And we're proud to say not one olive tree was harmed." Proven to do what it was built to do, how does Alaska Street's new GravityStone wall fair as far as street charm? "Because the face of both blocks looks the same, no one can tell that two different systems were used to develop this wall it looks good," says Seabrands. The final testament to the wall's aesthetic appeal is that two homeowners living across from the finished wall constructed their own private walls with GravityStone.

For more than 50 years, WestBlock Systems has set the standard for innovative, cost-effective and design-driven earth retention and barrier wall systems. Produced by a world-wide network of concrete block manufacturers, our products are sold direct and through dealers to both private and public sectors.

As distributors of masonry building materials since 1947, and manufacturers of concrete block since 1984, it's fair to say we've been around the block a time or two. Our intimate understanding of the various markets, trends, manufacturing technology, product engineering, and installation process make us an ideal partner. We not only talk the talk, we walk the walk. Focused on delivering customer-relevant solutions, our wide range of products reflect the perfect blend of form and function. From patented designs that ease installation and lower costs to unique textures and color options that compliment nature, WestBlock offers an efficient and effective way for customers to either grow their businesses or enhance their surroundings. Add our commitment to quality and it's no surprise that our products are readily accepted by manufacturers, engineers, contractors, and D.I.Y'ers.

To learn more about WestBlock Systems and how our wide range of high quality products can help you meet your hardscape objectives, please call **800.332.6489**.

WBS NEWS

Forth Quarter 2005 . Tacoma, Washington

CITY SAVES 100-YEAR OLD HOME, HEIRLOOM OLIVE TREES AND $80,000 IN THE PROCESS.

The City of Tacoma, Tacoma, Washington uses WestBlock's GravityStone Hybrid Retaining Wall System to meet AASHTO design standards and a homeowner's demands.

Situation:

After building a new school and a new fire station, the City of Tacoma needed to widen the existing roadway to meet AASHTO design standards. To meet their ojective, they would need to slice into a hillside and build a retaining wall.

Challenge:

A 100-year old home sat on top of the hill. And the homeowner didn't want one inch of his property disturbed, including heirloom olive trees imported from Italy by the family's grandfather.

Solution:

Build the retaining wall using the Gravity-Stone Hybrid System, a proprietary solution that utilizes a combination of MSE and modular blocks, doesn't require geogrid for the entire wall, or deep excavation tactics.

Results:

- *Alaska Street met AASHTO design standards without jeopardizing the integrity of the homeowner's property.*
- *The GravityStone wall saved City of Tacoma more than $80,000 in material costs alone.*
- *Neighboring homeowners liked the look of the GravityStone wall so much that they used the same block to install retaining walls on their own property.*

Completion of the new Ketleburg Middle School and Engine House Number 32 in Tacoma, Washington, required the City to redesign Alaska Street, the existing roadway, to accommodate increased traffic, new sidewalks, bike lanes and a left turn lane. In order to expand the road and still meet AASHTO design standards, the City would need to slice into a hillside on one side of the road. With a private residence sitting squarely on top of the hill, the City was faced with a challenge. At worst crews would need to cut within two inches of the home's foundation. At best workers would have to remove three Italian Olive trees that were imported by the family's grandfather. In the end, neither scenario would be approved by the home owner.

THE ALASKA STREET PROJECT

WESTBLOCK SYSTEMS®

Where there's a hill, there's a way: The GravityStone solution.

Unable to obtain a slope easement or the homeowner's approval to excavate on his property, the City of Tacoma could not standardize on a geogrid-based system for the entire wall. According to Civil Engineer for the City of Tacoma, Dan Seabrand, "Our engineering study suggested we go with a sheet wall design. But Scott West, a distributor for Pumilite of Washington, demonstrated a hybridconcept which utilized a modular base combined with a reinforced wall at the top. He convinced us that his crew could work within our narrow pocket and deliver a safe, reliable and highly functional wall." According to West, "We had a civil engineer review the stability of the soil, and with the assistance of the City's engineering department, we redesigned the wall to utilize GravityStone's proprietary hybrid system."

The retaining walls required on the Alaska Street project ranged from 3 feet to 16 feet in height. The walls 3 to 4 feet in height were comprised of GravityStone Fat Face tan units while walls taller than 4 feet featured a combination of MSE and Modular units. The base of the wall consisted of a double cell unit, four courses high and then switched to a single cell unit for an additional three courses. Once the base courses were laid, the contractor switched to a Fat Face unit that sat on top of the modular layer, utilizing grid. West and Seabrands agree that Alaska Street was the perfect project for utilizing the GravityStone Hybrid System.

"This is one of the first walls where we've utilized two systems. Not all blocks allow that kind of flexibility. To be able to work within such a small right away and not once encroach on the homeowner's property was nothing short of an engineering miracle," says Seabrands.

GRAVITY STONE

"Installing GravityStone saved the City of Tacoma $80,000 in material costs alone. At $20 per square foot, GravityStone out performs the standard sheet wall, which came in at $40 per square foot."

Easy to install, even easier on the budget.

In addition to maintaining the integrity of the homeowner's property, Seabrands reports that the City realized significant cost savings. "GravityStone kept our project on track, on time and under budget. At $20 per square foot for material costs versus the $40 per square foot for the sheet wall alternative, the City saved more than $80,000 in material costs alone. Cost savings also resulted because the GravityStone wall went in fairly quickly. Block-by-block it was easy, didn't require heavy machinery or extensive earthwork a layperson can install it." Seabrands adds, "Installing GravityStone's hybrid system saved a total of eight feet of excavation depth, allowing us to build the retaining wall six feet from the foundation of the home.

(Continued on back page)