



WELCOME!

REDBUD TRAIL BRIDGE PROJECT

(PROJECT ID: 5873.012)

Why Am I Here?

- **Learn** about the project & proposed design
- **Ask** questions about potential improvements
- **Share** your thoughts on the proposed design



Redbud Trail Bridge Project

Background



Core Issues

- Originally built in 1948, structures are over 70 years old.
- Bridges used by more than 16,000 vehicles per day — critical commuter route.
- Many bridges of this age were designed for lighter truck loadings and a 50-year design life. Trucks in 1940s were about one half the weight of today's trucks.
- Bridges are critical to the servicing and operation of the Ullrich WTP (UWTP) facility due to requirements restricting all UWTP traffic to Redbud Trail.

Critical Utility Link

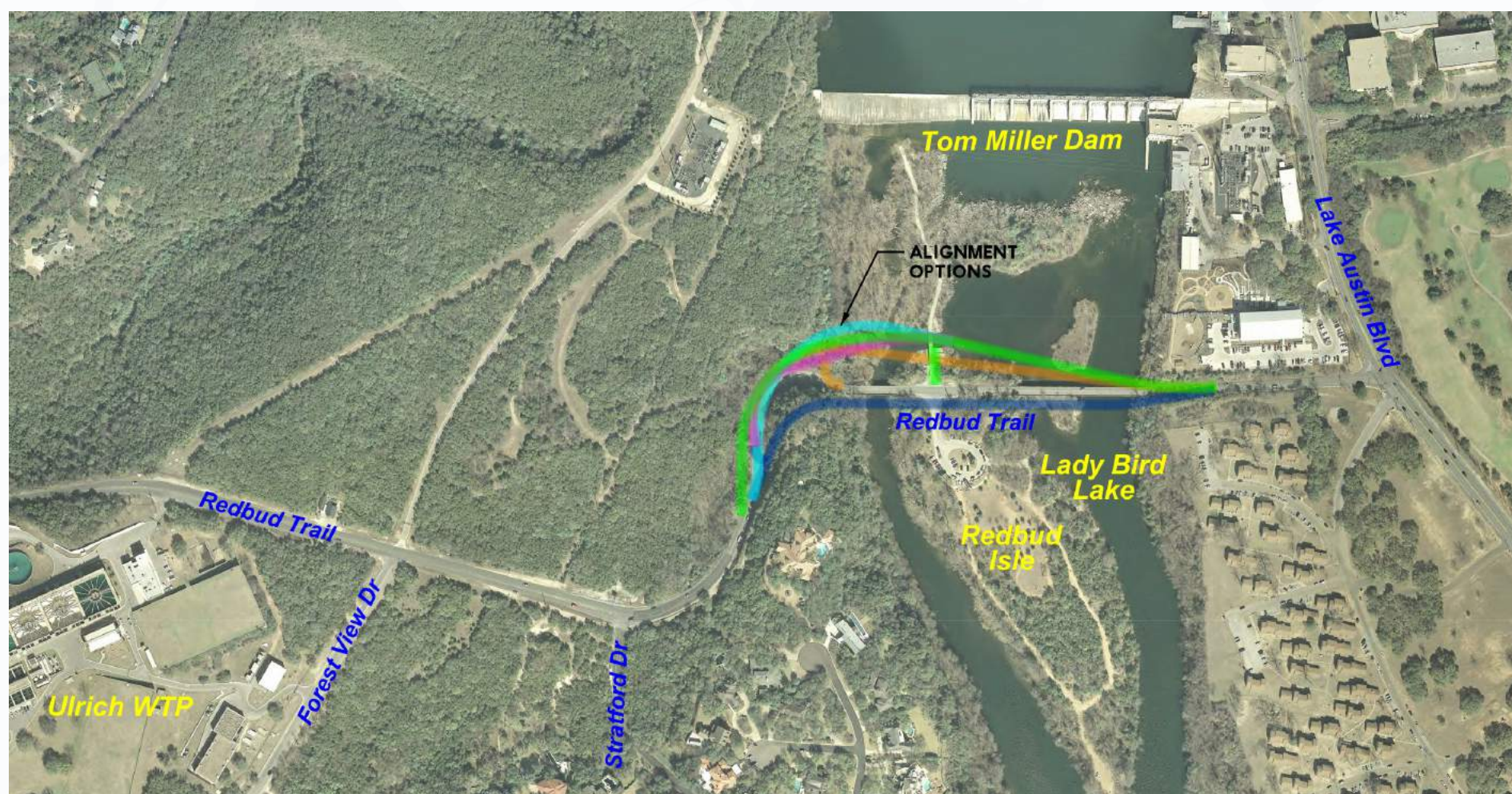
- Bridge carries process wastewater lines from UWTP as well as residential water/wastewater.
- These utility lines (and supporting bridge structures) are essential to the UWTP operations.
- A disruption to these process lines for even a brief period could cause a shutdown of a plant that provides drinking water to a large segment of Austin.

