



MARCH ■ APRIL 2005

VOLUME XXII NUMBER 2

REPORTER

The Magazine of the Pennsylvania Society of Professional Engineers



Also Inside...

Economic Loss Doctrine Undermined

Precedent-Setting Decision on Emergency Evacuations

University News

"America in Ruins"



Pennsylvania Society of
Professional Engineers

Engineers Focus on Continuing Excellence

Colleagues -

The PSPE conference benefits Professional Engineers. Earn up to 5 professional development hours in one day, preapproved to satisfy New York State licensing requirements.

Seminar topics:

- Liability and Management Challenges Related to Information Retention
- Computer Security for Networks
- Ethical Practices
- Forensic Engineering
- Achieving Technical Quality
- Defining Continuing Education for P.E.s in PA

Bonus features:

- Order of the Engineer ceremony
- Behind the scenes at Pocono Raceway

Bring your spouse, bring the kids - enjoy time with your family in the beautiful Pocono mountains, and increase your professional training.

Full details are printed on the center insert. I look forward to seeing you.

Regards,
Harry Garman, P.E.
President Elect



May 19-21, 2005

Chateau Resort and Conference Center
300 Camelback Road; Tannersville, PA



Pennsylvania Society of Professional Engineers

2004-2005 Executive Committee

President: Ernest U. Gingrich PE, PLS
103 Centerfield Drive; Harrisburg, PA 17112
P: (717)545-7020 • E: eugingrich@aol.com

President Elect: Harry E. Garman PE, PLS
5081 Hanover Drive; Wescosville, PA 18106-9450
P: (908)454-9500 • E: hegarman@aol.com

Treasurer: Leonard K. Bernstein PE
4140 Orchard Lane; Philadelphia, PA 19154-4418
P: (215)824-3570 • E: Leonard.Bernstein@phila.gov

Secretary: Frederick A. Waldner PE
3115 Bramar Road; Camp Hill, PA 17011
P: (717)363-0388 • E: fawaldner@engineer.com

Immediate Past President: S. Faruq Ahmed PE
400 Morgan Center; Butler, PA 16001
P: (724)285-4761 • E: syeda@aol.com

Vice President Southwest Region: Robert L. Garbart PE, PLS
176 Morgan Station Road; Lemont Furnace, PA 15456
P: (724)437-0497 • E: rlgarbart@aol.com

Vice President Southeast Region: Harvey D. Hnatiuk PE
910 Jode Road; Audubon, PA 19403-1972
P: (215)542-8700 • E: harvehnat@aol.com

Vice President Central Region: John F. Bradshaw PE
4431 N. Front St. 2nd Fl; Harrisburg, PA 17110-1709
P: (717)213-6301 • E: jbradshaw@mbakercorp.com

Vice President Northeast Region: Walter J. Poplawski PE
90 N Thomas Avenue; Kingston, PA 18704
P: (570)822-8500 • E: wpoplawski@aegroup.org

Vice President Northwest Region: David L. McCullough PE
390 Bradys Ridge Road; Beaver, PA 15009
P: (412)269-6141 • dlmccullough@pbsj.com

Executive Director: John D. Wanner, CAE
908 N. Second Street; Harrisburg, PA 17102
P: (717)441-605 • F: (717)236-2046 • jennifer@wannerassoc.com

Editor: Jennifer A. Summers

The *PE Reporter* is published six times annually by the Pennsylvania Society of Professional Engineers (PSPE) located at 908 N. Second Street, Harrisburg, PA 17102. Phone: (717)441-6051 • www.pspe.org. Opinions expressed by authors herein do not necessarily reflect the opinion of PSPE.

NSPE Code of Ethics for Engineers Engineers' Creed

As a Professional Engineer, I dedicate my professional knowledge and skill to the advancement and betterment of human welfare. I pledge:

To give the utmost of performance;

To participate in none but honest enterprise;

To live and work according to the laws of man and the highest standards of professional conduct;

To place service before profit, the honor and standing of the profession before personal advantage, and the public welfare above all other considerations. In humility and with need for Divine Guidance, I make this pledge.

Adopted by National Society of Professional Engineers, June 1954

Table of Contents

Columns

President's Message	3
Cover Photo	4
On Capitol Hill	5
Risky Business	7
Political Action Committee	18
New Members	19
Chapter Spotlight	20

Features

Economic Loss Doctrine Undermined	8
Precedent-Setting Decision on Emergency Evacuations	9
University News	10
"America in Ruins"	11

Advertisers

Avis	IBC
Barton Associates	16
Boles, Smyth Associates, Inc.	14
Buchart-Horn, Inc.	5
Burns Engineering Inc.	14
C.S. Davidson, Inc.	16
Carroll Engineering Corp.	12
Cumberland Geotechnical Consultants, Inc.	5
Engineering Mechanics, Inc.	14
F.T. Kitlinski & Associates	14
Fenner & Essler	2
GAI Consultants Inc.	14
Gannett Fleming	16
Garvin Boward Engineering	20
The Gateway Engineers Inc.	16
Hanover Engineering Associates, Inc.	4
Johnston Construction Company	14
Keddal Aerial Mapping	6
L. Robert Kimball & Associates	14
McMahon Associates, Inc.	12
Michael Baker Corporation	20
Modjeski & Masters Inc.	12
New Enterprise Stone & Lime Co. Inc.	6
Pickering, Corts & Summerson Inc.	12
Powell Trachtman Logan Carrle & Lombardo	2
Rettew Associates	4
Senate Engineering Company	16
Tantala Associates	14
UPS	BC
USAF	6

Cover Photo

"Maida Engineering, Inc. of Fort Washington, PA is leading a project team that is evaluating the condition of and potential improvements to the tram systems inside the Gateway Arch in St. Louis, MO. The team includes Valley Forge Chapter PSPE members Bob DiDomizio, P.E. of RAD Engineering (on the left) and Harve Hnatiuk, P.E. of Maida Engineering (on the right). From left to right, DiDomizio, Jack Hoagland (Maida), Arthur Armellini, P.E. (Maida), Tom Beebe (Lerch, Bates and Associates), Jeff Abendshien (Recreation Engineering), Chris Davis (Maida) and Hnatiuk."

Announcing A Revolutionary Concept In Insurance For Pennsylvania Engineers: A Choice.

When it comes to professional liability insurance, about the only choice available for engineers has been "take it or leave it." With limited options available it's no wonder so many engineers overpay for the coverage they know they need. Or worse, leave themselves exposed because adequate coverage is simply unaffordable.

But there is an alternative. Blue-chip professional liability coverage from a

company that knows the profession. Since 1923, Fenner & Esler has been delivering the right amount of coverage and value to professionals and firms of all sizes. We're industry leaders in



FENNER & ESLER
INSURANCE

SINCE 1923

providing customized coverage plans for design professionals and related companies. We represent numerous "A" rated carriers and can provide coverage that's customized, competitive-and flexible. Even if you're in the middle of a multi-year policy, we'd be happy to provide a quote on the exact coverage you need.

Now there's only one choice for you to worry about: will you be contacting us by phone, fax or e-mail?

Call Timothy P. Esler, CPCU: Toll Free: 1-866-PE-PROTEK ext. 208 (866-737-7683 ext. 208)

E-mail: tesler@fenner-esler.com

www.powelltrachtman.com

Stability requires protection. We provide both.

A full service law firm with a unique approach to the practice of law: we focus on the prevention, not just the cure, of our clients' problems. The firm provides counsel to the design professional community on matters including:

- Preparation of Contracts for Design Services
- Licensure Requirements and Compliance
- Defense of Professional Malpractice Claims
- Business, Tax and Estate Planning Transactions
- Commercial Litigation and Dispute Resolution
- Employment Law
- Business Organization

**POWELL
TRACHTMAN
LOGAN
CARRLE &
LOMBARDO**

A PROFESSIONAL CORPORATION

475 Allendale Road, King of Prussia, PA . 610 354 9700
114 N. Second St., Harrisburg, PA . 717 238 9300
1763 E. Route 70, Cherry Hill, NJ . 856 663 0021

President's Message

Ernest U. Gingrich, P.E., P.L.S.



Background

NSPE formed a 16-member Future Directions Task Force as a result of the Consensus Congress conducted at the National Convention in Washington, D.C. in January 2004. The task force is made up of a broad base of individuals, covering all aspects of the NSPE organization, including staff, state executives, and members who are diverse in age, race, gender, geography, area of practice, level of activity, as well as institutional and organizational financial knowledge. The task force was charged with assessing NSPE's current mission, vision, goals and objectives, and governance structure, with direction from NSPE leaders that "nothing is off limits."

After a year of review and deliberations, the task force proposed a working model that would result in NSPE consisting of two organizations. One would be similar to the current NSPE but with PE and Engineer Intern members and would focus more on state societies. The second organization would be a separate entity referred to as the "academy." (A plan holder name that would change.) The "academy" would serve all engineers and their cross-disciplinary needs, including internationally-based engineers.

