

THE FIRST WORD

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Wallace Engineering Wins 2005 Engineering Excellence "Grand Conceptor Award" For Oklahoma History Center

The 2005 ACEC OKLAHOMA Engineering Excellence "Grand Conceptor" Award winner is Wallace Engineering Structural Consultants for the Oklahoma History Center. The \$35 million, 190,000 square foot facility is located adjacent to the Oklahoma State Capitol. It houses 40,000 square feet of exhibit space in five galleries, as well as offices, library and research areas, conference and event facilities, exhibit and artifact archives, preservation areas, and a gift shop. The Center is home to the offices of the Oklahoma Historical Society and the State Historic Preservation Office.



The unique, curving geometry of the building was created in response to its site. The three-story office/library wing is an S-shaped element and forms the entry side of the center. The C-shaped gallery wings are nested into the office/library wing and face toward the State Capitol. The two wings are joined by a three-story atrium spine and an elliptical-shaped Grand Hall. The Grand Hall is a soaring atrium space that reaches 88 feet in height and is completely glazed on the exterior, providing a dynamic view of the State Capitol.

The exterior of the building consists of precast architectural concrete panels and glass curtainwall systems. The precast panels are curved to follow the shape of the building and have marble tiles cast into them along the exterior colonnade facing the Capitol. The Grand Hall is topped with a conical "headdress" with a skylight oculus at its apex.



The structural design of the Center incorporates creative uses of several common building systems. One of the most unusual involves the use of precast concrete panels. As originally conceived, the exterior skin of the facility was to consist of a combination of cast stone, marble, and backlit onyx. The systems were to be used as veneers, which

would require backup framing consisting of metal studs. The gallery wings have a 30-foot floor-to-floor height, which would have required intermediate girts and wind columns to support the veneer framing. Because of the deflection limitations required to prevent cracking of the stone, the framing would have been quite heavy, and the geometry of the framing, especially the studs, would be hard to control.

The design team started working with a precast manufacturer who makes high-quality architectural precast panels with a finish that resembles cast stone. The use of the panels eliminated the need for backup framing in the cast stone areas. The panels are also used as shear walls in conjunction

Engineering Excellence Award Goes to Wallace Engineering

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with interior movement-resisting frames. At the taller gallery areas, the design team decided to cast the marble tiles integrally with the precast panels to speed erection and reduce framing costs.

The floor plan geometry of the Center also created interesting and difficult framing challenges. The structural grid system is laid out on a radial coordinate system, with the radial grids dimensioned angularly and the concentric grids



dimensioned using distances. The floor framing consists of composite steel framing and it was designed to create as simple a framing layout as possible. The floor and roof framing are configured so that straight girders run along the concentric grids, creating a segmented curve. Beams

were placed perpendicular to the girders, so that all beam-to-girder connections were at 90 degrees.

The Center demonstrates that one can use standard materials in creative ways to attain a unique aesthetic. The facility is unlike any in the area and demonstrates that thought and creativity must work in concert with engineering fundamentals.



ACEC OKLAHOMA Chairman Jerry Farrar (L) presents 2005 Grand Conceptor Award to Brad Thurman of Wallace

The Center was complex on many fronts. The geometry of the building is the most visible complexity. Also, exposed structural steel is used throughout the Center and is especially visible in the Grand Hall. The steel tube framing not only had to meet architecturally-exposed steel requirements, but it had to be designed with simple elegant connections that would also brace the slender concrete columns supporting the roof of the Grand Hall.

Wallace Engineering provided full-service structural engineering design services for the project, and ACEC OKLAHOMA is proud to present the 2005 Engineering Excellence "Grand Conceptor" Award to Wallace Engineering Structural Consultants.

Gingrich to Headline ACEC Convention

Newt Gingrich, former speaker of the House of Representatives and chief architect of the "Contract with America," which fueled a Republican House majority for the first time in 40 years, will be a featured speaker at the 2006 Annual Convention and Legislative Summit, April 30-May 2 at the Grand Hyatt Hotel in Washington, D.C. Registration information is available at www.acec.org

Gingrich, who headlines an outstanding lineup of Convention speakers and activities, will discuss new directions in American politics during the Opening General Session, beginning 8 a.m. Monday May 1.

Gingrich served as House Speaker from 1995 to 1999 and was a member of Congress for 20 years, representing the state of Georgia. In 1995, he was named "Man of the Year" by *Time* magazine.