Flooding

- In a 100 year flood event, the bridge would be about 6 inches under water subjecting road and utilities to flood and debris/damage. Bridge could stay out of service for up to 3 days, not including time to address flood damage.

Funding

- Estimated cost is \$50 million
- Funding sources: 2012 bond program - Prop 12 and 2018 bond program - Prop G
- City is seeking additional funding opportunities





Redbud Trail Bridge Project

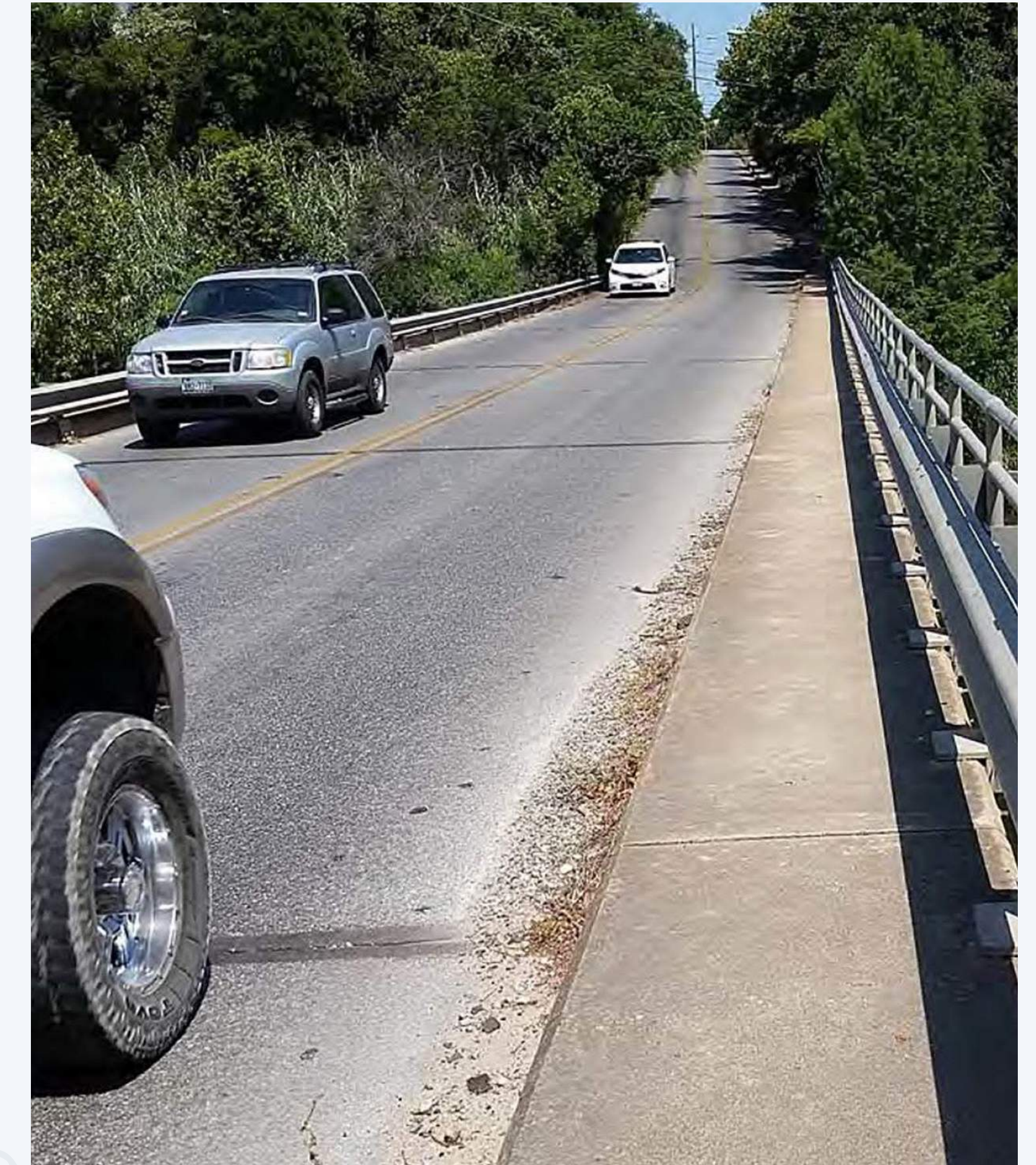
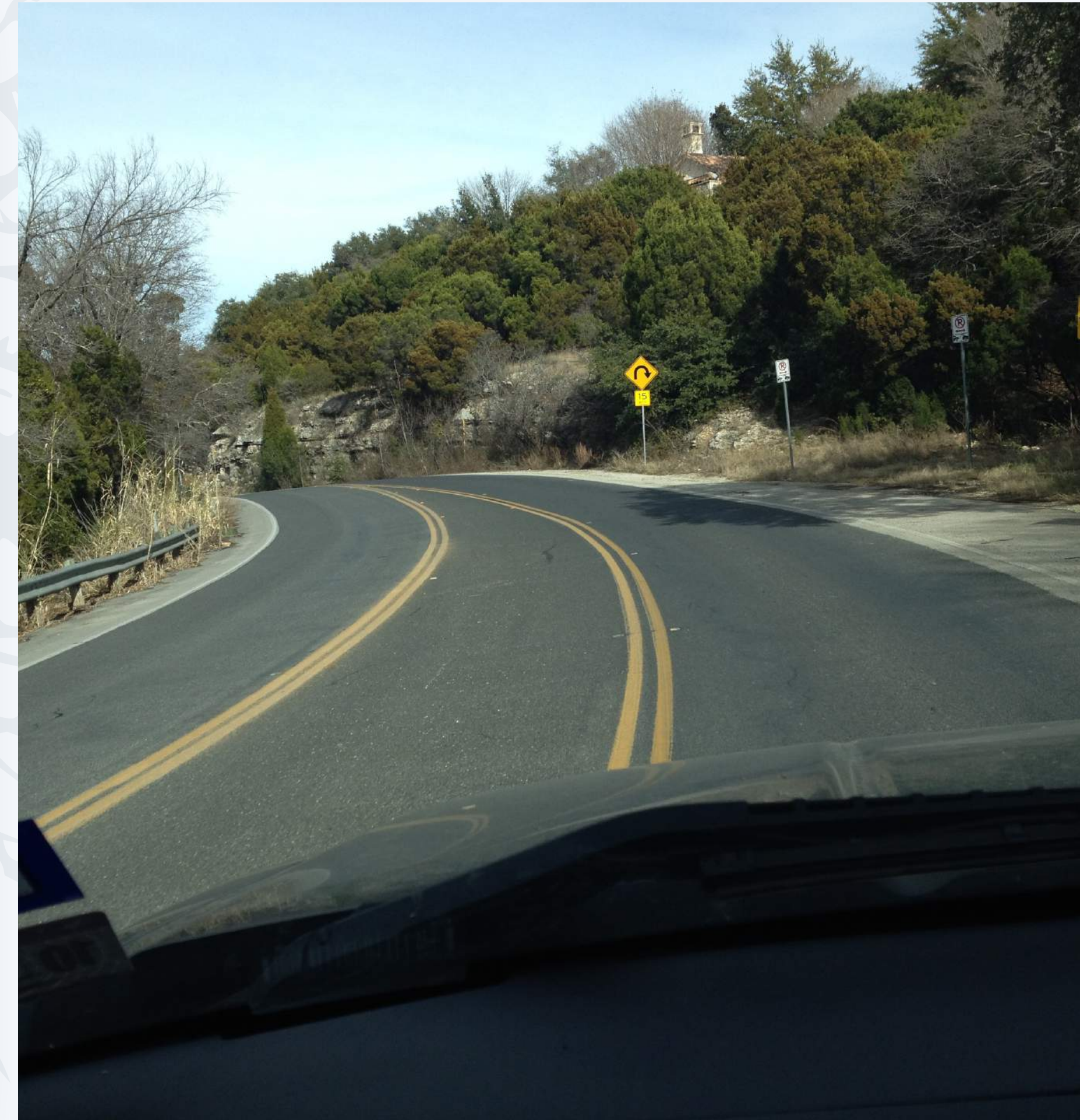
Why is a New Bridge Needed at Redbud Trail?

