assumed. Real-time bridge wellness was observed, and immediate notification would have been made if the superstructure did not perform elastically. The monitoring provided comfort that the superstructure was "operable" prior to its replacement.

Design Details and Construction

The new bridge, designed by HDR and constructed by the Joseph B. Fay crew, consists of one 11′-6″ lane, a 6′-0″ wide shoulder, and a 2′-0″ wide shoulder. The 22′-6″ wide bridge was supported by five W18x119 rolled beams spaced at 4′-11 7/8″. The concrete-overfilled grid deck is 7 3/16″ thick. HDR designed the deck to be placed in two sections using normal weight concrete and a closure pour. The contractor elected to use lightweight concrete and construct the superstructure adjacent to the existing bridge in its entirety. After demolition of the superstructure and partial demolition of the masonry stone abutments, precast concrete abutment caps were set to support the new superstructure. The new superstructure was then lifted and set in place. Precast concrete moment slabs were supported from the abutment caps to tie into the approach roadway.

The bridge was closed at 5:00 PM on Wednesday, November 21, 2012, and had to be open to traffic by 6:00 AM on Monday, November 26, 2012, or heavy liquidated damages would be assessed. The contractor completed placing guiderail on the evening of Saturday, November 24, 2012, approximately 1 ½ days ahead of schedule.

Setting precast concrete Abutment 1 cap set on Thanksgiving, November 22, 2012

Setting reinforced concrete moment slab at Abutment 1 set on Saturday, November 24, 2012

Giving Thanks

Employees of the affected businesses returned to work Monday after Thanksgiving using the new stream crossing. The new bridge will provide years of uninterrupted access to their places of employment.

This difficult project would not have been a success without the cooperation of the Allegheny County Department of Public Works, PennDOT District 11-0, the contractor, the design engineering company and the many stakeholders. Extensive planning and preparation by the above resulted in a Thanksgiving weekend to be remembered. ■

From the Editor's Laptop

John L. Hetrick P.E.

The other day when I went into ASHE's database to change my employment status, I was reminded how easy it is for ASHE members to update their employment and personal information. It takes two minutes to login to the National database and update your information, review your profile and make changes, if needed.

This is a vital step for each member and the organization. Each quarter when the SCANNER issue is mailed, ASHE pays several hundred dollars to identify issues not being delivered to members. You, as a member, are cheated by not receiving the SCANNER, and ASHE loses nearly $1,000 a year. So please keep your information updated as soon as you have changes, especially your address. (To access the database, see Page 1 of this SCANNER issue).

The second item I want to highlight is ASHE's two newest initiatives. They are:

- At-Large Membership for United States residents who do not live close to an existing Section.
- At-Large International Membership for those who live outside the United States.

Over the years, we have received numerous inquiries from those interested in joining ASHE, but were not able to gain their membership because they either lived outside a Section area or outside the United States. By adopting these two initiatives, ASHE now fills a void that has existed within the organization for many years. We are planning to do an article on these initiatives in a future SCANNER issue.

The guidelines and applications are located in the Operations Manual which can be found on the National website - www.ashe.pro The Operations Manual tab is on the left side of the page. While you are in the Operations Manual, check it out; it has everything you need to know about the ASHE. ■

A Traffic Engineer's Perspective on PowerPoint

James Mearkle

We've all witnessed a bad PowerPoint presentation. One in particular stands out in my memory: the speaker had lots of small, yellow text on a white background. Even though I was sitting near the screen, the slides were very hard to read. As he droned on, I found myself paying more attention to the format of the presentation than the content. However, I learned something that day; it occurred to me that there are parallels between the design of traffic signs and presentation slides.

With a few exceptions, visual media such as signs, pavement markings and lights are used to transmit traffic control, warning, and guidance information to the travelling public. Size and shape, color and contrast, and composition and simplicity of message are used to provide a clear meaning. Since PowerPoint is also a visual medium, the same principles can be adapted to design effective presentation slides.