Later that same day, Terry McAuliffe and Ed Gillespie, former chairmen of the Democratic and Republican National Committees respectively, will debate the current state of U.S. politics during the Convention's Keynote Luncheon.

The Convention also features the 40th Annual Engineering Excellence Awards Gala on Tuesday May 2, along with 20 cutting-edge education sessions on business management. Make your hotel reservations well in advance while rooms are available. Contact the Grand Hyatt directly at 202-582-1234 to secure your hotel room. ACEC's discounted room rates expire on March 31.



2006 Legislative Session Open Monday....Here We Go Again!

The 2006 Legislative Session opens for business on Monday, February 6th, with Governor Brad Henry delivering his State of the State address that day. Nearly 2,200 bills have been introduced for the 2006 session. When added to the “carry-over” bills from last session, the Legislature will be faced with over 3,400 “active” bills on the first day of the session.

During the past few weeks, the Democratic and Republican leadership teams have been holding “dueling press conferences” outlining each of their agendas for the session. A variety of issues have been addressed with Education, Transportation, Worker’s Comp, Lawsuit Reform and Tax Reform being the biggest topics.

The 2006 Session should be especially interesting considering that this is an election year with all seats in the House and half in the Senate on the November ballot. The Republicans will be working to maintain their majority in the House, having won the House in 2004 for the first time since the 1920’s. On the Senate side, Democrats hold a slim majority but face a difficult election due to the fact that term-limits are putting them at a severe disadvantage. Of the 9 term-limited seats in the Senate, all are held by Democrats. With shifts in voting habits combined with the Democrats loss of the “power of the incumbency”, the Senate Democratic Leadership faces a very tough election cycle.

Possibly the most interesting and important election race will be for the office of Lieutenant Governor. The Lt. Governor is the President of the Senate which gives the Lt. Governor the ability to preside over the Senate and to vote to break ties. It is not outside the realm of possibility that after the November elections that the Senate could be split 50-50, which means that whichever party holds the Lt. Governor’s office will control the Senate.

Add to that a popular Governor, at least according to the approval rating polls, facing a strong challenge from the Republicans and an open seat in the Congressional District currently held by Congressman Istook, and 2006 promises to be a year filled with political jockeying with all eyes focused on the November elections.

As for bills and issues which ACEC OKLAHOMA will be watching this session, we are currently tracking some 40 bills which have the potential to impact our members. Without getting into specifics on bills, we’re going to highlight the issues which ACEC OKLAHOMA will follow:

HIGHWAY FINANCING - There are a myriad of bills which have been introduced addressing the critical need of increasing funding transportation at all levels – state, county, & city. Each of the House and Senate Leaders and the Governor have put plans on the table. With the large number of bills, there isn’t yet a real “target” bill and probably won’t be until near the end of the session. In the long run, a House/Senate Conference Committee will write the final version and it’s anyone guess at this point what that bill will

include. With all of the attention which has been focused on the Highway Funding crisis in recent months, as well as with the November elections looming, optimism is at an all-time high that the Legislature will enact “meaningful” highway funding before the end of the session.

TORT REFORM – Both parties have made this issue a “priority” for this session. A lot of ideas have been floated, but there is a large gap between the two parties. Again, it will be late in the session, if even then, before this issue will be decided.

WORKER’S COMPENSATION – ACEC OKLAHOMA is watching three bills which address the “third party liability” issue which ACEC OKLAHOMA (then CECO) championed in the early 1980’s. At this time the bills don’t negatively impact the current statute, but we will keep a very close eye on these as things can change very quickly.

PROFESSIONAL LICENSURE – The State Board of Licensure for Professional Engineers and Land Surveyors is asking for amendments to last year’s re-write, which ACEC OKLAHOMA will follow closely. Also, there are two other bills which have the potential of impacting the Licensing statutes and/or Board.

QUALIFICATIONS-BASED SELECTION – The Construction and Properties Division is asking for some changes in both the State Consultants Act (QBS) and the Competitive Bidding Act. ACEC OKLAHOMA supports the modifications in the State Consultants Act. There is no negative impact, and in fact, the proposal expands QBS to clear up some “grey” areas such as aerial surveying.

