



New Mexico DEPARTMENT OF
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VIRTUAL PUBLIC INFORMATION MEETING

December 9th, 2020

NM 500 Rio Bravo Blvd.
Bridge Replacements Study
(MP 8.8 to MP 10.5)

NMDOT CN A301000

PRESENTERS

New Mexico Department of Transportation (NMDOT) Team Presenters

- Priscilla Benavides, NMDOT Central Region Design Manager
- Jill Mosher, NMDOT Assistant District Engineer
- Justin Gibson, NMDOT District Engineer
- Meghan Myers, WSP Project Manager
- Jennifer Hyre, WSP Environmental Planner
- Nathaniel Miller, WSP Project Engineer
- Kevin Alvarado, WSP Communications



AGENDA

Presentation Topics

1. Project Limits and Purpose & Need
2. Existing Conditions
3. Project Development Process and Schedule
4. Proposed Improvements
5. Alignment Alternatives & Evaluation
6. Next Steps

Q&A Session (after the presentation)





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PROJECT LIMITS AND PURPOSE & NEED

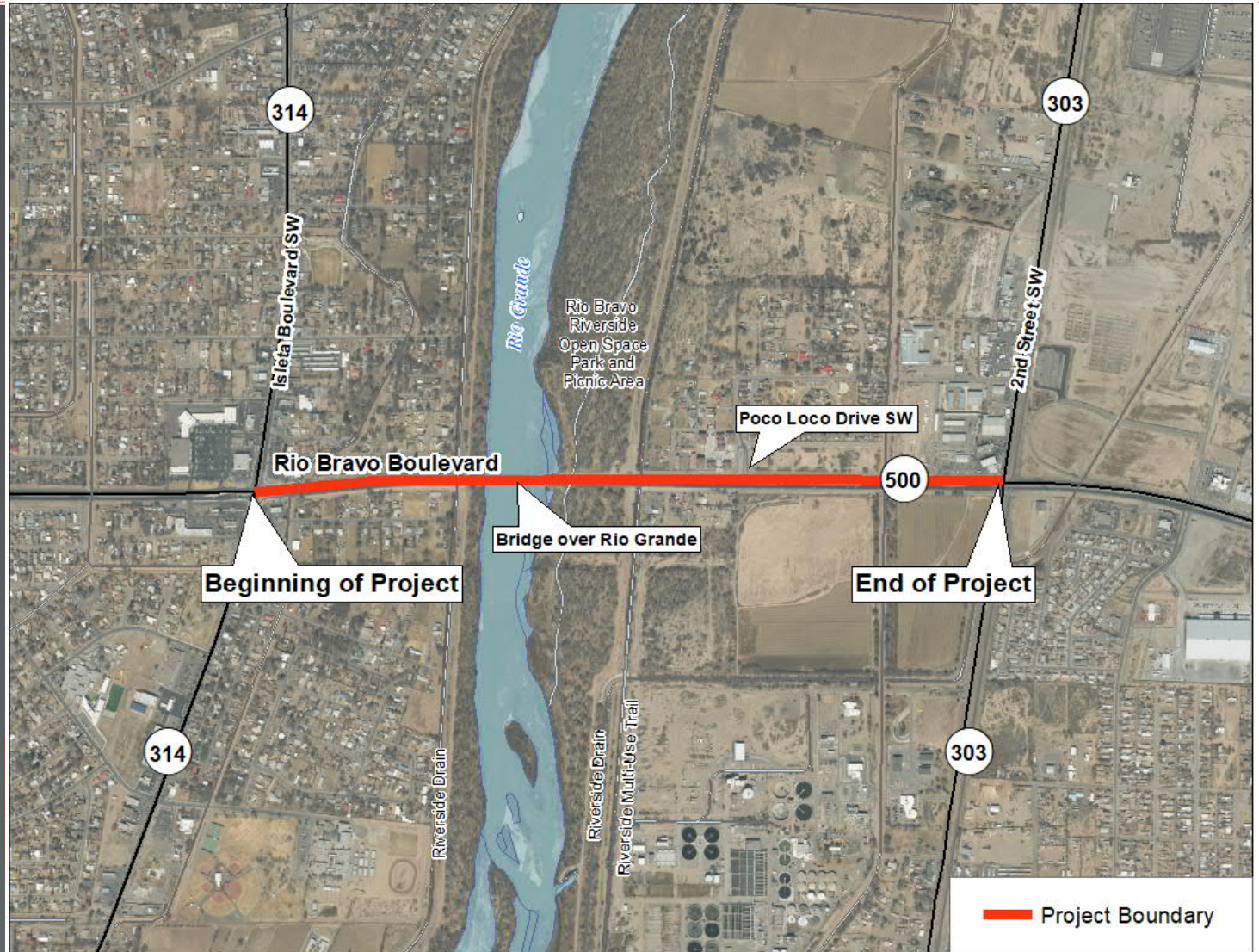
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Project Limits

Isleta Boulevard to
2nd Street

Intersection
Improvements are not a
part of this project



Purpose & Need



▲ Project Purpose

- » To address structural deficiencies and to improve transportation system continuity within the project limits

▲ Project Need

- » End of Design-Life Infrastructure
 - The eastbound river bridge is in poor condition and requires replacement
- » Roadway Capacity
 - Additional river crossing capacity is needed in the metro area
 - Review traffic control needs at the Poco Loco intersection
- » Multi-modal Improvements
 - Pedestrian and bicycle facilities are discontinuous

Bridge Infrastructure Deficiencies,
Traffic Capacity, and Multi-modal Connectivity

Emergency Rehabilitation for Eastbound River Bridge December 2019 thru February 2020

The Damage (Before)



Emergency Repair (After)



Emergency Rehabilitation for Eastbound River Bridge December 2019 thru February 2020

What Happened?

- December 2019 - NMDOT inspector noticed significant bump
- Emergency Bridge Inspection and Traffic Closure
- Emergency Repairs and Traffic Closures



Why this project is different?

- This project was already planned with funding programmed in the Statewide Transportation Plan (STIP) prior to the emergency
- Not an emergency
- Will assess all transportation needs within project limits
- Maintaining traffic flow will be a key project consideration



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EXISTING CONDITIONS

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Existing Structural Conditions



