

BARTON SPRINGS RD. BRIDGE

Mobility Committee Meeting

May 11, 2023



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“Effectively and Efficiently Deliver Quality Projects with the Concept of Speed”

Barton Springs Rd. Bridge



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Nearly
100
years old
built in 1926

20,000
Vehicles per day

1946
Bridge Expansion

**Key
Entrance**
to Zilker Park and
for Major City Events

\$36 million
Preliminary Funding Estimate
(Construction + Soft Costs)

FUNDING SOURCE:

- Preliminary Design: 2012, 2018 and 2020 Bonds
- Design: 2020 Bonds
- Construction: TBD

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Goal During Construction

- ✓ Maintain all 4 lanes of traffic during construction
- ✓ Maintain the Azie Morton / Barton Springs intersection during construction

20,000
Vehicles per day
on Barton Springs
Road

- Important commuter route
- Key access to Zilker Park
- Access to many special events (Trail of Lights, Austin City Limits, Blues on the Green, Zilker Park)
- Access to Zilker and Barton Hills neighborhoods

Barton Springs Rd. Bridge



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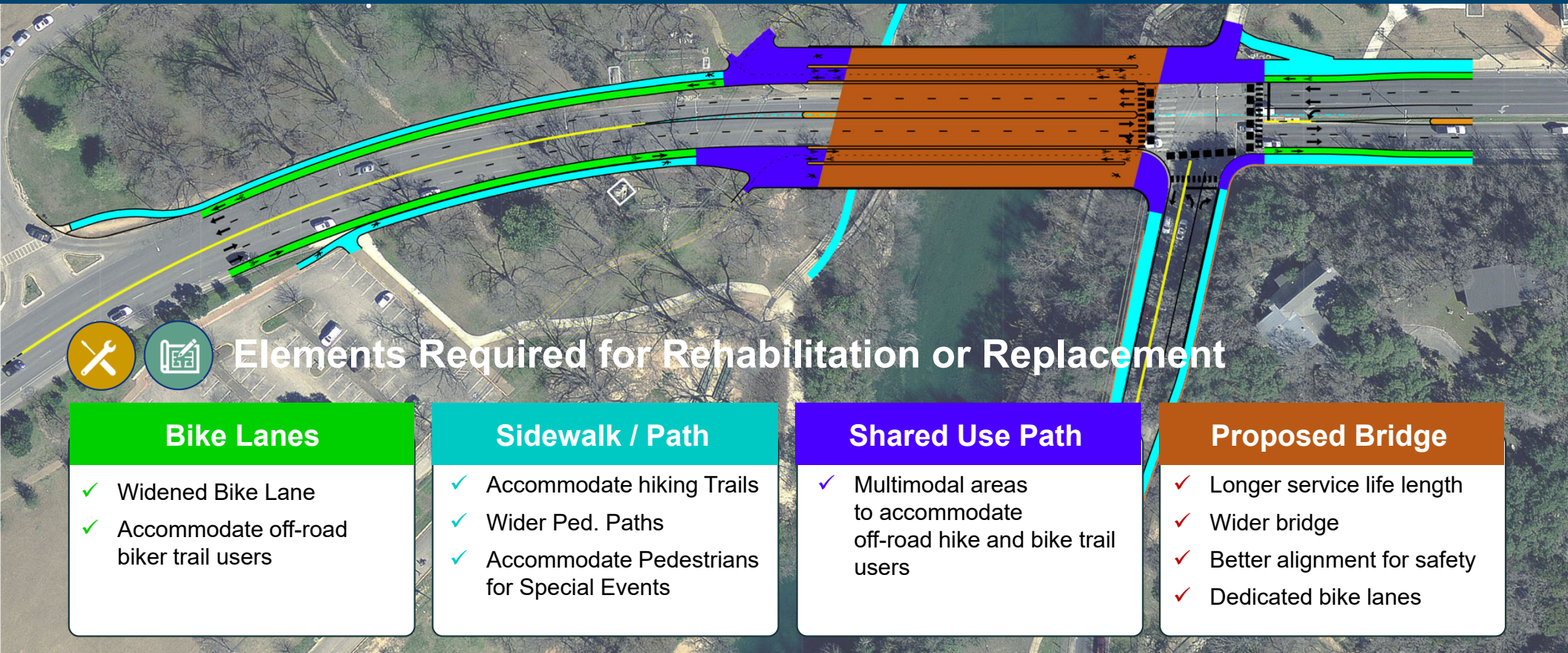
Coordination With Zilker Park Vision Plan

Team Coordination	✓ Project Managers for both projects attend meetings and provide updates to each other
Project Alignment	✓ Ensure preliminary bridge plans align with Zilker Park Vision Plan
Design Considerations	✓ Widen bike lanes and sidewalks on bridge ✓ Improve multi-modal connection into park
Public Input	✓ Completed public input (online and in person) for the initial recommendation

