

# The Nebraska Civil

# Engineer



Official Publication of the Nebraska Section of the American Society of Civil Engineers

## Calendar of Events:

### February:

- 4 - Happy Hour at the Upstream, West Omaha
- 17 - Geotechnical Group Meeting, 5:30 P.M., Angie's Restaurant, Omaha
- 18 - 22<sup>nd</sup> Annual Geotechnical Seminar, Peter Kiewit Conference Center, Omaha
- 23 - E-Week Banquet, 6:00 P.M., Georgetowne Club, Omaha
- 25-27 - Zone III Leadership Conference, St. Louis
- 26 - Truss Bustin' Competition, 1:00 P.M., Westroads Mall, Omaha

### March:

- 24 - Environmental Group Meeting, Lincoln

### April:

- 15 - P.E. Exam
- 27 - Transportation Conference, Scott Conference Center, UNO, Omaha (See Page 3)
- 28 - Transportation Group Meeting, Omaha

### May:

- 20 - Annual Meeting, Omaha (Tentative)

Visit [www.neasce.org](http://www.neasce.org) for an update on bills the PEC is reviewing.

## The Geotechnical Group Presents:

"Soil on the Moon  
What is it and how did we learn it?"

Thursday, February 17th

*"An illustrated look back at what geotechs did 35 years ago during NASA's Apollo manned lunar landing program."*

Featuring: Dr. James K. Mitchell

*Dr. Mitchell's research activities focused on experimental and analytical studies of soil properties and behavior, admixture stabilization of soils, soil improvement and ground reinforcement, in-situ measurement of soil properties, and mitigation of ground failure risk during earthquakes. He supervised the Ph.D. dissertation research of 72 students, and has authored more than 350 publications, including the book, "Fundamentals of Soil Behavior." During the 1960's and early 1970's he served as the Principal Investigator for the Soil Mechanics Experiment that was a part of the U.S. Apollo Moon landing and exploration program.*

*Dr. Mitchell is a consultant on geotechnical problems and earthwork projects of many types. Recently these have included the design of liquefaction mitigation options for several existing dams, ground improvement for a major bridge replacement project, a stability review board for large mine waste rockpiles, a seismic safety peer review panel for an urban rapid transit system, and special studies for remediation of a badly contaminated site.*

**Location:** Angie's Restaurant  
1001 Pacific St, Omaha

### Times:

Social Hour	5:30
Dinner/Announcements	6:30
Presentation	7:30

**Menu:** Chicken Parmigian, Club Steak,  
or Orange Roughy

Spouses and guests welcome

\$24 with a meal; \$10 without a meal.

RSVP by 11 AM Monday, February 14th

TO CRYSTAL 402.496.2498 OR

VP@NEASCE.ORG SUBJECT LINE: ASCE RSVP

*Prices include tax and gratuity. Portions of the meeting costs will go towards hosting our speaker.*

# From the President

- Loras A Klostermann, P.E.



Loras Klostermann, P.E.  
NE-ASCE President

National Engineers Week is a celebration of all engineering disciplines in the United States. This year E-Week is February 20 through 26. A total of 16 local engineering societies and organizations, including ASCE, have come together to form the Engineer's Roundtable in an effort to promote E-Week. The goal of Engineer's Roundtable is to generate interest in engineering by educating the largest possible audience regarding the function and roles that engineers play in society. Each year, Engineer's Roundtable is involved with educational events at local high schools and grade schools. All engineers, and especially Civil Engineers, are encouraged to assist in E-Week activities.

This year the E-Week Banquet will be held on Wednesday, February 23, 2005 at the Georgetown Club, 2440 South 141<sup>st</sup> Circle, Omaha, Nebraska. Guest speakers **Bruce Carpenter** from HDR Inc. and **Susan Morris** from Heritage Services will jointly provide a presentation about the development, design, and construction of Omaha's new Holland Performing Arts Center. Only advanced reservations will be accepted to the banquet and must be received by Friday, February 18. Call **Elizabeth Hunter** at 402.390.4473 for details.

