#### **Nomination Deadline for** Upcoming Awards Extended continued from page 1

have contributed substantially to the status of the engineering profession by establishing a formidable reputation for professional service, improving the conditions under which professional engineers render service to the public in the public or private sectors, improving civil engineering education, or providing guidance to young civil engineers. ASCE members of any grade, but not Honorary Members.

# ous service in an elective or appointive

Conferred in recognition of meritori-

**Civil Government Award:** 

position. Candidates are those whose performance has helped to raise the stature of the engineering profession. The award is intended to recognize outstanding performance by engineers serving as members of Congress, mayors, governors, city managers, city council members, municipal department heads, state or county officials, or members of state legislatures. Nominees for this award must be registered professional engineers. Those holding positions that traditionally have been held by engineers or positions that are filled on the basis of civil service examinations are not eligible. ASCE members of any grade, but not Honorary Members.

Government Civil Engineer of the Year Award: Conferred in recognition of outstanding performance by a civil engineer in the public sector. Candidates must be ASCE members in good standing, and preferably a licensed professional engineer. They must have 15 years in public service, at least 5 of them at a senior administrative level, and presently be employed in the U.S. public sector. Other criteria include participation in civic or humanitarian endeavors and evidence of personal and professional integrity.

Parcel-Sverdrup, Edmund Friedman, and Civil Government Award nominations may be submitted to the Honors and Awards Department at ASCE Headquarters. Government Civil Engineer of the Year Award nominations may be submitted to akarwoski@ asce.org or mailed to Alicia Karwoski, Professional Activities Department, 1801 Alexander Bell Drive, Reston, VA 20191-4400. For questions, contact Alicia Karwoski at (703) 295-6324 or (800) 548-2723 extension 6324. ■

## The Boundary Stones of the Federal City

By Stephen C. Powers, P.E.

If you have ever looked at a road map of the Metropolitan Washington, D.C. area, then it is clear where the boundaries of present day Washington, D.C. and Arlington County lie. But how did these boundaries come to be, and how are they defined today? It may come as a surprise to you that these boundaries are denoted by the first monuments ever commissioned by the United States Government, that 37 of the 40 boundary stones remain, and together as a group the Boundary Stones represent one of the oldest lasting surveys of Colonial America.

In 1791, George Washington appointed the Commissioners for the New Federal City to lay down four experimental lines so as to create the boundaries of the "ten mile square" tract on the upper Potomac River where Pierre L'Enfant's plan for the city would be designed and built.

It was agreed that the area of 100 square miles would embrace approximately 64 square miles of Maryland soil and approximately 36 square miles of Virginia soil. The City Commissioners contracted Major Andrew Ellicott who set the first stone, the South Cornerstone, at Jones' Point in Alexandria, VA on April 15, 1791 during a ceremony that included the sentiment "May the stone which we are about to place in the ground remain an immovable monument of the wisdom and unanimity of North America." Assisting Ellicott with the astronomical observations and calculations necessary to establish the location of the initial stone was Benjamin Banneker.

The layout called for establishing a northwest line 10 miles toward Falls Church, where the West Cornerstone would be placed. Along the route, nine 2-foot-high by 12-inch square-stone mile markers cut from Aquia Creek Quarry sandstone were placed. Ellicott then turned northeast and completed the survey on the Virginia side of the Potomac before halting for a brief hiatus during the winter months. In the spring of 1792, work resumed on the Maryland side of the Potomac. The survey continued toward present day Silver Spring where the North Cornerstone was placed. From there, Ellicott's party, headed southeast toward present day Seat Pleasant, located the East Cornerstone, and closed the square by turning south-



Southwest Face of NE#9 located in the front yard of a private residence along Eastern Avenue in Fairmont Heights, MD.

west back toward Alexandria and the Potomac River.

Assisting Ellicott were William and Nicholas King and Count de Graff. The field team was headed up by Isaac Roberdeau and consisted of chain men, ax men, mule teams, and laborers. Together they cleared a path 40 feet wide and over 38 miles long (taking into account 3 river crossings). All did not go smoothly for the members of the survey team, as several died from illness and one man was killed by a falling tree.

On January 1, 1793, Major Ellicott returned to Philadelphia with news of his accomplishment. "It is with great pleasure that I report to you that the lines are now opened and cleared 40 feet wide, 20 feet on each side of the line. I have set up square mile-stones, marked progressively except in a few places where the miles terminated in a declivity or in the water. In such case, the measurement was carried either forward or backward until firm ground was reached and the exact distance then marked on the stone in miles and poles. On the sides of the stones facing the Territory is inscribed, 'Jurisdiction of the United States.' On the opposite side of those placed in the commonwealth of Virginia is inscribed 'Virginia.' And on those in the State of Maryland, 'Maryland.' On the third and fourth sides, or faces, inscribed the year in which the stone was set up, and the continued on page 4

#### The Boundary Stones of the Federal City

continued from page 3

conditions of the Magnetic Needle at that place."