The Manual on Uniform Traffic Control Devices lists five basic principles for device selection and application. These are the principles, and how they apply to PowerPoint slides:

* Fulfill a need: Each slide should be in the presentation for a reason and should meet that specific need.
* Command attention: High contrast and bold design catch the eye. Fine print or details won't be readable.
* Convey a clear, simple meaning: Like a highway sign that only lists the major destinations, each slide should be limited to the essentials. Use no more than six bullet items per slide. three is better. Try to use six or fewer words in each bullet. Use symbols or pictures if they will better make your point.
* Command respect: You want to come across as clear, confident and professional. Gimmicky animations or cartoonish design will distract, not enhance. Bad design and spelling errors reduce your credibility.
* Give adequate time for proper response: You want your audience to quickly absorb the material on the slide, and then return their focus to you. Budget two minutes or so per slide. This will help you avoid going too fast trying to cover everything, or running out of time.

The MUTCD also includes design guidance to make sure traffic signs meet the five principles and are easily read and quickly understood by the traveling public. Guidance on color, contrast, and text readability are relevant to PowerPoint design.

Color and contrast: Use a bright color and a dark color. Dark on dark combinations are hard to see. It's hard to focus on bright on bright color combinations like cyan on yellow. Light letters on a dark background work best. While dark letters on white backgrounds are legible, they can be tiring to the eye.

Roughly one person in twelve has color-blind or color-deficient vision. There will probably be at least one in your audience. Most of them see reds and greens as beige, gray or black, so avoid combinations of these colors. Some individuals have trouble seeing red laser pointers, but can see green ones. There are more variations than can be discussed here, but you can check your slides with a color blindness simulator like www.vischeck.com.

Don't rely on your computer monitor. Monitors have better contrast than most digital projectors. Check your slides projected on a screen, preferably with the same projector and room lighting you'll use for your presentation. It often helps to slightly increase the contrast and brightness on photographs.

Lettering and symbols: The font you use affects how readable your slides will be. For example, **Arial Rounded MT Bold** is clearer than Arial, which is more readable than Arial Narrow.

For the best readability, make sure the projector fills the screen, and follow these guidelines:

- Use 40-44 point font size for titles
- Use 36 point font size for text
- Avoid text smaller than 28 point

If you have doubts, print the slide and try to read it from five or ten feet away. If you can't read it, use a larger or clearer font.

The same principles apply to symbols and graphics. A bold graphic will show up. Small symbols and fine lines will not. Eliminate excess detail and make the needed detail larger. For example, a roadway typical section from a highway plan will not be readable on a screen. Use bolder lines and text, and delete details like the material item numbers or lift thicknesses.

Make use of redundant information. Just as a stop sign is a red octagon with the word STOP on it, use text, shape and color to label data. Because of colorblind viewers, rely more on text and shape.

Use these tips, and your presentations should go better. Remember, however, your message is the most important thing. The PowerPoint file is just a tool to help you convey it. ■

Sources:

Tips for Speakers, Rosenbaum, Toni, Cornell Local Roads Program, Ithaca, NY

Manual on Uniform Traffic Control Devices, FHWA, 2009

http://accessibility.psu.edu/colorvibrate

http://www.vischeck.com/

Editor's Note: This article was incorrectly titled in the print version. I apologize for the mistake.

Pennsylvania Turnpike Rt. 29 All-Electronic Interchange (Exit #320)

ASHE Delaware Valley Section Project of the Year Over $10M

PROJECT OVERVIEW:

JBC Associates, Inc. was the prime construction management (CM) firm responsible for performing full service construction management and construction inspection (CI) services during the construction of a new $48 million Interchange connecting the Pennsylvania Turnpike with Route 29 in Chester County. Its services included construction inspection and testing, documentation/records control, conducting minutes, partnering, reviewing RFIs and change orders, shop drawing review and processing, reviewing contractor-prepared schedules, preparing correspondence, monitoring labor compliance, agency/utility coordination, environmental monitoring, public relations and project close-out.

Rapid growth of suburban office parks, retail centers and residential developments in Philadelphia's northwestern suburbs has contributed to ever-increasing traffic volume at the Pennsylvania Turnpike's Valley Forge Interchange, on Route 202, and other roads serving the Route 29 corridor in Chester County. As a result, traffic delays are a fact of daily life for many area motorists.

