

# PUBLIC MEETING

April 11, 2017 CN: A300423

## NM 6 Bridge Replacement

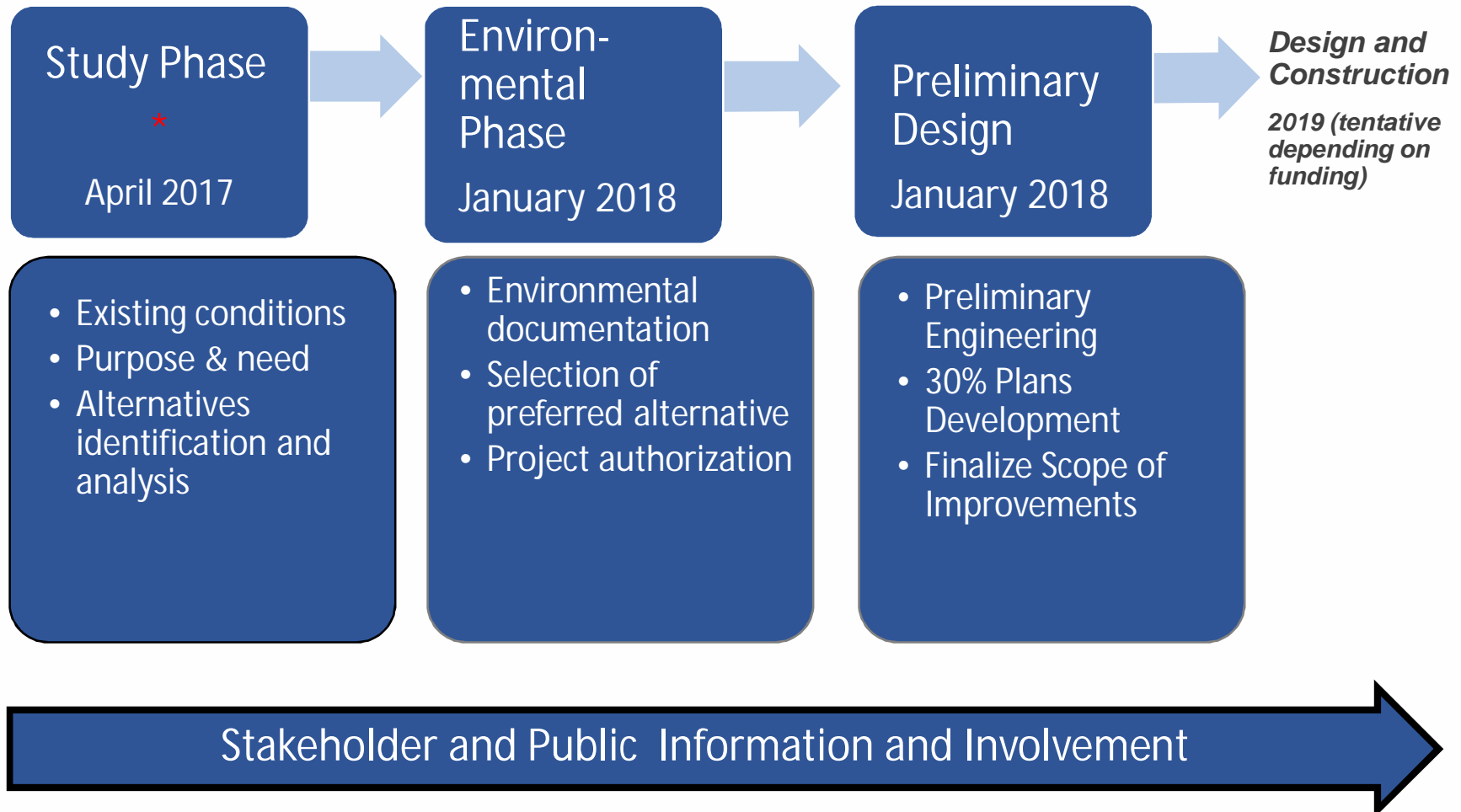


**PARSONS  
BRINCKERHOFF**

# Introductory Remarks

- Introductions
- Project Need:
  - Bridge is in Poor condition and structurally deficient
  - There is a need for a bridge that meets current design standards
- Meeting Purpose
  - Present the initial results of the planning study
  - Ask for feedback