Metro area high school student teams have been working on their truss designs for the upcoming Balsa Wood Tress Contest to be held on February 26, 2005 at Westroads Mall, within the area leading to Von Maur. Please attend and see the innovative designs. Your attention will provide encouragement to these future engineers.

The U.S. Department of Homeland Security (DHS) has announced program guidelines for the 2005 competition cycle of DHS Scholarship and Fellowship Program. Complete information is available on-line at <http://www.orau.gov/dhsed/>. The 2005 competition cycle will provide financial support beginning in fall 2005 for selected Scholars and Fellows. All applicants are expected to apply using the online application. The deadline for submitting an application is February 23, 2005, 11:59 p.m. Eastern Standard Time. Questions regarding the DHS Scholarship and Fellowship Program can be sent via e-mail to [dhsed@orau.gov](mailto:dhsed@orau.gov).

The Geotechnical Committee has selected "*Soil of the Moon – What is It and How Did We Learn It*" as the topic of this month's presentation. **Dr. James Mitchell** will provide a very interesting and illustrated look back at what geotechnical engineers did during NASA's manned lunar landing program. Come and enjoy and don't forget the geotech conference on February 18.

Have a safe and prosperous month.

Loras A. Klostermann, P.E.  
ASCE Nebraska Section President

## 2004-2005 NE-ASCE Officers

### President

Loras Klostermann, P.E.  
HWS Consulting Group  
(V) 402.333.5792, (F) 402.333.2248  
[president@neasce.org](mailto:president@neasce.org)

### President-Elect / Program & Annual Meeting Committee Chair

Steve Kathol, P.E.  
The Schemmer Associates, Inc.  
(V) 402.493.4800, (F) 402.493.7951  
[president-elect@neasce.org](mailto:president-elect@neasce.org)

### Vice President

Tom Mamik, P.E.  
Lamp, Rynearson, and Associates  
(V) 402.496.2498, (F) 402.496.2730  
[vp@neasce.org](mailto:vp@neasce.org)

### Past President

Mark Stark, P.E.  
Olsson Associates  
(V) 402.458.5616, (F) 402.474.5160  
[past-president@neasce.org](mailto:past-president@neasce.org)

### Secretary

Lindsay Madsen, E.I.  
The Schemmer Associates, Inc.  
(V) 402.493.4800, (F) 402.492.3276  
[secretary@neasce.org](mailto:secretary@neasce.org)

### Treasurer

John Hill, P.E.  
Lamp Rynearson & Associates  
(V) 402.496.2498, (F) 402.496.2730  
[treasurer@neasce.org](mailto:treasurer@neasce.org)

### Director / Geotechnical Technical Chair

Ed Prost, P.E.  
Terracon  
(V) 402.330.2202, (F) 402.330.7606  
[director1@neasce.org](mailto:director1@neasce.org)

### Director

Mike A. Naccarato, P.E.  
Davis Erection Co., Inc.  
(V) 402.738.6160, (F) 402.731.1116  
[director2@neasce.org](mailto:director2@neasce.org)

### Webmaster / Younger Member Chair

Marie Maly, E.I.  
The Schemmer Associates  
(V) 402.330.2202, (F) 402.330.7606  
[webmaster@neasce.org](mailto:webmaster@neasce.org)

### Newsletter Editor

Peggy Meyers, E.I.  
Lamp Rynearson and Associates  
(V) 402.496.2498, (F) 402.496.2730  
[editor@neasce.org](mailto:editor@neasce.org)