To provide traffic relief for thousands of Pennsylvania commuters, the Pennsylvania Turnpike Commission (PTC) built this $48 million project, which resulted in the Commission's first full, or "four-way", All-Electronic Toll Interchange (AETI), designated as Interchange 320. The project consisted of adding new eastbound and westbound exit and entrance ramps, mainline widening of the Turnpike to allow for a future six lanes, ramps over the Turnpike, Yellow Springs Road, and Atwater Drive, the construction of three retaining walls, two EZ-Pass electronic tolling facilities, and a weigh-in-motion (WIM) monitoring system.

The new interchange shortens commuting times to and from the Great Valley Corporate Center, the Commons at Great Valley, the Atwater corporate campus, and other nearby commercial areas and residential communities. Spurred by the ease of access to these areas, the new interchange is expected to foster economic growth for the region.

ACCESS FROM ROUTE 29:

Motorists enter and exit the new interchange from an access ramp that connects with existing Route 29/Morehall Road, about a half mile south of Yellow Springs Road. About 2,000 feet of Route 29/Morehall Road south of the new intersection, was widened to provide dedicated turn lanes to the new access ramp.

Turnpike Looking East

The new multi-lane road, situated to the east of Route 29/Morehall Road, was built atop embankments and four bridge structures that pass over Atwater Drive, Yellow Springs Road (two bridges) and the mainline Turnpike. An MSE retaining wall was built to support the ramp's embankment where it passes alongside an abandoned quarry.

ACCESS FROM THE TURNPIKE:

New westbound on- and off-ramps share space on the north side of the Turnpike in a partial cloverleaf configuration utilizing a new, four-span steel girder bridge to cross over the Turnpike's mainline.

The new eastbound off-ramp exits the Turnpike west of Route 29 and crosses over Yellow Springs Road before merging with the main access ramp. The new eastbound on-ramp splits from the main access ramp over Yellow Springs Road and enters the Turnpike at the eastern end of the new interchange.

Improvements at the new Route 29 Interchange also included expansion of approximately 4,000 feet of the mainline Turnpike east of the Route 29 overpass to accommodate future widening to six lanes between Downingtown and Valley Forge.

STORMWATER MANAGEMENT:

The project also included construction of an extensive storm water management system that utilizes wetland plantings and water quality inlets and structures that trap pollutants to control and treat runoff from the site of the new interchange. ■

Schuylkill River Parks Connector Bridge

ASHE Delaware Valley Section Project of the Year Under $10M

PROJECT OVERVIEW:

(Philadelphia, PA) The Schuylkill River Parks Connector Bridge creates an important access point to Schuylkill Banks and encourages walkable, multi-modal, and mixed use transportation in the urban core of Philadelphia. The project site is between the Schuylkill River and Fitler Square, a fashionable neighborhood in Center City Philadelphia. At this spot, the CSX Railroad parallels the river and presented a physical barrier for residents who wanted to enjoy the river and its recreational trail (Schuylkill Banks). The issue of public access became quite contentious and resulted in a Federal Court Order to provide safe access to the river.

The Connector bridge connects to a section of riverfront that has been developed along a formerly industrial bulkhead, creating a unique connection to Philadelphia's "Hidden River". It also enhances the existing transport network by creating direct connections between the Rittenhouse Square neighborhood, the University of Pennsylvania, 30th Street Station, Drexel University and Center City.

The bridge also emphasizes intermodal connections by encouraging mass transit use through the path's connections to AMTRAK's 30th Street Station and its proximity to numerous City mass transit routes. The corridor encourages pedestrian and bicycle transportation by linking residential, business, educational, and medical facilities in Center City and University City.

By enhancing the connection to Schuylkill Banks and by assuring that this grade separation is available for use even when freight trains may be stopped on the tracks, the project creates an alternative transportation corridor that will reduce demand on nearby roadways.