# Process



# Existing Bridge

- Built in 1974, nearing the end of 50-year design life
- Classified as structurally deficient due to poor condition of foundations and girders
- Rehabilitated in 2013 to extend life until bridge could be replaced



# Existing Bridge



Underside of the existing deck has been patched, but still shows rust from damaged steel reinforcement



Girder ends have large cracks, and abutment seats have cracks despite having being repaired in 2013



Steel piles have thin walls with heavy corrosion

# Opportunities

- Improve access for pedestrians and bicyclists
- Make improvements in accordance with adopted transportation plans and policies
- Improve Access to Riverside Park

# Traffic Considerations

- NM 6/Main Street is planned to remain 4-lanes
- Maintain traffic during construction
  - 25,900 vehicles per day (2016)
  - 4-lane traffic during peak hours is desired

# Evaluation Factors

- Traffic impacts during construction
- Cost
- Right-of-way
- Environmental impacts
- Public input
- Others
  - Drainage
  - Riverside Drains
  - Utilities
  - Access and businesses
  - Visual Impacts



# NM 6 Bridge Replacement

## Alternative 1 – Bridge Rehabilitation

- Advantages
  - Maintains existing alignment
  - Minor impacts to the bosque and nearby properties
- Disadvantages
  - Bridge is near the end of its design life
  - Foundations will not meet current design standards
  - High, ongoing maintenance costs
- Preliminary Recommendation
  - **Eliminate from consideration**





# NM 6 Bridge Replacement

## Alternative 2 - North New Parallel Alignment



### Legend

- Centerline
- New Roadway
- New Bridge
- Existing Right-of-Way
- New Right-of-Way





# NM 6 Bridge Replacement

## Alternative 2 - North New Parallel Alignment

- Advantages
  - New alignment minimizes traffic disruption during peak hours while the bridge is being constructed
  - New alignment away from traffic reduces construction time
  - Minor impact to the bosque and aquatic system
- Disadvantages
  - Requires reconstruction of the west Riverside Drain culvert
  - Curve geometry of the bridge approaches is acceptable, but not as smooth as other alternatives
- Preliminary Recommendation
  - Advance for further consideration





# NM 6 Bridge Replacement

## Alternative 3 - North New Curved Alignment





# NM 6 Bridge Replacement

## Alternative 3 - North New Curved Alignment

- Advantages
  - New alignment minimizes traffic disruption during peak hours while the bridge is being constructed
  - New alignment away from traffic reduces construction time
  - Smooth alignment curves are desirable for drivers
- Disadvantages
  - Requires reconstruction of the west Riverside Drain Culvert
  - Results in the loss of more mature trees compared to other alternatives
- Preliminary Recommendation
  - Advance for further consideration





# NM 6 Bridge Replacement

## Alternative 4 - South New Parallel Alignment





# NM 6 Bridge Replacement

## Alternative 4 – South New Parallel Alignment

- Advantages
  - New alignment minimizes traffic disruption during peak hours while the bridge is being constructed
  - New alignment away from traffic reduces construction time
- Disadvantages
  - Acquires the building south of NM 6 and west of the Riverside Drain
  - Requires relocation of the major electric line over the river
  - Takes property from Riverside Park
- Preliminary Recommendation
  - **Eliminate from consideration**





# NM 6 Bridge Replacement

## Alternative 5 – Split Bridge





# NM 6 Bridge Replacement

## Alternative 5 – Split Bridge

- Advantages
  - New alignments minimize traffic disruption during peak hours while the bridges are being constructed
  - New alignments away from traffic reduce construction time
- Disadvantages
  - Takes a minor amount of property from Riverside Park
  - Requires relocation of the major electric line over the river
- Preliminary Recommendation
  - Advance for further consideration





# NM 6 Bridge Replacement

## Alternative 6 – North Offset Alignment





# NM 6 Bridge Replacement

## Alternative 6 – North Offset Alignment

- Advantages
  - To keep four lanes open during construction, the new bridge must be built half at a time
  - Only minor impacts to the bosque and aquatic systems
- Disadvantages
  - Building the new bridge in halves increases the construction time and the disruptions to traffic
  - Building the bridge in halves would be more difficult and expensive than other alternatives, such as a new alignment
- Preliminary Recommendation
  - Eliminate from consideration