NSPE Mission and Vision

At the NSPE winter convention in January 2005, the task force presented wording for the Vision and Mission statements and a working governance model for review, discussion, input and voting. The following mission statement was accepted by the Summit vote: "NSPE, in partnership with State Societies, is the organization of licensed Professional Engineers (PEs) and Engineering Interns/Engineers in Training (EIs/EITs). Through education, licensure advocacy, leadership training, multi-disciplinary networking, and outreach, NSPE enhances the image of its members and their ability to

ethically practice engineering." (The working mission statement as presented was accepted by the Summit vote. The task force will consider additional suggestions.)

The following vision statement was accepted at the Summit: NSPE is the recognized voice and advocate of licensed Professional Engineers."

Proposed Governance Structure

The proposed governance structure was the primary focus of the presentation and was accepted by Summit vote; however concerns were raised as to how it would work. The new structure would be organized as follows:

House of Delegates

- one member from each state
- plus the Board of Directors for a total of 69 members.
- meet once a year with most business conducted by e-mail.
- select the officers and members of the Board of Directors,
- approve changes to Constitution and Bylaws
- set and change major NSPE policies.

Board of Directors

- 16 members that include 10 at-large members. (It was not proposed who would be the 10 at-large members.)
- The House of Delegates could designate representatives from Practice Divisions, Regions or other representatives.
- meet quarterly,
- approve budget, execute policies and strategic plan,
- make governance decisions
- appoint and evaluate the Executive Director.

Key differences between the proposed structure and the existing structure are (1) regions and practice divisions would not be represented on the Board of Directors unless the House of Delegates elects them, (2) individual NSPE members have no vote in

selecting the Board of Directors or in making changes to the Constitution and Bylaws and, (3) states would be represented on the House of Delegates by an individual member instead of the Board of Directors through the Regional Vice-Presidents.

The Academy

Prior to the Summit, concerns were raised as to how the "academy" would fit in with the NSPE organization. Concerns presented at the Summit were (1) competition with existing organizations, (2) competition with NSPE, (3) competition with NSPE products and services, (4) role of NSPE in originating the Engineering Academy, (5) expense of start-up and, (6) diversion of attention from NSPE direction, mission, vision and goals. No vote was taken at the Summit regarding the "academy."

Future Action

The Future Directions Task Force has been charged with completing its study and presenting recommendations for action at the Board of Directors meeting in July 2005 at which time it is to be disbanded. Implementation of the recommendations is to be undertaken by the existing Engineering Registry Task Force which has not met since January 2004. Before the recommendations can be implemented, the Constitution and Bylaws will need to be revised. The "academy" concept was relatively "low-key" at the Summit but it was presented as a possible option to be examined by the Registry Task Force.

Since NSPE has sensed a dire need to make revisions in its structure and service to members in the engineering community, major recommendations will undoubtedly take place. When they will be realized and how they might affect us as a state society or as individuals remains to be seen. More detailed results of the Summit can be found on the web at www.nspe.org. ■

Cover Photo

Maida Engineering, Inc. of Fort Washington, PA is evaluating the condition of and potential upgrades to the transportation systems inside the tallest national monument in our nation.

Although the Gateway Arch in St. Louis, Missouri, has been open to the public since the late 1960s, many visitors do not realize that when they visit this 630-foot tall monument dedicated to the Westward Expansion of the United States, they can get into one of eight five-person capsules that make up a "tram" in either of the Arch's two legs and travel to the Top of the Arch.

Richard Bowser designed the tram, more formally known as the Arch Transportation System, during the 1960s. The tram is part elevator, part ride and provides each passenger with a four-minute journey to the top of the arch evokes many feelings...including patriotism, an appreciation of engineering and technology, and a great feeling for the "heartland of America."

Maida Engineering, headquartered in Fort Washington, Pennsylvania, was asked to submit qualifications for evaluating the Arch's transportation system early in 2004. Nearly twenty other engineering firms throughout the United States were asked to provide competitive information. Through a qualifications based selection program per the provisions of the Brooks Act, each firm's credentials as well as their proposed approaches to the project were evaluated.

Maida Engineering was selected as the most qualified firm by an evaluation committee comprised of representatives from the

National Park Service (which oversees the Jefferson National Expansion Memorial complex) and Metro (St. Louis's transportation agency which operates the trams that take passengers to and from the Top of the Arch) as the most-qualified team to evaluate the transportation system's condition, to review proposed improvements to the transportation system and to...yes...think

outside the box (or, in this case, outside the Arch) to come up with other potential improvements.

The Maida Engineering team is comprised of engineers from its Fort Washington office and three subcontracted firms that are providing input on specialized areas of the Arch Transportation System. Harve Hnatiuk, P.E., Maida's Project Manager, has worked for Maida Engineering for over 25 years and is a Vice President of the firm. The Maida team recently provided a

preliminary list of recommendations to Metro and NPS and is scheduled to complete its project in February 2005.

Hnatiuk is well aware of the significance of this project. "The Gateway Arch is a place of national spirit. If you have visited it, you know what I mean by that. We at Maida Engineering have approached this project with a spirit of both professionalism and patriotism." ■

Editor's Note: PSPE members are eligible to publish project photos on the front cover. For details, please contact Jennifer Summers, 717.441.6051, jennifer@wannerassoc.com



Engineers • Planners • Surveyors • Landscape Architects
Environmental Consultants • IT Consultants

1-800-RETTEW-5 **RETTEW** www.rettew.com
We answer to you.
Camp Hill • Lancaster • Lehigh Valley • Pottsville

HANDOVER ENGINEERING
INCORPORATED

Our services are based on providing customized timely service and one-on-one personal attention in:
Municipal and Public Works Projects.

• Municipal	• Traffic/Transportation
• Wastewater	• Planning
• Water Supply	• Structural
• Geology	• Surveying
• Wetlands	• On Lot Sewage
• Hydrology	• Soils Investigation
• Storm Water Management	

ADDITIONAL OFFICES:
LEHIGH, LANCASTER, LEHIGH VALLEY, POCONO AREA, SOUTHEASTERN REGIONAL
FOR OUR WISCONSIN OFFICE: WWW.HANDOVERENG.COM

On Capitol Hill

John D. Wanner, CAE

Senate Appropriations Committee Grills Transportation Secretary Biehler on Mass Transit Funding

Senator Madigan inquired about changes at the Federal level that brought additional funds the Governor is flexing for mass transit. Secretary Biehler said that on October 28, 2004, the Federal government informed the state that there would be an increase in Federal funding for fiscal year 2004. The amount, he said, ended up being \$136 million. He then explained that PennDOT completes a four-year transportation improvement program based on meetings with MPOs and RPOs, which must be approved by the Federal government. Pennsylvania received Federal approval for its four-year plan on September 30, 2004. Senator Madigan asked who developed the plan to flex \$412 million for mass transit. Secretary Biehler answered that his Department worked with the Governor to come up with the proposal. Senator Madigan inquired if the Federal government has authorized highway funds to be used for mass transit, to which Secretary Biehler responded yes. Senator Madigan inquired when the Governor knew about the additional Federal money. Secretary Biehler explained that his Department did not inform the Governor until February 2005. He explained that his Department created new revenue projections based on the Oil Company Franchise Tax and the information received from the Federal government.

DEP Issues Guidance Advisory on Underground Mine Maps

The State Department of Environmental Protection has issued a Notice of Availability of Technical Guidance regarding "Validating Abandoned Underground Mine Maps and Establishing Barrier Pillars", in the March 19, 2005 PA Bulletin. This guidance establishes procedures to provide that abandoned mine voids are accurately located and mapped and to ensure that active underground mines are designed to include perimeter barriers that adequately address safety and environmental concerns. A notice of availability of the draft version of this document was published in the January 1, 2005 Bulletin. A 30-day public comment period was provided for the draft document, which concluded on January 31, 2005. No comments were received on the proposed changes to the document, and it became effective upon its publication on March 19. Contact: Gregory Shuler, Bureau of Mining and Reclamation, (717) 783-1199, gshuler@state.pa.us, for further information.

Governor's Office Announces Regulatory Agenda

Executive Order 1996-1 requires all agencies under the jurisdiction of the Governor to submit for publication an agenda of regulations under development or consideration. The following is the most recent publication of the Administration's regulatory agenda, grouped by agency.

Agendas are compiled to provide members of the regulated community advanced notice of regulatory activity. It is the intention of the Administration that these agendas will serve to increase public participation in the regulatory process. Agency contacts should be contacted for more information regarding the regulation and the procedure for submitting comments. This Agenda represents the Administration's present intentions regarding future regulations. The nature and complexity of an individual regulation obviously will determine whether and when any particular regulation listed below (as well as any considered subsequent to publication of this Agenda) is published. The following regulations of interest to PSPE have been announced.

1. Department of Community & Economic Development (DCED) - Building Energy Conservation Standards

12 Pa. Code Chapter 147 (final regulation with rulemaking omitted) The regulation will repeal this chapter, as the statute upon which this chapter is based was repealed by the Pennsylvania Construction Code Act. The regulation is scheduled to be published in "Spring 2005". Contact Jill B. Busch (717- 720-7314) for more information.

