

City of Austin Barton Springs Road Bridge



	Rehabilitation	Replacement
ROADWAY GEOMETRY		
Azie Morton Road – Extended Right Turn Lane	✓	✓
Barton Springs Road Alignment	<ul style="list-style-type: none"> • Improved but still unaligned • Less abrupt “zig zag” 	<ul style="list-style-type: none"> • Straight intersection with no “zig zag” • No east/westbound conflicts
PARK AMENITIES / IMPROVEMENTS		
Zilker Eagle Train	<ul style="list-style-type: none"> • Train replacement under bridge similar to current layout 	<ul style="list-style-type: none"> • Train replacement similar to current layout or relocation for additional space and safety
West Back Hike / Bike Trail / Pedestrian Bridge	<ul style="list-style-type: none"> • Pedestrian bridge replaced 	<ul style="list-style-type: none"> • Pedestrian bridge replaced or relocated
Hike / Bike Trail Passage Below Bridge	<ul style="list-style-type: none"> • Passage roughly twice as wide • Passage space and headroom similar to existing 	<ul style="list-style-type: none"> • Passage roughly twice as wide • Passage space increased vertically and horizontally
BRIDGE STRUCTURE		
Bridge Architecture and Aesthetics	<ul style="list-style-type: none"> • Existing arches and foundation remain • Structures undergo cathodic protection • New arches up/downstream complementary to existing arches • 8 arch lines 	<ul style="list-style-type: none"> • Existing arches removed • 4 substructure elements at two locations • New bridge aesthetic complementary to existing arrangement • 4 arch lines
Impacts to Historic Structure	<ul style="list-style-type: none"> • Preserves some existing historic bridge elements 	<ul style="list-style-type: none"> • Removes historic elements • Mitigation strategies offset impacts
Bridge Length and Abutment Locations	<ul style="list-style-type: none"> • Existing abutment remains • Expansion to north and south for additional arches 	<ul style="list-style-type: none"> • Shift west abutment further west • Provides more space and safety for pedestrian trail and train
Bridge Foundation Work	<ul style="list-style-type: none"> • Existing foundations receive cathodic protection, concrete mitigation and re-surfacing • 8 new foundations • 4 new arch lines with two piers 	<ul style="list-style-type: none"> • Existing arches and foundations removed down to creek bed • 8 foundations • 4 substructure elements at 2 locations
Temporary Construction	<ul style="list-style-type: none"> • Foundations for temporary works required 	<ul style="list-style-type: none"> • Construction by barge mounted cranes, no foundations for temporary works required
Bicycle Elements	<ul style="list-style-type: none"> • 10-ft wide bike lanes on each side • 2-way bike operation 	<ul style="list-style-type: none"> • 10-ft wide bike lanes on each side • 2-way bike operation
Pedestrian Elements	<ul style="list-style-type: none"> • 14-ft wide sidewalk on south side • 18-ft wide sidewalk on north side 	<ul style="list-style-type: none"> • 14-ft wide sidewalk on south side • 18-ft wide sidewalk on north side
Service Life	<ul style="list-style-type: none"> • Target Service Life Extension: 50-75 years • Dependent on additional sampling/testing of existing bridge 	<ul style="list-style-type: none"> • Target Service Life: 75 years • Can be extended to 100 years with enhancements to design basis and materials. 10%+ increase in cost
Bridge Maintenance	<ul style="list-style-type: none"> • Increased long term maintenance cost and requirements 	<ul style="list-style-type: none"> • Less maintenance cost and staffing labor required
Cost (Range including 50% inflation over course of project)	\$14.5M - \$22M	✓ \$10.2M – 15.5M
Constructability / Risk	<ul style="list-style-type: none"> • Constructability difficult due to precision-demolition and protection of remaining existing structures • Greater project risk with unknown material and subsurface foundation conditions 	<ul style="list-style-type: none"> • Comparatively less construction and project risk