



Mobility Committee – Bond Bridges Update



Agenda



1 Barton Springs Road Bridge

2 Redbud Trail Bridge

3 William Cannon Road Overpass

4 Wishbone Bridge

Barton Springs Road Bridge

City of Austin
County Committee Report: April 2, 2026

File ID: 26-1379



100
years old

built in 1926

20,000
Vehicles per day

1946

Bridge Expansion

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

FUNDING SOURCE:

- Preliminary Design: 2012, 2018 and 2020 Bonds
- Design: 2020 Bond
- Construction: FHWA/City



1 Direction from Council in 2020 Bond Resolution (20200812-011):

BE IT FURTHER RESOLVED:

Funding for Barton Springs Road Improvements shall only be used for improvements between Barton Boulevard and Lou Neff Road after completion of the preliminary engineering study for a Barton Springs Bridge, which shall include a community engagement process, and after presentation of improvement options, a public hearing, and approval of options by City Council. Any improvements shall be aligned with the Zilker Park Vision Plan once approved by Council.

2 Previous Council Action/Hearings:

- 11/30/23 – Council conducts a public hearing to recommend the bridge replacement alternative
- 12/12/23 – Council work session on the recommended option
- 12/14/23 – Council conducts a public hearing and directs Staff to pursue replacement option
- 03/07/24 – Council Directs TPW Director to apply for a federal bridge grant to replace the bridge
- 05/02/24 – Council approves additional engineering services for the bridge replacement
- 04/24/25 – Council approves accepting \$32M in grant funds from the FHWA for bridge replacement ⁴



Project Development Process

PRELIMINARY PHASE

2015 - 2023



PUBLIC MEETING

April 2023



RESPOND TO COMMENTS

Summer 2023



REFINE REPORT

Fall 2023

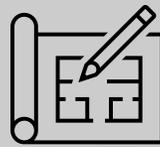


COUNCIL ACTION

December 2023

DESIGN PHASE

2024 - 2027



60% DESIGN + NEPA



PUBLIC MEETINGS + BOARDS AND COMMISSIONS



FINAL DESIGN AND PERMITTING

CONSTRUCTION PHASE

2027 - 2029



BID AND AWARD + COUNCIL ACTION



CONSTRUCTION

WE ARE HERE



Structural and Mobility Analysis:

- External Structure - Spalling Concrete
- Internal Structure – Deteriorating Steel
- Geotechnical Data –Replacement Design
- Cost/Benefit Analysis – extended life vs. cost
- ADA compliance – Pedestrian Circulation
- Pedestrian and Bicycle Mobility – no improvement to existing condition

Historic Analysis:

- Coordinated with US Army Corps (USACE) and Texas Historic Commission (THC)
- The bridge is a contributing feature to the Zilker Park Historic Landmark designation
- The Texas Historic Commission has approved potentially fully replacing the bridge. As the process continues, the final design will be reviewed and approved by USACE and THC.