The Schuylkill Parks Connector Bridge leverages existing investments by tying in to the South Street Bridge, via the Schuylkill Banks Boardwalk project, now underway and slated for completion in 2014, and the Schuylkill Banks trail leading north through Center City. Its cost-effective design maximizes path width and utility by creating a functional yet economical structure that fits into the fabric of the neighborhood. The design is context- sensitive, minimizing the environmental impact of the project by neatly tucking itself within the existing tree canopy.

The bridge will enhance partnerships among the City of Philadelphia, the Commonwealth of Pennsylvania, the Schuylkill River Development Corporation and local community groups, as all are project stakeholders working together in the planning process. Community input was gathered through neighborhood meetings. The bridge is also in conformance with the Tidal Schuylkill River Master Plan, which has been endorsed by local government, community and funding agencies.

The bridge allows for more direct connections between major city landmarks, neighborhoods, and major mass transportation hubs than any existing or planned roadways. This creates a convenient alternative to current indirect roadway systems, encouraging increased use of alternative transportation for everyday use in an area that already sees significant pedestrian and bicycle traffic. More than just a transportation facility, the Schuylkill River Parks Connector Bridge is a city landmark, that many hope will improve the quality of life in central and south Philadelphia, attract residential development in the urban core, and reduce urban sprawl. ■

Faller, Davis & Associates, Inc. (FDA), a leading provider of consulting services that enhance the infrastructure and environment throughout Florida, is accepting applications for the position of **Highway and Drainage Services Manager** for our Maitland office. The core values that define our company are passion, respect, growth, hard work, and teamwork.

The Highway and Drainage Services Manager will be responsible for hiring, developing, and leading the Highway and Drainage Services Group in the design, management, and production of quality highway and drainage projects for the Maitland office of FDA. This group will work collaboratively with the Tampa Highway and Drainage Services Group on projects throughout the State of Florida for the Department of Transportation and other local agencies. The Highway and Drainage Services Manager will be expected to identify and win new clients and projects and meet established financial goals while living our core values.

The successful applicant will have the ability to prioritize and complete tasks to ensure desired outcomes are delivered within allotted timeframes. The successful applicant will have a commitment to customer satisfaction, be personally accountable, be a self-starter, be able to communicate with others in ways that are clear, considerate and understandable, place a high emphasis on teamwork, and be goal oriented.

Minimum requirements include a Bachelor's degree in Civil Engineering, 10 to 15 years of progressive experience in highway design, and professional registration in Florida with recent Florida Department of Transportation highway project management experience.

We offer competitive compensation, benefits, and 401(k) match. We also offer personal time off and health, dental, short term and long term disability, and life insurance at various contribution levels. We are an equal opportunity employer. Please submit resume with salary requirements to foneil@fallerdavis.com.

Great Lakes Region				
Central Dacotah	$	1,000		
Central Ohio	$	8,500		
Circle City	$	-		
Cuyahoga Valley	$	7,500		
Derby City	$	-		
Lake Erie	$	4,500		
Northwest Ohio	$	20,000		
Triko Valley	$	16,500		
TOTAL			**$**	**58,000**
Mid-Atlantic Region				
Blue Ridge	$	-		
Carolina Piedmont	$	18,103		
Carolina Triangle	$	40,500		
Chesapeake	$	41,500		
Greater Hampton Roads	$	14,500		
North Central West Virginia	$	40,500		
Old Dominion	$	5,000		
Potomac	$	15,000		
TOTAL			**$**	**175,103**
Northeast Region				
Albany	$	4,000		
Altoona	$	40,500		
Central New York	$	5,000		
Clearfield	$	32,500		
Delaware Valley	$	98,850		
East Penn	$	29,000		
First State	$	98,000		
Franklin	$	28,500		
Harrisburg	$	119,900		
Long Island	$	7,500		
Mid-Allegheny	$	10,500		
New York Metro	$	53,000		
North Central New Jersey	$	81,500		
North East Penn	$	33,782		
Pittsburgh	$	16,000		
Southern New Jersey	$	123,500		
Southwest Penn	$	38,750		
Williamsport	$	18,500		
TOTAL			**$**	**839,282**
Rocky Mountain Region				
Phoenix Sonoran	$	3,000		
TOTAL			**$**	**3,000**
Southeast Region				
Central Florida	$	42,500		
Georgia	$	39,900		
Gold Coast	$	-		
Northeast Florida	$	81,377		
Middle Tennessee	$	24,000		
Tampa Bay	$	39,000		
TOTAL			**$**	**226,777**
GRAND TOTAL			**$**	**1,302,162**