"Capitol" continued p. 13

**Geotechnical Engineers & Geologists**
CUMBERLAND GEOTECHNICAL CONSULTANTS, INC.

- ♦ **Solid Waste Landfill Design, Permitting & Third Party CQA**



- ♦ **Subsurface Explorations**
 - Test & Auger Borings
 - Soil Sampling & Rock Coring
 - Monitoring Well Installations
- ♦ **Engineering Analyses & Reports**
- ♦ **Laboratory & Field Testing**
 - Soils, Rock, Concrete
 - Geosynthetics
- ♦ **Construction Observation**


www.cumberlandgeo.com
801 Belvedere Street • Carlisle, Pennsylvania 17013 • 717-245-9100 • FAX 717-245-9656

ENGINEERS ♦ ARCHITECTS ♦ PLANNERS
Route 39, York, PA



- Aerial Mapping/GIS
- Airport Design
- Architecture
- Bridges/Roadways
- Construction Services
- Municipal Buildings
- Parks & Trails
- Stormwater
- Telecommunications
- Water/Wastewater

www.bh-ba.com

**Offices in Coatesville, Harrisburg, Hershey, King of Prussia, Pittsburgh, New Cumberland, State College, Stroudsburg & York (HQ)**
800-274-2224

A division of Kucera International Inc.

KEDDAL AERIAL MAPPING

Cost-effective "sky-to-screen" services,
performed in-house:

Aerial Photography
LIDAR Technology
GPS Control Surveys
Orthophotography
Digital Photogrammetry
Terrain Modeling
Data Conversion
GIS Support Services



KEDDAL AERIAL MAPPING
Roy Kimble, Manager
1121 Boyce Road, Pittsburgh, PA, 15241
(724) 942-2881 Fax (724) 942-2885
E-mail: map@keddalairial.com

www.kucerainternational.com



New Enterprise Stone & Lime Co., Inc.

- Construction Services
- Concrete Paving
- Prestress Beams
- Ready-Mix Concrete
- Crushed Stone
- Blacktop

*Providing Highway Construction
Materials Since 1924*

(814) 766-2211

www.nesl.com

ENGINEER

WE HAVE A SUREFIRE WAY
TO PREDICT THE FUTURE:
HIRE YOU TO INVENT IT.

Cyberspace controls and laser defense systems came as no surprise to the U.S. Air Force. In fact, they came off our drawing boards. No wonder we're always looking to hire the best and brightest. You can leverage your degree immediately and get hands-on experience with some of the most sophisticated technology on earth. To find out how to get your career off the ground, call 1-800-423-USAF or visit our Web site at airforce.com.



U.S. AIR FORCE
CROSS INTO THE BLUE



Gannett Fleming

As a leader in transportation engineering, Gannett Fleming is proud to celebrate our 90th year. Gannett Fleming is nationally recognized and is perennially ranked one of the top 50 Engineering Design Firms in the country. To support sustained growth and to expand our capabilities, Gannett Fleming is seeking motivated individuals who will utilize their technical abilities to achieve success for the company, our clients and themselves. Successful candidates will contribute to an atmosphere of teamwork and benefit by advancement opportunities. We are looking for the following individuals to help us achieve this success in our **Ohio Valley Region** offices:

SR. TRANSPORTATION ENGINEERS

Morgantown, Akron & Columbus -

Civil Engineers with P.E. and 10+ years of exp. in highway design and management. Strong design, coordination, communication, management and leadership skills along with knowledge of the overall transportation design process and DOT/AASHTO standards are required. The ability to work with clients and other professionals to successfully complete projects is essential.

TRANSPORTATION ENGINEERS

Pittsburgh, Morgantown, Akron & Columbus -

Engineers with 4+ years of exp. in the design development of transportation projects. Knowledge of DOT/AASHTO standards, roadway design, highway drainage, traffic control and construction plan preparation is required. Microstation V8 experience is required. P.E. is preferred but not required. Our team environment and senior professionals provide the opportunity for your continual growth as a professional.

GEOTECHNICAL DESIGNERS

Pittsburgh, Morgantown, Akron & Columbus -

Geotechnical Engineers (BS or MS degree) or Engineering Geologists (MS degree only) with 0-4 years of experience in subsurface exploration and geotechnical design. Knowledge of transportation design is a plus.

STRUCTURAL ENGINEERS

Pittsburgh, Akron & Columbus -

Civil Engineers (BS or MS degree) with 0-4 years of exp. in bridge design. Knowledge of DOT/AASHTO standards is required, and Microstation V8 exp. preferred.

We offer competitive compensation and benefits. E-mail cover letter indicating desired location and resume, to Attr:PMC@employment@gfnet.com EOE

Risky Business

Rebecca A. Bowman, Esq., P.E.

The Risky Business of Rejection

Valentine's Day has passed by once more. When I was in high school, I remember guys who would break up in January so that they didn't have to deal with Valentine's Day. I always thought the worst, though, was the cad who broke up on Valentine's Day. That was the worst form of rejection to a teenaged girl.

As design engineers, participation in the rejection decision is a part of all project management/oversight duties. We are always called upon to advise the owner about deviations from the specification. The question for our discussion today, though, is the difference between contractual language which says that we "may" do something and language which says that we "shall" do something. We'll look at the implications of that distinction in the context of deficient work.

Most contracts have three clauses that work in concert to produce a specific effect: 1) the engineer has the "authority" to reject work that does not conform to the requirements of the contract documents, 2) the engineer does not have the authority to modify the contract on the owner's behalf, and 3) the owner has the power to stop work. The authority to reject usually shows up with the word "may." This configuration is reflected in industry-standard contract documents such as the AIA forms.

Clients sometimes think that are benefits in altering that language to shift responsibility. However, these clauses work together like the bricks in the game, Jenga. If one is shifted, the whole structure can come tumbling down. The engineer needs to be wary of changes in any of these clauses and to consider carefully how a change in one affects the others.

In the standard language configuration, the engineer advises the owner that the work does not conform. The engineer

generally accompanies that information with recommendations: follow-up testing, rejection, correction/repair, or acceptance. The owner decides whether to authorize the testing; reject the work, stopping progress; demand correction/repair, stopping progress; or accept the nonconforming work, effectively modifying the contract.

Clients sometimes think that are benefits in altering [contract] language to shift responsibility... The engineer needs to be wary of changes in any of these clauses and to consider carefully how a change in one affects the others.

Some clients want to change the authority to reject, "may," to a mandate to reject, "shall." There is a fundamental problem with this change. The engineer has been retained to exercise professional wisdom and judgment. A mandate to reject removes the benefit of that discretionary exercise. Under "shall," the engineer must reject any work that doesn't conform, no matter how trivial the nonconformance. Given the opportunity to evaluate the alternatives, most owners prefer to provide their engineers with the latitude to exercise that priceless wisdom and judgment in deciding whether or not the work needs to be rejected.

The effect of authority to reject must also be interlaced with the effect of the absence of authority to modify the contract. Take a step back for a moment. A

nonconformance is a characteristic of the work that fails to comply with the contractual requirements. If the engineer has unilateral authority to accept a nonconformance, the engineer has unilateral authority to modify the contractual requirements. In other words, the authority to accept a nonconformance is, in fact, the authority to modify the terms of the contract. So what? That means that any language giving the engineer unilateral authority to accept a nonconformance sets up a conflict with the language withholding from the engineer the authority to modify the contract. In more than thirty years, I have never encountered an owner who wanted to give the engineer the authority to modify the contract.

You also need to be careful about the decision not to reject. Check the contractual provisions. How does the waiver clause read? If you are not rigorous in enforcing conformance in trivial matters, does that constitute a waiver of nonconformance in other trivial matters? You want a strong non-waiver clause.

What does all this mean to you? The authority to reject does not equate to an authority to accept. Although that seems obvious when I write the sentence, too many design professionals have ended up in the middle of claims disputes because they forgot that inequality.

The authority to reject also does not equate to an authority to stop work. Typically, official rejection occurs when the engineer refuses to sign off on a payment application. Sometimes, rejection occurs sooner, when the engineer refuses to sign off on an inspection acceptance report. The inspection report is filed as a nonconformance report. The engineer's powers are to report the nonconformance and to decline to approve the payment application.

"Risky" continued p. 12

Pennsylvania Supreme Court Undermines Economic Loss Doctrine Protection for Design Professionals

Richard J. Davies, Esq.

Design professionals in Pennsylvania have lost a powerful defense to claims filed against them by contractors seeking damages alleged to have been caused by the design professional's errors and omissions.

Over two years after hearing oral arguments in the case of *Bilt-Rite Contractors, Inc. v. The Architectural Studio*, the Pennsylvania Supreme Court ruled on January 19 that contractors can sue design professionals directly for negligent misrepresentations, specifically including misrepresentations contained in contract documents.

Since the 1990s, Pennsylvania design professionals have been able to rely upon cases that forbid contractors from suing design professionals directly for "economic losses," which are financial damages that do not involve personal injury or property damage, unless the contractor has a contract with the design professional. All of that has changed with the Bilt-Rite decision. Bilt-Rite Contractors was hired by a school district to build a new school. The plans and specifications upon which Bilt-Rite's bid was based were prepared by a design professional firm hired by the school district pursuant to a written contract. Bilt-Rite alleged that the plans expressly represented that the curtain wall, sloped glazing and metal support systems

"could be installed and constructed through the use of normal and reasonable construction means and methods, using standard construction design tables," but "once construction commenced" Bilt-Rite discovered that constructing these systems required it to "employ special construction means, methods and design tables, resulting in substantially increased construction costs." Two lower courts dismissed the claim based upon the economic loss doctrine.