## Annual Truss Bustin' Competition

Saturday, February 26<sup>th</sup>

Plan on attending the Balsa Wood truss contest during Engineers Week, at the Westroads Mall area leading to Von Maur, on Saturday February 26, 2005, starting at 1:00 PM. The contest is for metro area high school students. The students build a truss out of 1/4-inch balsa wood that will be loaded to failure. The trusses will be judged on practicality and its load to weight ratio. Monetary gifts and framed certificates will be given to the top three finishers in the contest. Come out and support the students, and their schools, and enjoy the creative designs developed by the high school students. For any questions, contact **Bruce Harris** W: (221-4440) H: (498-0296)

### *Bruce Harris looking to pass the torch . . .*

NE-ASCE would like to give a big thanks to Bruce Harris for his years of dedication to the Annual Truss Bustin' Competition. However, Bruce is passing on the torch; NE-ASCE is looking for a successor to Bruce who enjoys inspiring local students with Civil Engineering. A description of Bruce's duties as the main coordinator can be found at [www.neasce.org](http://www.neasce.org).

## Future City Competition

Thank You to all of our members who volunteered their time to mentor the competitors and to all those who judged the competition.

**Mission Middle School** came in third place overall, with their city, "**Alrishia**." **Morton Middle School** came in second with "**Aquaville**". Winning the competition this year and heading off to Washington D.C. for the national competition is **Papillion Jr. High School** and their future city "**Phoenicis**".

Team Members, **Erik Hagerup**, **Rebecca Trelford-Thompson**, and **Tommy Stuart**, with the help of their mentor, **David Klostermeyer, P.E.** and their teacher, **Peg Alexander**, created Phoenicis on a brown site polluted by cyanic acid and used "microbes" to clean up the area. The city features a "Maglev Train" propelled by electromagnets and clean energy sources including wind, hydroelectric, solar, and fusion. Phoenicis also boasts a LEED certification level of Platinum.

Congratulations to all of our participants this year; and good luck to Papillion Jr. High in Washington D.C.!

## Transportation Engineering

### 1<sup>st</sup> Annual ASCE Transportation Conference

Wednesday, April 27<sup>th</sup>, 2005

Scott Conference Center

Omaha, Nebraska

In Collaboration with:

University of Nebraska

Nebraska Department of Roads

MAPA

City of Lincoln

City of Omaha

### Conference Topics Include:

- Impact Fee Implementation
- ITS Implementation
- New Guardrail System
- Utility Coordination
- West Dodge Road Elevated Expressway Construction
- Traffic Calming
- Traffic Management on Husker Game Days
- Future Planning of I-80
- Property Relocation & Acquisition for Roadway Projects.

Earn 7 PDH for Continuing Education

\$95 ASCE Members

\$125 Non-ASCE Members

More information and registration forms can be found at [www.neasce.org](http://www.neasce.org) as they become available.

Contact **Dave Ayala** at [dayala@hws.com](mailto:dayala@hws.com) or **402-333-5792** for more information.

## Become a Mentor

Girls and Boys Town is offering the rewarding opportunity of being a mentor. Many students need one-on-one help with math, ranging from basic math through algebra.

Most mentors at Girls and Boys Town mentor 1 hour a week during school hours.

For more information, contact **Chris Hyvonen** at 402.498.3041.

## E-WEEK BANQUET WEDNESDAY, FEBRUARY 23, 2005

### Sponsored by the Engineer's Roundtable

#### “Omaha's Holland Performing Arts Center”

In anticipation of the October, 2005 opening of Omaha's new Holland Performing Arts Center, our program will provide both the designer's and the owner's perspective of the planning, design and construction stages of this unique state-of-the-art facility. Mr. Bruce Carpenter, Senior Vice President of HDR Architecture Inc., has extensive architecture experience in the planning and design of numerous architectural projects of varying scope and size, including various performing arts facilities. His project roles have included programming, master planning and design of the Performing Arts Facility.

