

CIVIL ENGINEER



T H E N E W S L E T T E R

Tacoma ♦ Olympia Section of the
American Society of Civil Engineers



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**CIVIL ENGINEERS MAKE THE DIFFERENCE!
THEY PROVIDE THE QUALITY OF LIFE!**

The **Civil Engineer Newsletter** is published for the Tacoma/Olympia Section of the American Society of Civil Engineers monthly from September to May.

To submit ads or articles of interest, please contact the President of the Section or the Editor. Information must be submitted not later than the 15th of the month prior to publication.

For address changes and corrections, contact the Editor.

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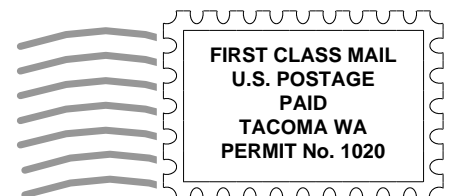
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CIVIL ENGINEER
The NEWSLETTER

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OCTOBER MEETING

DINNER MEETING

The New Seahawks Stadium

Days Inn, 6802 Tacoma Mall Blvd.
Tacoma, Washington

Tuesday, October 12, 1999

Social: 5:30 – 6:00 pm

Dinner: 6 – 7 pm – Pot Roast Buffet
Program 7 pm

The program is free to all. Dinner cost is \$20.00
for members, and students half-price.

Speaker: Ray Colliver, Project
Manager, First and Goal

Please join the Board of Directors of the
Tacoma/Olympia Section in welcoming
Mr. Ray Colliver of First and Goal as
the guest speaker for the October
Section Meeting.

Ray Colliver is responsible for managing
the Design and Construction Team for the
new football/soccer stadium, exhibition
center and parking garage. Mr. Colliver
has 25 years experience in the construction
industry in both his native Australia and
here in the United States of America. He
holds a Bachelor of Architecture from the
Royal Melbourne Institute of Technology
and has studied Urban and Regional
Planning at Western Washington
University. Prior to joining First and Goal,
Mr. Colliver formed his own business
specializing in project management to the
building and construction industry. His
design and construction experience
includes the Melbourne Cricket Grounds,
a major sports stadium in Melbourne,
Australia and the Melbourne Exhibition
Center. Both projects won several major
construction industry awards.

Reservations

Please make your reservations to **Connie Linden** at (253) 383-2422 or **Mark Leingang** at (360) 754-0330, by close of business, Friday October 7, 1999. It is very important for us to receive an accurate count for catering and room reservation purposes. We regret to inform you that those making reservations for dinner, but who are unable to attend will be billed for the event. If you miss the reservation deadline, please call Connie or Mark anyway. It is better to indicate that you will be attending, than to show up without a reservation.

Directions

Directions: I-5 North Bound take the 72nd Street Exit and Head west to Tacoma Mall Blvd. (Just across I-5). Make a right onto Tacoma Mall Blvd.

Days Inn is located between the Yankee Diner and Seattle light.

I-5 South Bound: take the 72nd Street Exit west to Tacoma Mall Blvd. Stay on Tacoma Mall Blvd. Across 72nd street and follow same instructions for North Bound travelers.

Remember, the Tacoma-Olympia Section Home page can be found at:
<http://www.asce.org/gsd/sections/tacoly/tacoly.htm>

Installation of Officers for the 1999-2000 year:

Mr. Larry Wade, Zone IV Vice President, ASCE, will be installing the Tacoma/Olympia Section officers at the October Board Meeting.

Our new officers are:

President:

President Elect.:

Secretary:

Treasurer:

Director:

Director:

Past President:

Tacoma House:

Olympia House:

Kathy Hargrave
Richard Swanson
Scott Sawyer
Brian Matthews
Michael Hale
Chris Beckman
Jim Brigham
Connie Linden
Mark Leingang

Help us to congratulate and support those coming into office.