To know the stones today is to understand the development and growth of the Washington D.C. Area. Of the 26 stones placed in Maryland, 23 continue to define the boundary between Washington, D.C. and the state of Maryland. They currently reside at or near their original locations and are located on Corp of Engineer's land, private residences, roadside right of ways, National Park Property, a Cemetery, and commercial property. They are located adjacent to Bethesda, Chevy Chase, Silver Spring, Takoma Park, Mt. Rainier, Brentwood, Capitol Heights, Temple Hills, Suitland, and Oxon Hill. Of the missing 3 Maryland stones, 2 stones were destroyed/lost in the 1950's and the individual sites are marked by a plaque (NE#1) and a replica stone (SE#8) respectively. The final stone (SE#4) is in storage after a mid-1980's traffic accident, and is currently awaiting rededication in the vicinity of its original location in the near future.

The Virginia land was retroceded back to the state of Virginia on July 9, 1846 under a Federal Act of Congress. There are 14 stones on the Virginia side of the Potomac, 10 of which currently define the Arlington County boundary adjacent to McLean, Falls Church, Bailey's Crossroads, and Alexandria. The remaining 4 stones are located in the City of Alexandria and no longer define a boundary. Thirteen of the Virginia stones are original stones.

Only one Virginia stone (SW#2) has been lost (for at least the last century), and the Old Town Alexandria site is marked by a commemorative stone.

The preservation of these stones came about in the late 1890's through the 1960's when Fred E. Woodward, brother of the owner of the Woodward & Lothrup's department stores, and the Washington, D.C. local chapter of the Daughters of the American Revolution began a campaign to save the stones by educating the public to their existence and erecting iron fences around as many as possible. That campaign is now championed by NACABOSTCO, The Nation's Capitol Boundary Stones Committee, a group dedicated toward the preservation of the stones/sites and of which ASCE's National Capitol Section History & Heritage Committee currently has representation. Among

the many goals of this committee is to promote the Stones/Sites for designation as a National Historic Landmark. To that end, ASCE H&H has an effort underway to nominate the Ellicott Survey represented by the Boundary Stones/Sites for an ASCE National Historical Landmark designation.

Hopefully this article has sparked your curiosity enough to visit a stone or two. Certainly if you have ever crossed into the District from Maryland or into Arlington from Fairfax County or Falls Church you have been within a half mile of at least one of the stones if not closer. ASCE is planning to schedule a tour in the future of several of the stones, with more details to follow. For more information on the location and history of the stones, please visit www.boundarystones.org.

Stephen Powers is employed by DMJM Aviation and is the Lead Resident Engineer and Construction Department Manager for Parsons Management Consultants at Washington National Airport. He holds a B.S. in Civil Engineering from Virginia Tech and is a recent addition to the NCS ASCE H&H Committee.

### New NCS Life Members Named

Congratulations to the NCS members who have received Life Member status. These distinguished members will be honored at our Annual Banquet on April 10, 2007. Congratulations to them for their service to the Society.

Eduardo Bindhoff, P.E., M.ASCE Taft Broome, Ph.D., M.ASCE Jorge Calderon-Rossell, P.E., F.ASCE William Caruthers, P.E., Aff.M.ASCE Daniel Ta-Ming Chen, M.ASCE Hsuan Chen, Ph.D., F.ASCE Ken Chong, P.E., Hon.M.ASCE Florencio Coquia, P.E., M.ASCE Joseph De Lasho, P.E., M.ASCE Edward Dobranetski, P.E., L.S., M.ASC Raymond Ellis, Ph.D., M.ASCE Muna Faltas, M.ASCE Mahmood Fateh, P.E., M.ASCE Peter Forster, M.ASCE Richard Giangerelli, P.E., M.ASCE Kent Goering, M.ASCE Frank Gray, P.E., Aff.M.ASCE Peter Graziano, M.ASCE Jacob Greenstein, Ph.D., M.ASCE Miles Haber, Aff.M.ASCE Herbert Herrmann, P.E., M.ASCE Ernest Huckaby, M.ASCE Mahmud Hussain, M.ASCE

Robert Kapsch, Ph.D., M.ASCE William Kelly, P.E., F.ASCE Anil Khare, P.E., M.ASCE Khalilollah Khozeimeh, M.ASCE Hanan Kivett, Aff.M.ASCE Clarence Lee, P.E., M.ASCE Gary Maring, P.E., M.ASCE Hugh Mc Gee, Ph.D., P.E., F.ASCE Thomas Meany, P.E., F.ASCE Errol Noel, Ph.D., P.E., F.ASCE Jacob Patnaik, M.ASCE Vedula Sarma, M.ASCE Lee Schmidt, P.E., M.ASCE Norman Schmokel, P.E., Aff.M.ASCE Robert Scholz, P.E., M.ASCE Subir Sen, P.E., M.ASCE Donald Shilesky, Ph.D., M.ASCE Charles Smith, P.E., M.ASCE Glenn Smith, Ph.D., P.E., M.ASCE James Smyth, P.E., M.ASCE Franklin Spielberg, P.E., M.ASCE Robert Stout, P.E., M.ASCE Suneel Vanikar, M.ASCE

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