The Pennsylvania Supreme Court decided to let the case go forward, as it could "see no reason why...architects and other design professionals" should be protected from such claims. There is no need for a contract between the contractor and the design professional, because "the duty to foreseeable third parties flows from the architect's contractual duties to the party retaining the architect." The Supreme Court found that the contractor was a foreseeable user of the plans and specifications, that the design professional knew that the contractors bidding on the project would rely upon them, and that the design professional knew that the contractors would suffer harm if the plans and specifications were prepared negligently. The economic loss doctrine "does not bar recovery in such a case."

Two judges dissented, arguing that stripping design professionals of this protection will introduce chaos in to the carefully orchestrated contractual relations between the many participants in the construction process and defeat the risk allocations that they negotiate. Unfortunately, the majority was not persuaded by this consideration.

What remains undecided is whether or not the case will apply beyond its facts to abolish the defense as to economic loss claims other than those by a contractor based on the design documents.

Pennsylvania is not unique in allowing this type of action by contractors against design professionals. We are investigating ways that you can maximize your protection against these claims, including taking a look at the risk management techniques that have been successful for design professionals in states that permit such actions. However, no risk management technique is going to provide the protection of the economic loss doctrine, and the decision will almost certainly prompt new claims by contractors against design professionals. For now, be aware that the protections that you so carefully negotiated in your contract with the owner will not necessarily be of use to you in defending a misrepresentation suit by a contractor.

If you would like to receive a copy of the opinion, or you would like to discuss it in further detail, please feel free to contact us.

Powell Trachtman Logan Carrle & Lombardo, P.C.; 475 Allendale Road, Suite 200; King of Prussia, PA 19406. 610.354.9700; www.powelltrachtman.com. ■

Printed with the permission of Powell, Trachtman, Logan, Carrle & Lombardo.

Powell, Trachtman, Logan, Carrle & Lombardo has worked as special counsel to the PSPE, and as counsel for other trade associations.

Precedent-Setting Decision on Emergency Evacuations

Washington Lawyers' Committee for Civil Rights and Urban Affairs

For the first time, a court has declared that the Americans with Disabilities Act (the ADA) requires places of public accommodation to consider the needs of people with disabilities in developing emergency evacuation plans. This groundbreaking decision - issued on December 28, 2004 by Judge John W. Debelius III of the Circuit Court for Montgomery County, Maryland - means that shopping malls, stores, restaurants, movie theaters, museums, and other private entities subject to the ADA throughout the country, whether landlords or tenants, must now seek to accommodate people with disabilities in the development and modification of emergency evacuation procedures.

"This is a significant decision that should greatly enhance the safety of persons with disabilities in the post-September 11th world," said Elaine Gardner, Director of the Disability Rights Project at the Washington Lawyers' Committee for Civil Rights and Urban Affairs. "The ADA always has been understood to help get people with disabilities into places of public accommodation. Now, for the first time, it also has been found to require that public places try to get those same people out in the event of a fire, terrorist attack, or other emergency."

The court's significant decision arises out of a lawsuit that was filed in Spring 2003 by Katie Savage, a Washington, D.C. resident who became trapped during an emergency evacuation in a local shopping mall that had no accessible exits for persons with disabilities. Ms. Savage, who uses a wheelchair, was shopping at a Marshalls store in Silver Spring, Maryland's City Place Mall on September 3, 2002, when the store

and the Mall were evacuated. After Marshalls required her to exit into an area of the Mall that is below ground level, Ms. Savage found that she was trapped there and unable to evacuate, because the elevators were shut down and all the exits had stairs. Abandoned by store employees and trapped, Ms. Savage resolved to use her terrifying ordeal as a vehicle for ensuring that fellow citizens with disabilities would not be similarly victimized in emergency evacuation situations. Ms. Savage joined the Disability Rights Council of Greater Washington (the DRC) in filing a lawsuit against Marshalls and City Place Mall that alleged violations of the ADA in both the Mall's emergency evacuation plan and Marshalls' corporate-wide evacuation policies.

In briefs filed with the court last Fall, Marshalls took the position that the ADA does not require places of public accommodation to modify evacuation plans in order to accommodate the needs of people with disabilities. The court, however, rejected Marshalls' view and held that "a store's nationwide evacuation procedures would certainly constitute a public accommodation's 'policies.'" Therefore, the court wrote, "it is certain that Title III of the ADA does apply to this situation."

"I am delighted by the court's decision and hope that it has a lasting impact on improving safety for people with disabilities," said Ms. Savage. "Regrettably, Marshalls and other major retailers have seen fit to evacuate non-disabled persons, while leaving people with disabilities to fend for themselves in an emergency. That is not only a poor business decision, it is also now against the law."

One of Ms. Savage's attorneys, Steve Hollman, agreed. "We've all heard stories about people with disabilities being trapped and left to die on September 11th and in other emergency situations," said Mr. Hollman, a partner with Hogan & Hartson L.L.P. in Washington, D.C. "Hopefully, this decision will serve as a wake-up call to public accommodations across the country that they must start considering the needs of people with disabilities in their evacuation plans."

The Opinion of the Court also was significant for refusing to allow a tenant to abdicate its responsibility to patrons with disabilities by merely placing them outside a store's entrance in an emergency evacuation situation and leaving actual evacuation to a shopping mall's owners. Additionally, the Opinion recognized Ms. Savage's standing to bring her ADA claims against Marshalls. Despite the fact that Ms. Savage had not visited the Marshalls fitting room at City Place Mall, she was found to be able to seek barrier removal there, as "a Plaintiff need not encounter every barrier in a store to bring a claim for all the store's ADA violations." Moreover, the Court found that Ms. Savage had standing to remedy Marshalls' corporate-wide emergency evacuation policy - which is in effect at more than 672 Marshalls stores - because "where the harm alleged is directly traceable to a written policy . . . there is an implicit likelihood of its repetition in the immediate future." The Disability Rights Council of Greater Washington also was found to have standing to proceed. As a result, the case will now proceed to trial to determine whether Marshalls and City Place Mall are in violation of the requirements of the ADA. ■

University News

Virtual Electrical Laboratory

Temple University

Engineers and scientists spend countless hours learning in the classroom, but nothing compares to laboratory training. Hands-on education allows students to experience the backbone of engineering and science - conducting experiments, testing hypotheses, learning from their mistakes, and reaching their own conclusions.

For students unable to use their arms, the lab has been a place for observation, not action. Now, in a novel extension of the innovative computer-based tutoring technology he developed, Brian P. Butz, a professor of electrical engineering at Temple University, is helping these students to overcome this challenge, and get the most out of their learning experiences.

Butz created a "virtual electrical laboratory," which replicates actual lab conditions and allows students to conduct hands-on research, and a "virtual office" to step into if they need help - all without leaving their computer terminals.

Using their voices, head signals, pointers, and other input devices, students can instruct the virtual lab to gather and operate instruments and tools one would find in any electrical engineering laboratory. They can hook up voltage meters and signal generators, for example, input the values and levels they want to check, and record the results. If they have questions, they can call up the virtual office and click on a bookshelf to obtain reference materials, a file cabinet for background materials, and a tutor for help.

The core of the virtual laboratory is the Interactive Multimedia Intelligent Tutoring System (IMITS), the program Butz developed to augment more traditional computer tutorials by adding an "expert system" that "learns" from those using it. As a student answers a series of questions, the program determines what the student knows and does

not know and how he or she likes to learn. IMITS then creates an individualized program of study for the student.

Simulated lab projects are set up with video clips that run on the computer monitors. In one project, emergency room doctors work to revive a heart patient only to find their defibrillator is defective. The lead doctor turns to the camera and asks, "Is there an engineer in the house?" The virtual office returns to the monitor, and the student is signalled to check his e-mail to receive the new assignment. The head of an engineering company orders his employee, the student, to fix the defibrillator. The student then goes to work in the virtual lab; if successful, a video clip displays the patient coughing and returning to life, and if unsuccessful, a sheet is drawn over the patient's face.

For more information, to speak with Dr. Butz, or to see a demonstration of the virtual electrical laboratory, contact Tom Durso in Temple's News Bureau at 215.204.7476 or tdurso@unix.temple.edu.

New \$6.1 Million Nanotechnology Facility

University of Pittsburgh

The University of Pittsburgh recently made a major commitment to boost its already-formidable efforts in the burgeoning field of nanotechnology by announcing its intentions to construct a new \$6.1 million nanofabrication facility and to increase nanoscience and engineering faculty by almost 25 percent in the next few years.

Pitt Provost James V. Maher announced construction of the new 4,000-square-foot NanoScale Fabrication and Characterization Facility, to be part of Pitt's Institute of NanoScience and Engineering. The facility is scheduled to open in late 2005 and will be housed in Benedum Hall.

Pitt's Institute of NanoScience and Engineering currently includes approximately 40 faculty researchers, and Maher announced the addition of nine more. The added faculty will include scientists - chemists, biologists, and physicists - as well as engineers.

The new facility will promote multidisciplinary research, scholarship, and education among Pitt's School of Engineering, School of Arts and Sciences, and Schools of the Health Sciences. Maher said he hopes the new facility will help attract top-level talent and garner more grants, as well as facilitate partnerships with industry.

