SCANNER

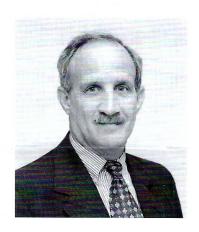
NEWSLETTER OF THE AMERICAN SOCIETY OF HIGHWAY ENGINEERS



Feburary 2000 - 1

Central Florida Section President Named Florida DOT District Five Secretary

by Jackie Vander Pol, LJ Nordarse and Associates



Mike Snyder, PE, President of Central Florida Section, was recently appointed to District Secretary of the Florida Department of Transportation (FDOT) District Five. Mike is one of eight district secretaries. In naming Mike to lead the nine county district on



December 15, 1999, FDOT Secretary Tom Barry said, "Central Florida is one of the most dynamic regions of our state. Mike's extensive transportation experience in both production and operations makes him an excellent leader for the region."

As District Secretary, Mike will continue being involved in the \$2.7 billion I-4 reconstruction project. This is the largest public works project ever undertaken in District Five and involves a gigantic effort in public participation – interaction and coordination with cities, counties, homeowners, community groups, Federal Highway Administration, MPO's and the area mass transit system. Mike considers the I-4 Project to be a once-in-a-career opportunity and plans on maintaining involvement with each phase of the project.

Mike is a champion for Intelligent Transportation Systems (ITS). Through his efforts, District Five leads Florida in ITS applications. Mike is working with local television stations to provide 24-hour live feeds of traffic and traffic related problems from the 24 cameras located along I-4. He also serves on the University of Central Florida Board - Center for Advanced Transportation Systems Simulation (CATSS) – where he is involved in a \$400,000 federal research grant studying the future technologies of Intelligent Transportation Systems (ITS).

Mike joined FDOT in 1990 as the District Structures and Facilities Engi-

neer where he supervised the inspections and rehabilitation plans for nearly 450 state and local bridges. Two years later, he became the District Consultant Project Manager where he supervised 18 project managers in the development of project scopes, consultant services, contract negotiations, and project management. In 1998, he became the District Director of Operations and was responsible for construction, maintenance, traffic operations. As District Secretary, Mike is responsible for all the district's planning, production, public transportation, construction, and maintenance functions.

"Mike's style is to lead by example. Whether it be involvement in Board and committee work, the Adopt-a-Road program or other Section activities, Mike is there. He has a genuine interest in tackling the tough transportation issues facing Central Florida," says Section President-elect Steve Kreidt. Mike's activities in ASHE have paralleled his rise in FDOT. He became an active member in 1995; was elected to the Board in 1996; and chaired the Adopt-a-Road committee since 1997. Through Mike's leadership, the Central Florida Section has improved the quality of its monthly meetings and has diversified its focus to balance social and technical interests of its membership. ASHE's Second Vice President Cooper Curtis said, "Mike is the kind of guy most everyone likes immediately - even if they don't play golf. He has subtle leadership abilities that you really

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National Board News

National board members met for a regular board meeting on January 15, 2000, at the Ramada Inn/Blue Ridge, in Raleigh, North Carolina. National President Charlie L. Flowe, P.E. presided over the meeting. The following are highlights of the committee reports and board actions:

Membership:

Total ASHE membership stands at 4,853 including 32 Sections over the nine ASHE Regions. This count is a decrease of 147 since the October 1999, national board meeting for a total decrease of 15 members this year.

New Sections:

Second Vice President Cooper Curtis and Director Ronald Purvis reported two new sections are likely to charter by the end of this ASHE year in Tallahassee, Florida and in the Greater Hampton Roads area of Virginia. Future goals are to establish several sections in Texas and then extend east with new sections filling in the Southeastern United States.

Director Purvis is interested in pulling together existing materials on ASHE along with some personal testimonials to create a PowerPoint presentation to help market ASHE. Anyone interested in providing a testimonial should contact Ronald Purvis.

