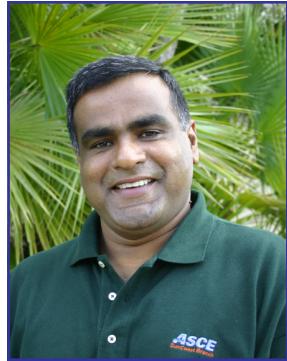


August-September 2012

Volume 12, Issue 6

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**ASCE SunCoast
Branch President
Amjid Hussain**

Dear Members and Friends of ASCE

I am pleased to report that at the Florida Section annual meeting, our SunCoast Branch was awarded "2012 Florida Branch of the Year". Our branch won this award after 12 years. On behalf of the executive Board, I would like to congratulate all of our branch members for this achievement. The credit for this achievement is shared amongst the SunCoast Branch officers, committee members, and all those who contributed to the branch activities this past year.

It has been a little while since we last sent our newsletter, so let me update you on a few successful events we have organized during this time. On August 10th, ASCE SunCoast held a Laws and Rules Workshop for professional engineers (P.E.) to offer professional development hours (PDH) required for P.E. license renewal. The workshop was a great success and was sold out. Based upon the feedback, the parti-

pants greatly appreciated this ASCE service which was provided to the engineering community.

The ASCE P.E. test review classes started on August 7th and will finish on September 25th. These classes are offered to both members and non-members at no cost. Please contact me if you would like to attend the remaining two sessions.

Now we are back to the time of year when we hold our annual elections; please nominate your candidate for the upcoming elections. Nominations can be sent to Branch Secretary, Kim Clayback, P.E. at asce.suncoast@gmail.com before September 28th. Please see more details in the newsletter.

Our next monthly meeting will be on Thursday, September 27th. Sarasota County Administrator Randall Reid will be our guest speaker. Mr. Reid will present his vision for Sarasota County. Please visit our website at www.ascesuncoast.weebly.com to learn more about our programs and find ways to become involved with your own ASCE SunCoast Branch. I look forward to seeing you at the next meeting.

Thank you for your continued support.

Amjid Hussain, P.E., M.ASCE

September Luncheon Meeting Details

This months luncheon meeting is on Thursday September 27th with **Randall Reid, Sarasota County Administrator, presenting his Vision of the Future.** The presentation starts at 12 noon with registration starting at 11:30 am.

When: Thursday September 27, 2012
Check in begins at 11:30 AM

Where: Derr Dutchman (fka Troyers Dutch Heritage)

Please RSVP: <http://ascesuncoast.weebly.com/monthly-meetings.html>

For ASCE Members

Annual ASCE Executive Board Elections

Gary Downing will be our Branch President for 2012-2013. We are seeking nominations for Treasurer, Secretary and VP positions. If you are a member of ASCE SunCoast, you can nominate a fellow member. Please send nomination to us at asce.suncoast@gmail.com. The deadline for nominations is September 28th (before 5:00 p.m.).

Voting ballots will be sent to members only the first week of October.





Building Our Community

City of Sarasota Water Distribution Project

By Tim Foushee, Ayres Associates

Designing and installing 2,100 feet of new water main under Sarasota's Big Pass waterway is a challenge any engineer would be excited to take on. That segment was only one part of a \$450,000 project undertaken by the City of Sarasota Utilities Department last year to upgrade water mains in four locations. "The existing lines were old, leaking, losing pressure, and requiring continuous maintenance," said Dori Sabeh, project engineer with Ayres Associates. Ayres Associates was retained by the City to design the water main plans and manage the permitting process.

The old asbestos cement or cast iron lines were replaced with plastic PVC lines. "Manufacturers talk about a 50-year life for the PVC lines," said Dale Haas, capital project manager for the City. "We expect them to last longer than that. There's nothing to corrode in that pipe, and as long as we don't have physical damage from the outside, we expect them to last a very long time."



The segment under Big Pass would be the longest in the project with its 2,100 feet of new 16-inch water main between Siesta Key and Lido Key islands. In the early 1990s, an old 16-inch water line that served that segment began to leak. As a temporary fix, a new 10-inch pipe was slipped through the old one, and that temporary fix has lasted 20 years.

Dale Haas, the City's Utility Technical Manager at the time, explained, "With the construction of new condominiums and high-rise apartments on the south end of Lido Key, the 10-inch pipe began to raise some fire protection concerns. So we decided to re-establish the capacity of a 16-inch line under Big Pass."

The water main was installed using horizontal directional drilling (HDD), greatly reducing the project's environmental impact. "Big Pass is a very highly traveled waterway in the community, sands are shifting all the time, and currents are very strong through the pass," Haas said. "Trying to excavate a trench would be a real challenge."

Projects at the other three locations also had unique needs. The Bay Road water main involved installing a major transmission line down a county road to loop the existing City water network between Osprey Avenue and Tangier Terrace. The South Orange Avenue water main used HDD to cross the Hudson Bayou, plus jack and bore casing installation under a busy state highway to minimize traffic disruption. The Orange Avenue project replaced a 10-inch cast iron line that was so corroded its water flow was only equivalent to the capacity of a 4-inch pipe. The Osprey Avenue project replaced a 12-inch asbestos cement water main that had gasket failure problems.

