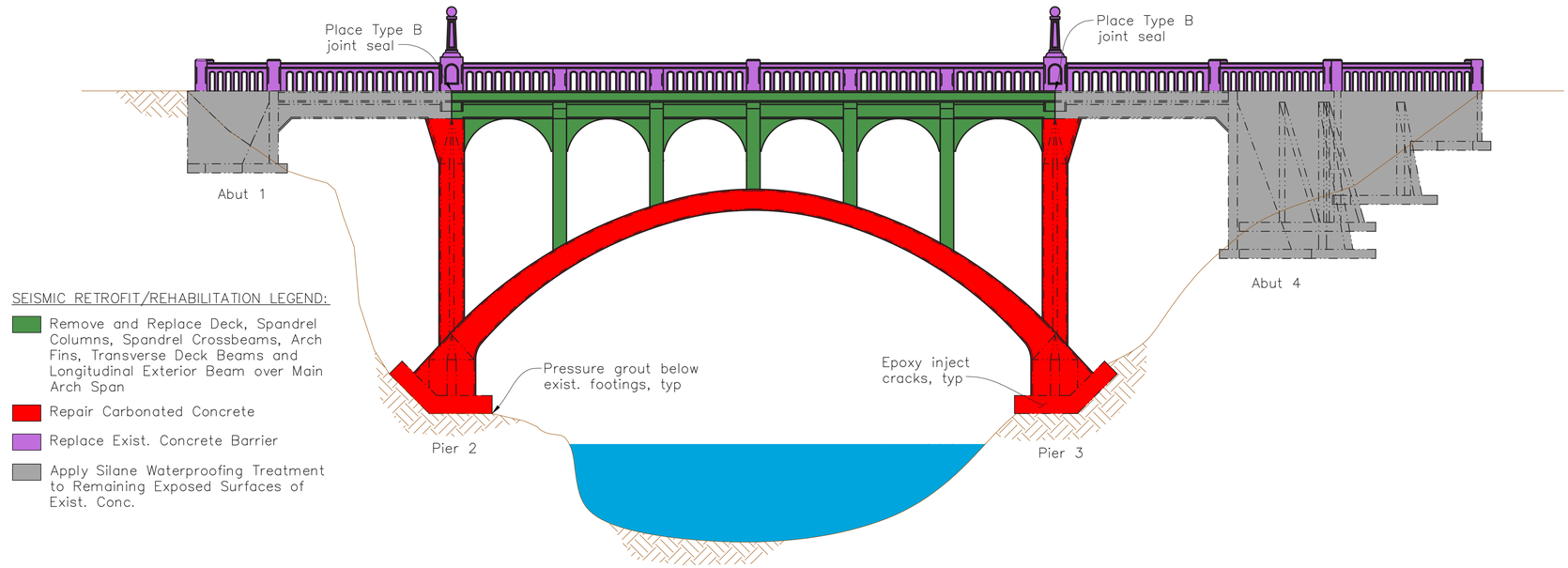
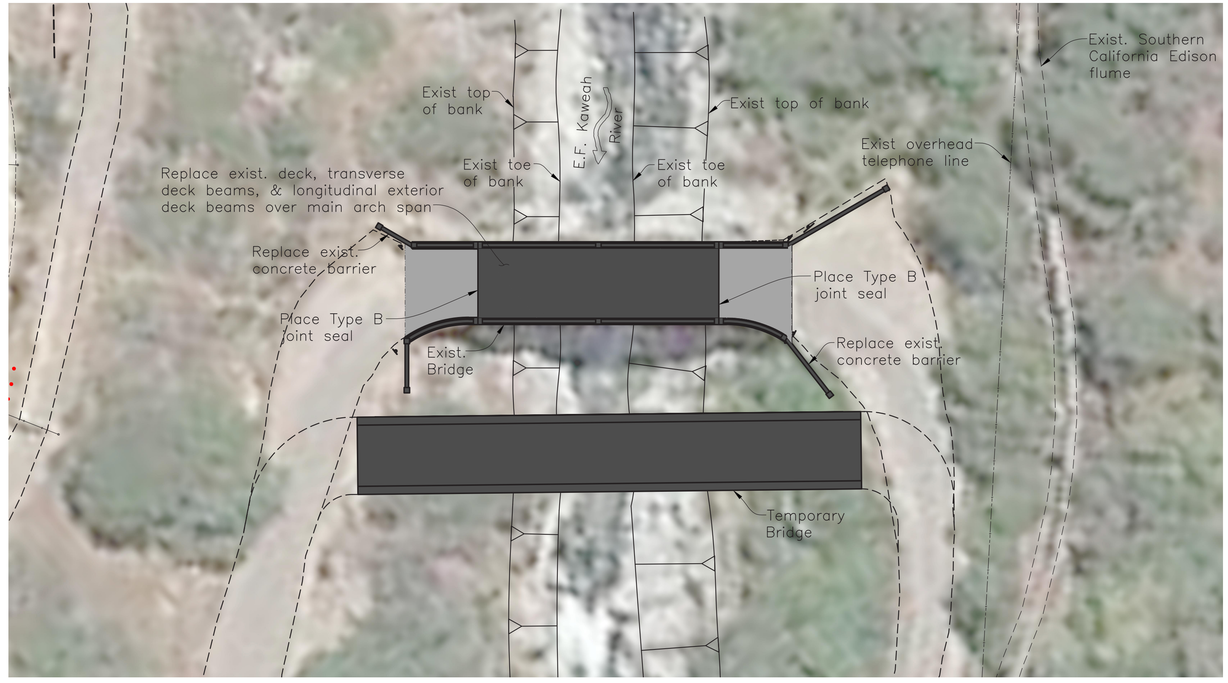