National Conferences:

Director David Jones reported on the status of Conference 2000. All committees are firmly working toward an excellent conference with all speakers committed at this time. Sponsor and exhibitor letters went out December 21, 1999, with good results so far. Program advertising requests will be mailed soon. Sections are encouraged to provide support for Dacotah Section, our westernmost ASHE Section.

Director Dominic Piccolomini reported that the Southwest Penn Section would hold Conference 2001 at the Seven Springs Resort near Somerset, Pennsylvania from June 28th through July 1st. All committees are in place and subjects for the technical sessions have been selected. Entertainment and the spouse programs are in progress.

Director Shirley Stuttler reported that Franklin Section is progressing well toward hosting Conference 2002 in the Erie, Pennsylvania area. They will have informational materials available at

Conference 2000.

Later in the meeting a motion was approved to defer board action on future conferences after 2003 until the National Conference Committee provides recommendations and guidelines for conference rotation.

Nominating Committee:

1st Vice President

President

Immediate past President James Charles announced the following slate of officers and directors for the 2000-01 ASHE year:

Domenic M. Piccolomini, PLS

Cooper E. Curtis, P.E.

2 nd Vice President Treasurer Secretary	Sandra K. Ivory Robert E. Yeager, PLS Terence D. Conner, P.E.
Director - 1 year Region 4 Region 5 Region 6	Robert M. Peda, P.E. Robert E. Somers Rodney P. Pello, P.E.
Director – 2 year Region 7 Region 8 Region 9	Ronald L. Purvis, P.E. Tracy L. Hill, P.E. John M. McDowell, P.E.
Director – 3 year Region 1 Region 2 Region 3	Robert A. Hochevar, P.E. Shirley A. Stuttler Frank S. Lopez, Jr.

Also, Roland Nesslinger was nominated for the Robert E. Pearson Person of the Year. The Board approved the above nominations.

Directory/National Roster:

First Vice President Domenic Piccolomini distributed several copies of the 2000 Sections Membership Directory on compact disc and hard copy format. Two copies of the CD will be distributed to each section shortly. Sections may distribute copies to their membership as deemed appropriate.

continued from page 1

appreciate, but more readily recognize, after working with him. Central Florida Section and FDOT are in good hands with Mike at the helm."

Prior to joining FDOT, Mike worked for more than 20 years in the transportation industry in Maryland. In 1984, he was the youngest ever District Engineer hired for the Maryland State Highway Administration when he accepted the challenge of the area surrounding Washington, D.C. – an area with the worst transportation problems, highest population density, and the most politically charged.

Prior to the Maryland State Highway Administration, he served as Chief Engineer for the Maryland Toll Facilities Administration for six years. He oversaw construction of Baltimore's \$1 billion Ft. McHenry Tunnel, at the time the city's largest CIP program in the history.

Mike began his engineering career in 1970 with the Baltimore City Public Works Department following his graduation from the University of Maryland.

President's Message

by Charlie Flowe, P.E.



I hope that everyone is surviving the winter without major hardship. The Raleigh, NC area is just digging out from under the largest snowfall in its history. I know that this is comical to the ASHE members who routinely deal with major snow events, but this is a big deal to those of us who are southerners.

One of the major tasks undertaken by your National Board this year is the update of ASHE's Long-Range Plan. The original ASHE Long-Range Plan was adopted in 1993 and updated in 1996. The current Long-Range Plan expires in 2000 and many of its goals have been accomplished or need to be revisited. As a consequence, the board voted during the October 1999 National Board Meeting to hold a strategic planning session. The goal of this session was a review of the entire long-range plan.

A strategic planning session was scheduled in conjunction with the National Board's January 2000 meeting. The strategic planning group consisted of the members of the National Board; Past Presidents Steve Lester and Pat Dougherty; and Bill Gilmore, manager of North Carolina DOT's Program Development and Environmental Analysis Branch. The session was facilitated by ASHE Past President Roland Nesslinger. The session involved a review and evaluation of ASHE's vision, mission, and values along with setting the necessary goals, strategies and objectives to fulfill our mission.