ASHE Scholarship Update

ASHE Sections contributed $134,500.00 in scholarship award monies in 2012, bringing the accumulated total to $1,302,162.00. ASHE scholarship programs began in the 1980s. Region totals and Sections raising $3,000.00 or more for 2012 include:

Great Lakes Region – An increase of $13,500.00, from $44,500 to $58,000.

- Central Ohio Section, $3,000.00
- Northwest Ohio Section - $6,000.00

Mid-Atlantic Region – An increase of $21,000.00, from $154,103.00 to $$175,103.00

- Carolina Triangle Section, $4,500.00
- Chesapeake Section, $6,000.00
- North Central West Virginia Section, $4,500.00
- Old Dominion Section, $3,000.00
- Potomac Section, $3,500.00

Northeast Region – An increase of $72,000.00, from $767,282.00 to $839,282.00

- Altoona Section, $3,000.00
- Delaware Valley Section, $6,500.00
- First State Section, $7,000.00
- Harrisburg Section, $10,500.00
- New York Metro Section, $4,500.00
- North Central New Jersey Section, $4,500.00
- North East Penn Section, $10,000.00
- Southern New Jersey Section, $5,000.00
- Southwest Penn Section, $6,500.00

Rocky Mountain Region – An increase of $1,500.00, from $1,500.00 to $3,000.00

Southeast Region – An increase of $26,500.00, from $200,277.00 to $226,777.00

- Georgia Section, $4,500.00
- Northeast Florida Section, $13,000.00
- Middle Tennessee Section, $8,000.00

ASHE National officers thank all the members for their continual support of the Sections' scholarship programs.

ASHE

Online Apparel &
Merchandise Store

Introducing the ASHE Online Apparel & Merchandise Store

As a member of ASHE, you now have access to an amazing online resource: The new ASHE Online Apparel & Merchandise Store.

This store offers branded, logo'd merchandise that celebrates your membership, looks fantastic and is easy to order at the click of a button. Sign on today and look to see all the great items available:

- **Embroidered Apparel**
- **Branded Apparel**
- **Speaker Gifts**
- **Bags & Totes**
- **Caps & Hats**
- **Picnic/Outing Items**
- **Eco-friendly Items**
- **Golf, Sports & Outdoors**
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Best of all, each item only takes about two weeks from the time you order till you have it in-hand!
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ASHE Membership

Northeast Region	
Albany	107
Altoona	200
Central New York	52
Clearfield	94
Delaware Valley	383
East Penn	126
First State	152
Franklin	205
Harrisburg	373
Long Island	33
Mid-Allegheny	94
New York Metro	133
North Central New Jersey	186
North East Penn	131
Pittsburgh	533
Southern New Jersey	200
Southwest Penn	304
Williamsport	158
Subtotal	3464
Mid Atlantic Region	
Blue Ridge	77
Carolina Piedmont	58
Carolina Triangle	255
Chesapeake	209
Greater Hampton Roads	119
North Central West Virginia	34
Old Dominion	89
Potomac	203
Subtotal	1044
Southeast Region	
Central Florida	44
Georgia	437
Gold Coast	7
Middle Tennessee	156
Northeast Florida	200
Tampa Bay	103
Subtotal	947
Great Lakes Region	
Central Ohio	185
Circle City	49
Cuyahoga Valley	114
Derby City	67
Lake Erie	125
Northwest Ohio	42
Triko Valley	115
Subtotal	697
North Central Region	
Central Dacotah	123
Subtotal	123
Rocky Mountain Region	
Phoenix Sonoran	130
Subtotal	130
At-Large Membership	
At-Large	6
Subtotal	6
National Total	**6411**
Total Membership	6411
Professional Status	58%
Government	13%
Consultant	69%
Contractor	6%
Other	12%