The new equipment will allow researchers to see and change materials and structure on the atomic level. Key technologies available and their capabilities will be:

Transmission electron microscope: Directs a beam of electrons at a material and "reads" the reflected and scattered electrons to create an atomic-level image of the surface;

Scanning-probe microscope: A tiny tip hovers above the material and reacts to changes in voltage of electrons jumping between itself and the surface; this allows for mapping at the atomic level;

Modular X-ray diffraction system: X-rays nanostructures to reveal their density, crystallinity, and the presence of impurities or structural defects;

Inductively coupled plasma reactive ion etching system: A beam of charged particles cuts nanometer-wide grooves, pits, or holes in materials;

Electron-beam lithography system: A beam of electrons "writes" nanometer-sized patterns on materials;

Dual-beam nanopatterning system: Beams of electrons and/or other charged particles cut nanometer-wide patterns in materials; and

Multisource e-beam deposition system and plasma-enhanced chemical vapor deposition: Deposition system for metals, semiconductors, insulators, and organic materials. ■

“America in Ruins”

Johann F. Szautner, P.E.

Watching daily news, you can't escape the ongoing reports of our problems in Iraq. We hear that one of the reasons for the sustained insurgency is that people are disappointed with the lack of progress in reconstructing the infrastructure. We also hear from our military spokespeople that the problems of reconstructing the infrastructure quickly and efficiently are the result, not of war-related damages, but of 30 years of neglect during Saddam's reign.

In 1981, Choate and Walter wrote a paper entitled “America in Ruins.” They wrote it to alert us to the “infrastructure crisis,” decrying the ongoing decay of crumbling highways, bridges, dams, and water and wastewater systems, just to name a few. In 1988, a presidential commission was created to study and report on our infrastructure, and they assigned an overall grade of C. The title of the report, “Fragile Foundations: America's Infrastructure,” hinted at the shaky state of our infrastructure. However, as it is not unusual with government-sponsored studies, this one faded quietly away, resulting in the also not unusual government-sponsored “no-action” alternative.

On the 10th anniversary of the first report card, the American Society of Civil Engineers (ASCE) studied the state of the infrastructure and issued its own report card. Based on their evaluation, the state of our infrastructure had slid from a C to a D.

ASCE recently released its latest report card, and no surprise, we are continuing the trend of tolerating functional and structural decay of our infrastructure. We now achieved an overall grade of D, down from D+ given at the last grading in 2001. At this point, and 24 years after the issuance of “America in Ruins,” we have not even established a common vision, or goals, or priorities of how to address our infrastructure problems. With this continuing trend, in another six years we will have matched Iraq's experience of infrastructure neglect, at least in the corresponding time frame. It obviously goes without saying that as the most developed country, we still may also have the most developed infrastructure, but for how much longer?

Few politicians had and have the political will to not only acknowledge our infrastructure crisis, but also to do something about it. Is it not time to examine what politicians do with the money they borrow from our children and grandchildren? Shouldn't we ask them if the money would generate investments and create jobs?

For the official ASCE press release and copy of the report card, please use the following link. <http://www.asce.org/reportcard/2005/page.cfm?id=108>. The following copy of the 2005 ASCE report card, is being published with their permission. ■



Today's Commitment to Tomorrow's Challenges


 **Carroll Engineering Corporation**

949 Easton Road • Warrington PA 18976
215.343.5700 • Fax 215.343.0875

555 Second Avenue • Suite G-101 • Collegeville PA 19426
610.489.5100 • Fax 610.489.2674

128 E. Lincoln Highway • Coatesville PA 19320
610.466.1630 • Fax 610.466.1632

www.carrollengineering.com

 **PICKERING, CORTS & SUMMERSON, INC.**
professional engineers and land surveyors

**LAND SURVEYING
SITE DEVELOPMENT
MUNICIPAL ENGINEERING
LANDSCAPE ARCHITECTURE
HIGHWAY & BRIDGE DESIGN
HIGHWAY STRUCTURE INSPECTIONS**

Providing the foundations for development and growth in our communities

NEWTOWN, PA 215.958.9300
PENNINGTON, NJ 609.737.2033
PLYMOUTH MEETING, PA 610.238.4504

 **McMAHON ASSOCIATES, INC.**
TRANSPORTATION ENGINEERS & PLANNERS

RESPONSIVE TRANSPORTATION SOLUTIONS



**Comprehensive Traffic Data Collection
Traffic Studies
Transportation Planning
Land Survey
Traffic Signal Design/ITS
Highway & Intersection Design
Pavement Design
Structural Design
Highway Occupancy/Access Permitting
Construction Surveillance & Inspection
Expert Witness Testimony**

Corporate Headquarters:
Fort Washington, PA
215.283.9444

Elton, PA
610.594.9995

Harrisburg, PA
717.885.1200

www.mcmtrans.com

MODJESKI and MASTERS
Consulting Engineers

P.O. Box 2345, Harrisburg, PA 17105
(717)790-9565 Fax (717)790-9564
www.modjeski.com

Bridge and Highway Engineering

"Risky" continued from p. 7

"Oh," you think, "it would be so nice to have the ability to smack some of those contractors with a Stop Work Order." Actually, no it wouldn't. The courts have held that any party with stop-work authority is required to exercise it. That has resulted in some completely unintended results. For example, an engineer responsible for HVAC design was held liable for safety violations because he had the authority to stop work and knew (or should have known) of an unsafe condition. See what I mean? You don't really want authority to stop work.

We also need to be wary about directing contractor's work. Too much "guidance" can be interference. This becomes especially important in the arena of rejected work. We should not advise the contractor on means of achieving

compliance. Once work is rejected, the design professional should not give the contractor advice (read "direction") on ways to correct the deficiencies. That is the contractor's business and you don't want to be named as a co-respondent on a claim for interference, directed changes, delay, and additional cost. It is our business to assure compliance.

What do you do when you have recommended rejection, but the owner decides the credit offered is worth accepting nonconforming work? That may be just fine. However, if the nonconformance violates a code, standard, or regulation or sets up a public life-safety problem, it's not fine. If such a situation arises, obviously you must do your best to persuade the owner to reject (and thoroughly document your efforts). However, if the owner persists, both your ethical responsibilities

and the law require that you notify the appropriate public official.

We all know that with power comes responsibility and with responsibility comes liability. So, know what your contractual powers, responsibilities, and liabilities are. Handle them appropriately. If you don't, you're in a risky business. ■

The "Risky Business" column offers articles covering liability from both the legal and engineering perspective. Mrs. Mowman's articles share general information and should not be relied upon as professional legal advice of either a general or specific nature. Rebecca Bowman is a civil engineer-attorney in solo private practice in McMurray, Pennsylvania for more than 25 years. Her practice is a certified woman-owned business. Her B.S. in Civil Engineering is from the University of North Dakota.

"Capitol" continued from p. 5

2. Department of Environmental Protection (DEP) - two regulations:

a. New Chapter 301 Operator Certification Regulations Water and Wastewater Systems Operators' Certification Act. This proposal will implement the provisions of Act 11 of 2002, the Water and Wastewater Systems Operators' Certification Act which restructures the testing and training program for operators and enhances security provisions for all water and wastewater treatment systems in PA. Scheduled to be published in "September 2005", as proposed. Contact Veronica Kasi (717) 772-4053 for more information.

b. Chapter 109—Safe Drinking Water Act 25 Pa. Code, Chapter 109. This general update will revise several sections in Chapter 109 to retain or obtain primacy, including monitoring/reporting requirements for lead, copper, inorganic chemicals, volatile synthetic organic chemicals, and synthetic organic chemicals. Other sections will be clarified, such as QA/QC requirements for on-line instrumentation; monitoring/reporting requirements for disinfectants and disinfection byproducts; requirements regarding the practice of engineering, land surveying and geology; reporting requirements for failure to monitor; and comprehensive monitoring plan requirements. Scheduled to be published in "October 2005", as proposed. Contact Lisa Daniels (717) 772-2189 for more information.

3. Department of General Services (DGS) - three regulations:

a. Responsibility (4 Pa. Code, Chapter 60) - This chapter must be amended to conform with the legislative changes required by Act 57 and to provide for uniform Commonwealth agency debarment and suspension procedures. The proposed regulation is now expected to be published in Spring 2005. Contact Mary B. Seiverling (717) 772-2749 for more information.

b. Emergency Construction Repairs (4 Pa. Code, Chapter 67) - The regulation is being amended to more accurately reflect present practice and to delete contract provisions. Such provisions should not be in regulatory form and their deletion will serve the same purpose as noted for Chapter 61. The

regulation is expected to be published in winter 2005, as proposed. Contact Mary B. Seiverling (717) 772-2749 for more information.

c. Contract Compliance 4 Pa. Code, Chapter 68. Executive Order 1996-8 transferred the contract compliance responsibilities to the Department of General Services. Expected to be published in "Spring 2005", as proposed. Contact Mary B. Seiverling (717) 772-2749 for more information.