The framework for a new strategic plan was developed and will continue to be developed by subcommittees through the winter and early spring. The current schedule calls for the following:

A draft strategic plan ready for review and approval at the April 2000 National Board Meeting.

Distribution of a draft strategic plan to the sections at the 2000 Conference in Bismarck, ND.

Receipt of comments and adoption of a new ASHE Strategic Plan early in the 2000-2001 administrative year.

I appreciate everyone's help on this major undertaking. We anticipate completion of a strategic plan that will serve to carry ASHE into the future while protecting the things that make ASHE a great organization.

See you in Bismarck!



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Building a Bridge to the 21st Century

by

Tampa - Hillsborough County Expressway Authority

The Tampa - Hillsborough County Expressway Authority is building a bridge to the 21st Century!

Committed to providing *exceptional* transportation services, the Tampa-Hillsborough County Expressway Authority actively seeks new ideas and embraces creative solutions to transportation problems. The Authority's objective is to provide extraordinary service to our customers, while enhancing our urban environment by constructing facilities that are beautiful, innovative, safe and affordable.

These qualities are clearly evident in the Authority's newest project – a nine-mile, reversible-lane bridge that will add capacity to the Lee Roy Selmon Expressway between Interstate 75/Brandon and downtown Tampa.

Bridge segments will be pre-fabricated off-site, delivered to the Expressway and erected in the median of the existing roadway. This efficient, economical construction technique will produce a distinctive structure of superior quality and durability while minimizing construction delays for motorists on the Expressway. Electronic toll collection and video surveillance will allow SUNPASS customers on the new bridge to travel without interruption. Reversible lanes on the bridge will double its traffic-carrying capacity and provide uncongested travel during peak commuting hours.

the bridge will be an open-air laboratory for testing new developments in transportation technology, such as electronic motorist information services and automated emergency response systems. The bridge may also be an early test site for new safety devices being developed by vehicle manufacturers, including advanced systems for improved braking, steering and crash avoidance. In short, the bridge will be a prototype for 21st Century urban transportation facilities.

The project's cost will be financed by a one-dollar toll paid by its users. Because of its unique design, the bridge will be built entirely within existing right-of-way, dramatically reducing its cost while preserving valuable urban land. Extensive computer modeling demonstrates that the project will attract commuters from other congested facilities and efficiently disperse traffic to local streets in Brandon and Tampa.

Existing right-of-way beneath the bridge will be preserved for future use, ensuring long-term capacity for the Expressway to serve as a regional facility connecting communities across Tampa Bay, and as an economic lifeline to the Port of Tampa, Ybor City, and businesses and neighborhoods throughout Tampa and Hillsborough County.

Construction of the Bridge to the 21st Century will begin in the year 2000 with the entire facility completed as early as 2005, subject to final engineering and financing plans.



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SPX Latex Offers Flexibility for High-Quality Polymer-Modified SHRP PG Binders

by
David A. Carlson, Rub-R-Road, Inc.
Patrick M. Welsh, Highway Rubber Products

What can you do to specify asphalt binders that will perform under high traffic and or varied climatic conditions? Several agencies have asked that question and answered by specifying polymermodified asphalt. Adding polymers to asphalt enhances both the PG temperature range and the binder's adhesive properties. The net result is a tougher, longer-lasting pavement that is more resistant to rutting, raveling and cracking.

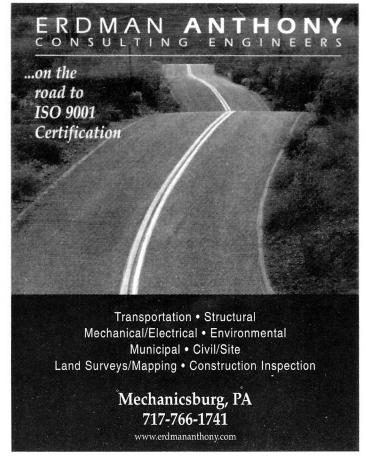
The Ohio Department of Transportation (ODOT) recognized such benefits from their evaluation of polymer-modified asphalt pavements constructed over the past 40 years with SBR latex added at the Contractor's hot mix plant. ODOT specifies polymer-modified asphalt to be used on heavy traffic pavements to extend the time between resurfacing. The polymer-modified asphalt specification (SS1055) can be acquired from their web site: www.dot.state.oh.us. The specification permits Contractors to use a preblended polymer-modified asphalt or produce their own by adding SBR latex to an unmodified straight run asphalt cement in their hot mix plants during hot mix production. Sampling and electronic flow meters and computers that provide documentation of quality assurance monitor the addition of the latex at the Contractor's hot mix plant.