Need: What problems are we trying to address?

- Bridge is beyond structural life span
- Insufficient roadway shoulders on bridge
- Insufficient bike/pedestrian paths on bridge
- Safety concerns for roadway users
 - Steep, blind curve
 - Road not aligned with bridge
 - Accident history

Purpose: What are we trying to do?

- Improve public safety on the bridge and adjacent roadway
- Address historic design deficiencies



Project Objectives

- Improve safety
- Increase bridge elevation above 100-year flood
- Provide critical utility conveyance and access
- Avoid/mitigate limestone cliffs/ledge rock fall
- Maintain access to Redbud Isle during construction
- Keep traffic and utilities operational during construction
- Avoid, minimize, or mitigate environmental impacts



Benefits of a New Bridge

Safety

- New bridge to meet current design standards and loads
- Wider and safer pedestrian and bicycle routes
- Increased safety on bridge and roadway approaches
- Improved safety and access for critical utility link

Connectivity and Neighborhood Use

- Widened sidewalks to Lake Austin Blvd
- Easier bike/pedestrian access to Redbud Isle
- Redbud Isle Park improvements

Reduced Bridge Maintenance

- 100-year life for new bridge
- Height - above flood plain





Redbud Trail Bridge Project

Environmental Analysis of Project Area

Activities Completed to Date:

- Review of available environmental data
- High-level field surveys
- Documentation / mapping of environmentally sensitive areas
- Environmental evaluation of conceptual alternatives