4. Infrastructure Investment Authority

25 Pa. Code §§ 963.12(a)(6) and (7) 963.13(b) 2,963.13(c), 963.15(a), and 25 Pa. Code § 965.4(9). PENNVEST recommends the following revisions: (1). Delete Sections 963.12(a) (6) and the second sentence of Section 963.13(b)(2) thereby allowing PENNVEST to provide financial assistance (loan or grant) for costs associated with the development of an approvable official sewage plan under the Sewage Facilities Act, 35 P. S. § 750.1 et seq. While PENNVEST has always construed these costs to be encompassed within the statutory definition of "eligible cost" (35 P. S. § 751.3), the agency chose as a matter of policy not to fund this planning process because the Pennsylvania Department of Environmental Protection already provided grant funds for 50% of these costs. PENNVEST is revising its policy because the agency is concerned that, in some instances, needed projects are unable to move forward in a timely manner due to a lack of funds to conduct this necessary planning. PENNVEST, therefore, is removing the impediment to funding imposed by the above regulatory provisions. (2). Delete 25 PA Code § 963.12(a)(7) thereby allowing PENNVEST to provide financial assistance (loan and grant) for costs associated with the extraction for profit of minerals or other resources from wastewater or sludge whether the project is sponsored by a public or private actor. While PENNVEST has historically allowed these costs for public facilities provided the profits were used to reduce system user costs it has not allowed financial assistance for such processes for private facilities. PENNVEST is revising its policy because it wants to support recycling and other innovative wastewater projects and the current policy has the potential to stifle

such projects. In order to further these objectives, PENNVEST is removing the impediment to funding imposed by the above regulatory provision. (3). Amend 25 PA Code 963.13 (c) by revising the section to read as follows: "Terms of Loans. Advance funding loans will be for a term of five years. The term will be payment of interest only for 59 months and repayment scheduled for month 60. The scheduled repayment date, month 60, shall not exceed 1 year from completion of the advance funding project. If the recipient of an advance funding loan subsequently receives a construction loan from the Authority, the term of the outstanding advance funding loan shall be amended to carry both the interest only term and the repayment term of the construction loan, provided the interest only term shall not be extended beyond five years." (4). Amend 25 Pa. Code § 963.15(a) by revising the first sentence to read in its entirety: "The term of the loans shall normally be twenty years beginning on the date construction is completed or three years from the date of loan closing, whichever occurs first." This amendment provides a level loan repayment and a defined term at loan closing (normally twenty years). Under the old policy the loan term was determined sometime in the future after construction closed out. Consequently, under the old policy a Borrower with a project that took two years to construct would have had only eighteen years to repay the loan. Under the new policy the repayment term would be twenty years plus two years of interest only payments to provide for construction. (5). Amend 25 Pa. Code § 965.4 (9) to place a period after the word "Board" and delete the remainder of the sentence. This amendment allows those costs associated with the acquisition of land under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 to be financed by PENNVEST. This change is necessary to reflect a shift in policy by the Environmental Protection Agency and the desire of PENNVEST to take advantage of the policy shift to finance such costs. Expected to be published in "Summer/Fall 2005", as proposed. Contact Jayne B. Blake (717) 783-6776, for more information.

"Capitol" continued p. 15



TANTALA ASSOCIATES
CONSULTING ENGINEERS
www.tantala.com

4903 FRANKFORD AVENUE
PHILADELPHIA, PA 19124-2617

T: 215.289.4600
F: 215.289.1885
E: mail@tantala.com

civil engineering
structural
geotechnical
site development
risk management

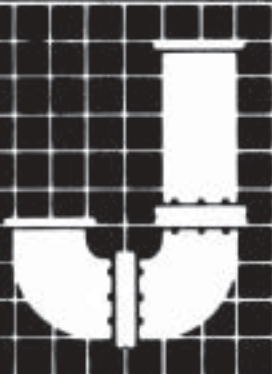
Engineering • Planning • Construction
Environmental Services



gai consultants
transforming ideas into reality

Tel 412.476.2000
Fax 412.476.2020
www.gaiconsultants.com

Charleston, WV • Ft. Wayne, IN • Jacksonville, FL • Orlando, FL • Pittsburgh, PA



**JOHNSTON
CONSTRUCTION
COMPANY**

MULTI-TRADE
ENGINEERED
CONSTRUCTION

P.O. Box 98,
Dover, PA 17315
Tel. (717) 292-3606

BOLES, SMYTH ASSOCIATES, INC.

Consulting Civil Engineers

Philadelphia



ENGINEERING MECHANICS, INC.
Consulting Geotechnical Engineers

Daniel Grieco, Jr., P.E.
President

Joseph P. Fagan, P.E.
Vice President

4636 CAMPBELLS RUN ROAD
PITTSBURGH, PA 15202
www.emigeotech.com

Phone: 412-788-3650
Fax: 412-787-5991

One of the 100 Best Places to Work in PA

- Architecture and Engineering
- Civil Engineering and Environmental Services
- Mapping Sciences
- Telecommunications and Technology Consulting and Engineering
- Transportation Services



Kimball
L. Robert Kimball & Associates
Architects and Engineers

Corporate Headquarters:
815 West Highland Avenue
Harrisburg, PA 17101
Phone: 814-472-7700
www.kimball.com

OTHER PA OFFICES: Coraopolis • Harrisburg • Pittsburgh • State College • West Chester

THE Burns GROUP
Engineering and Construction

Solutions that build your Future

www.burns-group.com

Philadelphia, PA • McLean, VA • Pittsburgh, PA
Edison, NJ • Wilmington, DE

F. T. KITLINSKI & ASSOCIATES, INC.
Civil / Geotechnical
Engineers & Consultants

THE FOUNDATION SERVICES COMPANY
Test Borings Division

Services Limited Exclusively to the Field of
Soil Mechanics, Foundations and Geotechnics
3608 N. Progress Ave. Harrisburg, PA. 17110
717-652-8620

"Capitol" continued from p. 13

5. Department of State

a. State Registration Board for Engineers, Land Surveyors and Geologists Biennial Renewal Fees and Examination Fees 49 Pa. Code § 37.17 (16A-478) The regulation would increase biennial renewal fees for all license classes, delete examination fees as unnecessary, and make editorial and organizational changes to the other fees. Statutory Authority: Section 4 of the Engineer, Land Surveyor and Geologist Registration Law, 63 P. S. § 151(d) and (e). Contact Shirley Klinger (717) 772-8528, for more information.

6. Department of Transportation

(PENNDOT): Pre-qualification of Bidders (67 Pa. Code, Chapter 457). 36 P. S. Section 670-404.1 "Prequalification of Bidders" mandates the Department to have regulations to establish and maintain a system for the qualification of competent and responsible bidders. Expected to be published in "June 2005", as proposed. Contact Joe Cribben (717) 787-3733 for more information.

Legislative Activity

HB 2 RE: Green PA Bond Act (by Rep. Thomas Quigley, et al)

The Green PA Bond Act places a question of incurring indebtedness of up to \$800,000,000, in annual increments not to exceed \$115,000,000, for the maintenance and protection of the environment, open space preservation, watershed protection, abandoned mine reclamation, acid mine drainage remediation and other environmental initiatives to the electors at the next election. Proceeds of the borrowing would be used as determined by the General Assembly by law, for the maintenance and protection of the environment, open space preservation, watershed protection, abandoned mine reclamation, acid mine drainage remediation and other environmental initiatives.

Passed House, 2/15/2005 (183-12)

Reported as committed from Senate Environmental Resources and Energy Committee and read first time, 3/15/2005

Read second time, and rereferred to Senate Environmental Resources and Energy Committee, 3/16/2005

HB 120 RE: Lower, Broader Sales Tax (by Rep. Sam Rohrer, et al)

Amends Tax Reform Code further providing for imposition of sales and use tax by lowering the tax rate to 5% and adding a variety of different services and items under the tax, including prescription drugs, malt and brewed beverages and spirituous and vinous liquors, newspapers, caskets and burial vaults, flags of the United States, the use of mail order catalogs, firewood, electric vehicles, hybrid electric vehicles and zero emission vehicles, subscriptions for magazines, candy or gum and pre-built housing, among other items. It is the intent of the General Assembly to broaden the sales and use tax base and reduce the rate of that tax in order to provide funds for the operating expenses of school districts. All revenues received on or after January 1, 2006, from the tax imposed would be transferred to the Education Operating Fund. **Referred to House Finance Committee, 3/14/2005**

HB 194 RE: Dormitory Sprinkler Act Costs (by Rep. Bob Flick, et al)

Amends the Dormitory Sprinkler Act further providing for the sprinkler system program by adding that if the authority finances a project it would finance all costs associated with the sprinkler installation, including costs of modifying water supply sources and plumbing necessary for the sprinklers, costs of renovation work necessary for installation, costs of asbestos abatement necessary as a result of the installation and costs of integrated smoke detection and fire alarm systems.

Reported from House Local Government Committee, and rereferred to House Labor Relations Committee, 3/16/2005

HB 815 RE: 2005-06 Budget (by Rep. Brett Feese)

This is the General Appropriation Act of 2005 providing for expenses of the Executive, Legislative and Judicial Departments, the public debt, for the public schools for the fiscal year July 1, 2005, to June 30, 2006. The House will consider the budget, with amendments, the week of April 4. It will pass, and the Senate will get to it some time later.