Current Condition

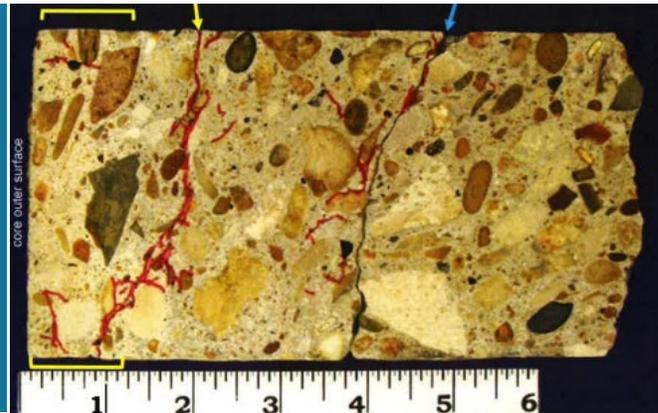
Spalling
Concrete in
Bridge
Structure



Delamination
of Beams



Concrete
Cores



Curb And
Railing Do
Not Meet
Current
ADA
Standards

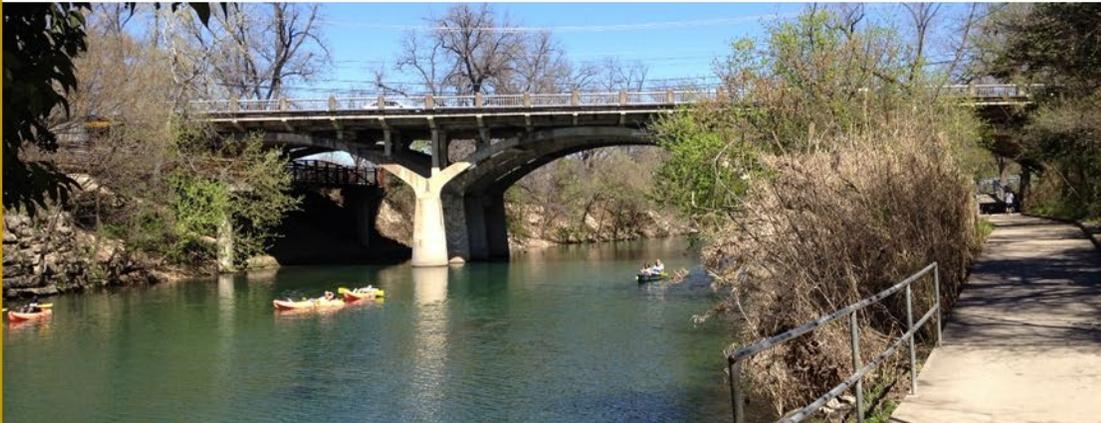


Load Restricted As Of November 2023 – Heavy Vehicles Moving Eastbound Must Use Outer Lanes

Project Options



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





Bridge Rehabilitation

Bridge Structure Rehabilitation



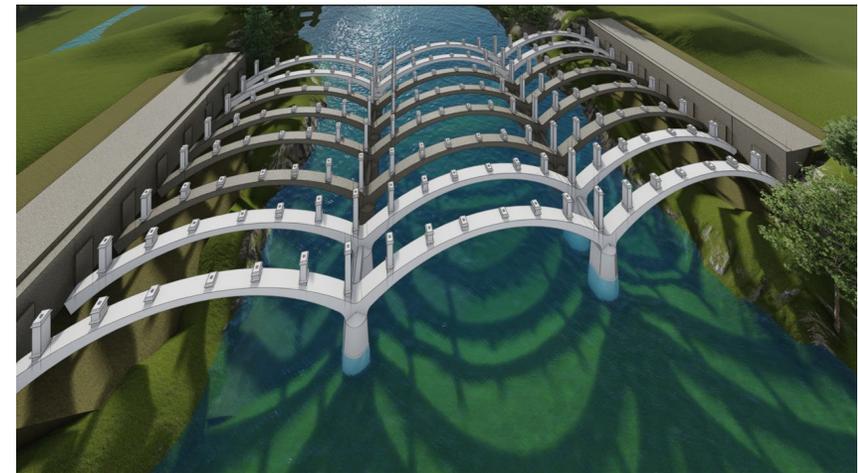
1

Remove Existing Bridge Deck and Spandrel Columns



2

Remaining Portion of Existing Structure



3

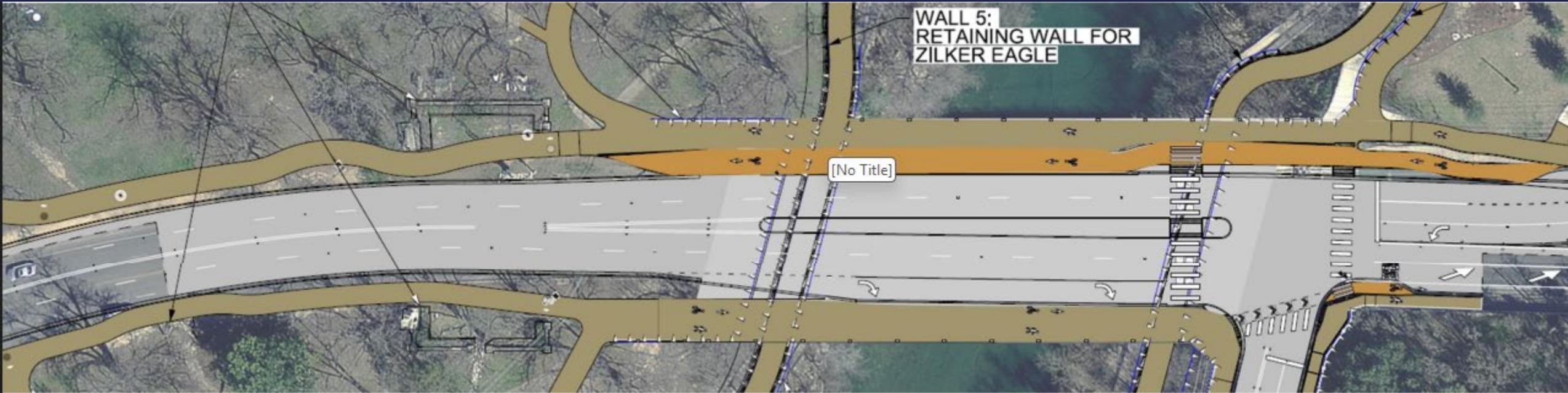
New Components: Exterior Pairs of Arch Ribs, Spandrel Columns, Deck, and Abutment Extensions

