UNIVERSITY OF MINNESOTA RESOLVES PARKING LOT DRAINAGE PROBLEMS WITH WILLOW CREEK PERMEABLE PAVERS

Stormwater from more than 60,000 square feet of University of Minnesota parking lot surfaces is now being infiltrated into the ground instead of running directly into local waterways thanks to a Willow Creek Permeable Paver solution.

The project took place over a three-year period at two student housing parking lots midway between the University's Minneapolis and St. Paul campuses. The first lot was over 30,000 square feet and was finished in 2009; the second 30,000-square-foot lot was finished in 2011.

"Instead of just reconstructing them, we had to meet some very strict U of M runoff standards," explains Stan Lim, engineer with HR Green, the St. Paul consultants who designed the projects. "The site's water drainage had to meet pre-settlement conditions," meaning most all of it had to be retained.

"That site has some really poor drainage. When there was a big rain, people said you could see stormwater drain lids blown right off," says Lim. "To replace it with asphalt, we would have had to build some kind of stormwater management system—underground tanks, detention pond."

Instead, HR Green selected Willow Creek Aqua-Loc Permeable Pavers to manage the stormwater runoff at a much lower cost.

"The whole parking lot is essentially an infiltration system," says Lim. Virtually all of the runoff flows through the pavers and underlying aggregate and is temporarily stored in the ground under the parking lot instead of running into the city's storm sewer system. By eliminating over 95 percent of the runoff, it meets the University's strict stormwater management requirements.

LOCATION:
Minneapolis, MN

OWNER:
University of Minnesota,
Como Student Housing

DESIGNER:
HR Green, St. Paul, MN

CONTRACTOR:
J. D. Rynders Inc., Prior Lake, MN &
Glacial Ridge Inc., Willmar, MN

MANUFACTURER:
Willow Creek Concrete Products,
Oakdale, MN

SOLUTION:
Aqua-Loc

PRODUCT COLOR:
Sandstone & Sedona

Willow Creek™
Permeable Pavers