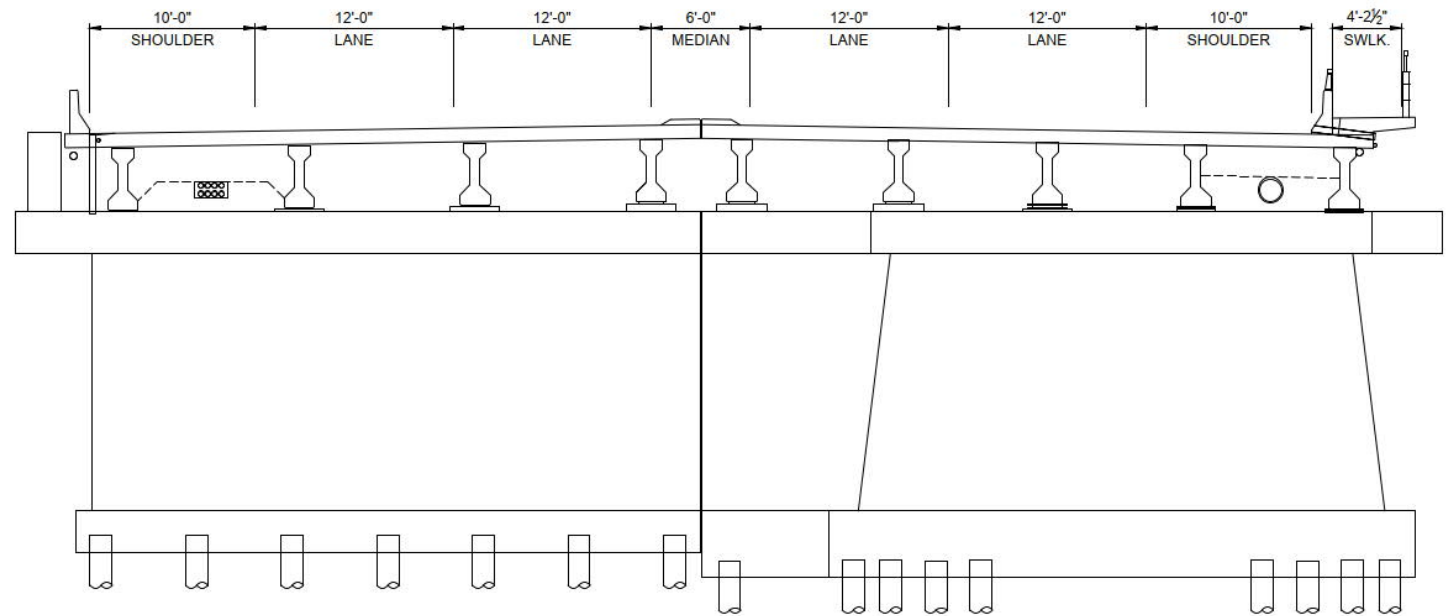
- ▲ Rio Grande Bridges
- ▲ Riverside Drain Bridges
- ▲ Riverside Drain Culverts
- ▲ Eastbound Bridges
 - » Built in 1961, at the end of 50-year design life
 - » Emergency Repair in February 2020
- ▲ Westbound Bridges
 - » Built in 1985, will be 40 years old at the start of new construction



Existing Roadway Conditions

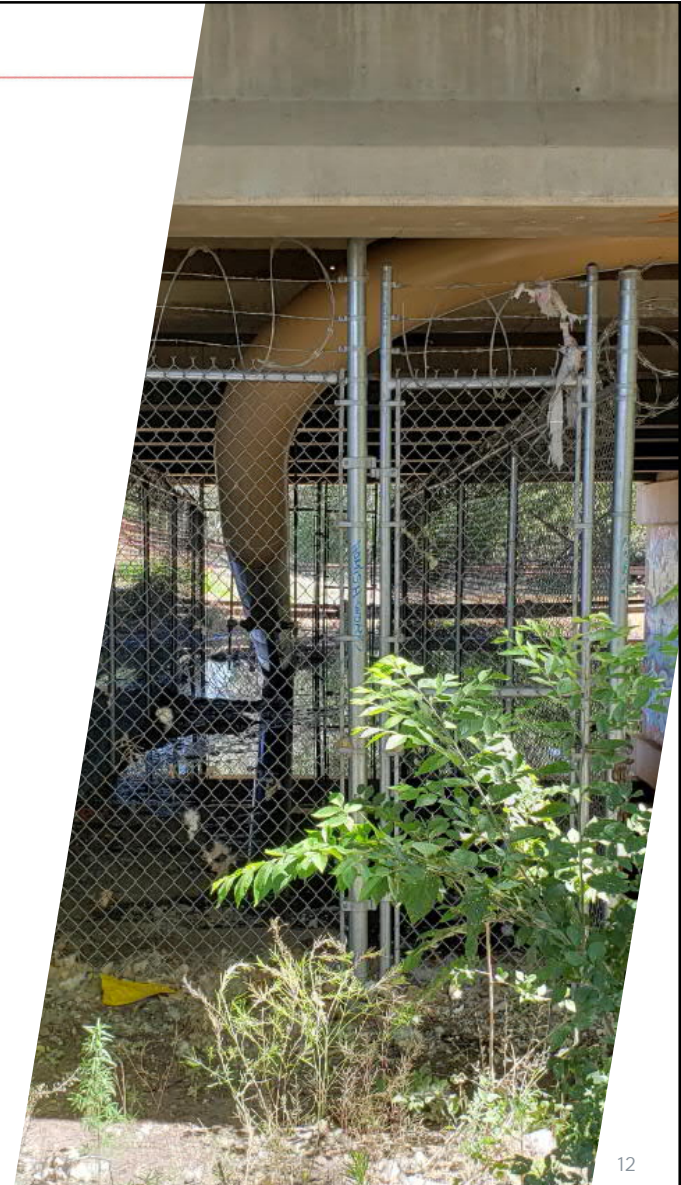
Existing Typical Section (Rio Grande River Bridges)

- » Four Lanes with outside shoulders
- » Raised Median
- » 1" Joint between bridges
- » Sidewalk on south side only; narrow and discontinuous



Other Infrastructure Existing Conditions

- ▲ Utilities
 - » Gas
 - » Fiber-optic Communications
 - » Electric
 - » Water
- ▲ MRGCD Riverside Drains and Access
 - » Both sides, outside levees
 - » Box culvert for access on west side
- ▲ Recreation Facilities
 - » Rio Bravo Riverside Picnic Area, Fishing Pier, and Trail
 - » Paseo del Bosque Trail
 - » Riverside Drain Trail
- ▲ Lighting
 - » Both sides of Rio Bravo Blvd