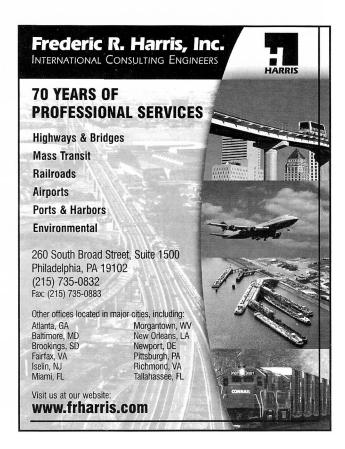
Utilizing both methods of modification has provided the ODOT with aggressive competitive bidding on high quality polymer-modified asphalt cements meeting high PG grading standards. Allowing both methods of modifying the asphalt cement provides the

Contractor with valuable options. These options make it possible for Contractors to best utilize the capabilities of their plants to meet all their various production schedules without incurring any significant additional expenses. For example, Contractors who elect to produce their own polymer-modified asphalt by means of adding SBR latex can use the same asphalt cement for several projects currently in production by merely turning on or off the latex supply. This flexibility has made it possible for contractors to bid more aggressively on more work while providing the motoring public with higher quality materials.

Many contractors report that adding SBR latex at their hot mix plant gives them more control of their final mix product. Contractor experience and testing using SHRP PG asphalt, preblended polymer-modified asphalt and SBR latex polymer-modified asphalt has led some Contractors to use SBR latex for modifying their hot mix asphalt for warranty work in order to reduce rutting, raveling and cracking and minimize their future maintenance costs.

When specifying SHRP PG graded cements with greater than 86 °C range (such as PG 64-28,70-22, 76-22) requiring the use of polymer-modified asphalt should be considered. Utilizing the option of using a preblended polymer-modified asphalt or contractor added SBR latex polymer-modified asphalt provides Contractors with the ability to better bid and construct high quality hot mix asphalt paving resulting in cost savings for the motoring public.





Legal Corner



Highway Contractors Held Liable for Injuries Sustained in Automobile Accident

by Travis L. Kreiser, Esquire, Korn & Cohn, P.C.

Nearly every highway construction or rehabilitation project now involves planning for the safe management and control of existing traffic during construction. Such planning is required in order to protect both motorists and construction personnel. As one recent lawsuit demonstrates, lack of proper planning can have devastating results for both contractors and motorists.

In J. D. Abrams, Inc. v. Joyce McIver as Guardian of Lori Crane, 966 S.W.2d 87, two highway contractors were held liable for injuries sustained in an automobile accident that occurred at a construction site controlled by one of the contractors and near a construction site controlled by the second contractor.

On October 13, 1990 at 2:30 a.m., Daniel Quinlan rear-ended a vehicle driven by Lori Crane on a section of highway under construction by J. D. Abrams, Inc. Lori Crane sustained severe injuries in the collision, and the passenger in her car was killed by the impact.

Lori Crane's mother (Joyce McIver) subsequently commenced a multi-million dollar lawsuit against numerous parties claimed to be responsible or partially responsible for the accident. For instance, Crane's mother sued Mr. Quinlan and two restaurants, which had served Mr. Quinlan alcoholic beverages the night of the accident. Crane's mother also sued Abrams and Granite Construction Co., a separate contractor which was performing work on a separate construction project adjacent to Abrams' site where the accident occurred.