# NM 6 Bridge Replacement

## Alternative 7 – South Offset Alignment





# NM 6 Bridge Replacement

## Alternative 7 – South Offset Alignment

- Advantages
  - To keep four lanes open during construction, the new bridge must be built half at a time
  - Only minor impacts to the bosque & aquatic system
- Disadvantages
  - Building the new bridge in halves increases the construction time and the disruptions to traffic
  - Building the bridge in halves would be more difficult and expensive than some other alternatives
  - Takes a minor amount of property from Riverside Park
  - Requires relocation of the major electric line over the river
- Preliminary Recommendation
  - **Eliminate from consideration**





# NM 6 Bridge Replacement

## Alternative 8 – In-Line Replacement





# NM 6 Bridge Replacement

## Alternative 8 – In-Line Replacement

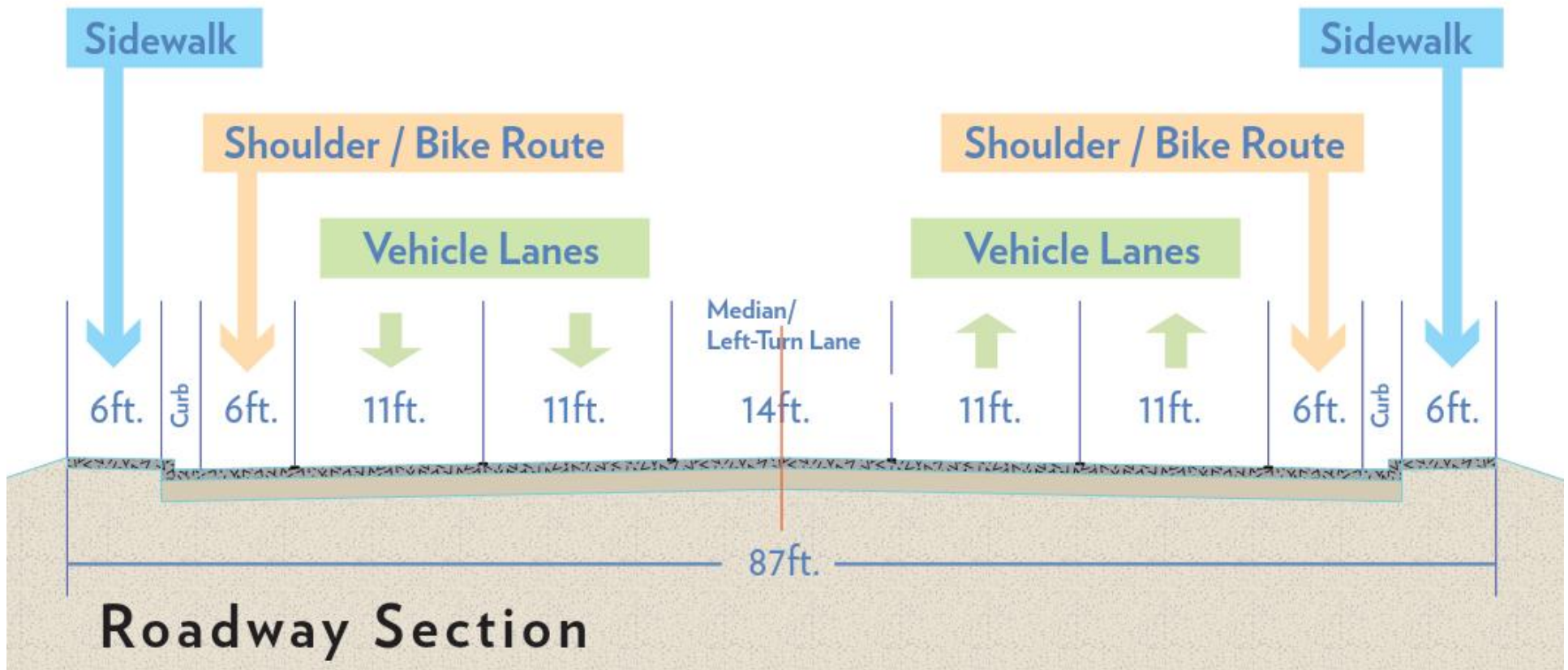
- Advantages
  - Maintains existing alignment
  - Least impact to the bosque and nearby properties
- Disadvantages
  - Maintaining 4-lanes during construction would be highly complex and difficult
  - Relocation of utilities on bridge structure is more difficult
  - Higher cost than other alternatives
- Preliminary Recommendation
  - **Eliminate from consideration**