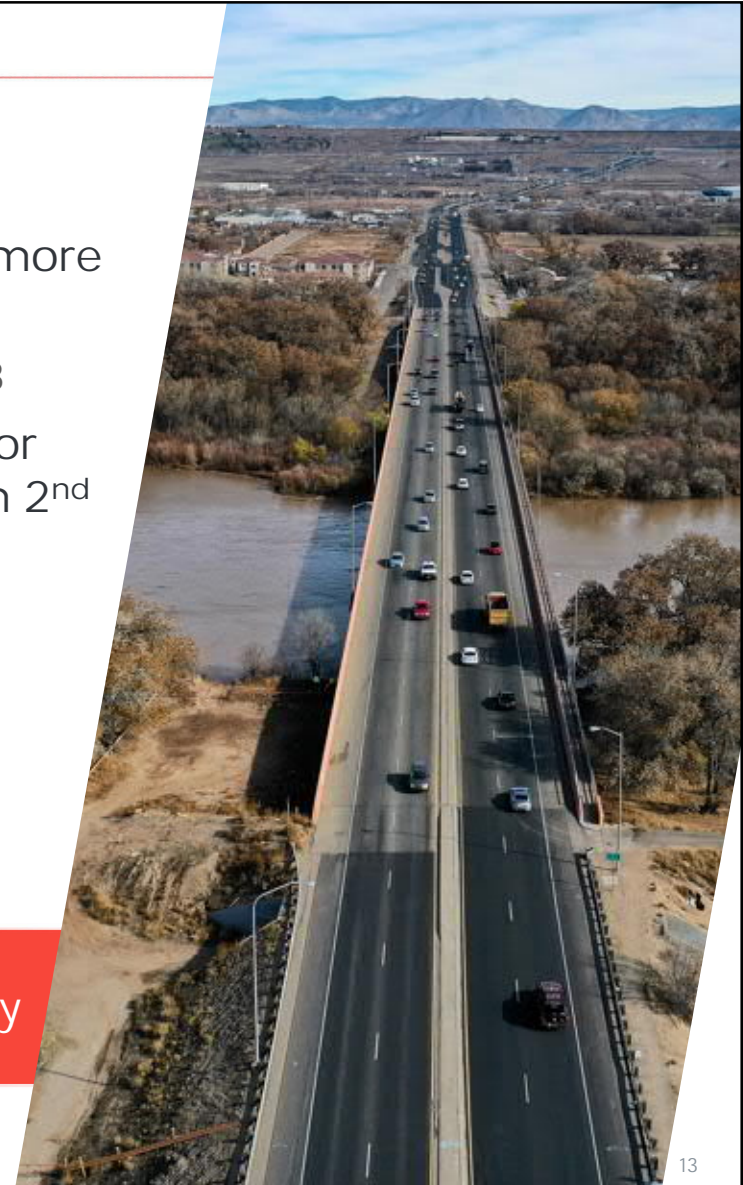


Existing Traffic Conditions

▲ Traffic Considerations

- » Rio Bravo river crossing serves more than 30,000 vehicles per day
 - High volume of 35,600 in 2008
- » Rio Bravo Boulevard has been or will be widened to 6 lanes from 2nd Street to I-25
 - River crossing currently 4 lanes
- » Traffic during construction:
 - Apply lessons learned from emergency repair project

Major River Crossing for South Valley



Existing Traffic Conditions



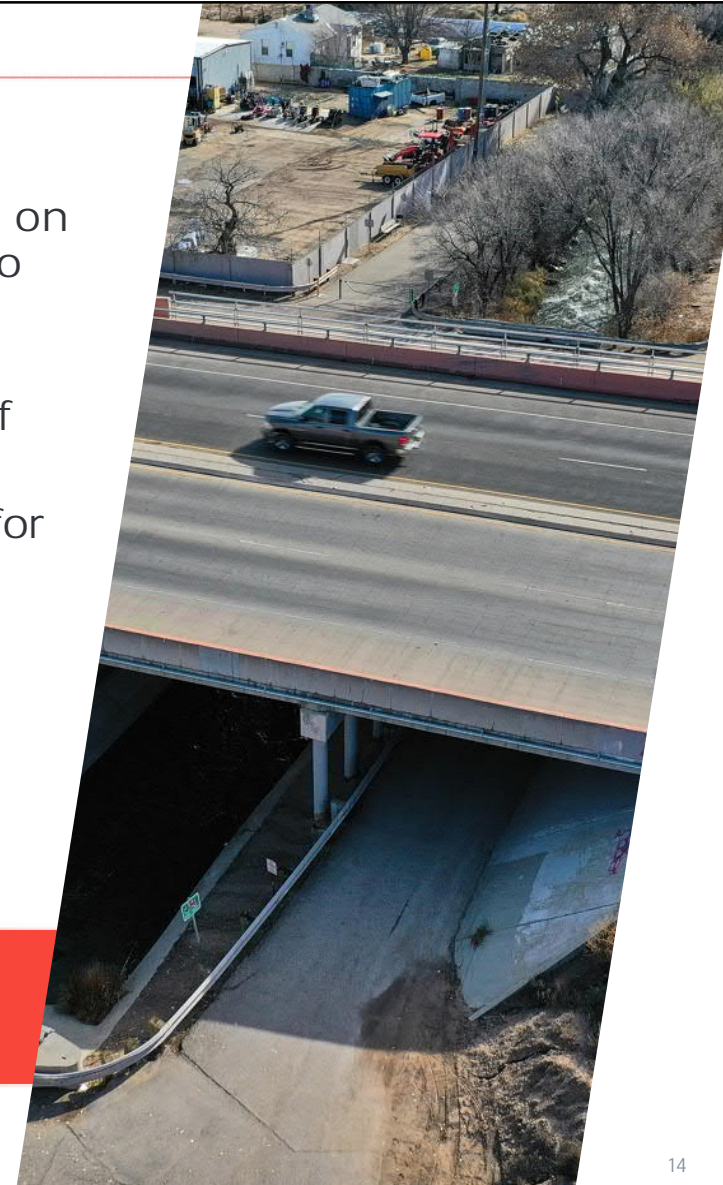
▲ Multi-Modal Uses

- » Multi-Use Paseo del Bosque Trail on east side; crosses under Rio Bravo Blvd
- » No sidewalk connections on Rio Bravo Boulevard on either side of the bridges
- » Existing shoulders may be used for bicycle travel

▲ Poco Loco/Dean Drive Intersection

- » Traffic Signal Warrant Study to determine IF there is a need for signal control