ARCHITECT’S ACT – There are several bills addressing long-standing concerns in the State Architectural Act as well as with the licensure of other professionals such as Interior Designers. Also, there are bills which would exempt public construction in small communities from the required the use of an Architect, as well as changing the definition of a “building” and increasing the dollar limits over which an Architect is required. These issues have been around for several years without resolutions, but there are hopes that some agreements can be reached this session to solve at least some of these issues.

The first major deadline of the session occurs on Thursday, February 23rd when bills must clear the Committee to which they were assigned. Failure to clear Committee by that date effectively kills the bill for the balance of the session.

ACEC OKLAHOMA will be watching the activities of the first few weeks very closely, and striving to protect the interests of the consulting community throughout the session. We will report back to you as necessary, and issue Legislative Alerts when your immediate action is necessary.



Two Top Executives of major Oklahoma corporations have announced the transformation of a ballot initiative into a permanent road advocacy group whose objective include permanent increases in funding for the state's ailing transportation system.

Leaders of the Transportation Revenues Used Strictly for Transportation Coalition (TRUST) said Monday, January 30th that they want state legislators to use motor vehicle fees and taxes for transportation costs, rather than diverting the money to other programs.

Tom Love, co-chairman of the TRUST coalition, said that while part of the motor vehicle fees are diverted toward education, the coalition does not want to interfere with those funds. Instead, TRUST wants the Legislature to engage in an honest discussion of keeping transportation funds for transportation rather than general revenue, said Love, who is also chief executive officer of Love's Travel Stop & Country Stores. Of the \$1.1 billion that is collected in motor vehicle fees and taxes, about \$300,000 to \$400,000 goes into the state's general revenue fund. That money should be spent on improving the state's roads and bridges, Love said.

To be prosperous, Oklahoma must make transportation a priority rather than an afterthought, Love said. "Oklahoma is the crossroads of America, but the crossroads are crumbling," he said. "If we truly want to see Oklahoma excel as a state, we must get serious about rapidly repairing our highways and bridges."

If money is collected in the name of transportation, Newport said that is how it should be spent. Legislators are lying to their constituents when a tax is collected for one thing but spent on other things, he said.

Kell Kelly, president and chief executive officer of Tulsa-based Spirit Bank, is also leading TRUST's efforts. According to a news release, the coalition will use a grassroots network and a four-month public awareness campaign to convince state lawmakers that the state's transportation infrastructure should be as much a priority for legislators as it is for the public.

"I think Oklahomans would be shocked to know that less than 1 percent of motor vehicle fees go to state roads and bridges," said Rep. Jim Newport, R-Ponca City.

Newport, who described himself as a passionate supporter of transportation, said approximately \$1.1 billion in funds is collected annually in road taxes and fees. About 46 percent of that money gets diverted into the general revenue fund - which Newport likened to a black hole - where lawmakers decide how to spend the money.

To re-enforce this stance, the coalition presented polling data collected by Cole Hargrave Snodgrass & Associates Inc. According to the data, 62 percent of the 500 registered voters polled strongly agreed that Oklahoma needs to spend more money on road and bridge maintenance, while 27 percent somewhat agreed.

For more information or to join the TRUST coalition, visit their website at <http://www.restoretrust.org/>

IRS SETS STANDARD MILEAGE RATES FOR 2006

The IRS has lowered the optional standard mileage rate for 2006 to 44.5 cents per mile for business miles driven, down from the 48.5 cent rate set for the last third of 2005.

The standard mileage rate is used to calculate the deductible costs of operating a vehicle for business, charitable, medical or moving purposes. The 48.5 cent rate set for the last four months of 2005 was a one-time adjustment in response to the sharp increase in gas prices, which topped \$3 a gallon. The standard mileage rate for the first two-thirds of 2005 was set at 40.5 cents per mile.

"The IRS took the extraordinary step of temporarily increasing the standard mileage rates in the aftermath of Hurricane Katrina," said IRS Commissioner Mark Everson. "We promised to continue closely monitoring the situation. The 2006 mileage rates reflect that gas prices have dropped."

Beginning Jan. 1, 2006, the standard mileage rates for use of a car (including vans and pickup trucks) for medical or moving purposes will be 18 cents per mile. The rate for miles driven in service of charitable organizations, other than activities related to Katrina, will be 14 cents per mile. For 2006, the Katrina-related charitable rates will be 32 cents per mile for deduction purposes and 44.5 cents per mile for reimbursement purposes.