Less than half of the original structure will remain

- ✓ Remaining structure will require refacing with new material surfaces
- ✓ View of old arches will be mostly blocked by new structure



New Bridge Features



Bike Lanes

- ✓ Widened Bike Lane
- ✓ Accommodate off-road biker trail users

Sidewalk / Path

- ✓ Accommodate hiking Trails
- ✓ Wider Ped. Paths
- ✓ Accommodate Pedestrians for Special Events

Shared Use Path

- ✓ Multimodal areas to accommodate off-road hike and bike trail users

Proposed Bridge

- ✓ Longer service life length
- ✓ Wider bridge
- ✓ Better alignment for safety
- ✓ Dedicated bike lanes

Next Steps



- **Initial reviews from THC and USACE indicate replacement as a viable alternative**
- **As the project moves through NEPA process, all jurisdictional agencies and departments will review accordingly:**
 - Texas Historic Commission
 - US Army Corps
 - COA Permitting:
 - City of Austin Development Services
 - Boards & Commissions (Environmental, Mobility, Parks, Landmarks, etc.)
 - Community Outreach
- **Project received Federal Highway Administration Bridge Improvement Program grant for \$32M.**
- **Anticipated NEPA clearance at the end of 2026, bidding in 2027**





Example of a Bridge Replacement - Before





Example of a Bridge Replacement - After



Redbud Trail Bridge

City of Austin
Mobility Committee Backlog April 2, 2025

File ID: 26-1379



78
years old
built in 1948

3'
Single Sidewalk

No
Shoulders

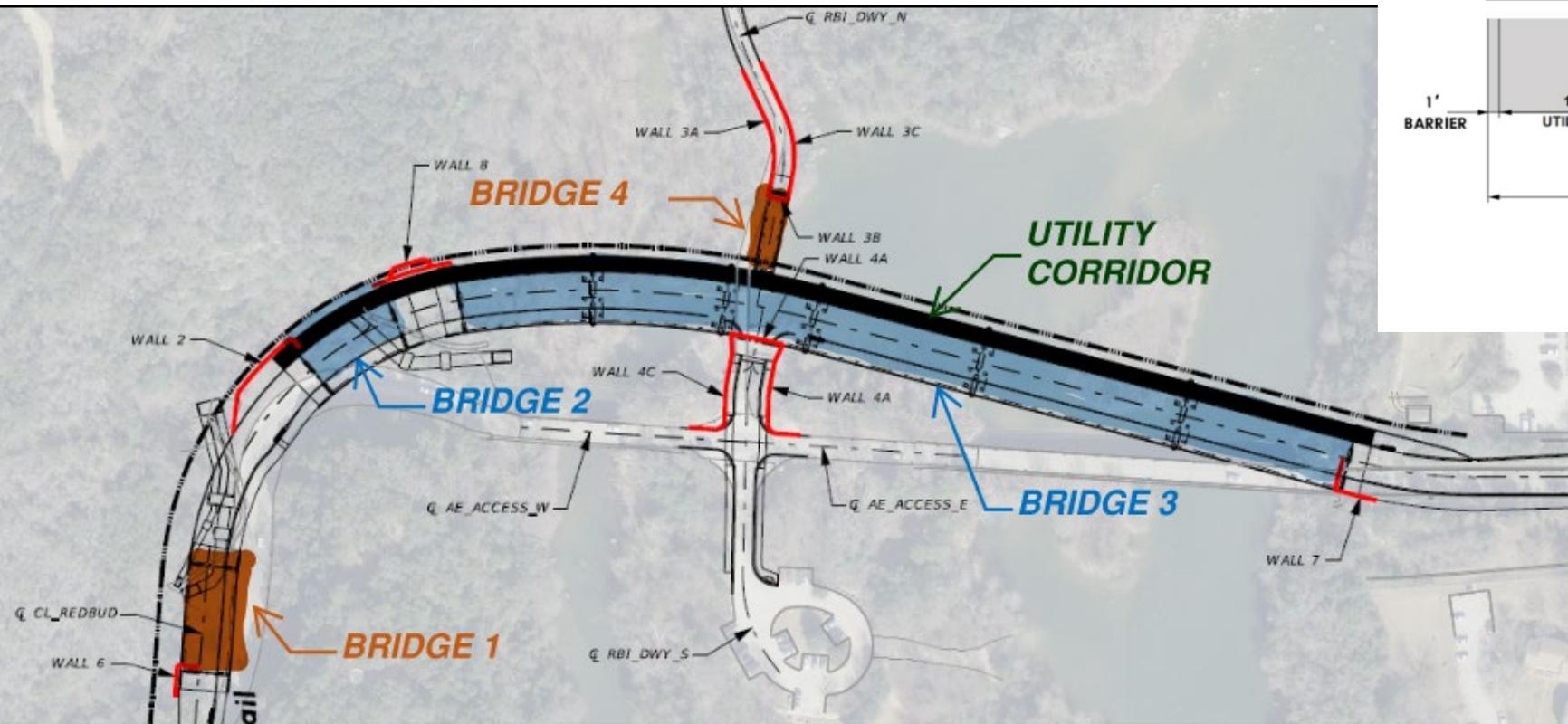
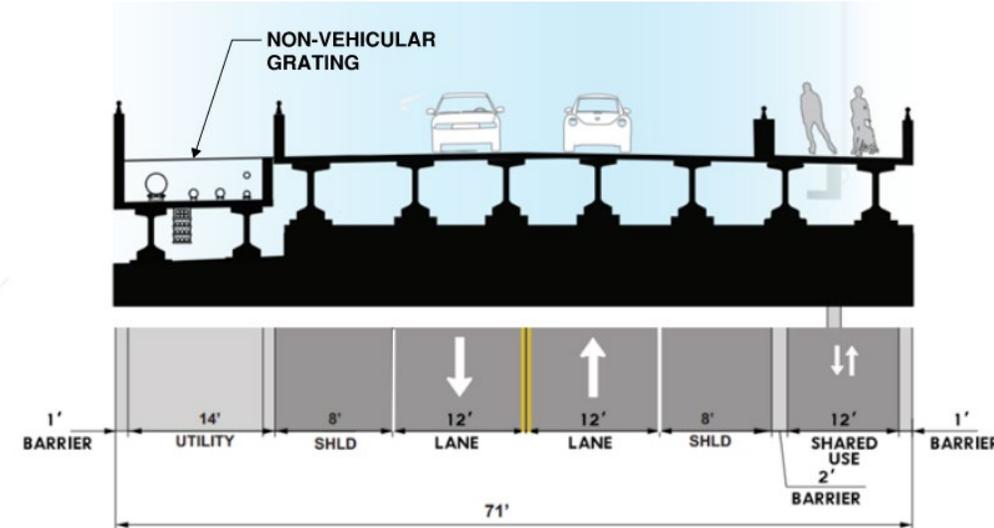
Utility
Corridor
Houses 8 separate
utility lines

Existing Rails are Obsolete



Original Project Scope & Cost

Total Project Cost = \$130M
Funding Need = \$77M



Existing Bridge Conditions



In late 2025, a Structural engineer was hired to perform a bridge assessment....