# NM 6 Bridge Replacement

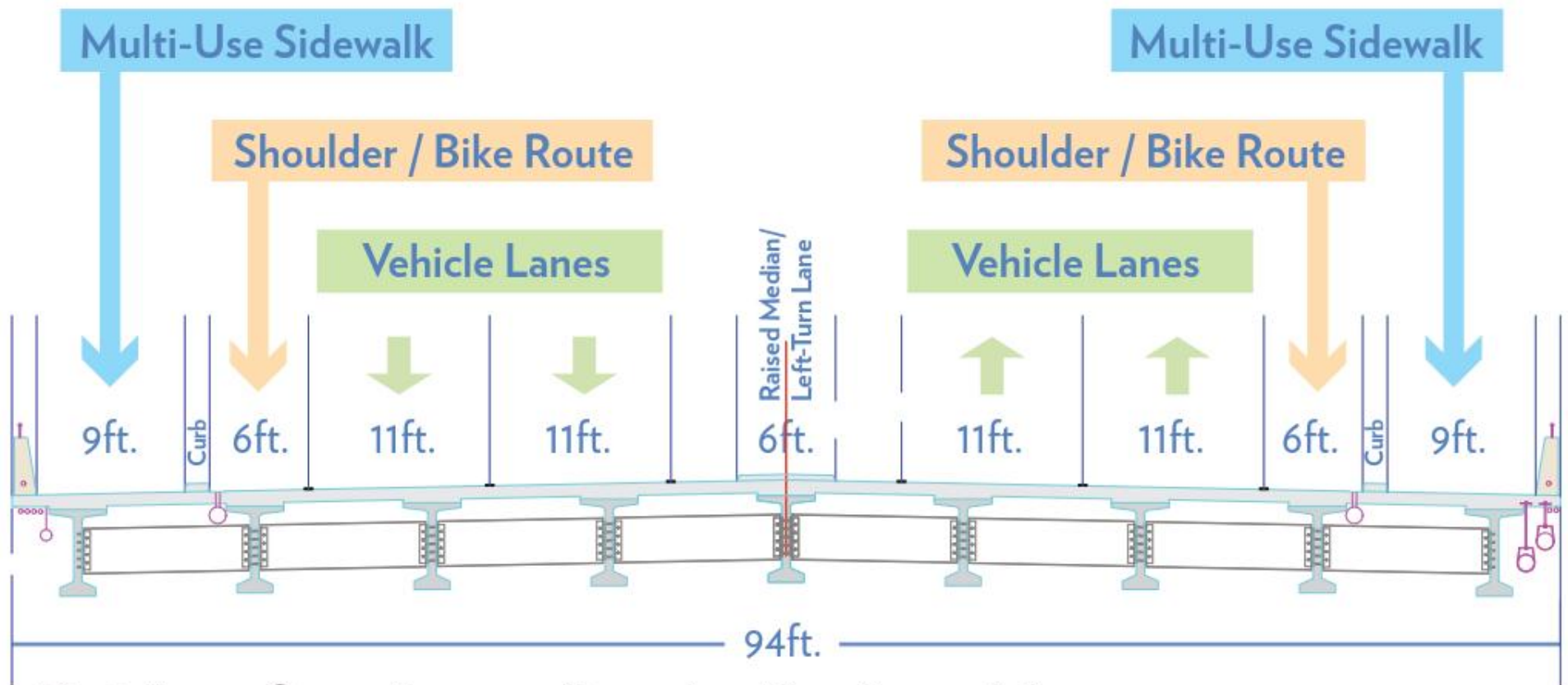
## Proposed Cross Sections





# NM 6 Bridge Replacement

## Proposed Cross Sections

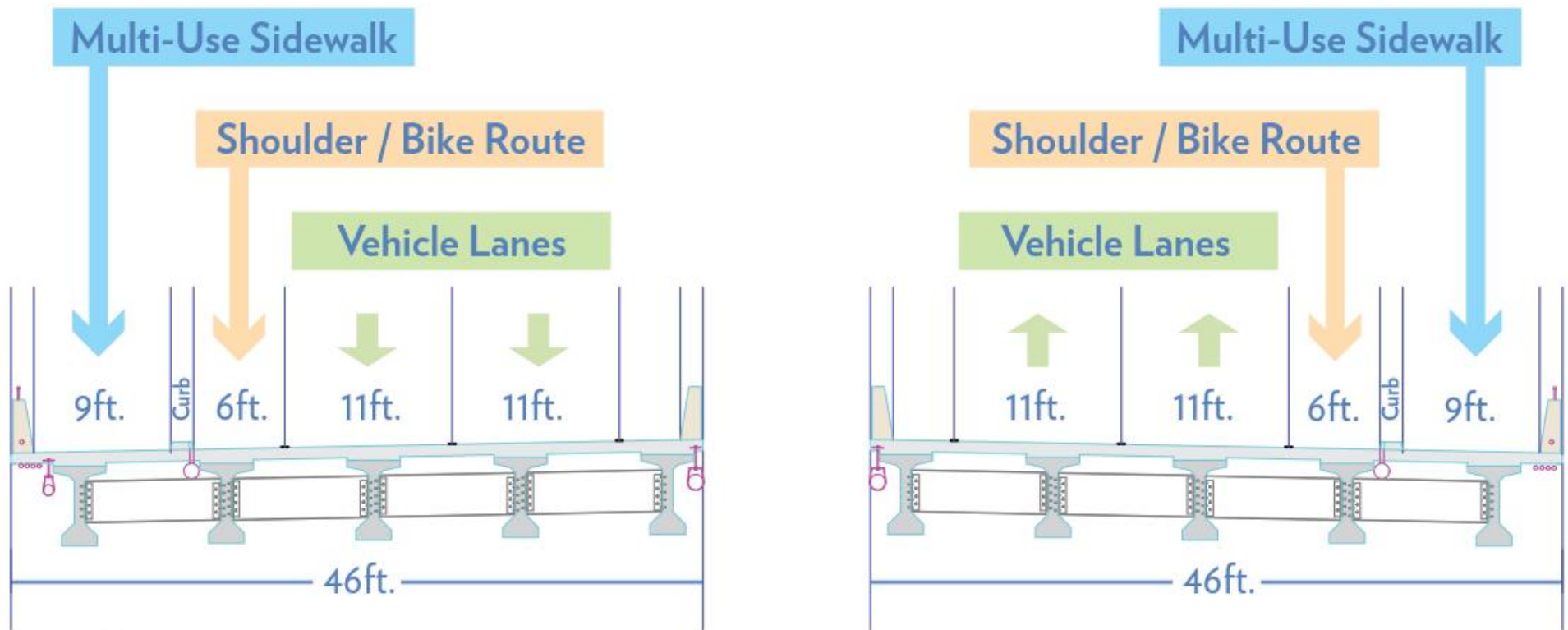


## Bridge Section - Single Bridge Alternatives



# NM 6 Bridge Replacement

## Proposed Cross Sections



**Split Bridge Section - Alternative 5**

# Environmental Considerations

- Wetlands / Riparian Habitat
- Rio Grande
- Wildlife
  - Rio Grande Silvery Minnow
  - Yellow-Billed Cuckoo
  - Southwest Willow Flycatcher
  - Bats
- Parks / 4(f) Properties

# Community Input

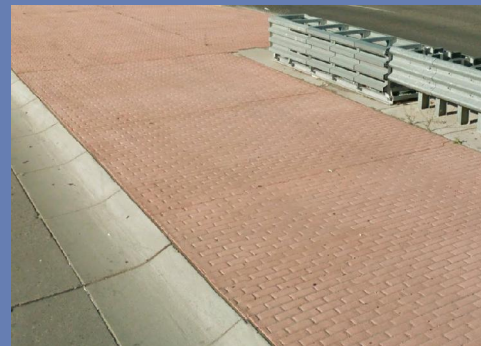
- Alternative Recommendations
  - Input on alternatives and recommendations
- Evaluation Factors
  - Any additional considerations?
- Additional Input
- Aesthetics



# NM 6 Bridge Replacement

## Aesthetics

- Concrete railings
- Median pavement
- Retaining walls
- Light poles
- Paint colors



# Thank you!

## Questions?

Send comments to:  
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Albuquerque, NM 87110  
(505) 878-6581  
Email: [fredinejl@pbworld.com](mailto:fredinejl@pbworld.com)