



Executive Summary: *Providing a Safe and Clear, Year-Round Connection for a Heavily Used Corridor*

The **Maroon Creek Multi-Use Trail** in Aspen, Colorado, exemplifies engineering excellence through its innovative design, environmental sensitivity, and community impact. Led by Otak, **this project transformed a challenging mountain corridor into a safe, scenic, and sustainable transportation route for pedestrians and cyclists.** Aimed at adding a safe, year-round route for the City of Aspen (City), the Maroon Creek Multi-Use Trail creates a clearly defined connection through a heavily used and tightly constrained corridor.

Extending to the Aspen Highlands Trail, Otak provided planning, conceptual design, and final construction documents for this path to complete a much-needed connection between the city core, Aspen Recreation Center, Aspen Highlands Ski Area, and iconic Maroon Bells Scenic Area. The trail connects residential neighborhoods, schools, recreation, and downtown Aspen, promoting active transportation and reducing vehicle dependency in a region known for its ecological and recreational value.

An amenity for locals and tourists alike, the world-renowned mountain destination of Aspen features a trail system that enhances active transportation across the area, including Snowmass, Woody Creek, Basalt, and the greater Pitkin County. The Maroon Creek Multi-Use Trail connects the SH 82 roundabout with the Aspen Recreation Center and its busy transit station, where a previously poorly defined mixture of pathways created potential conflicts between vehicles, pedestrians, and bicyclists. The ability to clear snow means the path is also now available for use in all seasons. Careful consideration of adjacent land-use led to intensive grading treatments, trail friendly buffer zones, unique drainage solutions, and additional channelization features, which created a trail that functions effectively while sitting naturally in the existing landscape. Intersection safety improvement measures, drainage upgrades, realignment of an existing pedestrian bridge approach, and transit stop enhancements were also among the features of this multimodal project.

For Phase 1 of the Maroon Creek project, Otak provided planning, conceptual design, and cost-estimating services for this connection

between the Castle and Maroon Creek roundabout on SH 82 at the northern end of the existing Highlands Trail, while considering how to provide separation from the Aspen High and Aspen Middle School pathways as well as how to interact with the well-established Nordic trails in the area.

Phase 2 of the project involved the development of detailed construction plans and specifications to facilitate a Construction Manager/General Contractor (CM/GC) solicitation. With input from the CM/GC, modular block retaining walls were selected to save cost and keep the project on schedule. Otak also employed other innovative design approaches, including using a concrete barrier wall as a retaining wall to elevate the trail directly adjacent to the existing roadway. This provided for a more comfortable trail experience while avoiding impacts to the roadway and the existing bridge abutment. The narrow corridor provided limited space for detention, and Aspen design criteria required that offsite flows be maintained at or below historic levels. Otak employed dry-well structures to mitigate off-site flows while avoiding a larger project footprint.

Despite steep slopes, constrained right-of-way, and challenging drainage requirements, the final trail met the project goals of creating a safe and clearly defined connection between the core of Aspen, the Aspen public schools campus, and the Aspen Recreation Center. It now serves over 1,200 users daily during peak season and has become a model for sustainable trail development in Colorado's high country. The Maroon Creek Multi-Use Trail demonstrates how engineering can solve complex problems while enriching communities and protecting the environment.