Referred to House Appropriations committee, 3/14/2005

Reported as committed from House Appropriations Committee, read first time, and laid on the table, 3/15/2005

Removed from the table, and read second time, 3/16/2005

SB 62 RE: Local Government Electronic Bidding (by Sen. Jane Earll, et al)

Amends Title 62 (Procurement) by adding chapter 46, entitled the Local Government Unit Electronic Bidding Act. The legislation states that a local government unit may permit the electronic submission of bids and may receive bids electronically if the local government unit has the electronic capability to maintain the confidentiality of the bid until the bid opening time. The legislation outlines the procedure for competitive electronic auction bidding.

Reported as amended Senate Local Government Committee, and read first time, 3/15/2005

New Bills Introduced

HB 236 RE: IRRRC Small Business Provisions (by Rep. Tina Pickett, et al)

Amends the Regulatory Review Act further providing for legislative intent, for proposed regulations and procedure for review. The act is intended to improve State rulemaking by creating procedures to analyze the availability of more flexible regulatory approaches for small businesses in accordance with certain findings. For any regulation subject to the act, a small business that is adversely affected or aggrieved by final agency action is entitled to judicial review of agency compliance. A small business may seek the review during the period beginning on the date of final agency action and ending one year later. The act is not intended to create a right or benefit, substantive or procedural, enforceable at law by a person against another person or against the Commonwealth, its agencies or its officers. Lastly, "small business" is defined as a business entity, including its affiliates, that is independently owned and operated and employs fewer than 250 full-time employees or has gross annual sales of less than \$6,000,000. This bill was passed by

"Capitol" continued p. 17

Barton Associates

Mechanical & Electrical Consulting Engineers

- Heating & Ventilating
- Air Conditioning
- Plumbing
- Fire Protection
- Medical Gases & Vacuum
- Process & Control Systems
- Sustainable Design
- Power Generation
- Power Distribution
- Lighting
- Fire Alarm & Security Systems
- Information Technology Systems
- Commissioning

Barton Associates, Inc.
Consulting Engineers
Susquehanna Commerce Center North
221 West Philadelphia Street
York, PA 17404

(717) 845-7664 phone
(717) 845-3258 fax
barton@ba-inc.com
www.ba-inc.com

 **Be Safe Building Better**

Join the Firm that is Changing the Face of Consulting Engineering and Making the World a Better Place - One Project at a Time.

**CIVIL • TRANSPORTATION • GEOTECHNICAL
WATER RESOURCES • ENVIRONMENTAL
STRUCTURAL • GIS • MECHANICAL • ELECTRICAL**

 **Gannett Fleming**

P.O. Box 67100 • Harrisburg, PA 17106-7100
(717) 765-7211

Chambersburg • Clearfield • Lancaster • Philadelphia
Pittsburgh • Pottsville • State College • Valley Forge

A Tradition of Excellence
www.gannettfleming.com

**SENATE ENGINEERING
COMPANY**

- Providing Engineering Services For Over 40 Years -

Water & Wastewater Systems • Feasibility Studies • Funding Acquisition
Roads & Bridges • Structural Steel • Bridge Inspections • Permitting
Site Development • Stormwater Management • Surveying & Mapping • LEED
Project Management • Construction Service Group

Kittanning, PA
Ph: (724) 543-1776

Pittsburgh, PA
Ph: (412) 826-8464

Washington, PA
Ph: (724) 229-8456

www.senate-engineering.com

 **GATEWAY**
On Call. On Time. On Target.

OUR OFFICES:
1011 Alcon Street
Pittsburgh, PA 15220
412.921.4030

Meadows Professional Building
Suite 400
1385 Washington Road
Washington, PA 15301-9642
724.229.3362

201 South Main Street
Butler, PA 16001
724.287.1055

A full-service civil engineering firm specializing in Municipal Engineering, Land Development, Surveying, G.I.S. Mapping and Systems, Landscape Architecture, Water and Sewer Analysis and Design, Government Permit Assistance and Construction Management

WWW.GATEWAYENGINEERS.COM

 **C.S. Davidson, Inc.**
Since 1923 • Three Generations • Four Score Strong

- Civil Engineering
- Structural Engineering
- Survey Services
- Planning Services
- Construction Inspection

Offices in:
York, PA (717) 846-4805 Fax: (717) 846-6811
Gettysburg, PA (717) 337-3021 Fax: (717) 337-0782

**VOTED
BEST PLACES
to work in PA**
2000, 2001, 2002, 2003 & 2004

www.csdavidson.com

Classified

Perform tracer studies to access chlorine contact times at 106 small filtration plants over a three-year period. For bid package, contact Sherry Morrow at (717) 772-1216 or smorrow@state.pa.us.

PA Department of Environmental Protection

Location: Throughout the Commonwealth

Duration: July 1, 2005 through June 30, 2006, with renewal options to June 30, 2008

Contact: Sherry Morrow, (717) 772-1216

"Capitol" continued from p. 15

the General Assembly last session, but vetoed by Gov. Rendell.

Referred to House Commerce Committee, 2/8/2005

HB 633 RE: Minimum School Design Standards (by Rep. Art Hershey, et al)

Amends the Public School Code by increasing state reimbursement amounts to districts that buy or use alternative fuel vehicles or that have school buildings adhering to minimum design standards published in the Leadership in Energy and Environmental Design (LEED).

Referred to House Education Committee, 2/16/2005

HB 652 RE: Contractors Liability (by Rep. Keith McCall, et al)

Amends Title 62 (Procurement) by adding provisions related to delays beyond the control of a contractor, contractors' claims for concealed or unknown conditions, and mediation for claims arising of construction contracts.

Referred to House State Government Committee, 3/1/2005

HB 882 RE: Sinkhole Act (by Rep. Rich Grucela, et al)

Establishes the requirements that would apply to land developments and/or subdivisions. All land developments and/or subdivisions covered by the act would be evaluated by a licensed professional civil engineer with expertise in geotechnical engineering or a licensed professional

geologist. The bill establishes the format and content of the carbonate assessment report. The carbonate assessment report must be received by the Department when a plan is submitted for preliminary land development or subdivision approval. Where compliance with this act is required as part of an application for subdivision or land development approval, the Department's decision on whether compliance has been achieved would be made as part of the review of the subdivision or land development application.

Referred to House Environmental Resources and Energy Committee, 3/14/2005

HB 900 RE: The Fire Safety Act (by Rep. Bob Belfanti, et al)

Requires the Department to establish and administer a loan program for the purpose of providing low-interest loans to facilities to install or retrofit automatic water sprinkler systems or automatic fire suppression or control systems and automatic and manually activated fire alarm systems installed to transmit an alarm automatically to a fire department and to procure alternate forms of emergency communication in facilities in order to comply with the act. Funds will come from the Fire Safety Fund. The bill also establishes safety requirements for facilities, with regard to automatic sprinkler systems, fire alarms, and emergency use communications.

Referred to House Veterans Affairs/Emergency Preparedness Committee, 3/14/2005

SB 326 RE: Sales Tax Exemption For Building Materials (by Sen. Rich Kasunic, et al)

Amends the Tax Reform Code providing a sales tax exemption for building materials used in construction activities in a deteriorated area designated as an enterprise zone by the Secretary of Community and Economic Development.

Referred to Senate Finance Committee, 2/18/2005

House & Senate Session Days Schedule

Remaining 2005 House Spring Session Schedule

March	29, 30
April	4 (cancelled), 5(cancelled), 6(cancelled), 11, 12, 13
May	2, 3, 4, 9, 10, 11
June	6, 7, 8, 13, 14, 15, 20, 21, 22, 23, 24, 27, 28, 29, 30

Remaining 2005 Senate Spring Session Schedule

March	21 (cancelled), 22 (cancelled)
April	4, 5, 6, 11, 12, 13, 18, 19, 20
May	2, 3, 4, 9, 10, 11
June	6, 7, 8, 13, 14, 15, 20, 21, 22, 23, 27, 28, 29, 30

Copies of all bills of interest are available from the PSPE office, or they can be accessed via the Internet at <http://www.legis.state.pa.us/WU01/LI/BI/billroom.htm>. ■

Political Action Committee

2005 Sponsor Recognition

Many thanks to the following individuals who contribute to the PSPE Political Action Committee fund, allowing our staff to influence bills on behalf of PSPE members. PSPE is very active at the Pennsylvania state capitol monitoring legislation that could impact PSPE members in their profession. Your contributions are critical as PSPE affects bills such as those found in the article "On Capitol Hill."

(If you would like to receive monthly legislative updates from the PSPE listserv, simply send an e-mail message to jennifer@wannerassoc.com with the subject: "add me to the monthly update."

Century Club

(2005 Contribution \$100 - \$200)

Reyman Branting, PE
Harry Garman, PE
Thomas Maheady, PE

Capitol Club

(2005 Contribution \$50 - \$99)

Albert Bedard, Jr., PE
Earl McCabe, Jr. PE

Friends Society

(2005 Contribution \$5 - \$30)

John Boderocco, PE
John Bradshaw, PE
Gunther Carrie, Esq. PE
James Cobb, PE
Jon Drosendahl, PE
J. Dixon Earley, PE
Robert Fisk, PE
David Folk, PE
David Goodling, PE
Barry Isett, PE
Paul Maxian, PE
William McElroy, PE
John Smyth, PE
Benjamin Thayer, PE
Thomas Tronzo, PE
Eugene Waldner, PE
James Wickersham, PE
David Zartman, PE
Ronald Zborowski, PE
Joseph Zucofski, PE
Clarence Wysocki, PE

Use my contribution!

