

City and County of Denver 16th Street Reconstruction

Denver, CO

*Historic Character,
Modern Performance*

Entering Firm:

**Martin/Martin
Consulting Engineers**
Lakewood, CO

Owner:

**City and County of Denver,
Dept. of Transportation
and Infrastructure**
Denver, CO



The 16th Street Redevelopment is a transformative civil engineering project that revitalizes downtown Denver's iconic pedestrian spine. Spanning 13 city blocks and 9 acres, Martin/Martin led civil design with a focus on sustainability, accessibility, and modernization, preserving the street's historic identity while preparing it for future generations.

The team introduced several infrastructure solutions, including a modular suspended pavement system with integrated soil cells, slot drains, and reinforced walls—supporting tree

growth and streetscape durability. The project also incorporated Continuously Reinforced Concrete Pavement, typically used on highways, to withstand a high-load transit setting.

A reengineered drainage system with stainless steel slot drains and precision-formed concrete mitigates freeze-thaw risks, enhancing long-term performance. These innovations were backed by modeling, testing, and quality control measures, including over 1,000 potholes to inform a comprehensive 3D utility model. The project exemplifies inclusive design, with detailed ADA strategies and pedestrian-focused enhancements supporting Denver's downtown workers and residents. Over 1,000 cubic feet of uncompacted soil per tree improves the urban canopy, while permeable subgrades and underdrains promote stormwater management and sustainability.

Delivered through a design-build partnership with PCL Construction, Martin/Martin coordinated a 60+ person team and five subconsultants to meet the city's goals for safety, mobility, and economic vitality, all while ensuring uninterrupted business access during construction. This landmark redevelopment reaffirms the role of civil engineers in shaping resilient, equitable, and inspiring urban spaces.