I have been looking forward to this newsletter. Not just because it is my first, but also because it is the only newsletter that will be distributed to the entire Tacoma/Olympia Section of ASCE during my presidency. It is my only opportunity to address everyone. First, I would like to thank each member for their continued support of ASCE. I am especially grateful to all of our Section dues-paying members who make the publication and distribution of the newsletter possible.

At this time, we have approximately 550 assigned members to the Tacoma/Olympia Section. Of those, approximately 275 are Section dues-payers. I would like to encourage more of our membership to actively participate in our local section. Having a larger percentage of our assigned members who currently pay ASCE National dues opt to also pay local Section dues would be a good beginning. Having better attendance at Section meetings and more people taking advantage of opportunities for involvement within our local section is more critical to the long-term success of our Section.

A Challenge for You

It is my understanding that the Section needs to provide interesting, timely, cost effective programs to boost section meeting attendance. We are working toward this goal by providing a mix of lunch and dinner venues with topics for discussion having dynamic appeal. The Kelso Landslide presentation at the September lunch meeting was very well attended and we are confident that this month's stadium topic presented at a dinner meeting will be equally well supported. If you know of an interesting and timely topic that you would like to see presented please contact me or any of the board members. We can serve you best when there is dialogue between us.

Greater participation in section activities and committees is probably one of our greatest challenges. This year I would like to see our section develop a meaningful program that promotes Civil Engineering in our community. This could be in any of a number of forms from finding more ways to support MESA (Math, Engineering and Science Achievement) to perhaps starting a mentoring program. I think that we as engineers have been blessed with talents for the application of math and science skills. For us to find a way to share our talents in our community will benefit everybody who participates. I understand that all of us are busy people but I am sure that our agenda is not so full that we can try a little something new.

I saved the next-to-toughest ambition for last. That ambition is to persuade a larger percentage of assigned section members, to pay the voluntary section dues. A

vast majority of our working capital as a section is derived from voluntary section dues. Perhaps more people would be interested in this if they knew how much the \$20.00 per member means to the Section. With the capital that we have we support Architects and Engineers Legislative Council, MESA, the student Chapter of ASCE at St. Martins. We publish and mail the Newsletter, maintain a web-site and send Section officers and delegates to ASCE meetings locally and across the United States. I think that we are doing very well to be able to support all of these activities and remain on stable financial ground. I know that our outreach will only be improved and expanded when more of the membership gets involved.

Again, thank you for your support. I am looking forward to this year, serving you as the president of our Tacoma/Olympia Section of ASCE.

Feedback



Your feedback is always welcomed and can only make this newsletter and your board/officers more useful. Please address questions comments, statements, and opinions to kathyhargrave@sitts-hill-engineers.com

Kathy Hargrave, President
Tacoma Olympia Section

Book Review

I do not read books that are written for or about engineers. For me, that would be too much. I am not completely illiterate, however, and in this, the last book review that I will be including in the newsletter, I will recommend some books that I have enjoyed over the years (I am sure that millions have loved them too).

These are the books, authored by James Harriot: *All Creatures Great and Small*, *All Things Bright and Beautiful*, *All Things Wise and Wonderful*, and *The Lord God Made Them All*. I have read them multiple times and enjoyed them from the time I was in Sr. High School, through college and into my career. They represent for me a microcosm of the human experience. They are funny (especially when read aloud), the stories have a genuine human quality, full of respect for life, they contain triumphs and disasters and naturally some of the sketches have a sadness derived from the suffering and/or loss associated with dealing with animals and their owners.

For those who have yet to enjoy these books, I am envious of you for the opportunity to discover some very good books. For those of you who are familiar with, and enjoyed the television series, I encourage you to try the first book. It is true for me that the book is always better than the movie or the television production. For those who have read them silently to themselves, just try reading a favorite chapter out loud to your family - we have found it very entertaining.

These books can be found in any bookstore (even used bookstores) and at the local library.