After a lengthy trial, the jury found that Crane was entitled to recover \$13.5 million in damages and further concluded that part of those damages were recoverable from Abrams and Granite. Abrams appealed the verdict, arguing that Crane failed to prove that Abrams' actions or inaction caused the accident.

The Appellate Court rejected Abrams' arguments and upheld the jury's award. The Court explained that substantial amounts of evidence justified the jury's verdict against Abrams, including the following facts:

- Abrams controlled the construction site where the accident occurred, and its traffic control officer could not recall whether Abrams had erected signs warning motorists of the construction, potential delays and sudden stops.
- Eight other drivers testified that they did not see any warning signs the night of the accident.
- Three other automobile accidents occurred in the same general area the night Crane was injured.
- Abrams did <u>not</u> comply with the terms of its contract, which required the use of concrete traffic barriers, and instead used traffic

barrels to separate the construction activities from traffic. This deviation was found to be significant because traffic barrels occupy more road space than do concrete barriers, and therefore, cause more traffic congestion.

In other words, the Court found that sufficient evidence existed to allow the jury to find that Abrams was negligent and that its negligence was a substantial cause of the accident.

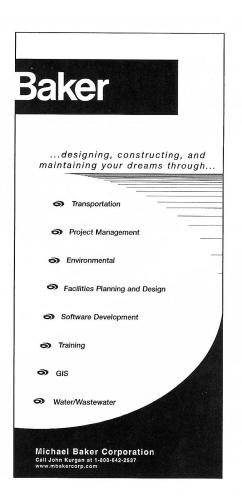
As to the separate contractor, Granite, on the adjacent site, liability was premised on the theory that the traffic congestion might have originated in the area of Granite's work. This argument was advanced, and apparently accepted by the jury, even though Abrams' own traffic control officer could not remember traffic backing-up from Granite's work site. In other words, it appears as though the jury found Granite liable for being close to the wrong place at the wrong time.

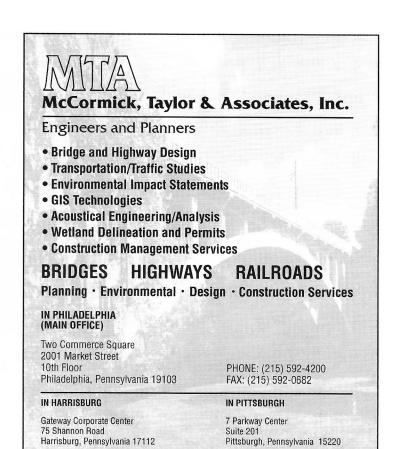
Looking back, the accident may well have occurred despite Abrams and Granite's best efforts to carefully manage and control traffic. However, the outcome of the litigation could easily been different for both contractors if they had been better prepared. In order to adequately defend itself:

(1) Abrams should have carefully analyzed the project site and prepared a <u>written</u> plan to manage traffic B a plan which addressed all reasonably foreseeable risks. These written records allow a contractor to show the jury that the contractor considered traffic safety to be an important issue and that the contractor actively attempted to plan for motorist safety;

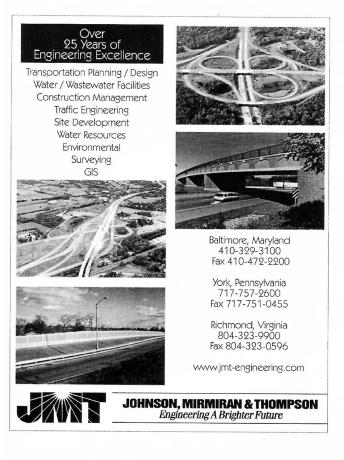
(2) Abrams should have documented, in <u>writing</u> and with photographs, its efforts to fulfill its own traffic safety plan, including photographs of any warning signs erected. Such written records and photographs avoid the need to rely upon the fading memory of a traffic control officer;