**Enclosed is my personal contribution
to PSPE's Political Action Committee.**

Name: _____

Address: _____

City, State, Zip: _____

Occupation: _____

Name of Employer: _____

Employer's Address: _____

Amount Enclosed: ☐ \$100 ☐ \$50 ☐ \$30 ☐ Other: _____

- Please make your personal check payable to: PSPE PAC
(CORPORATE CHECKS CANNOT BE USED BY PAC.)
- Return check to: PSPE, 908 N. Second Street, Harrisburg, PA 17102.

Thank you!

New Members

PSPE is proud to welcome the following engineers to the society network. We are pleased to offer a wealth of resources through NSPE, PSPE and your local chapter. Call on us at any time, 717.441.6051, www.pspe.org or www.nspe.org for services and programs valuable to your career.

Bucks County

George John Anastos PE
Robert D Irons PE
Jeff Rockower
Colin McGovern Whitaker

Chester County

Bruce William Crowley PE
Eric Roy Menendez

Delaware County

Ana E Diaz PE
Anthony G Handley
Joseph Bruno Parisi

Erie

Robert J Michael PE

Harrisburg

Barry J Basom II PE
Alaric J Busher PE
William Casey Deller
Justin L Kuhr
Keith A Lilley
Eric L Martz PE
James P Menge PE
Yves E Pollart PE
Mark Paul Rzucidlo PE
Matthew D Todaro PE

Johnstown

Matthew Darl Troutman

Lehigh Valley

Rocco J Caracciolo PE
Eugene L Dimond PE
Jose L Ibanez
Mark Kerestes PE
David Lee Schlumpf
Donna Moore Weaver PE

Lincoln

Michael H Hiras
Sondra J Laub
Jonathan David Raab PE
Charles R Smith PE
Charles E Wright

Luzerne County

James P Connor PE

Midwestern

Keith R Casey
Daniel R Fritz

Northeast

Jeromy Paul Petch

Philadelphia

David Do
Thomas C Faranda PE
Ismael Lloyd Guthrie PE
Robert Ly
James P Markham PE
Michael J Mctamney
Adam C Peck PE

Pittsburgh

Amy Beth Costabile
David T Markowski
Tanesha L McFarlane
Daniel T Powell PE
Jacqueline Lu Zaldana

Reading

Michael D Hartman PE
Alexander D Martinez

Valley Forge

Kevin J Doyle
Armin Feldman
Kenneth J McFadden PE
W Bond Reinhardt
Jeffrey S Todd PE

Westmoreland

Jeremy John Spisak

Chapter Spotlight

DiDomizio's Once Again Dominate Valley Forge Competition

When the Valley Forge Chapter first went to Philadelphia Park Racetrack for its Holiday Event in the early 1990s, it seemed that either Bob DiDomizio, P.E. or Diane DiDomizio (Bob's better half) won the Chapter's annual Handicapping Contest. For some reason...probably because they did not want to win every year...Bob and Diane did not participate in the past few contests.

The DiDomizio's returned to the chapter event at Philadelphia Park Racetrack this year and regained the championship. Diane was the big winner, capitalizing on hitting a dead-on exacta in the 5th race that was worth over 163 points (a new record for the competition). Bob finished in second place, making our contest a DiDomizio exacta! Bob and Diane's son, Nick, was a big contributor to the winning selections.

Diane will be awarded the photograph of our group picture in the Winner's Circle from the 13th running of the Valley Forge PSPE Classic, which was carded as the 5th race on Sunday.

The complete order of finish for this year's competition follows: Diane DiDomizio; Bob DiDomizio, P.E.; Frank Stanton, P.E.; Don DeCleene, P.E.; Layne Blavier, P.E.; Sheri DeCleene; Paul Dugan, P.E.; Brent Wagonseller; Jonathan Stanton; Cyndee Nowicki; Harve Hnatiuk, P.E. (expert handicapper...except for this event!)

This year's Day at the Races was a great time...we had nearly twenty members and guests on hand on a picture-perfect December Sunday. All enjoyed a great lunch as well as the racing action that we viewed from our tables overlooking the race track.



THE 13TH ANNUAL VALLEY FORGE PSPE CLASSIC
Prize - \$9,900
J P R Racing Stable's
Colford Sike, Jr., Trainer
Jose Flores, Rider
7 Purloins 1:29.40
Dixie Stripes
Nancy's Horses 2nd
Attendance 3rd
December 5, 2004
© Ecol-Photo, Inc.

PSPE Calendar of Events

2005

March 18-19	Pennsylvania MATHCOUNTS <i>Harrisburg, PA</i>
May 5-8	National MATHCOUNTS <i>Detroit, MI</i>
May 19-21	PSPE Annual Conference <i>Chateau Resort and Conference Center Tannersville, PA</i>
July 7-9	NSPE Annual Convention & Expo <i>Renaissance Chicago Hotel</i>

Baker

Pittsburgh
(412) 269-6300

Beaver
(724) 495-7711

Harrisburg
(717) 221-2000

Philadelphia
(215) 444-0888

ChallengeUs.

Michael Baker Corporation

Planning, design, and construction management services inc.

- Transportation
- Civil Infrastructure
- Environmental
- Facilities
- Water Resources
- Water / Wastewater
- GIT / GIS / GPS

www.mbakercorp.com

GARVIN BOWARD
A STEP ABOVE A STEP BEYOND

CONSULTING
GEOTECHNICAL,
FORENSIC &
ENVIRONMENTAL
ENGINEERS

Joseph F. Boward, P.E.
Principal Engineer

R. Gary Garvin, P.E.
Principal Engineer

Garvin Boward Engineering, Inc.
180 Bilmar Drive, Suite IV
Pittsburgh, PA 15205

Phone: (412) 922-4440
Fax: (412) 922-3223

Extra savings for Pennsylvania Society of Professional Engineers members from Avis.



Simply present this coupon.

As a Pennsylvania Society of Professional Engineers member, you can save big every time you rent from Avis by using your Avis Worldwide Discount (AWD) number **A539100**. And now you can save even more! Through December 31, 2006, you can enjoy a free weekend day. Simply provide coupon number **TUGA646** when making your reservation, and be sure to present this coupon at check-in.*

Try Avis and you'll agree that our We try harder® service makes your rental experience fast and easy.

For reservations, see your travel consultant, log on to **avis.com** or call Avis at **1-800-831-8000**

To save every time you rent, always provide your Avis Worldwide Discount (AWD) # **A539100**

Avis features GM vehicles.

© 2006 Avis Rent A Car System, Inc.

*Please see coupon for complete Terms and Conditions.

FREE WEEKEND DAY

To enjoy this offer, see your travel consultant, visit us online at **avis.com** or call **1-800-831-8000**. Be sure to provide coupon number **TUGA646**. Offer valid through 12/31/2006.

Terms and Conditions: Coupon of one weekend day free of the daily time and mileage charges applies to the third consecutive day of a minimum three day weekend rental on an Intermediate (Group C) through Full Size 4-door (Group F) car. Weekend rental period begins Thursday and car must be returned by Monday 11:59 pm, or a higher rate may apply. Coupon must be surrendered at time of rental, one per rental and cannot be used for one-way rentals. May not be used in conjunction with any other coupons, promotion or offer, except with your member discount. Coupon valid at participating Avis locations in the contiguous U.S. and Canada, except the New York Tri-State area. An advance reservation is required. Offer may not be available during holiday and other blackout periods. Offer may not be available on all rates at all times. Cars subject to availability. Renters must meet Avis age, driver and credit requirements. Taxes, concession recovery fee, customer facility charge and other surcharges may apply. (In CA, customer facility charge is \$10/contract.) Rental must begin by 12/31/2006.

Rental Sales Agent Instructions.

At Checkout:

- In AWD, enter A539100.
- In CPN, enter TUGA646.

RA# _____

Rental Location _____

- Attach to coupon tape.



avis.com

Coupon # TUGA646

"Brown" gives me a special
association discount.
I always knew I was special."

When Brown handles all your international, overnight and ground shipping, you get peace of mind that comes from using just one, perfectly integrated network. And Brown offers association discounts on overnight and international deliveries. Easy shipping. Special savings. It's as simple as that. For details, call 1-800-325-7000.



WHAT CAN BROWN DO FOR YOU?™

Special
UPS Savings
for Members
of the
Pennsylvania
Society of
Professional
Engineers

\$1.50 off
UPS Next Day
Air® letters

10% off
UPS Next Day
Air packages
UPS 2nd Day Air
A.M.® letters
UPS 2nd Day Air
A.M. packages

20% off
UPS Worldwide
Express® letters
or packages
(U.S. origin only)

To take advantage
of these valuable
discounts, call
1-800-325-7000.



Pennsylvania Society of Professional Engineers
908 North Second Street
Harrisburg, PA 17102

PRSRT STD
U.S. Postage Paid
Harrisburg, PA
Permit No. 339