

PROJECT SPOTLIGHT: URBAN ALLEY RENEWAL

Full Depth Reclamation (FDR)

33% Increase in average CBR value	100% In-place materials recycled and stabilized	<72 Hours Before Chip Seal Surface Installed
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CHALLENGES

- The existing pavement was heavily distressed and composed of inconsistent and variable pavement layers.
- Patches and temporary fixes were no longer effective.
- Poor drainage caused moisture issues and accelerated the pavement distress.

SOLUTION

- Reclaimed the upper 6" of the distressed alley to create a uniform layer of material.
- Stabilized the upper 6" of the alleyway with Midwest's Eco-Pave®.
- Installed chip seal over the stabilized foundation and fog sealed for a finished surface.

RESULTS

- **33% Increase in Load Bearing Capacity:** Increased the average CBR value of the alleyway from 27 to 36 to support vehicle traffic.
- **Improved the Alley's Uniformity:** Reduced the road's Coefficient of Variation (COV) in CBR value from 35% to 17% after stabilization.
- **100% In Place Materials Used:** Reclaimed and stabilized 100% of the existing pavement – no additional aggregate required.
- **Eliminated Local Soft Spots:** Raised the minimum CBR value from 14 to 31.



PROJECT BACKGROUND

Product: Eco-Pave®
Location: Ohio
Industry: Municipal
Customer: Public Works Department

The Public Works Department needed a practical way to restore a short alley segment that had deteriorated from years of patching, utility cuts, and rutting. Full reconstruction would have been costly and disruptive.

Instead, the City partnered with Midwest and Asphalt Zipper to pilot a stabilized full-depth reclamation (FDR) method. The approach, incorporated Midwest's polymer-based Eco-Pave® with recycled in-place material to ultimately create a uniform, stabilized base ready for chip seal and final fog seal.

LOOKING FORWARD

This pilot project showed how stabilization can serve as a value-engineered alternative to full reconstruction. The Public Works Department can now consider scaling the approach to other alleys and low-volume roads, reclaiming in place, stabilizing with Eco-Pave®, and finishing with chip and fog seals. For municipalities, this represents a way to stretch maintenance dollars and deliver more miles of improved roadway with fewer resources.