



## Greenway Cross Section Comparison Information updated December 16, 2011

Design Element	Barrier Separated Path		Swale Separated Path	
	Pros	Cons	Pros	Cons
General	Considered a safer design with controlled access to Clear Creek.	Requires a wider section, resulting a larger overall footprint and increased retaining wall heights.	Requires a narrower section with less visual impacts, lower retaining walls and continuous access to Clear Creek. Less construction cost. Allows for ability to "meander" the path.	Provides no physical protection between the path and CR 314.
Roadway guardrail between path and CR 314	Provides physical protection for path users from errant vehicles. The path "feels" safer to all users due to the separation. Restricts vehicles from parking on the path.	Aesthetic guardrails could be a problem for maintenance and replacement of parts. Guardrails are obstacles and themselves are a physical hazard for vehicles (roadway and maintenance). Guardrail may have to be uninstalled/reinstalled for any detour work on the Twin Tunnels project. To maintain NEPA separation of projects, barrier needs to be installed as part of phase I, potentially causing issues with detour.	Without guardrail, no maintenance is required. Inside shoulder of CR 314 may be reduced to 2 feet. Eliminates NEPA conflict between projects caused by the barrier.	Without guardrail, significantly errant vehicles could travel onto the path or possibly park on it, creating a safety issue for path users.
42" railing adjacent to CR 314	Provides physical protection for path users from toppling into the roadway.	The railing requires a 3 foot clearance from the path, requiring a wider path section. Adds another maintenance element to this section of CR 314. Allowable openings on the railing are restricted to less than 6 inches, detracting from the visual experience as well as creating a wildlife barrier between the hill and the creek.	Without railing, no maintenance is required and visibility and wildlife are not impacted. Inside recovery area on the path may be reduced to 2 feet.	Without railing, path users have direct access to CR 314, possibly creating safety issues for vehicles.
42" railing adjacent to Clear Creek (only at cantilever retaining walls)	Provides physical protection for path users from toppling into the creek.	The railing requires a 3 foot clearance from the path, requiring a wider section. Allowable openings on the railing are restricted to less than 6 inches, detracting from the visual experience as well as creating a wildlife barrier between the path and the creek. Restricts access into the creek.	Without railing, no maintenance is required and visibility and wildlife are not impacted. Outside recovery area on the path may be reduced to 2 feet, depending on the steepness of the slopes. Recreational access to creek is enhanced.	Short separation from the path to the creek could present a hazard for significantly errant bicyclists.
Swale between the path and CR 314	Without a swale there is less chance for water to seep below the trail or roadway.	Without a swale, water quality enhancements are significantly restricted due to the narrow corridor.	The presence of a swale provides the opportunity to add a water quality feature between the roadway and the creek.	Parking of vehicles in the swale or onto path could be a problem. If grassed, moving will be required.
Other significant design elements??				