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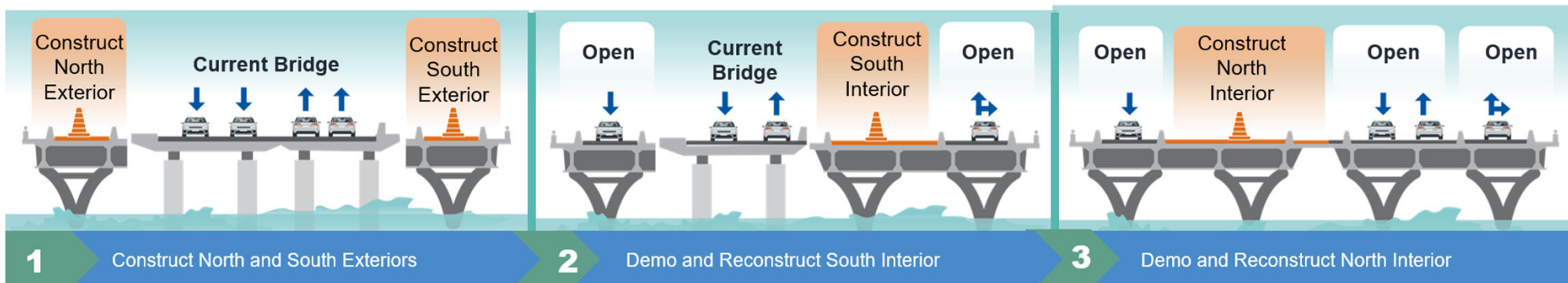


Barton Springs Rd. Bridge

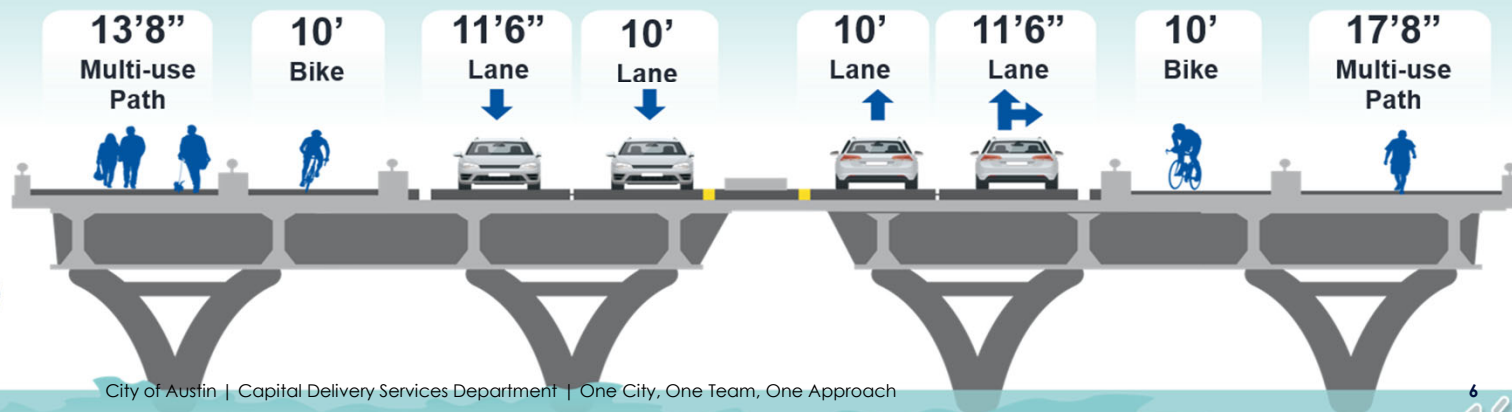


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Bridge Construction Phasing: 4 lanes open through construction



Final Bridge



City of Austin | Capital Delivery Services Department | One City, One Team, One Approach

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PROJECT OPTIONS

Barton Springs Rd. Bridge



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Rehabilitation Options



1 **PRESERVE** existing structure, consider separate bike/ped structure (minimal rework - light touch)

2 **REHABILITATE** and widen deck to include bike/ped

Replacement Options

RECONSTRUCT BRIDGE completely and widen deck to include bike/ped

1 **One-Span**
option



2 **Two-Span**
option



3 **Three-Span**
option



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Bridge Structure Rehabilitation



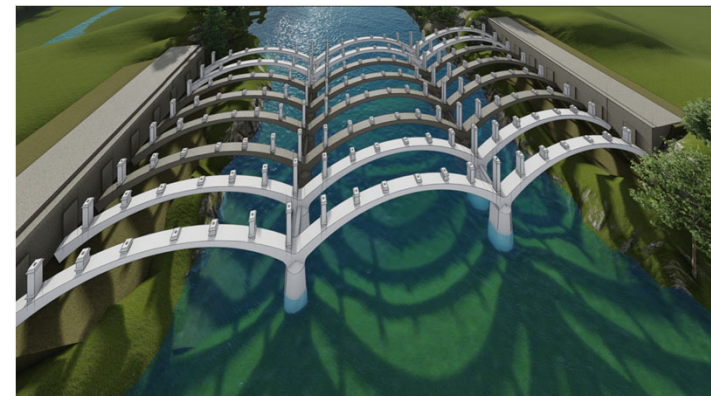
1

Remove Existing Bridge Deck and Spandrel Columns



2

Remaining Portion of Existing Structure



3

New Components: Exterior Pairs of Arch Ribs, Spandrel Columns, Deck, and Abutment Extensions