Proposed Improvements will Benefit all Travel Modes

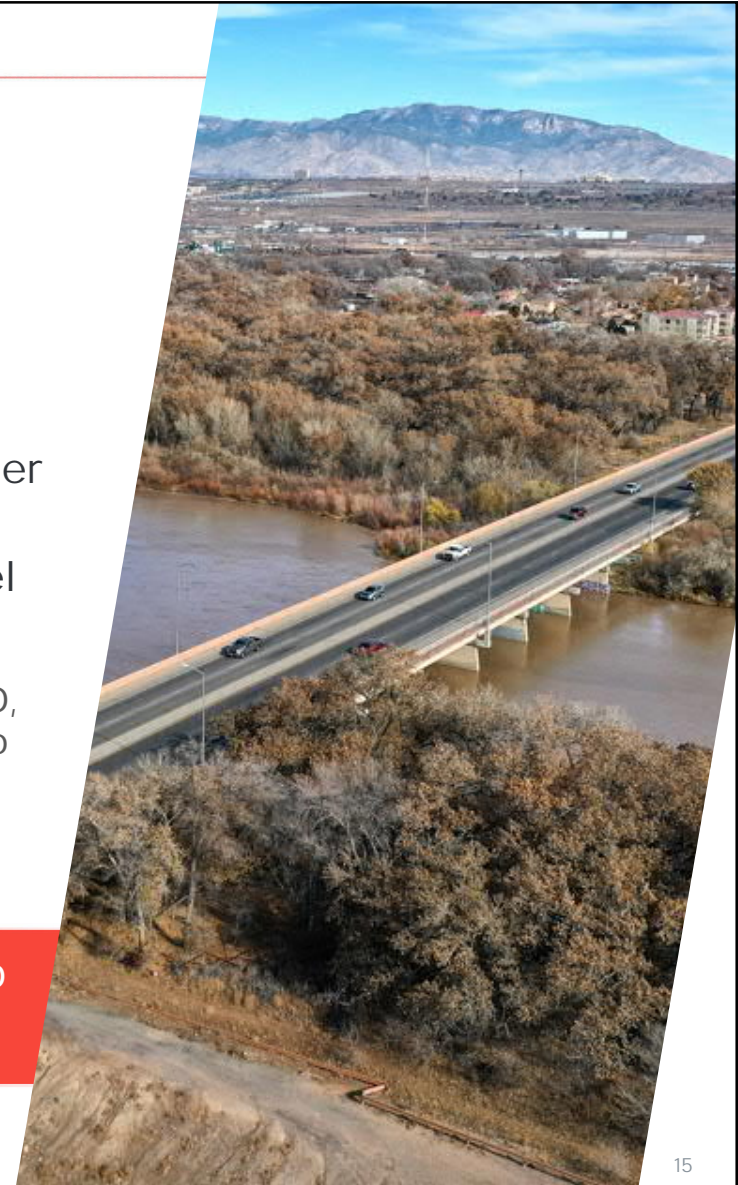


Existing Flood Plain Conditions

▲ Floodplain

- » FEMA Requirements
 - No-Rise Allowed
 - Temporary Rise Possible
- » Levee System
- » Height of bridge girders over water level
- » Bridge supports in active channel
- » Coordination
 - Army Corps of Engineers, MRGCD, Bureau of Reclamation, Bernalillo County, Interstate Stream Commission, US Fish & Wildlife Service

Bridge Alternatives will be chosen to minimize impacts to floodplain



Existing Environmental Conditions

▲ ENVIRONMENTAL

- » Agency Coordination
- » Threatened and Endangered Species and Habitats
- » Bat Roosting and Nesting Birds
- » Water Resources
- » Cultural Resources
- » Noise
- » Visual Resources
- » Riverside Recreational Area





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Project Development Process and Schedule

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Project Development Process

- ▲ Phase I
 - » Currently in this phase
- » Phase II
 - » Final Design
- » Phase III
 - » Construction

Phase IA/B: Alignment Study

- » Establish Why Improvements are Needed
- » Evaluate Alternatives and Select the Preferred Alternative

Phase IC: Environmental Processing

- » Environmental Investigations
- » Obtain Authorization to Construct Improvements

Phase ID: Preliminary Design

- » Preliminary Engineering
- » Define Right-of-Way Needs
- » Prepare Engineering Cost Estimate

Stakeholder and Public Involvement
- Ongoing throughout Phase I

Collect Comprehensive Data

- ✓ Design and R/W Survey
- ✓ Environmental Surveys
- ✓ Geotechnical
- ✓ Bridge Conditions
- ✓ Floodplain
- ✓ Traffic and Access
- ✓ Agency Coordination
- ✓ Stakeholder Input



Project Schedule

- ▲ Start of Study (Phase IAB) - Spring 2020
- ▲ Public Meeting - Fall 2020
- ▲ Completion of Study - Spring 2021
- ▲ Initial Engineering Design Development -2021
- ▲ Environmental Analysis & Documentation - 2021 / 2022
- ▲ Final Engineering Design - 2022 / 2023
- ▲ Anticipated Construction Start - 2024



We are Here

Study Phase to Construction



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Proposed Improvements

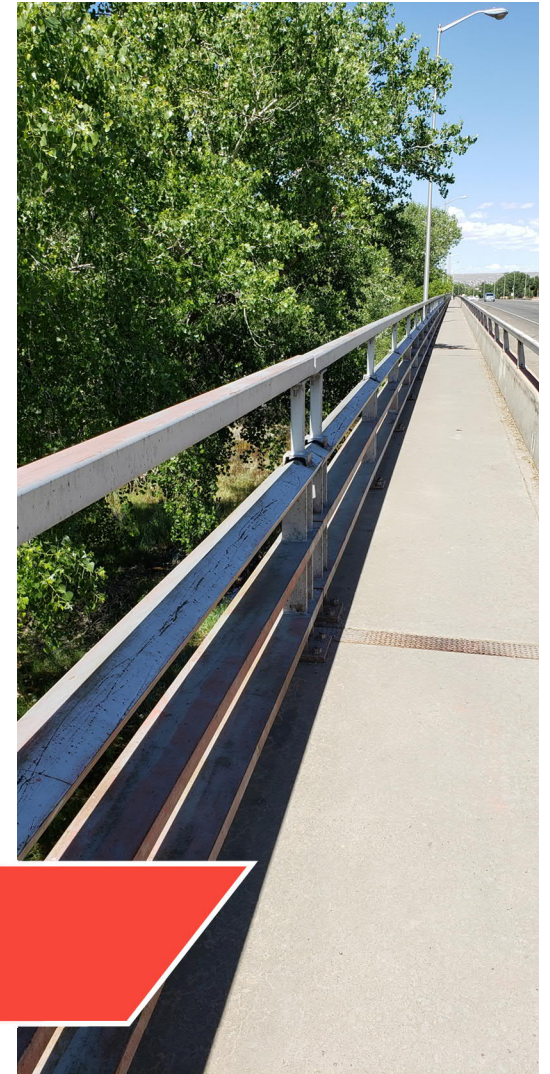
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Proposed Improvements

- ▲ Highway Improvements
 - » Additional traffic capacity
 - » ADA accessible sidewalks and access
 - » Bridge replacements or rehabilitations
 - » Bosque trail access improvements
 - » Bicycle accommodations
 - » Adjacent road project connectivity

Final conditions will provide an improved, connected corridor

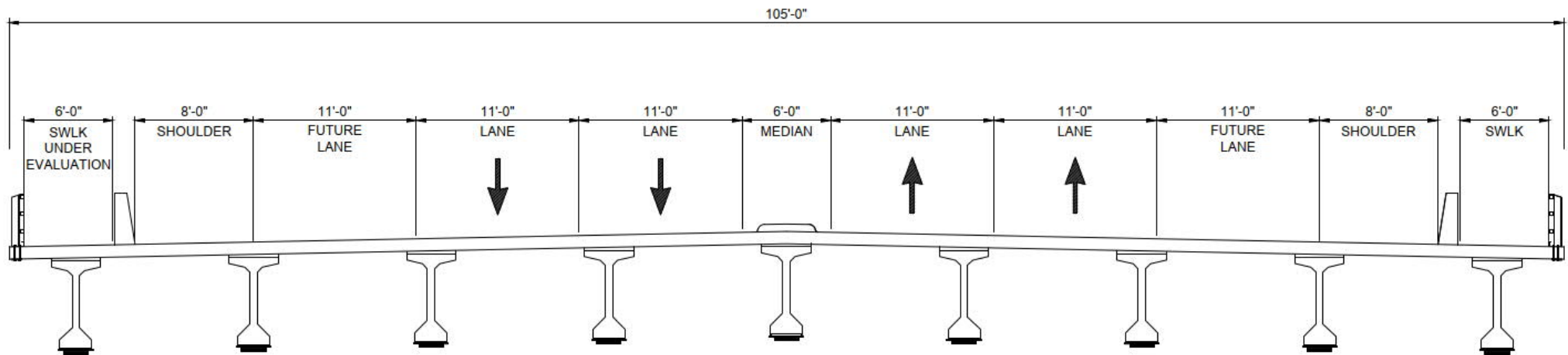


Proposed Improvements

When first opened the bridge may only be striped for 2-lanes in each direction

▲ Proposed Typical Section

- » Provide additional traffic capacity
- » Provide sidewalk on both sides of the bridge
- » Maintain outside shoulders





