



Gillis says this is the highest wall system with the heaviest surcharge that his company has been involved with. *"We're going on two years since the walls were installed. In that time, the area has experienced record rainfall and high winds. The ground is stable, the walls are solid and the homes haven't budged they're definitely here to stay."*



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

**Situation:**

Construction of a 63-home community built on a steep slope with a stagnant surcharge required the builder to install a number of 25 ft. high retaining walls.

**Challenge:**

The developer's challenge was two-fold:

1. Built on a Glacial Till in Western Washington, where high rainfall is the norm, the homes sat 5 ft. from the retaining walls, making unstable soil and wet conditions a hazardous combination. To stabilize the soil and stay within the budget, the builder needed a proven, cost-effective alternative to the proposed soil nail wall.
2. Provide a zone in which the foundations of the homes were not impacted by geogrid reinforcement.

**Solution:**

GravityStone Hybrid System from WestBlock Systems. This creative approach used MSE over modular with single cell facing to add stability, connection strength, and to eliminate geogrid at the top of the wall.

**Results:**

- Contractor saved \$150,000-plus by using the GravityStone Hybrid System rather than the alternative soil nail wall.
- Soil is stable, safe, can handle significant of surcharge.
- Split-faced wall design compliments the high-end luxury homes and surrounding environment, creating an aesthetically pleasing community.

## INSTALLER ONE-UPS THE COMPETITION, SAVES DEVELOPER \$150,000+

*Sound Retaining Walls, Tacoma, Washington, uses WestBlock's GravityStone™ Hybrid Retaining Wall System to add stability and beauty to a luxury adult community.*



As urban sprawl expands its reach, and flat level land becomes a distant memory, developers are forced to look for creative and cost-effective ways to meet construction demands. The Pemberton Creek development in University Place, Washington, is no exception. This high-end adult community attracts retirement age folks with its breathtaking views of the Cascade Mountain Range. However, like most new communities in this neck of the woods, Pemberton Creek is built on a series of steep slopes cut from the hillside. A particular challenge considering the site features a stagnant surcharge and extremely unstable soil.





## THE PEMBERTON CREEK PROJECT

(From cover)

In order to stabilize the ground, a preliminary design called for the installation of a soil nail wall system that would be 25 feet high with homes sitting within five feet of the walls. “The soil at Pemberton Creek is called glacial till and very common around here. Left alone, it’s perfectly fine. Disturb it and you’re asking for problems. Add wet conditions like we see in Western Washington and you have a builder’s nightmare,” explains Ty Gillis, owner, Sound Retaining Walls (SRW). “The contractor called us in to review preliminary plans for a soil nail wall. We convinced him we could install a better, more attractive wall for less money. And we did,” says Gillis.



### ***Making the grade with GravityStone™***

To make good on their promise, SRW would need to import fill and save enough money on the install side of the quote to make the net result less than soil nail. “To make this happen we knew we had to get creative with our design. So we turned to WestBlock Systems.”

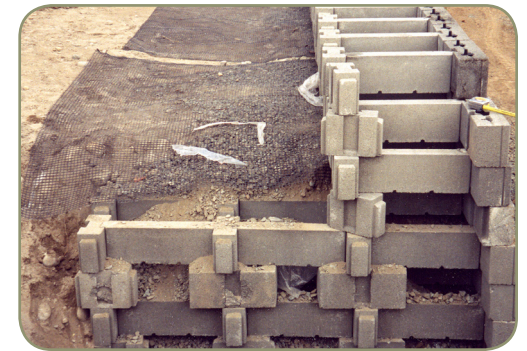
“When SRW approached us with the opportunity to help them create a high quality, low cost wall that could hold a lot of surcharge, we suggested GravityStone,” recalls Jim Hammer, owner, WestBlock Systems. “GravityStone typically installs in two different ways: The MSE approach combines block and geo-grid. While our modular product uses a cribbing system, which is narrow and thereby requires less



Forth Quarter 2005 • University Place, Washington

excavation. To meet SRW’s challenge, we combined the two different approaches to create a “hybrid” design using the modular cribbing system at the base of the wall and M.S.E in the upper portions.”

According to Gillis this was just the creative spin he needed. “The beauty of Jim’s approach was that instead of having to use multi-cell depth in the Modular design, or needing to use super long grid lengths in the MSE design, we used only one cell and then incorporated very heavy, very dense geo-grid.” The result was a MSE wall that used less grid and fewer block yet was just as strong as a soil nail wall. “This hybrid solution only works because the single cell GravityStone unit tests extremely high in “connection” strength and in “pullout” equations,” says Gillis.



***GravityStone saved the contractor \$150,000-plus in material costs alone. At \$28.95 per square foot, GravityStone provided a high quality, cost-effective alternative to the proposed soil nail wall, which came in at \$62 per square foot.***

### ***Reducing costs, increasing aesthetic appeal***

GravityStone not only helped SRW keep its promise to create a better wall, but it also proved they could bring it under budget. “Even we were surprised at how much our customer saved by going with GravityStone,” says Gillis. At \$29.98 per square foot versus the \$62 per square foot for the soil nail wall alternative, GravityStone saved the developer more than \$150,000 in material costs alone.

Gillis attributes the cost savings to Hammer’s innovative solution and the fact that GravityStone is so easy to install. “The work can be done by skilled laborers, eliminating the need for high-cost certified masons.” As an added bonus, GravityStone’s split-face design compliments the high-end luxury homes, creating an aesthetically pleasing community.

(Continued on back page)