Less than half of the original structure will remain

- ✓ Remaining historical structure will require refacing with new material surfaces
- ✓ View of historical structure will be mostly blocked by new structure
- ✓ Estimated cost of \$19M




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Bridge Replacement Option Comparison

	1-Span	2-Span	3-Span
			
Structural Complexity	<ul style="list-style-type: none"> • Complex system 	<ul style="list-style-type: none"> • Less complex • Uses conventional foundations 	<ul style="list-style-type: none"> • Least Complex
Visual Openness	<ul style="list-style-type: none"> • Obstructed visuals • Views along center line maintained • Potential scour and bank/trail complexities 	<ul style="list-style-type: none"> • More visually open than 1-span option • View along center of creek obstructed 	<ul style="list-style-type: none"> • Most visually open • Clear views along center line of creek
Constructability	<ul style="list-style-type: none"> • Most complex to build • Requires temporary piers and falsework to make the arches 	<ul style="list-style-type: none"> • Fewest number of foundations in water • Top of bridge requires specialty construction and falsework 	<ul style="list-style-type: none"> • Specialty construction with fewest challenges
Initial Const. Cost (Bridge Only)	<ul style="list-style-type: none"> • \$18.1M 	<ul style="list-style-type: none"> • \$13.6M 	<ul style="list-style-type: none"> • \$10.2M

Barton Springs Rd. Bridge



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Rendering of Initial Recommended Bridge Replacement Option

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Bridge Pedestrian Concept
with access on both sides

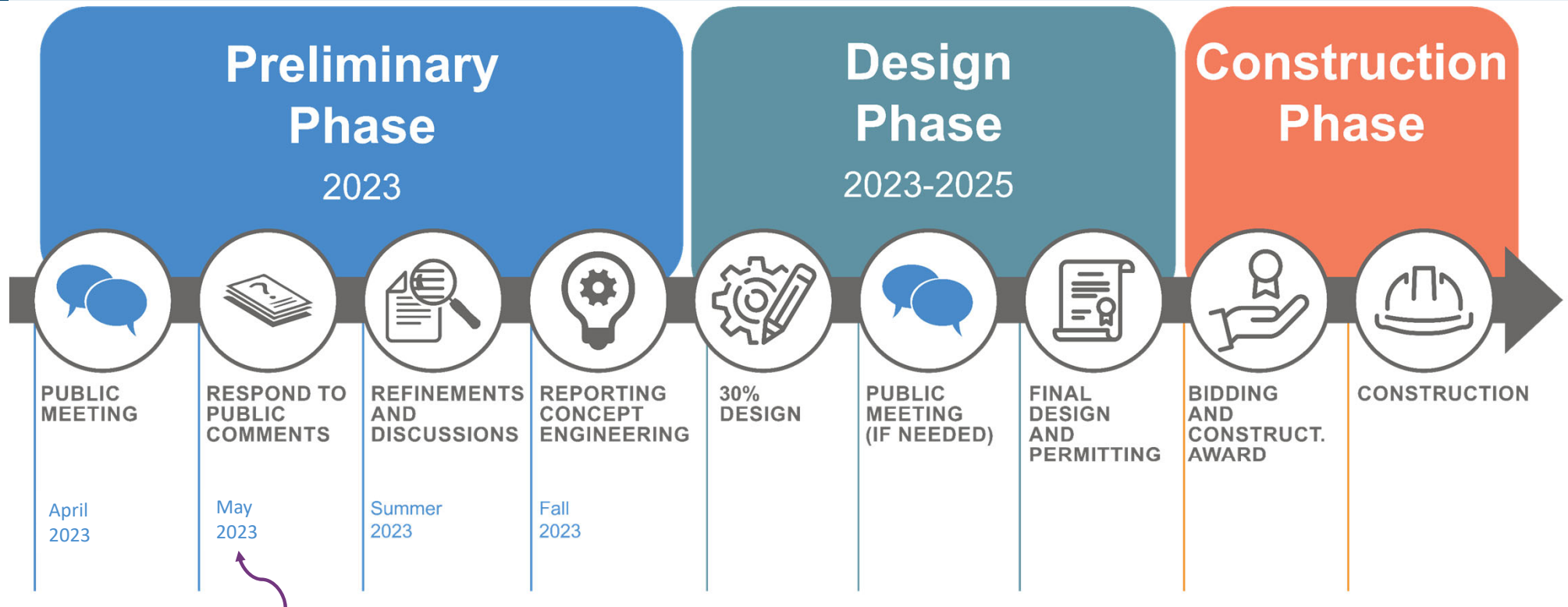


Rendering of Initial Recommended Bridge Replacement Option

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We are here!

QUESTIONS + ANSWERS



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