Ms. Susan Morris, President of Heritage Services, has been involved with numerous capital campaigns, totaling nearly \$300 million, including the \$75 million capital and endowment campaign supporting Joslyn Art Museum and the Durham Western Heritage Museum. In addition, Susan served as Executive Director of the \$29.5 million Strategic Air Command Museum Campaign. Currently, Ms. Morris is directing the \$100 million initiative to provide funds to renovate the Orpheum Theatre and build the new Performing Arts Center. She has also implemented new programs, unique to the fund-raising community, offering consulting services and educational seminars to other non-profit organizations.

**Banquet Location:**

Georgetowne Club  
 2440 South 141<sup>st</sup> Circle  
 (2 blocks north of West  
 Center Road on 141<sup>st</sup> Street)

**Time:**

6:00 PM Social Hour (Cash Bar)  
 7:00 PM – Banquet & Speaker

**Dinner Selections & Prices:**

Prime Rib of Beef	\$33.00
Chicken Wellington	\$31.00
Grilled Salmon	\$35.00

(All dinner selections include a mixed garden greens salad, herb roasted new potatoes, seasonal vegetables, dinner roll & butter, coffee or tea, and choice of mini cheesecake dessert.)

**Lead Society & Master of Ceremonies:**

The lead society for this year's national E-Week is the American Society of Mechanical Engineers. Bruce Stanley, the chairman of the ASCE Nebraska Section, will be our Master of Ceremonies.

Please note the change of this event to a **Wednesday evening**. In order to provide a total attendance count to the Georgetowne Club, only advanced reservations will be accepted. Advanced reservations, menu choices, attendee's name and payment must be received by **5:00 PM, Friday, February 18, 2005**. Checks should be made payable to the **“E-Week Roundtable.”** Please clip the reservation form below (add an additional sheet if required), attach payment and send to the address shown.

Send to: Elizabeth Hunter, Leo A. Daly Company  
 8600 Indian Hills Drive, Omaha, NE 68114 (Phone # 390-4473)

Attendee's Name(s)	Quantity	Menu Choice	x	Total Cost
_____	_____	Prime Rib	x	\$33 _____
_____	_____	Chicken Wellington	x	\$31 _____
_____	_____	Grilled Salmon	x	\$35 _____
<b>Total Cost</b>				_____

Attendee's E-mail address or daytime phone number: \_\_\_\_\_

## February Meeting Hosted by the Water Resources Group

Thanks to **Ben Higgins**, **Carter Hubbard**, and the UNL student chapter for hosting a great meeting.

Ben Higgins spoke about flood plain remapping and regulations affecting watersheds in Lincoln. Awards were also presented to **Lamp, Rynearson, and Associates, Inc.** for "**Superior Employer Recognition Award**," and to **Marie Maly**, for an outstanding website.



Left: **Ben Higgins**, Speaker; and **Carter Hubbard**, Water Resources Chair



Right: **Tom Marnik**, Lamp Rynearson & Associates, Inc.; and **Loras Klostermann**, NE-ASCE President

The names listed below can be considered official documentation of attendance at the January meeting worth 1 PDH credit.

Dave Admiraal	Doug Holle	Peggy Meyers
Aaron Buettner	Carter Hubbard	George Pinkerten
John Cambridge	Dave Johnson	Daryoush Razavian
Charles Denbarry	Gny Lindeman	Phil Rossbach
Paul Dierking	Loras Klostermann	Mike Sklenar
Paul Gonzales	Loras Klostermann	Mark Stark
John Hill	Daren Konda	Tom Strauss
	Marie Maly	Ed Thiele
	Tom Marnik	Laurie Zode

# NE-ASCE News

**Lamp, Rynearson & Associates, Inc.**  
 14710 West Dodge Road Phone: 402.496.2498  
 Omaha, Nebraska 68154 Fax: 402.496.2730  
 www.LRA-INC.com

Engineering Planning Surveying 3D Services  
 Telecommunications Construction Administration GIS

## PE Exam Help

**Both P.E.'s and F.E.'s are encouraged to participate**

The Younger Members are compiling a list of future test-takers and "experts" (licensed engineers) to be used as a help reference. A study group may also be set up depending on interest.

