What You Don't Know About The Quad Restoration

FOR A LONG TIME, everyone knew something had to be done about Stanford's balustrade, the sandstone railing that adorns the front of the Quad. Eroded years ago by sprinklers and by a cement restoration that didn't quite seal, it was a broken necklace among the University's many architectural jewels. Balusters were crumbled, ornamental urns missing, and intricate carvings eroded. "It was a safety issue," says Julie Hardin-Stauter, Stanford's associate director for zone management, as well as an aesthetic dilemma. Today, after an 18-month restoration led by stone sculptor Oleg Lobykin, the balustrade is whole again, matching the seismic work already done on the Quad. In the process, Stanford has learned a lot about sandstone.

The big Russian guy is a sorcerer in stone.
Lobykin, 41, learned his craft in St. Petersburg, a city beautiful with granite, limestone and marble. After he came to America in 1990, he sculpted the stonework at Cathedral Church of St. John the Divine in New York. When his American wife, Kimberly Carlton, MBA '02, attended Stanford, Lobykin showed his portfolio to the University's then-associate architect, Ruth Todd, who planned the restoration of the balustrade. Lobykin remains a fan of Stanford's carving: "There's nothing like this, at least in California. It's excellent-quality work."
Open mouth. Check mirror. Floss. Understand?
Unless you're cavity-free, your mouth can teach you the essentials of this kind of restoration. That porcelain filling that matches the color of your teeth? Think of it as the restoration mortar, known as Jahn M-70, used throughout the balustrade project. A replacement tooth? It's like the new stone balusters, squat replacement pillars cast to match the originals in color. The cleaning you need for those coffee stains? Liken it to the power wash that removed layers of dirt and biological growth from Stanford's light posts.

Rocks around the clock.
As one of California's Big Four, Leland Stanford knew railroads like most of us know our freeway on-ramp. When his geologists found the sandstone he craved in San Jose's Almaden Valley, he ran a railway spur from Southern Pacific's New Almaden line to retrieve the durable, but carvable, stone. Workers hauled out roughly 800 cubic feet of stone daily for four years and shipped it to Palo Alto. The stone, which is 85 percent quartz, included the occasional fossil: check out the mold of a turritellid gastropod, a cone-shaped mollusk, near the northwest corner of the Peterson Lab building.

From storied urn to animated bust.
The numbers alone reveal the difficulty of the job: the restorers needed to install 435 new balusters and restore 60 old ones. Check. To replace five missing top stones and reinforce another 33 with one-inch steel rods. Check. With each baluster weighing 240 pounds and top stones averaging 1,200 pounds, they removed and put back 200 tons of stone. Groan. In the process, Lobykin went through more than 100 drill bits, dozens of diamond discs, and more than 100 cubic feet of mortar.

Missing persons report: Gutenberg and Franklin.
Face the Quad from Palm Drive and you'll see two restored sculptures by Antonio Frilli that command spots high above the entrance to Jordan Hall. The statues honor Louis Agassiz and Alexander von Humboldt. On the left, however, above Wallenberg Hall,
are empty spots where representations of Benjamin Franklin and Johannes Gutenberg used to stand. One of the University’s architects, Sapna Marfatia, says they were last seen when scaffolding covered the building before the Law School moved to the front of the Quad in 1950. Stanford authorities, who don’t know how they went missing, are asking for public help in finding the sculptures.

**On the level? Something doesn't measure up.**

As they worked on the 1,200-pound stones atop the balusters, the restorers made two intriguing discoveries. The first is that the sandstones aren't on the level. Over the years, they've settled slightly in the middle, drooping from ¼ to ½ inches. The second is that the stones were linked by mechanical keys built into the rock: when Lobykin tried to lift one stone, he found its neighbors tugged upward as well.

- SCOTT HERHOLD