from page 7

Earthtalk[®]

"Leaders in the emerging Living Building movement define a living building as "a structure that generates all of its own energy with renewable non-toxic resources, captures and treats all of its water, and operates efficiently and for maximum beauty."

Dear EarthTalk: I recently heard the term "living building." Can you explain?

-Rebecca Gordon, Seattle, WA Over the past couple of decades, architects and builders looking to green their projects turned to the addition of various piecemeal elements to save water here or cut down on electricity there. Those who added more than a few green touches could apply for and get certified by the United States Green Building Council (USGBC) under its Leadership in Energy and Efficient Design (LEED) program. While these efforts have been laudable—essentially launching the green building industry as we know it today—they represent merely the infancy of what green building might someday become.

The concept of the "living building" has now emerged as a new ideal for design and construction. The Cascadia Region Green Building Council (CRGBC)—the Pacific Northwest chapter of the USGBC—defines a living building as a structure that "generates all of its own energy with renewable non-toxic resources, captures and treats all of its water, and operates efficiently and for maximum beauty." The group has been pushing for adoption of the concept by construction industries here at home, and also helped to launch the International Living Building Institute to promote the concept internationally.

"We view our role as the organization that is meant to ask the really tough questions, to push the boundaries as far as possible," says Jason McLennan, CEO of CRGBC. To this end, in 2006 the group launched its Living Building Challenge (LBC), a "call to the design and construction community to pursue true sustainability in the built environment." So far 60 different projects around North America are vying to meet the high standards of the LBC, which exceed even the highest status of LEED certification.

The first building to be completed for consideration under the LBC program is the Omega Center for Sustainable Living, in Rhinebeck, NY. The 6,200 square-foot, one-level building, which serves as headquarters for the Omega Institute for Holistic Studies, features a geothermal heating and cooling system, solar panels, rain gardens that direct water run-off to irrigate plantings, a 4,500-square-foot greenhouse that helps filter wastewater for reuse, "daylighting" design that brings natural light indoor to minimize electric light usage, and eco-friendly building materials all around. It was designed-per LBC criteria-to be "net-zero," meaning it uses no more energy than it generates itself. Of course, the costs of creating a living building today are very high. Achieving net-zero can be especially costly, and stands out as one of the biggest obstacles to greater interest in the living building concept. Another challenge is finding materials that meet LBC standards, since many common building materials-such as PVC piping for wastewater transport-off-gas chemicals and have other hazardous attributes. LBC also expects builders to source locally as many materials as possible to boost local economies and make efficient use of nearby natural resources. McLennan remains confident that costs will come down as green materials, technologies and methods become more commonplace within the general building industry.



Soccer

year's record-breaking season, 2009 Pioneer League Coach of the Year, Juan Mosquera, remains highly optimistic when it comes to this season's possibilities. "Sure, we've lost some great leaders and athletes last year, but we have a strong and deep program here in El Segundo. We were league champs at all three levels last year. Across the board, we outscored our opponents 6 to 1. We can fill the holes on Varsity and with some very hard work, we'll be back on top." Coach Mosquera is assisted by and experience team of assistant coaches. 2001 El Segundo High graduate, Tabitha McCullah serves as assistant coach, along with former USC goalkeeper, Steve Maynard and Dale Shelton.

El Segundo High School in association with El Segundo Kiwanis is hosting its 21st

Eagles

was scooped up by 6'3," 270-pound Stephen Buhring, who rambled 45 yards for a touchdown. "We were moving the ball and we were setting them up for a surprise. I'm sure we would have gone in for a score," said Bundy.

El Segundo's defense backed the Knights up on their next possession and the Eagles took advantage by forcing a safety on the punt attempt to make it 13-2. The Knights, who have held their opponents to an average of just eight points per game this year and have five shutouts, found themselves actually in a game. "El Segundo has a great tradition of not giving up and it didn't surprise us when we came up short and we had to punt. They put the pressure on us and the ball sailed out of the end zone," said Knights' coach Mike Hartman.

The Eagles had great field position after the safety, but a key drop might have cost them a chance to continue their possession and perhaps score. Their drive stalled at the Knights' 45 yard line. The Knights used the opportunity to go 80 yards in nine plays, capped by Cusack's 15-yard TD run early in the second quarter to make it 20-2.

Bundy led the Eagles' on their best drive of the night, but once again the Eagles came up empty. After staring on their own 21 yard line, Bundy guided the Eagles on a 13-play drive that used up nearly five minutes. The drive stalled when Cusack intercepted Bundy at the St Joseph nine-yard line. The Eagles stopped the Knights once again and forced them to punt from their own end zone, but kicker Garret Dudock intentionally punted the ball out of the end zone for another safety. The teams went to the locker room at halftime with the Eagles trailing 20-4.

The Eagles also went to the locker room trying to figure out how they were going to fill the positions of players who were unable to continue because of injuries. Quiñones' sustained a shoulder injury while McAllister and Hovland were seen on crutches. Others who played through injuries in the second half like Grant Palmer (leg), Matt Binder (leg), Brice Savage (elbow), Nigel Nootbaar and Armando Clemente (arm) as well as others played with every bit of moral fiber. Annual Varsity Girls Soccer Tournament where 16 of the best Southern California Varsity Girls Soccer Teams will meet on the "friendly fields of strife" at Campus El Segundo on December 4, 5, 11 and 12. In addition, the El Segundo Girls Soccer Program is holding the First Annual Varsity Girls vs. Alumni soccer match on December 17 at Campus El Segundo.

Pre-season play starts with Serra Gardena High School on November 30. The team's first Pioneer League game is January 13 against North Torrance. Complete schedules, player information, statistics and news are available on the team's MaxPreps site: http:// www.maxpreps.com/high-schools/wav6CXwOZ0yySgDVsC6RUw/el-segundo-eagles/ girls-soccer/home.htm •

from page 7

The Knights got two more rushing touchdowns from Cusack in the third quarter to essentially put the game out of reach. The Knights continued to play their first team offense and defensive units well into the fourth quarter when Bundy took the Eagles on their final scoring drive of 2009.

Bundy, who completed 25 of 39 passes for 196 yards, guided the Eagles on a 65-yard, nine-play drive. During the drive, the senior QB completed four passes and ran for two first downs. After picking up 13 yards on a pass play to Palmer to get the Eagles to the Knight six yard line, Bundy found Savage open over the middle for a six-yard TD pass.

It was a historic year for the Eagles when they became the first El Segundo team to advance to the CIF Southern Section quarterfinals in consecutive years.

For Mike Bundy, his stellar career ends by passing for 6,828 yards, with 60 touchdown tosses. He completed 530 of 908 pass attempts. Both are good to place him behind school record-holder Matt Engle. Jimmy Quiñones ends his career with a school record 18 interceptions and a school record-tying six interceptions in a season--each year, three times.

One other historic note for this Eagle team is it will be the last team to play on an allgrass Hazeltine Field. With the passage of a recent bond, work should start sometime next year and the new stadium will hopefully be playable for the 2011 season.

The Eagles will graduate a number of three-year starters on defense who had great careers, including Sean DeFrancesco (82 tackles, 38 assists), Brandon Jimenez (134 tackles, 84 assists), Quiñones (148 tackles, 59 assists) and Nick Kessler (161 tackles, 92 assists).

The 2010 Eagles will return a number of key players and should once again vie for a Pioneer League crown. With the realignment of CIF Southern Section Northwest Division schools like Serra, Oaks Christian, Cathedral and St. Josephs (all four semifinalists this year) into other divisions, the Eagles should have an opportunity to play with other schools next year without worrying about who the parochial schools are recruiting. •