If you would like help or are willing to occasionally answer questions, please e-mail your name, phone number, e-mail, license status, and area of experience to **Marie Maly** at [ymg@neasce.org](mailto:ymg@neasce.org). The list will be compiled and provided to those participating.



The Nebraska Civil Engineer  
February 5 2005

**geopier**® "The alternative to deep foundations and overexcavation & replacement"

*RAMMED AGGREGATE PIERS*

**Applications:**

- Shallow foundation and floor slab support
- Industrial storage tank/mat foundation support
- Increase bearing pressure with strict settlement control
- Resist seismic/wind uplift loads and lateral loads
- Stabilize embankments and landslides
- Support/stabilize MSE and concrete retaining walls

**Consider Geopier Soil Reinforcement as a potentially cost-effective alternative to:**

- Deep foundations
- Overexcavation & replacement
- Preloading and surcharge loading
- Overlaid footings

For design and feasibility or for more information about the patented Geopier system contact:

**GEOPIER FOUNDATION COMPANY - MIDWEST**  
 4504 Ashley Park Drive, West Des Moines, IA 50265  
 phone: 515.224.6330 fax: 515.224.4945  
 e-mail: [geopier.genard@midco.com](mailto:geopier.genard@midco.com) web: [geopiers.com](http://geopiers.com)

**Soil Reinforcement for Foundations & Slopes**

**Quality Materials to Build America's Future Count on Concrete**

Ready Mixed Concrete Co.  
 Gerhold Concrete Company, Inc.  
 Lyman Richey Sand & Gravel Company  
 Central Sand and Gravel Company  
 United Products Company

General Offices:  
 4315 Cuming Street  
 Omaha, NE 68131  
 Phone (402)558-2727  
[www.lymanrichey.com](http://www.lymanrichey.com)

**URS**

- ◆ Environmental and Pollution Control
- ◆ Hazardous / Solid Waste Management
- ◆ Design and Construction Management
- ◆ Asbestos / Industrial Hygiene Services
- ◆ Indoor Air Quality Consulting
- ◆ Civil Engineering
- ◆ Urban Planning
- ◆ Transportation

12120 Shamrock Plaza  
 Suite 300  
 Omaha, NE 68154  
 Phone (402) 334-8181  
 Fax (402) 334-1984

**DAVIS ERECTION COMPANY**

STEEL & PRECAST ERECTION  
 CONCRETE REINFORCING - HEAVY RIGGING

Omaha, Nebraska

Michael A. Naccarato PE  
 Project Manager/Structural Engineer  
 5818 S 27th Street • Omaha, NE 68167  
 Office: 402-738-6160 • Fax: 402-731-1116  
 Mobile: 402-366-2055 • Nextel: 191-2600877  
[www.daviserection.com](http://www.daviserection.com) • [mnaccarato@daviserection.com](mailto:mnaccarato@daviserection.com)

**REGA**  
 CIVIL DESIGN • TRAFFIC ENGINEERING • SURVEYING

REGA ENGINEERING GROUP INC.  
 5000 CENTRAL PARK DRIVE  
 SUITE 204  
 LINCOLN, NEBRASKA 68504  
 PHONE 402.466.5000  
 FAX 402.466.5056

[www.schemmer.com](http://www.schemmer.com)

**THE SCHEMMER ASSOCIATES**  
 Architects Engineers

402.493.4800

**hgm ASSOCIATES INC.**

ENGINEERS ARCHITECTS SURVEYORS

**"Turning Visions ... Into Reality"**

5022 S. 114th St., Suite 200, Omaha, NE 68137  
 (402) 346-7559 (800) 332-1005  
[www.hgmonline.com](http://www.hgmonline.com)