Haas said the biggest challenge was getting all the necessary state and local permits. "It took a lot of effort to get everyone to understand what we were doing, why, and how," he said. "Ayres Associates was able to help us get all the appropriate permitting."

Permitting activities included extensive coordination with an alphabet soup of agencies, including:

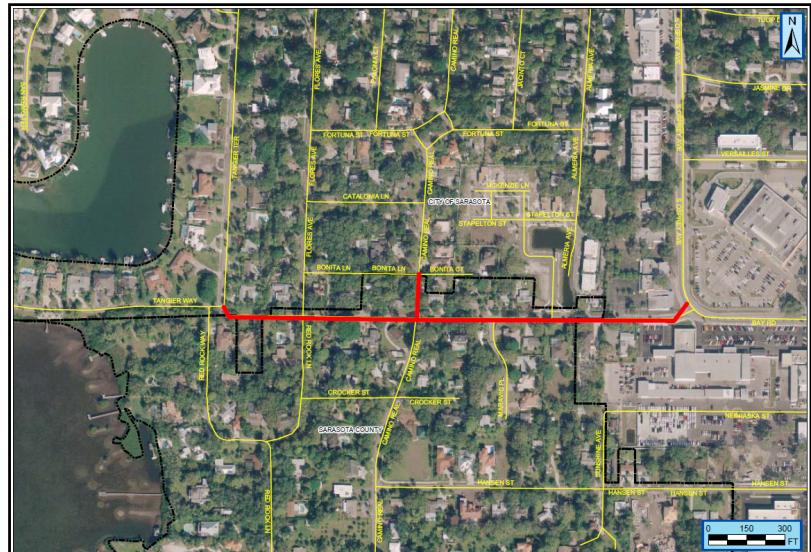
Building Our Community (continued)

- Florida Department of Environmental Protection (FDEP) - Standard General Permit
- U.S. Army Corps of Engineers (USACE) – Regional General Permit for Big Pass and Hudson Bayou crossing
- Florida Department of Transportation (FDOT) - Utility Permit for each FDOT right-of-way crossing
- Board of Trustees of the State of Florida - Submerged Land Public Easements for the proposed water mains under Hudson Bayou and Big Pass
- Sarasota County Department of Health - Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWSs
- Sarasota County Coastal Resources
- Sarasota County Parks and Recreation Department
- Sarasota County Environmental Services
- Sarasota County Board of County Commissioners
- Sarasota County Real Property
- City of Sarasota Right of Way Use Permitting Program

In addition, a detailed contingency and monitoring plan for HDD construction was prepared and accepted as part of the FDEP and USACE permit application.

Although thought the City typically used HDPE pipe for most HDD pipe installation projects, Sharon Lappin, the Engineering of Record for Ayres, assisted the City in evaluating the use of Fusible PVC. Because it appeared to offer the possibility of a lower installed cost versus HDPE while maintaining the required flow area, they included it as another bid option. As it turned out, every bidder quoted Fusible PVC pipe, rather than HDPE, and the City was satisfied with the cost savings.

When the project was completed in February 2011, no sign of the important infrastructure upgrades was left above ground to be seen or noticed by the general public, but the engineers involved understand the significance of what was accomplished and rest easier knowing that the fire hydrants on Sarasota's islands are a little more secure today.