Next Steps:

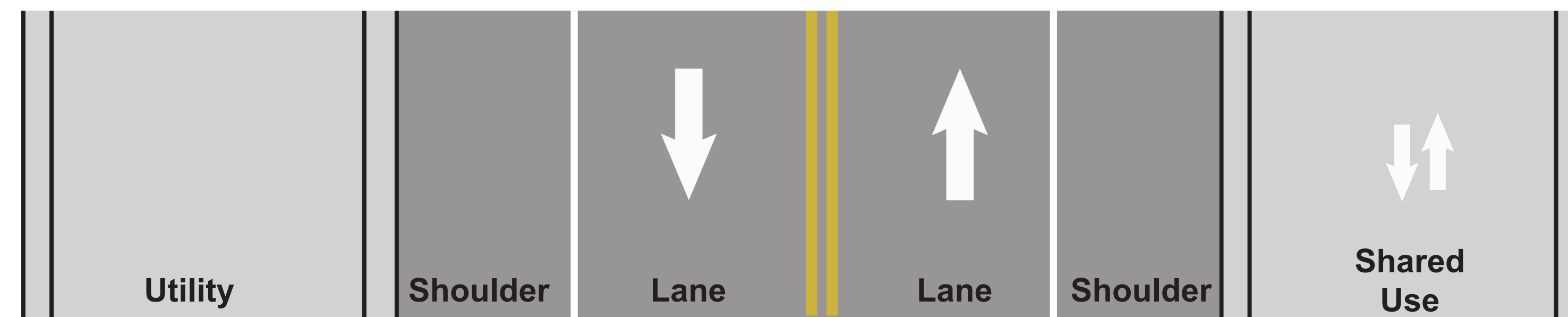
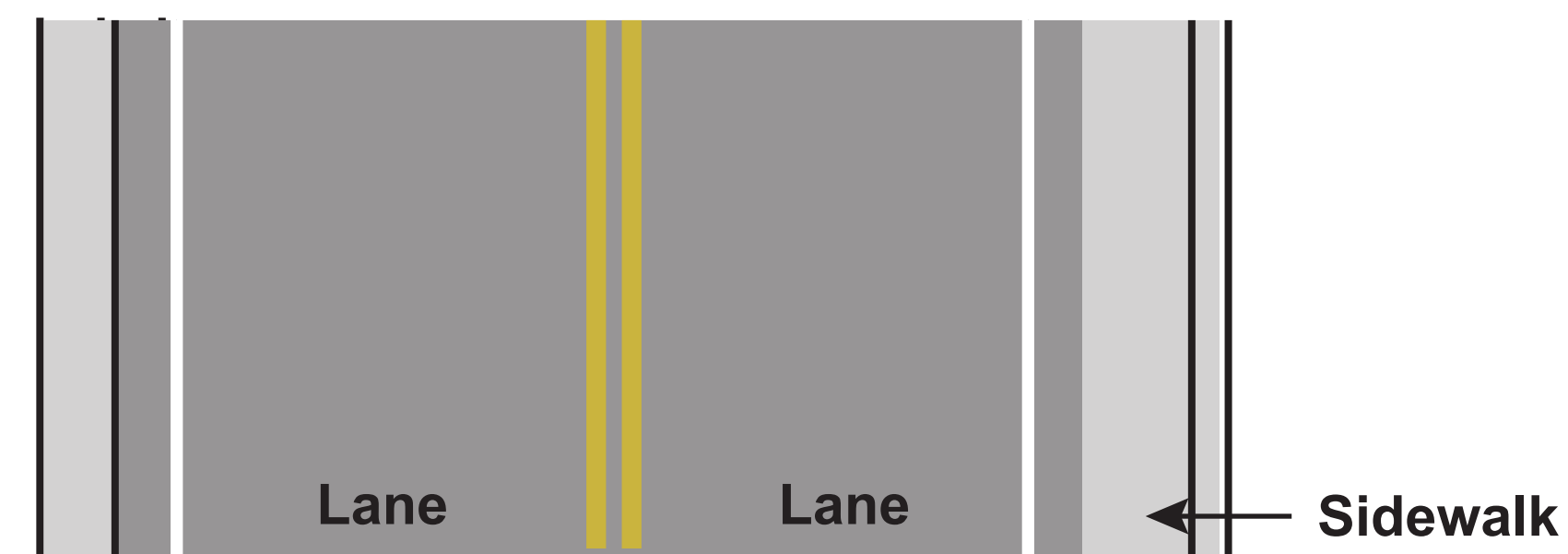
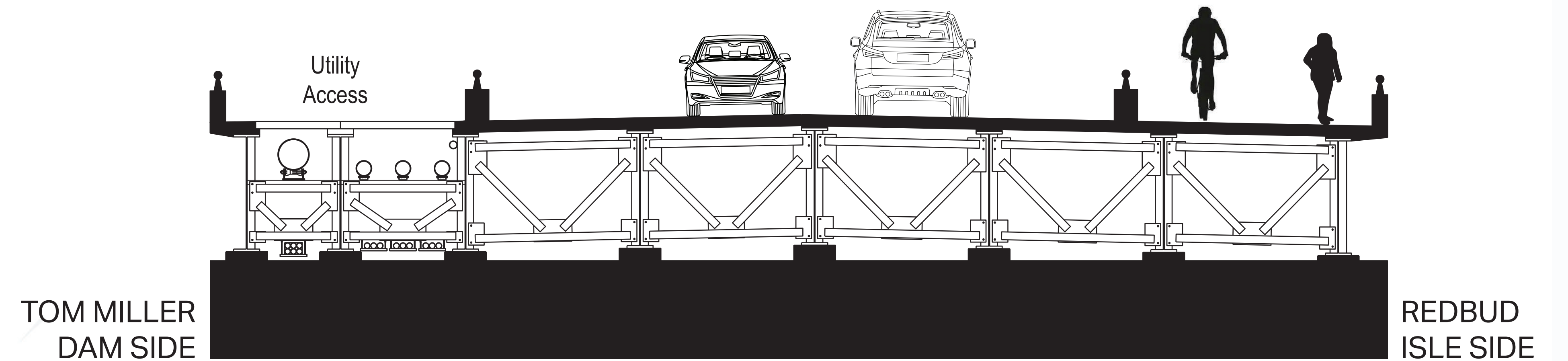
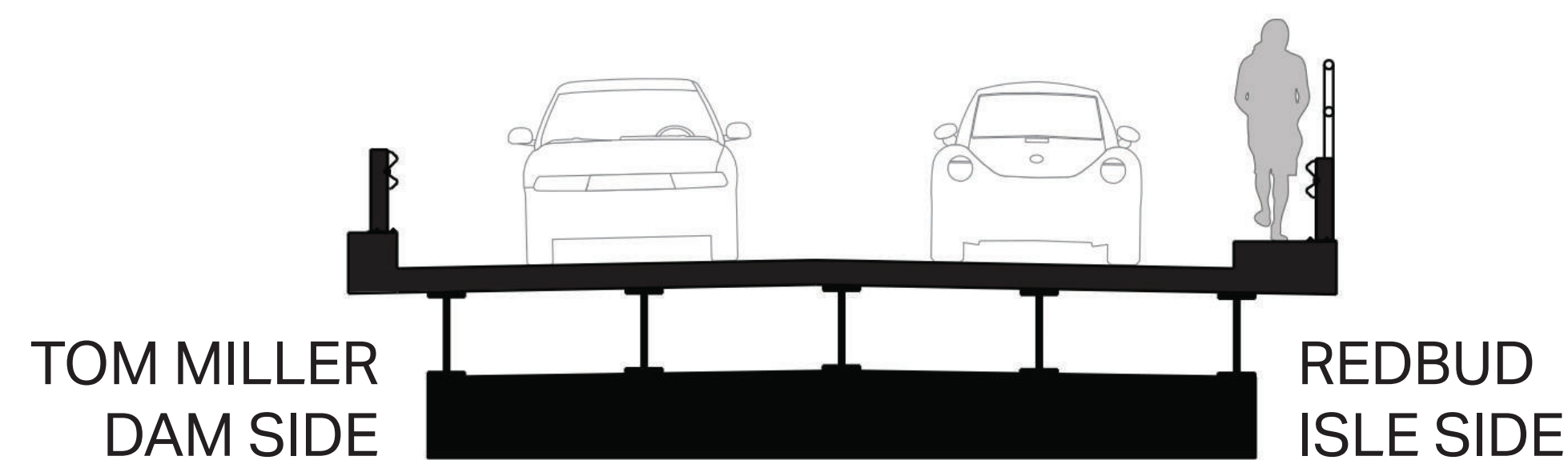
- Conduct detailed field investigations for critical environmental features
- Coordinate with regulatory agencies including:
 - U.S. Fish and Wildlife Service
 - U.S. Army Corps of Engineers
 - Texas Commission on Environmental Quality
 - Texas Parks and Wildlife Department
 - Multiple City of Austin Departments
- Work with design engineers to avoid, minimize, or mitigate environmental impacts