- Bridge deck and sidewalk in good condition, with small localized spalls and cracks
- Existing Steel Superstructure lifespan \approx 90 years
- Substructure (Abutments and Bents) are in satisfactory condition

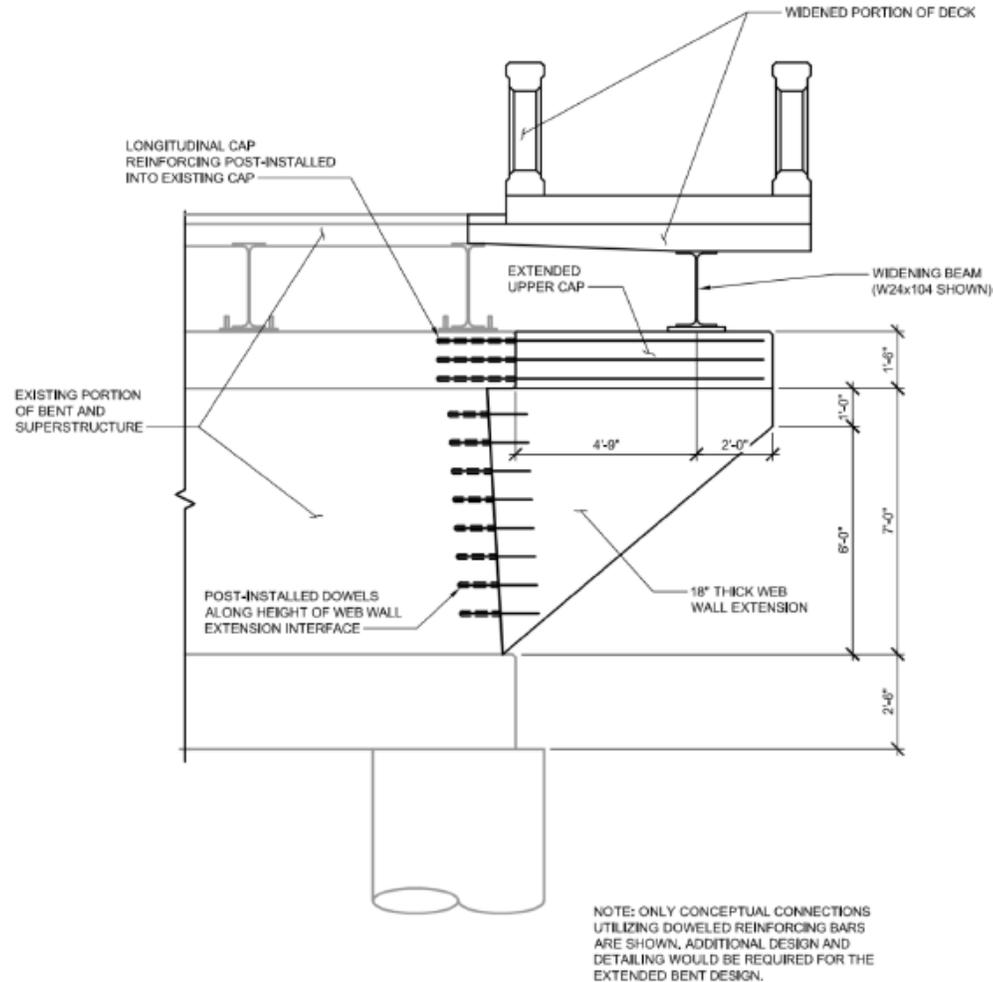
Conclusion: By performing bridge repairs and proper maintenance, this bridge's service life can extend for an additional 50 years.



Concrete Cracks in Abutment Wingwall



Potential Improvements



EXTENDED CANTILEVER BENT CAP OPTION

- Make suggested repairs to the superstructure, substructure and approaches
- Widen existing bridge to better accommodate bicycle and pedestrian traffic
- Improve bicycle and pedestrian connectivity between Red Bud Isle Park and Lake Austin Boulevard as feasible within existing ROW

Wishbone Bridge



Project Background



Bridge:

- Provides connectivity to trail users as well as commuters
- Structure configuration and name result of public feedback
- Features:
 - Dark sky compliant lighting
 - Center pergola with shade coverings
 - Planters, benches, bike racks, trash receptacles



The "Wishbone" bridge

Project Background



Unity Underpass:

- 16'x 30' structure replaces 5x7 box culvert
- Provides connectivity between Butler Trail and Roy G Guerrero Park
- Public Art Installation – AIPP funded

Project History



PUBLIC PROCESS



DELIVERY TIMELINE



Project Background



By the numbers:

- Design Duration = **35 months**
- Construction Duration = **18 months**
- Construction Contingency used = **1%**



QUESTIONS & ANSWERS