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Alignment Alternatives & Evaluation

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Roadway Alignment Alternatives

▲ No Build Alternative

- Do Nothing Alternative
- Does not satisfy the Purpose and Need for this Project
- 1965 Bridge requires replacement

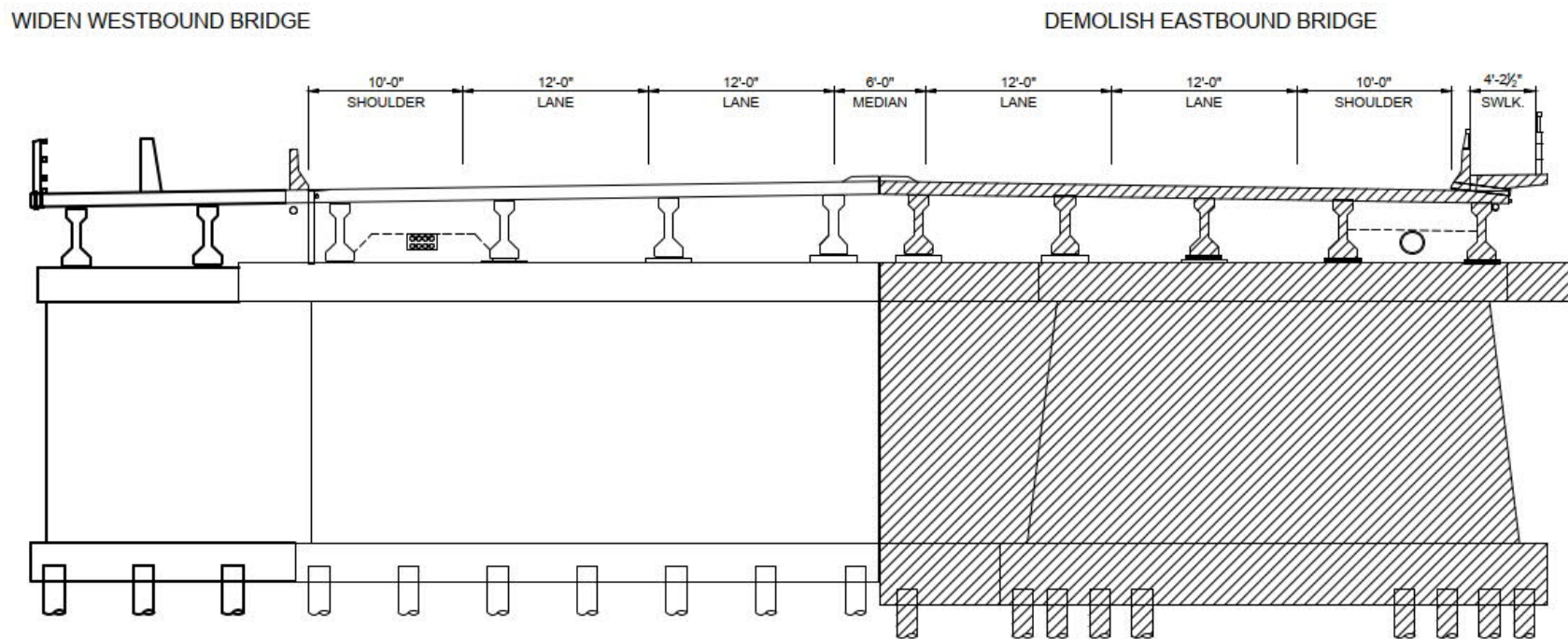
▲ How Should the Bridges be Improved?

- » Maintain existing alignment
- » Build in new offset location on either side of the existing bridges
- » Combination of existing and offset alignments



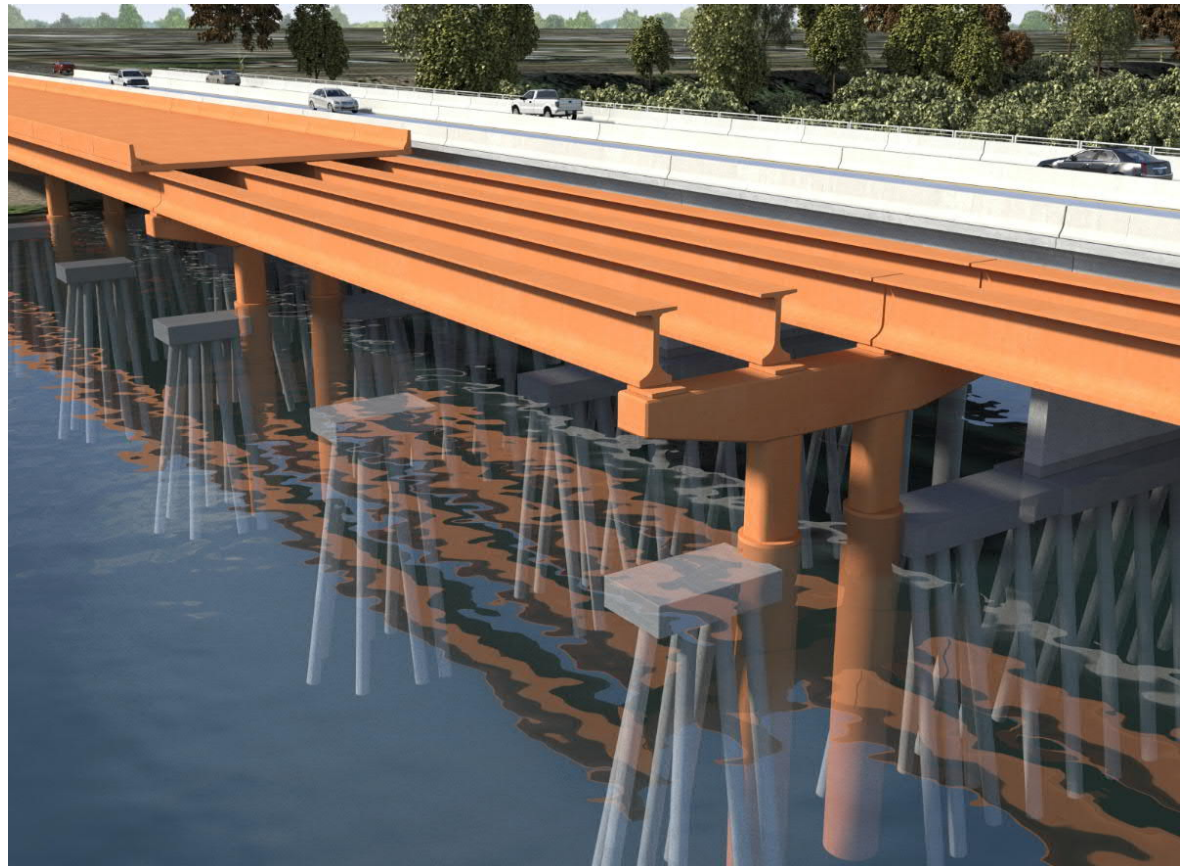
Alternative 1 – Maintain Existing Alignment Replace the Eastbound Bridge Only