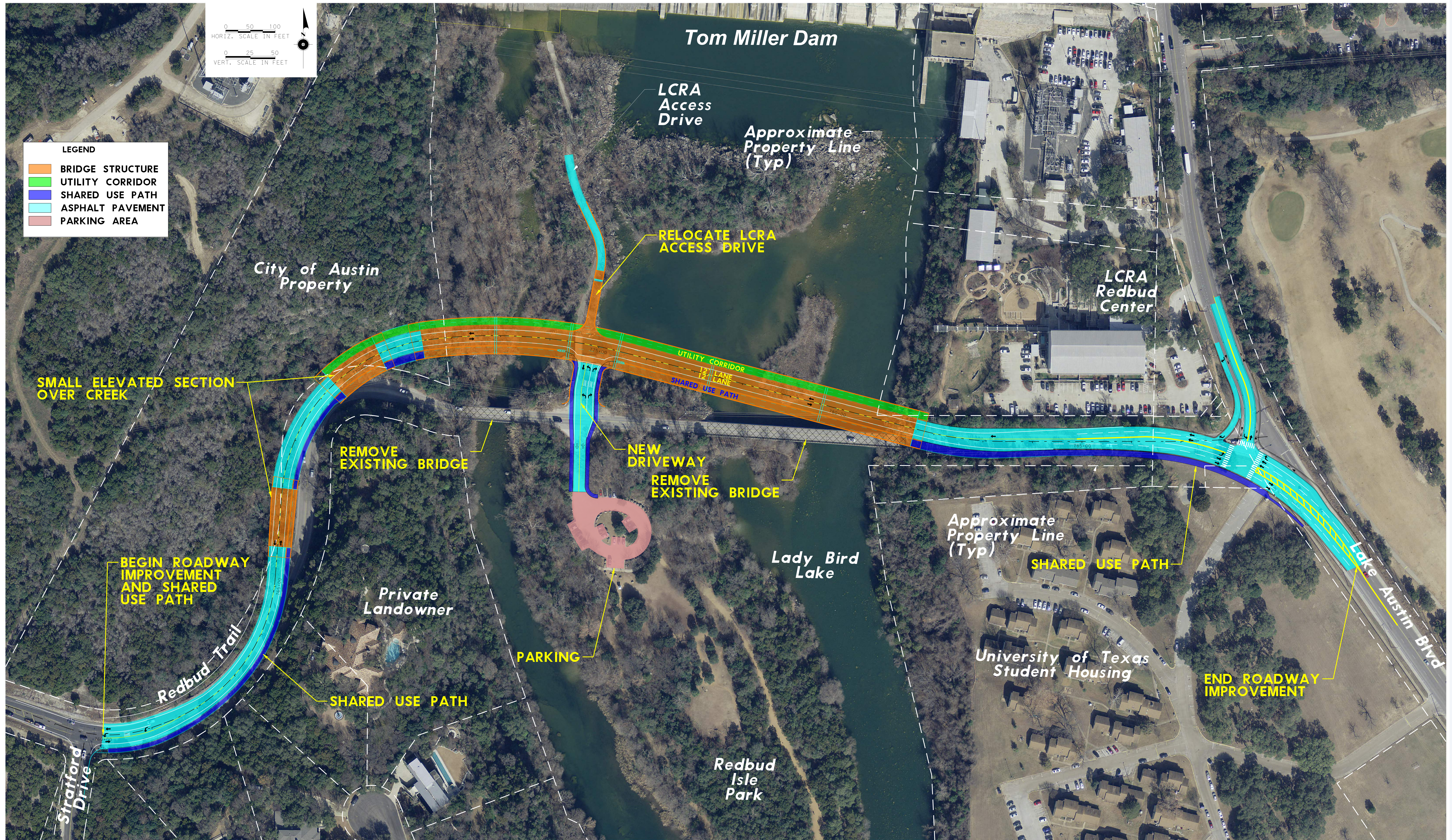
Redbud Trail Bridge Project

Cross Sections: Before and After





Redbud Trail Bridge Project





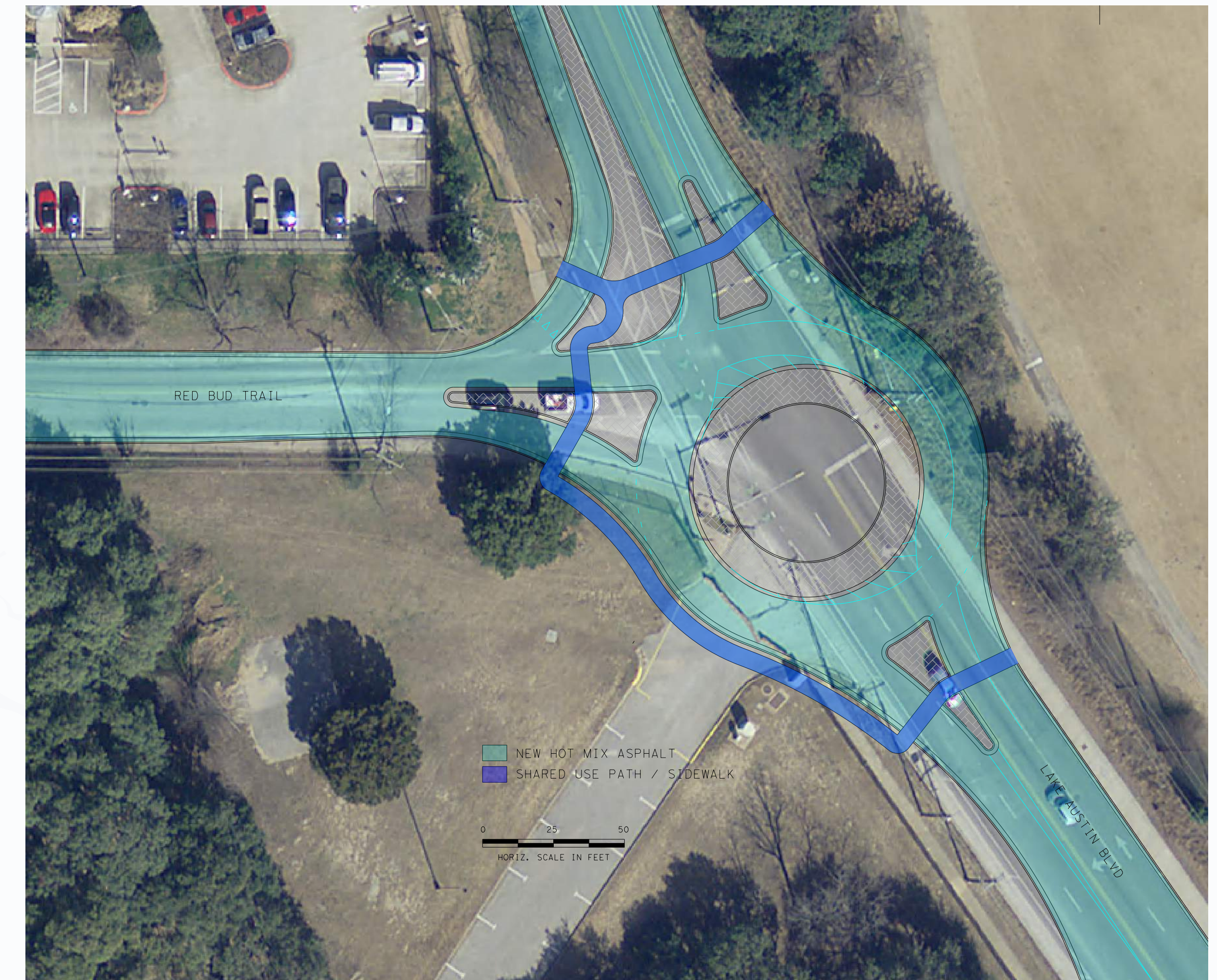
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Lake Austin Blvd. / Redbud Trail Intersection Alternatives Evaluation



Preferred Alternative: Roadway Realignment

- Provides best reduction in delays, especially at high demand times such as the PM rush hour.
- Allows more traffic through the intersection between Lake Austin Blvd and Redbud Trail.



Alternative Not Selected: Roundabout

- Worsens southbound delays in the PM rush hour and presents additional ROW and operational constraints