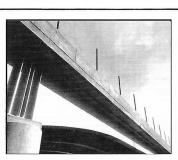
- (3) Abrams should have developed and implemented policies and procedures to immediately address unexpected trouble spots. Prior accidents serve as a strong warning signal and should never be ignored. Abrams should never have allowed a third accident to occur in the same area on a single night without taking further steps to mitigate the apparent traffic hazard; and
- (4) Abrams should <u>not</u> have deviated from the owner's traffic safety and control requirements. Such unauthorized deviations provide claimants, their attorneys and juries with a compelling explanation why the contractor caused the accident, i.e., the contractor caused the accident by breaching its contract with the owner. Deviations should only be implemented where the contractor's written request for change demonstrates that the deviation will not compromise safety and then, only after receiving written approval from the owner.





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I-26 Construction

by John Lansford, P.E.

Madison County, NC, is currently the site of the largest interstate grading projects ever let by the North Carolina Department of Transportation. The two projects are 8.8 miles in length and are being constructed through some of the most rugged terrain in the state. Over 35,000,000 cubic yards of excavated material will be removed on these projects, along with nearly 100,000 linear feet of drainage pipe, 600' deep cuts and 300' high embankments. The two contracts, known as A-10C and A-10D, were let to construction for a total of over \$140,000,000. Engineers in disciplines such as Highway Design, Hydraulics, Soils & Foundations, Geology, Erosion Control, Structures and Construction worked together to overcome the challenges presented in the design and construction of these projects.

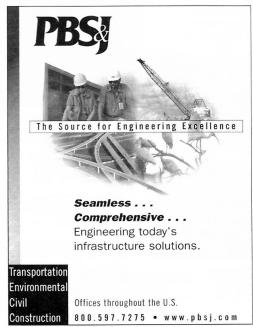
The terrain these projects crossed was the largest challenge. Elevations ranged from 2220' at the south end near US 19 to 4000' at the Tennessee state line at Sams' Gap. The existing slopes were very steep, and old landslide material had to be removed and disposed in approved waste sites. Trout streams had to be avoided or bridged and in some cases, relocated. Animal crossings, rest and scenic areas, truck escape ramps, culverts, bridges and waste sites had to be located and designed, taking into account how they would impact the environment. An interchange was designed at Bear Branch Road to provide access to the interstate for the local populace. Two existing roads and a trout stream had to be relocated to provide room for the interchange. This stream relocation involved rebuilding 400' of the existing stream, adding pools, meanders and ripples, and natural vegetation along the banks. Grade separations and secondary roads were relocated at five other locations along these two projects. One of these grade separations will require the construction of a 220' high, 800' long bridge crossing Laurel Creek and Laurel Creek Road. This huge structure will be the tallest highway structure in the state.

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To mitigate for the thousands of feet of streams that ended up in culverts and pipes, NCDOT agreed to reconstruct over 26,000 linear feet of trout streams in Madison County. These streams will be rebuilt by NC's Water Resource Agency but funded by NCDOT. Over 1,500 feet of Little Laurel Creek will be renovated on A-10D to help mitigate the stream loss as well. Erosion control measures were vitally important given the steep terrain, sensitive environment, large volumes of material being moved and the heavy rainfall this area experienced. The Roadside Design Unit designed large sediment basins, silt dams and fences, brush barriers and permanent rock dams and incorporated them into the project plans, along with strict limits on clearing operations and other restrictions on the contractors. A water quality monitoring program was developed and contracted out to a private consultant. The Hydraulics Unit designed velocity suppression pools at the outlet end of every drainage pipe to slow down the water leaving these pipes and allow sediment to settle out.