- ▲ Phase 1 – Widen the Westbound Bridge
- ▲ Phase 2 – Demolish the Eastbound Bridge



Alternative 1 – Maintain Existing Alignment Replace the Eastbound Bridge Only

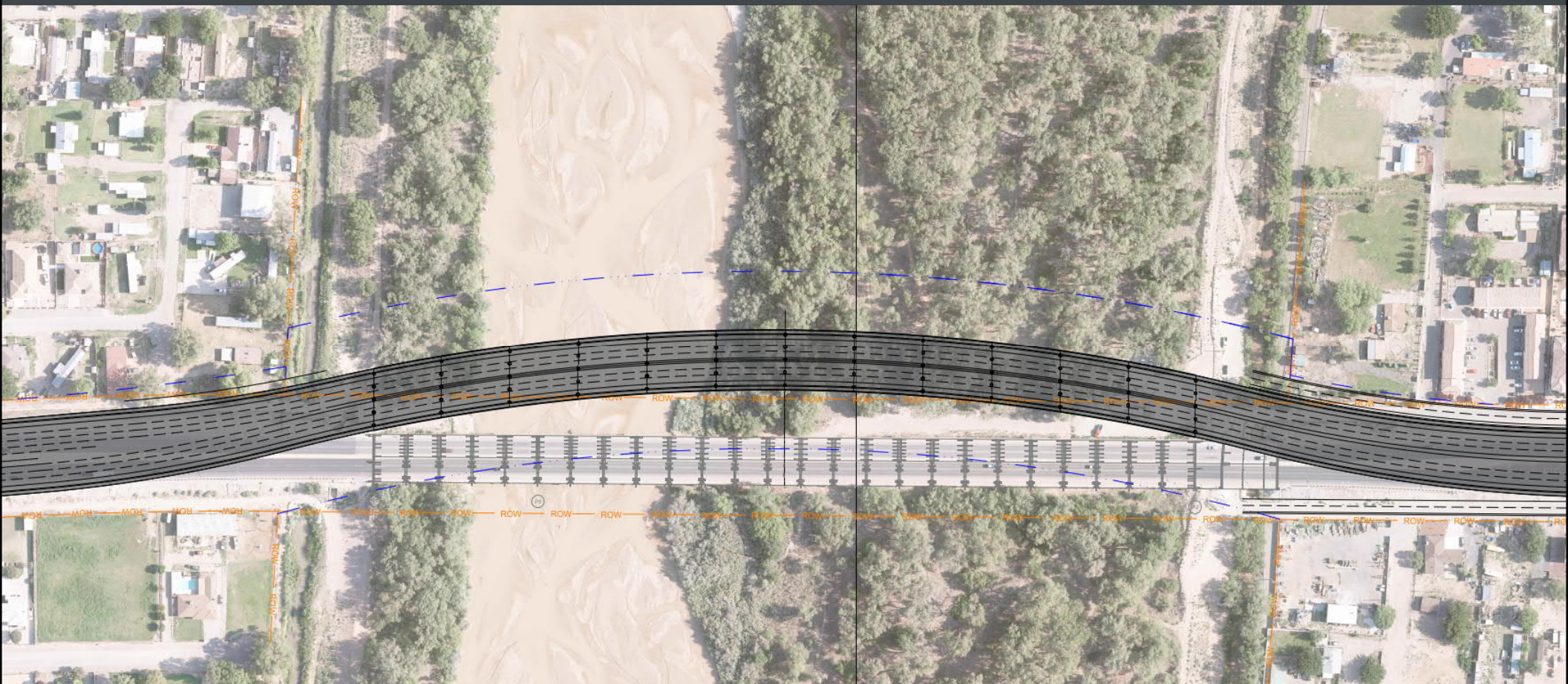
- ▲ Phase 3 – Replace the Eastbound Bridge
- ▲ BUT
 - » Strict Floodplain requirements will require the replaced Eastbound bridge to line up with the existing piers
 - » The existing Foundation Elements will present a great challenge accomplishing this



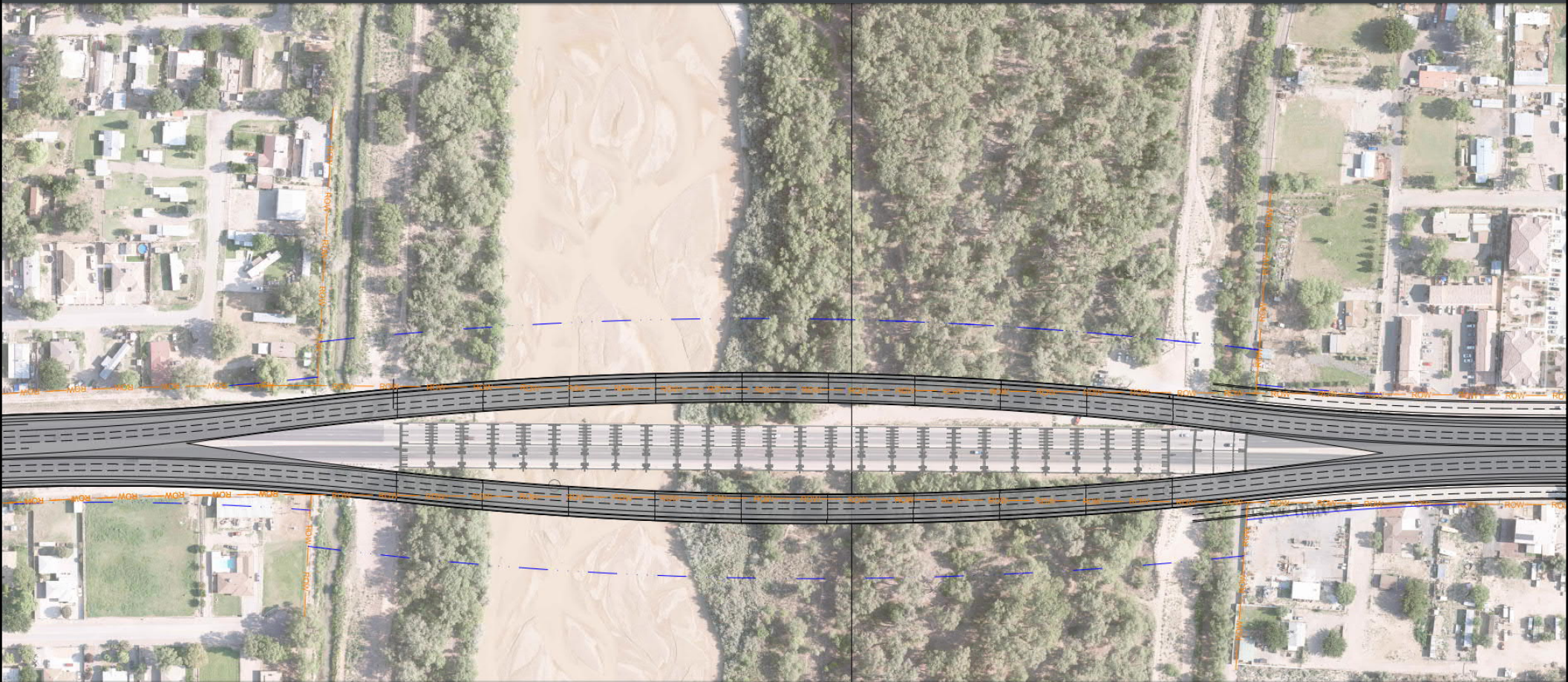
Alternative 2 – Maintain Existing Alignment Replace all Bridges