Bridge Aesthetics - Pylon Option





Bridge Aesthetics - Pylon Option





Bridge Aesthetics - Monument Option





Bridge Aesthetics - Monument Option





Redbud Trail Bridge Project

What you may see later this year

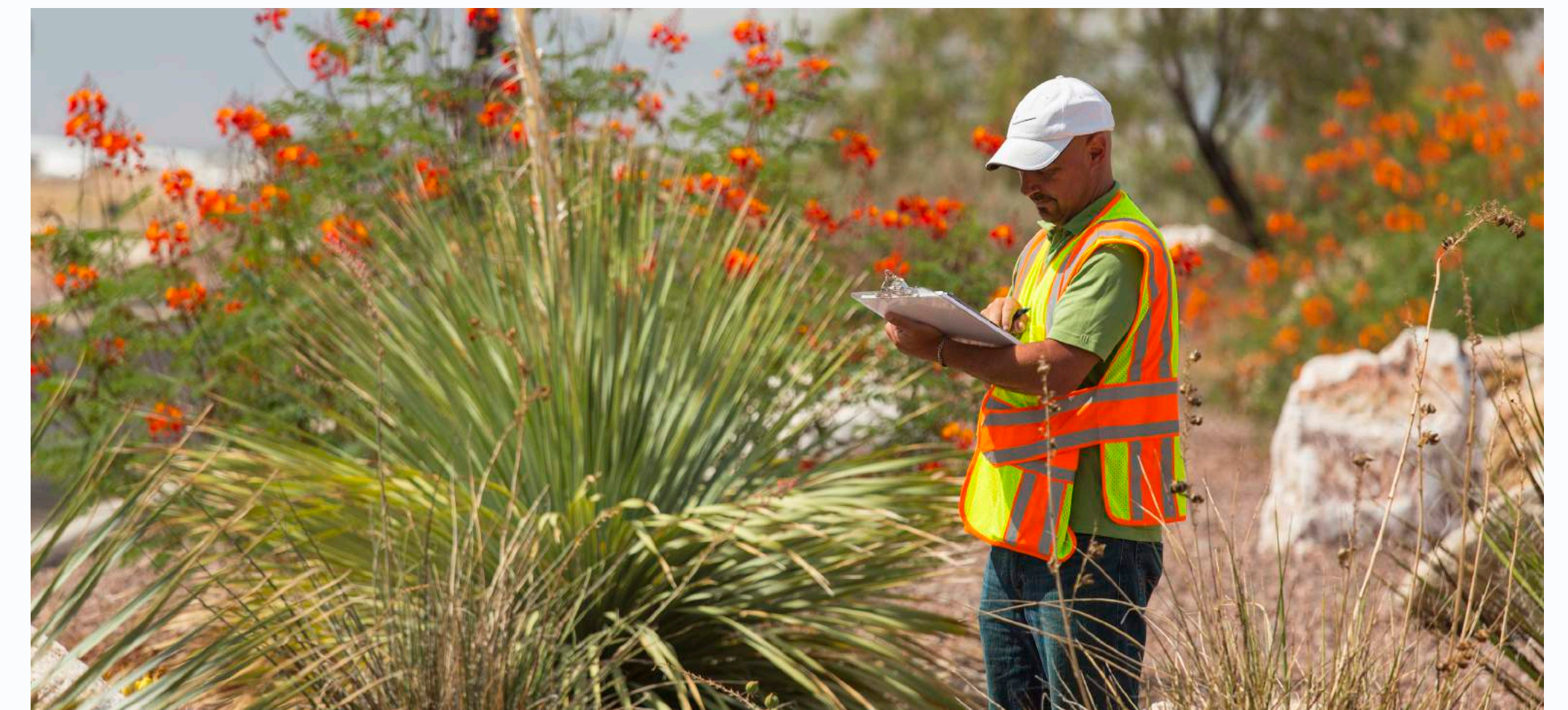
In 2020, the project is entering the Design Phase. As a result, you may notice various crews in the road and bridge vicinity gathering field data and information for design.



Geotechnical Borehole Drilling for subsurface conditions

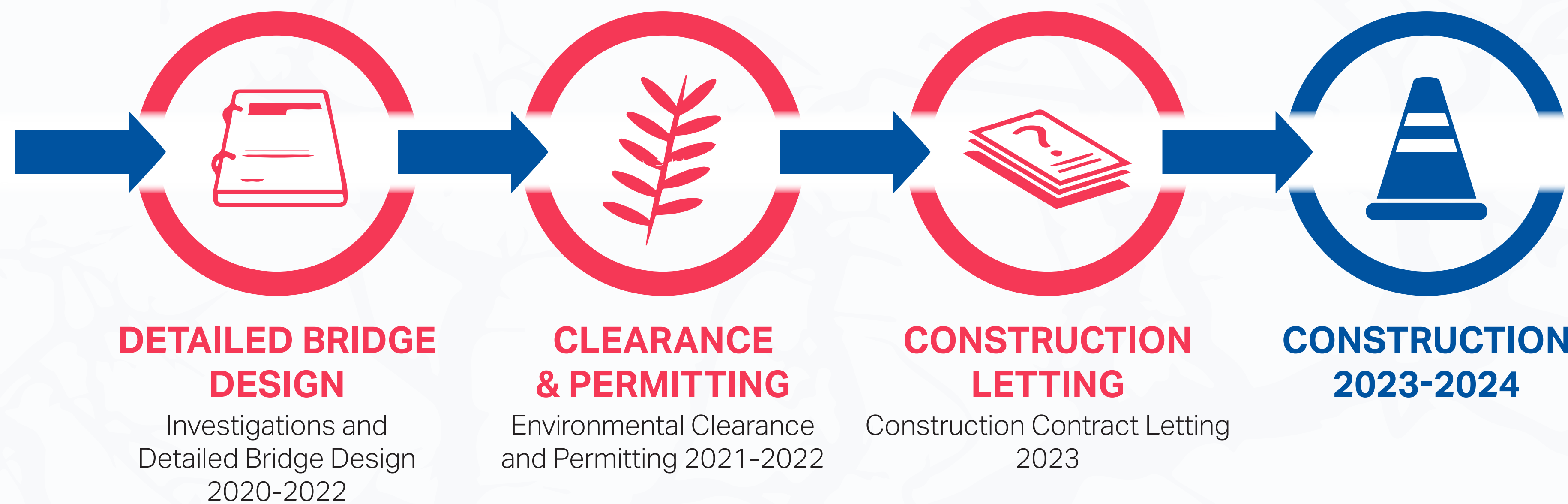


Survey Crews to identify topography and existing conditions



Environmental Field Staff to identify sensitive features

Project Next Steps



Bridge maintenance activities will also continue in 2020. In addition, safety measures to improve roadway surface friction are anticipated in 2020, prior to the ultimate bridge/ roadway project.