The most difficult construction related problem was the huge volume of material excavated on these projects. Steep rock slopes in most of the cuts over 100' in depth were designed to minimize the excavation volumes, but the excavation and waste concerns still existed. Over 25,000,000 cubic yards of material would be removed on A-10C alone. A-10D required another 10,000,000 cubic vards of excavation and created 4,000,000 cubic yards of waste as well. Two isolated valleys on each project were included in the R/W and designated as waste sites for the contractor's use. When construction is completed, these waste sites will be contour graded and seeded with native plants to assist them to return to a natural state. Over 7000' of rock fence will be installed on both projects to protect motorists from falling rock. This fence will be located on the back of a combination concrete planter and wall that will contain vegetation to help conceal the fence from the motorists. Unstable material known as colluvium was present under most of the embankments on both

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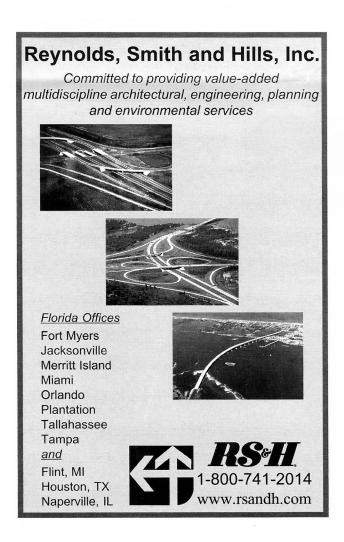
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projects. Ranging in depth from 10' to 50', this material had to be removed before further construction could begin. In some locations 150' high rock buttresses were designed to support the interstate where the soil was especially unstable. The buttresses will be covered in soil to conceal the rock and allow vegetation to grow on the slopes.

When grading is completed in 2002, these projects will have moved over 35,000,000 cubic yards of material over nearly 9 miles of future interstate route, at a cost of over \$150,000,000. The new route is expected to open to traffic in 2003 once the paving projects are completed, providing motorists with another interstate through the Appalachian Mountains between North Carolina and Tennessee. To see how the construction is progressing, visit http://users.vnet.net/lansford/a10/. This web site documents how these immense projects are being built and provides many interesting photos and information on them.



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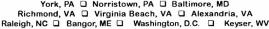
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The verdict against Granite is probably even more troubling to contractors, because it is seems to hold one contractor (Granite) liable for the inaction of a different contractor (Abrams) on a separate construction site. While it is difficult for a contractor to avoid liability for actions or inaction occurring on a separate construction site, contractors, such as Granite, can improve the odds of avoiding liability. For instance, Granite could have documented its traffic safety and control measures, as well as the actual traffic conditions the night of the accident. Granite may well have avoided liability if it could have documented the absence of traffic congestion at its site and that it took all appropriate steps to warn motorists of the construction occurring in Granite's zone of operation. In addition, since Granite was working on an adjacent section of the same highway, Granite could also have coordinated its traffic safety measures with Abrams. Perhaps the two contractors working together would have developed a better traffic control plan and saved money by splitting some of the expenses.

In sum, the Crane case demonstrates that liability for automobile accidents occurring on highway construction sites can be extremely costly. Indeed, Abrams' failure to properly plan for and/or document its plans for traffic safety resulted in a \$13.5 million damages verdict. However, as explained above, contractors can limit their exposure to such liability by carefully planning for traffic safety and fully documenting their traffic safety plans.

Travis L. Kreiser is an attorney associated with the law firm of Korn & Cohn, P.C., which focuses its practice in the areas of construction law and litigation. Questions or comments concerning this article may be directed to Mr. Kreiser at 620 West Germantown Pike, Suite 450, Plymouth Meeting, PA 19462 (610-825-7070).

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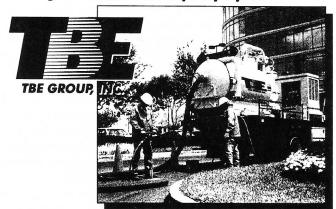
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Going the Extra Mile for U.S. Route 219, the Meyersdale Bypass

Dain Davis, Environmental Manager of PennDOT, District 9-0

The U.S. Route 219, Meyersdale Bypass project located in Somerset County, Pennsylvania recently was awarded a Pennsylvania Quality Initiative Award, a Gold Level National Quality Initiative Award, and recognized by the Pennsylvania Game Commission for their Habitat Mitigation Initiatives.