Alternative 3 – New Alignment North Curve

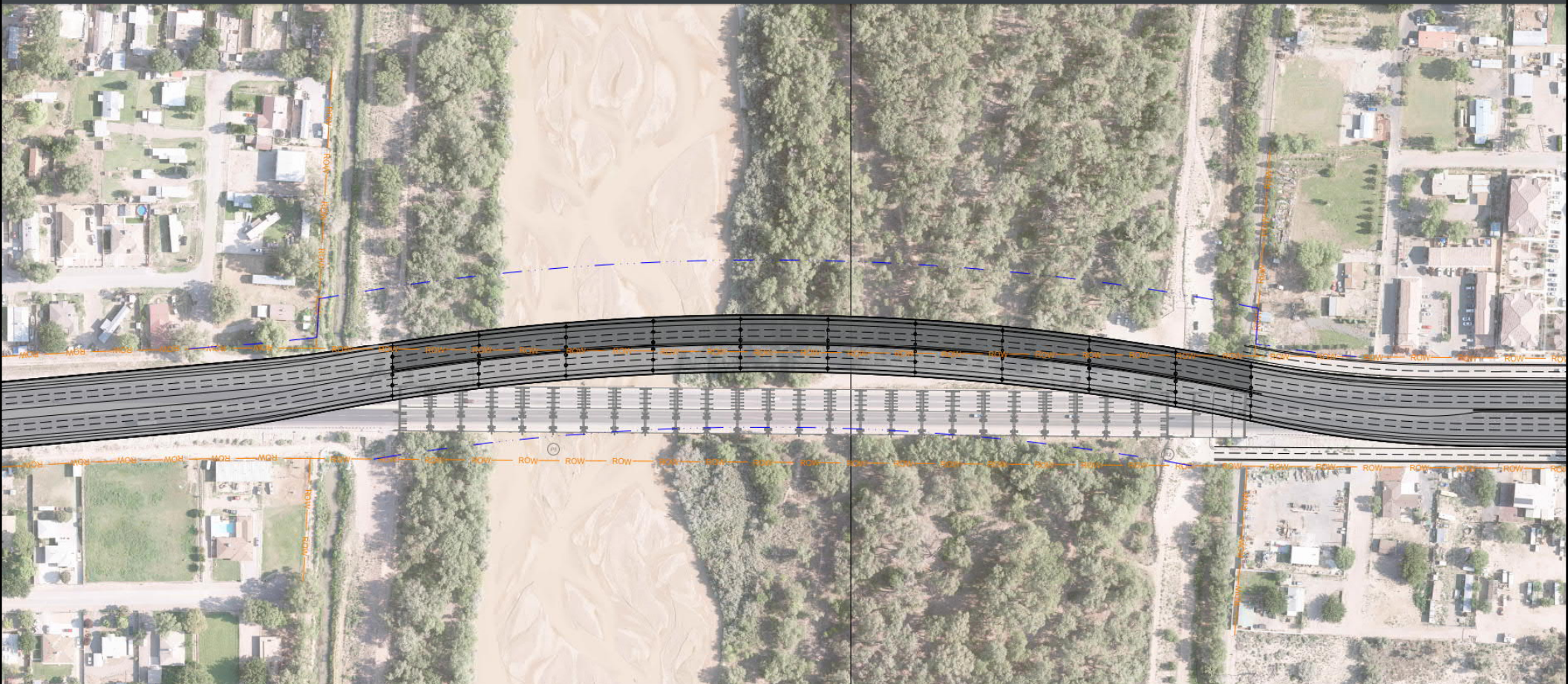


Alternative 4 – New Alignment Split Bridge



Alternative 5 – Offset Alignment

Offset half the new bridge to the North



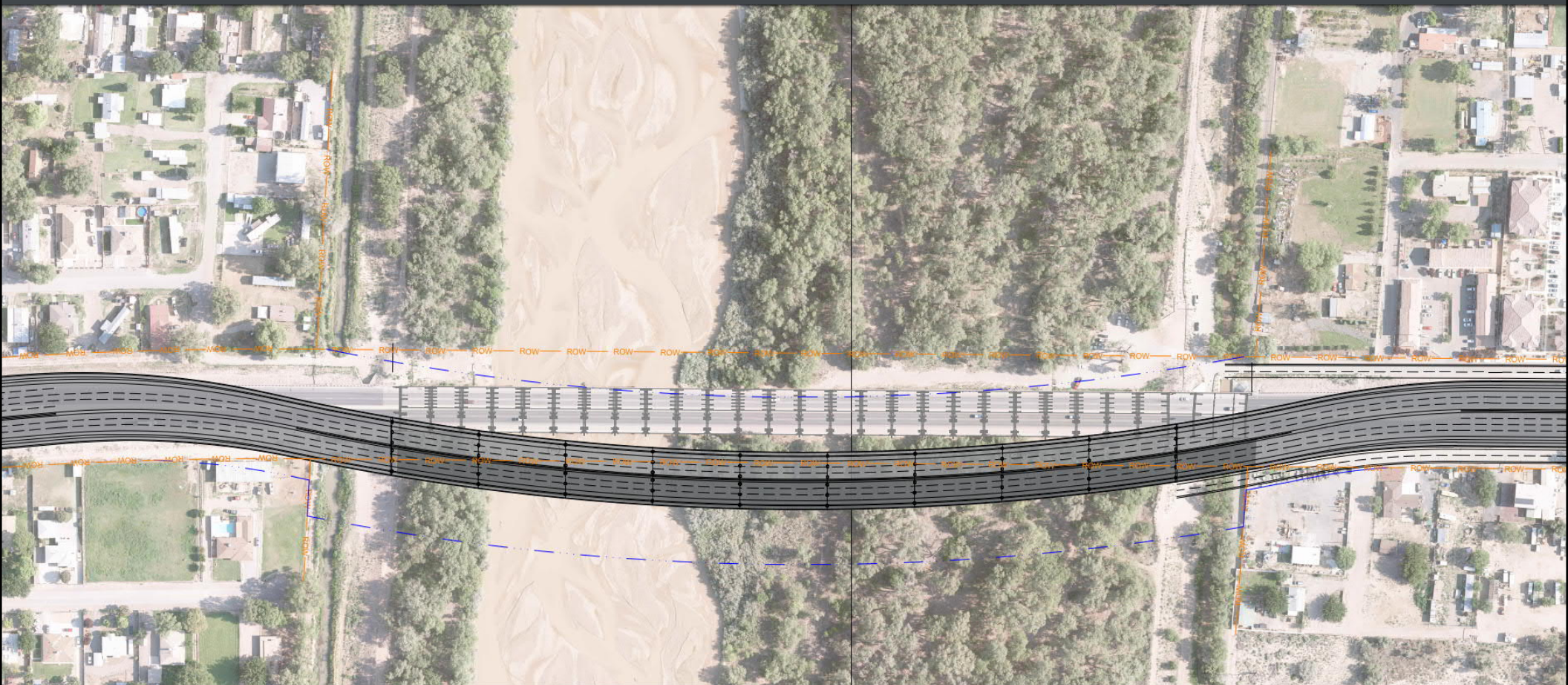
Alternative 6 – Offset Alignment

Offset half the new bridge to the North, Straight



Alternative 7 – Offset Alignment

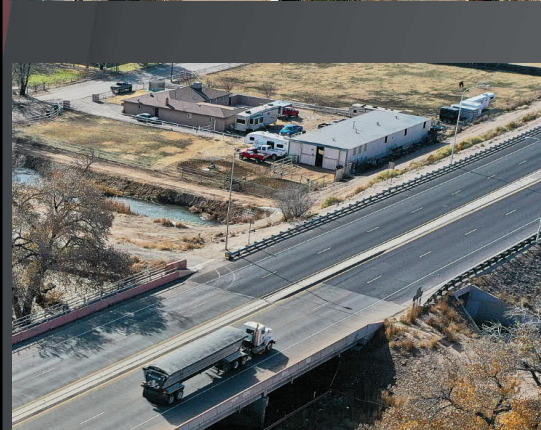
Offset half the new bridge to the South



Evaluation Criteria

▲ Evaluation Criteria for Alternatives

- » Construction Cost
- » Constructability (e.g., site access)
- » Environmental Impacts
- » Property & Right-of-way Impacts
- » Maintaining Traffic during Construction
- » Utility Phasing
- » Pedestrian & Bicycle Mobility
- » Rio Grande Requirements
- » Future Maintenance
- » Public & Stakeholder Support



Comparative Evaluation of Alternatives

Rating Scale

Significant Advantage	Advantage	Neutral	Disadvantage	Fatal Flaw
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Evaluation Criteria	Alignment Alternatives								
	0	1	2	3	4	5	6	7	8
	No Build	Widen WB in place, replace EB In-Line	In-Line Replacement	North Full Offset	Split	North Half Offset	North Half Offset - Straight	South Half Offset	Rehabilitate all Bridges
Project Purpose & Need									
Initial Construction Cost	N/A								N/A
Future Maintenance	N/A								N/A
Design Life	N/A								N/A
Constructability	N/A								N/A
Maintenance of Traffic during Construction	N/A								N/A
Property Takes & ROW Impact	N/A								N/A