Positions Wanted/Positions Open

Resume Policy: Our section newsletter will provide free space for ASCE students and members to advertise their qualifications. The resume information needs to be received by the 20th of the month to make the next newsletter. If you still don't have a job, send it again the next month. The resume information is limited to: *Name, Engineering Degree/Year, Position Desired, Years of Related Experience, Membership Status, ASCE section, Address to obtain more information, and Daytime Phone.* Please send information to kathyhargrave@sitts-hill-engineers.com

OCEA Award

The Outstanding Civil Engineering Achievement awards to be forwarded to ASCE National were selected at the PNC (Pacific Northwest Council), held in Boise, Idaho, September 24, 1999. The two projects selected to go forward included a Directional Drilling Project through permafrost in Alaska, and the Tongue River Basin Project. Both projects to varying degrees satisfy the requirements for the award. There are six requirements:

- 1) Contribution to the Well-being of People and Communities,
- 2) Resourcefulness in Planning and Solving Design Challenges
- 3) Pioneering in the Use of Materials and Methods
- 4) Employing Innovations in Construction
- 5) Impacts on the Physical Environment
- 6) Beneficial (as well as adverse) Effects of the Project, including Aesthetic Value.

Four Sections in the Pacific Northwest Council submitted projects for consideration. These were Seattle, Montana, Alaska, and Southern Idaho.

There is a whole list of requirements for applying for this award. If any of you know of an outstanding project that will be completed in 2000 or scheduled for completion in 2001, and would like more information on submittal requirements, please contact Kathy Hargrave or a member of the board. It would be wonderful to showcase one of the many fine projects that are being built in the Section in this forum. Please consider this as an invitation to get regional and perhaps national recognition for one of our projects. If there is enough interest in this, our section could host its own Tacoma/Olympia Section OCEA Award.

ASCE Web site



The American Society of Civil Engineers (ASCE) has a web site featuring 27 of its journals, which will be accessible **free of charge until January 2000** when full access to the site becomes accessible only to paid subscribers.

Web browsers can search 1999 ASCE journals along with the 80,000 bibliographic records of the Civil Engineering Database (CEDB). The site allows desktop access to: technical information, a broad range of content across 27 engineering specialties, custom search capabilities and desktop article delivery. Visit: <http://www.pubs.asce.org/journals/jrns.html>



Name Post **ANDY CHAN** posted 09-14-99
08:22 AM ET (US) **Status:** Member
Total Posts: 1
Current Email: hcchan36@hkstar.com
Homepage: <http://>
Occupation: STRUCTURAL ENGINEER
Location: HONG KONG
Interests: STRUCTURAL ENGINEERING

CAN ANYBODY ELSE HELP ME TO FIND SOME INFORMATION ON PRESTRESSED COMPOSITE STRUCTURE ?

Name Post **David Atkinson** posted 09-28-99
11:51 AM ET (US) **Status:** Member
Total Posts: 1
Current Email: datkinson@agraee.com
Homepage: <http://www.agra.com>
Occupation: Civil Engineer
Location: Calgary, Alberta, Canada
Interests: urban drainage, stormwater management, water quality

We have a stormwater related project that needs to get 25 m³/s (883 cfs) down a 50 metre escarpment (which is at 2H:1V) to the receiving stream. We have looked at using a conventional USBR type chute but want to consider using pipe for aesthetic reasons. Using 2.4 m diameter concrete pipe, running partly full, the velocities get up around 20 to 25 m/s (65 to 80 fps) which is a concern regarding cavitation and abrasion. The literature that we have been able to find suggests that at velocities of 12 m/s (40 fps) or greater, cavitation effects can be serious unless the surface is smooth and internal offsets at joints are closely controlled. Is steel penstock type pipe the only way to go or are there other options, similar projects, etc. out there?

You can access the Ultimate Bulletin Board at through the ASCE Web Page/ASCE national/forums.