In October 1998, the long awaited 5.7 mile U.S. 219 Meyersdale Bypass opened to traffic. It is one of the largest roadway projects ever built in western Pennsylvania. This four-lane, limited access facility, nestled in the Casselman River Valley near the rural farming community of Meyersdale, Pennsylvania, has forever changed the way highway projects are designed and constructed in the Commonwealth. The level of quality maintained throughout the project demonstrates what can be accomplished when dedicated, empowered teams focus on quality and work together through partnering.

Many unique factors became a part of the project during design and construction. Local school students built a footbridge, trail, and an outdoor classroom at the wetland replacement site. PennDOT and the Pennsylvania Game Commission formed a partnership to provide effective and productive terrestrial mitigation to offset the loss of wildlife habitats. A regional public television station produced a program on the archaeological studies and subsequent discovery of Native American village sites. A key discovery was the oldest house foundation ever found in Pennsylvania, dating back 5,000 years. These unique findings were very popular with the public and local officials. In addition, the archaeological studies conducted on this project were the most extensive ever done in Pennsylvania.

The original concept for the bypass around Meyersdale began in the 1950's when an increasing number of trucks began using the narrow, two-lane Route 219 through the residential and commercial areas of town. Traffic congestion, air and noise pollution, and safety concerns soon followed. The number of coal trucks from local strip mines compounded the problem. In the early 1990's, intense public demand from area residents and businesses restarted the design process, eventually leading to a beautifully designed, environmentally friendly, well-constructed highway that will greatly benefit the area. Public demand initiated the project; therefore, the public has been a major participant throughout the project's life. The goal of PennDOT was to provide a high quality transportation facility for area residents. PennDOT realized public input was essential in producing a high quality project. Numerous public meetings were held during the design phase to determine public needs and address its concerns. Newsletters kept the public informed on the progress of the design. During the construction phase, the project team staffed information booths at local festivals and county fairs. In early October, 1998, the team created, promoted, and staffed a "Community Day on the Bypass" so residents could walk, bicycle, and roller blade along the new roadway before it was opened to motorists. The public who was so supportive of the project for many years turned out in large numbers to celebrate. On October 28, 1998, the community came together with the project team, local officials, and elected politicians for the grand opening of the new roadway.

Throughout design and construction, team members, bound by the partnering agreement, worked together to provide the highest quality project attainable. The environmental engineering phase was complicated by extensive archaeology studies, historic structures, wetlands, endangered species, wildlife habitats, trout streams, and Amish farmlands. Through exceptional coordination between the environmental agencies, the designers, and PennDOT, the numerous concerns of all the team members were addressed. It is this type of cooperation that elevated this project to a project of exceptional quality and value.

The challenges continued into the construction phase. In a period of only 21 months, more than five million cubic yards of earth and rock were moved, 5.2 miles of four-lane concrete pavement were placed, 15,000 linear feet of pipe, and 13 miles of underdrain were constructed. Thirteen major bridge structures, including two large river crossings and two large box culverts were constructed on the project. Because of the project's location adjacent to the Casselman River and its various tributaries, erosion and sedimentation measures were extensive and closely monitored by local and state agencies. There were 36 comprehensive and rigorous inspections, with zero environmental citations.

The Meyersdale Bypass was completed on time and within budget, more than \$600,000 under the low bid. This is a credit to the entire project team. This project will serve as a model for all future projects in Pennsylvania. It symbolizes what can be achieved through partnering, and with an uncompromised level of quality.



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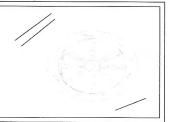
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Judy is actively involved in the Consulting Engineers Council of Pennsylvania, serving as chairperson of the statewide public relations committee and chairperson of the annual Diamond Awards for Engineering Excellence. She is a member of the past presidents' council of the Harrisburg Chapter of the International Association of Business Communicators, and previously served on the District Board of Directors and as a National Delegate.

She is also a member of the Harrisburg Section of the American Society of Highway Engineers where she serves on the membership committee, and was previously a member of the organization's board of directors and the national conference committee. Judy holds a bachelor of humanities in communications from the Pennsylvania State University.



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