Environmental Impacts	N/A								N/A
4(f) Property Impacts	N/A								N/A
Utility Phasing	N/A								N/A
Pedestrian & Bicycle Mobility	N/A								N/A
Drainage Requirements	N/A								N/A
Roadway Geometry	N/A								N/A
Public and Stakeholder Support	N/A								N/A



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Next Steps

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Next Steps

- ▲ Gather Public Input
- ▲ Detailed Evaluation of Improvements
- ▲ Prepare Phase IA/B Study
 - » Select Alternative to Advance
- ▲ Complete Environmental Studies & Documentation
- ▲ Develop Preliminary Design Plans
- ▲ Develop Final Design Plans
- ▲ Right-of-way Acquisition
- ▲ Construction

PHASE IC & PHASE ID



We Want to Hear from You...

Please provide us with comments by January 9th, 2021.

Electronic submittals preferred

▲ How to Provide Comments?

- » Email: jennifer.hyre@wsp.com
- » Call: (505) 878-6577
- » Mail:
WSP | Jennifer Hyre | Attn: NM 500
2440 Louisiana Blvd NE, Suite 400
Albuquerque, NM 87110
- » Complete a MetroQuest Survey:
<https://linktr.ee/nm500riobravo>
- » More information on the NMDOT Projects Page:
<https://dot.state.nm.us/nmdotprojects>

All Comments are Welcome!!

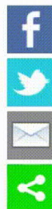
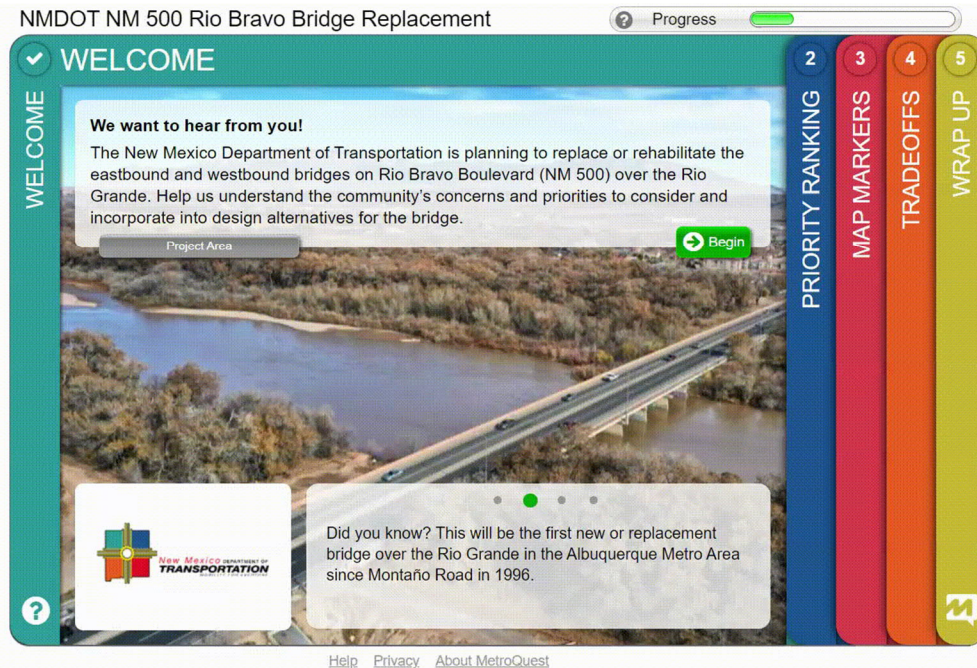


MetroQuest Survey

Access at:
linktr.ee/nm500riobravo

Help us learn about your
concerns and priorities

Available in English
and Spanish





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Questions

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