CIVIL DESIGN, LAND PLANNING,  
SITE DEVELOPMENT, SURVEYING  
2200 Fletcher Avenue, Suite 102; Lincoln, NE 68521  
Phone 402-438-4014 Fax 402-438-4026

Arizona • Colorado • Kansas • Minnesota • Missouri • Nebraska



**OLSSON ASSOCIATES**  
ENGINEERS • PLANNERS • SCIENTISTS • SURVEYORS  
www.olssonconsulting.com



**Transportation Engineering Services**  
Highway, Traffic, Environmental Planning and  
Track Design, Highway and Rail Bridge Design,  
Field Surveys, and Construction Management

rpherweg@transystems.com 16934 Frances St., Ste. 100  
Phone #: (402) 895-5400 Omaha, NE 68130  
Fax #: (402) 895-3500 www.transystems.com

**NIELSEN-BAUMERT ENGINEERING, INC.**  
Structural Engineering Analysis and Design

Michael F. Baumert, PE., S.E.  
Principal

9802 Nicholas Street, Suite 105 • Omaha, NE 68114  
Phone: (402) 496-4750 • Fax: (402) 496-1147



A great place to work since 1946



**KIRKHAM MICHAEL**  
Consulting Engineers

Check out [www.kirkham.com](http://www.kirkham.com) for local and national job opportunities



**E&A CONSULTING GROUP, INC.**  
ENGINEERS • PLANNERS • SURVEYORS

Omaha, Nebraska Lincoln, Nebraska  
402-895-4700 402-420-7217  
<http://www.eacg.com>



Geotechnical Services, Inc.

GEOTECHNICAL  
ENVIRONMENTAL  
CONSTRUCTION TESTING

OMAHA • LINCOLN • GRAND ISLAND  
(402) 339-6104 [www.gsinetwork.com](http://www.gsinetwork.com)



**HWS**

Solutions Through Service

Transportation • Geotechnical • Environmental  
Municipal and Public Works  
Construction Services • Laboratory Services  
Engineering Services

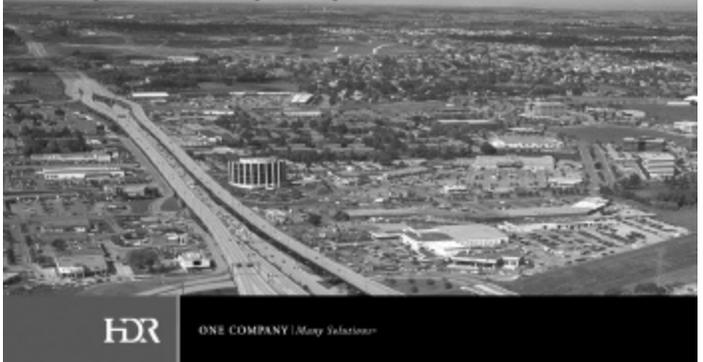
Offices also in:  
Denver, CO  
Manhattan, KS  
Chicago, IL

Lincoln, Nebraska  
402.479.2200 FAX 402.479.2276  
Omaha, Nebraska  
402.333.5792 FAX 402.333.2249  
[www.hws.com](http://www.hws.com)



COMPREHENSIVE ENGINEERING SERVICES

Transportation Design Environmental Design-Build  
Traffic Engineering Water/Wastewater Security  
Planning Program Management Architecture



HDR

ONE COMPANY | Many Solutions™

*Thank you to the businesses that support this newsletter through their contributions.*

*For underwriting information, contact Ben Higgins, Fund-Raising Committee Chair, at (402) 441-7589 or [bhiggins@ci.lincoln.ne.us](mailto:bhiggins@ci.lincoln.ne.us)*

## The Nebraska Civil Engineer

c/o Peggy Meyers  
Lamp, Rynearson, and Associates, Inc.  
14710 West Dodge Road, Suite 100  
Omaha, Nebraska 68154

FIRST-CLASS MAIL  
U.S. POSTAGE PAID  
Omaha, NE  
Permit No. 479