CONGRATULATIONS

ASCE SunCoast Branch was named

2012 Florida Branch of the Year



Amjid Hussain, Branch President, accepting award
at July 2012 Orlando Conference

2012 Awards



**Congratulations
to our 2012 Branch
Award Winners**

Adnan Javed

Government Engineer of the Year

Sage Kayima

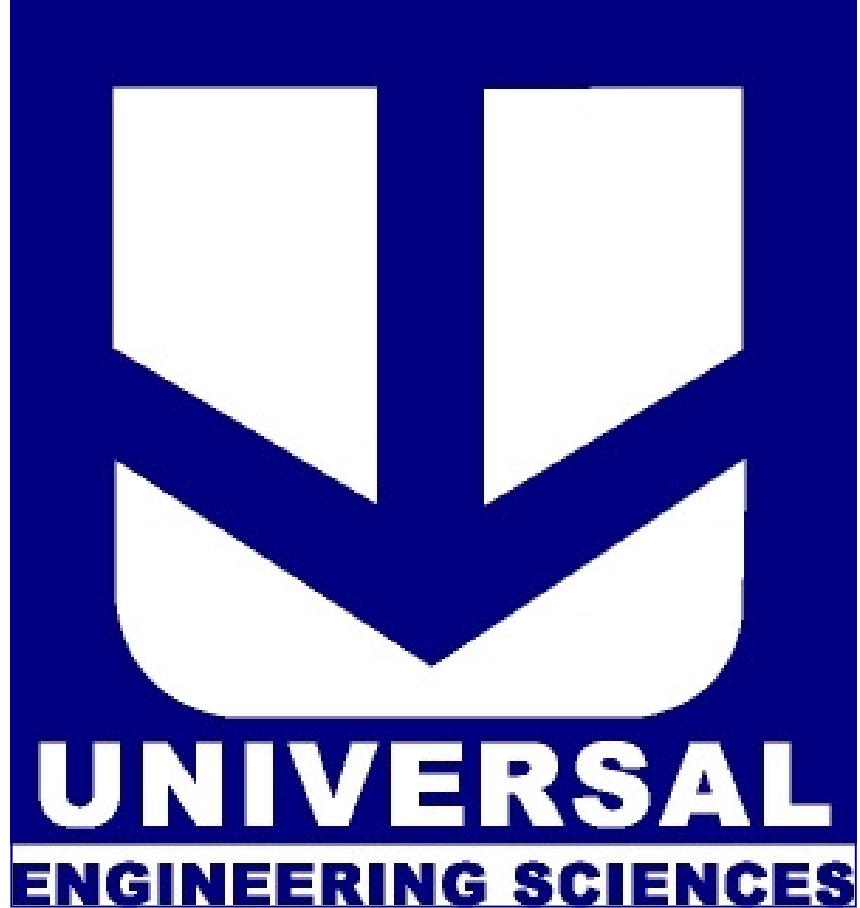
Manatee County Project of the Year

Tim Foushee

Engineer of the Year

Sonya Fronckowiak

Young Engineer of the Year



PE Exam Review Classes

ASCE SunCoast Branch is offering a free PE Exam review class. Classes will be held on Tuesdays from 5:30 pm to 7:30 pm at the BOB building (1001 Sarasota Center Blvd) in Conference Room 3 starting August 7th. The classes are taught by local, qualified professionals. Please contact Amjid Hussain, P.E. at ahussain@scgov.net if you would like to attend.

Class Schedule

Aug 7: Test Preparation Overview/
Horizontal & Vertical Curves

Aug 14: Stormwater, Hydrology, Hydrographs, SCS

Aug 21: Geotechnical Eng, Foundations & Retaining Walls, Soil Mix

Aug 28: Water Supply, Pumps, Pipes, Reservoirs, Water Quality

Sept 4: Construction, Scheduling, Engineering Economics

Sept 11: Wastewater Design

Sept 18: Traffic Systems, Intersection Design, HCM, Accidents

Sept 25: Structural Engineering, Steel, Concrete

2012 ASCE SunCoast Executive Board

President: Amjid Hussain, P.E.

ahussain@scgov.net

941-861-0750



Vice-President: Gary Downing, Jr., P.E.

gary.downing@hdrinc.com

941-342-2700



Secretary: Kim Clayback, P.E.

kclayback@jonesedmunds.com

941-358-1440



Treasurer: Kwamena Sankah, P.E.

isankah@scgov.net

941-861-0511



Past President: Sonya Fronckowiak, P.E.

sonya.fronckowiak@stantec.com

941-907-6900



Vice-President—District II: Adnan Javed, P.E.

ajaved@scgov.net

Please visit
<http://www.ascesuncoast.weebly.com>



Other News of Interest



Articles you may be interested in.....

Mile-High Towers Possible by 2025 in Race to Top

A mile-high skyscraper, almost double the height of today's tallest building, may become a reality by 2025 as developing countries splurge cash in an ego-fueled race to construct the world's highest tower.

"If you have enough money, I'm sure the human mind can create a lot higher," said [Timothy Johnson](#), an architect and chairman of the Chicago-based [Council on Tall Buildings and Urban Habitat](#), in an interview in Shanghai yesterday. "Who are we to say it's good or bad. People want to push higher and higher. That's just human nature, isn't it?"

Read more at: <http://www.bloomberg.com/news/2012-09-19/mile-high-skyscraper-possible-by-2025-as-ego-fuels-race-to-top.html>

Duke Energy executive:

Levy County nuclear plant will be built

Duke Energy executive Jeff Lyash told state regulators Monday that the \$24 billion Levy County nuclear plant will get built and come online in 2024.

"We've made a decision to build Levy," said Lyash, executive vice president for power generation. "I'm confident in the schedule and numbers."

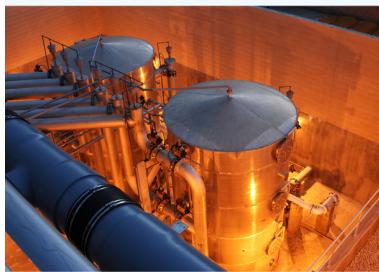
A decision to move forward with the Levy project could cause electric bills to soar, beginning with an additional \$20 a month for the average customer in 2018.

Lyash's firm stance on building the nuclear plant appeared to contrast with what his boss, Duke Energy CEO Jim Rogers, told the Public Service Commission at his first appearance before the regulatory body last month.



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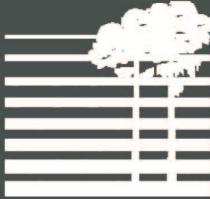


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Laws and Rules Class

ASCE

**sponsored a Laws and
Rules class hosted at the
Sarasota County BOB
Building on August 11,
2012. Thanks to Dr
Charles Glagola and all
the participants for a
successful event**