SEISMIC RETROFIT/REHABILITATION LEGEND:

- Remove and Replace Deck, Spandrel Columns, Spandrel Crossbeams, Arch Fins, Transverse Deck Beams and Longitudinal Exterior Beam over Main Arch Span
- Repair Carbonated Concrete
- Replace Exist. Concrete Barrier
- Apply Silane Waterproofing Treatment to Remaining Exposed Surfaces of Exist. Conc.

ELEVATION

NO SCALE



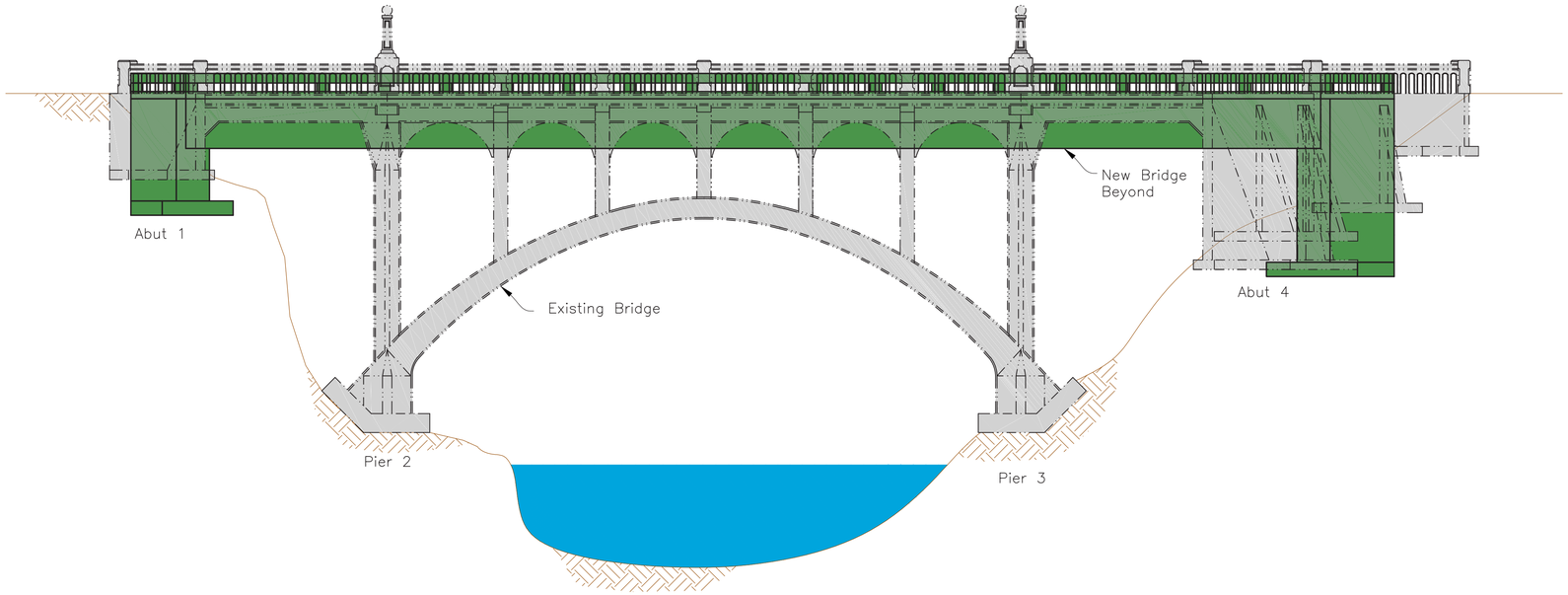
PLAN

1"=20'-0"

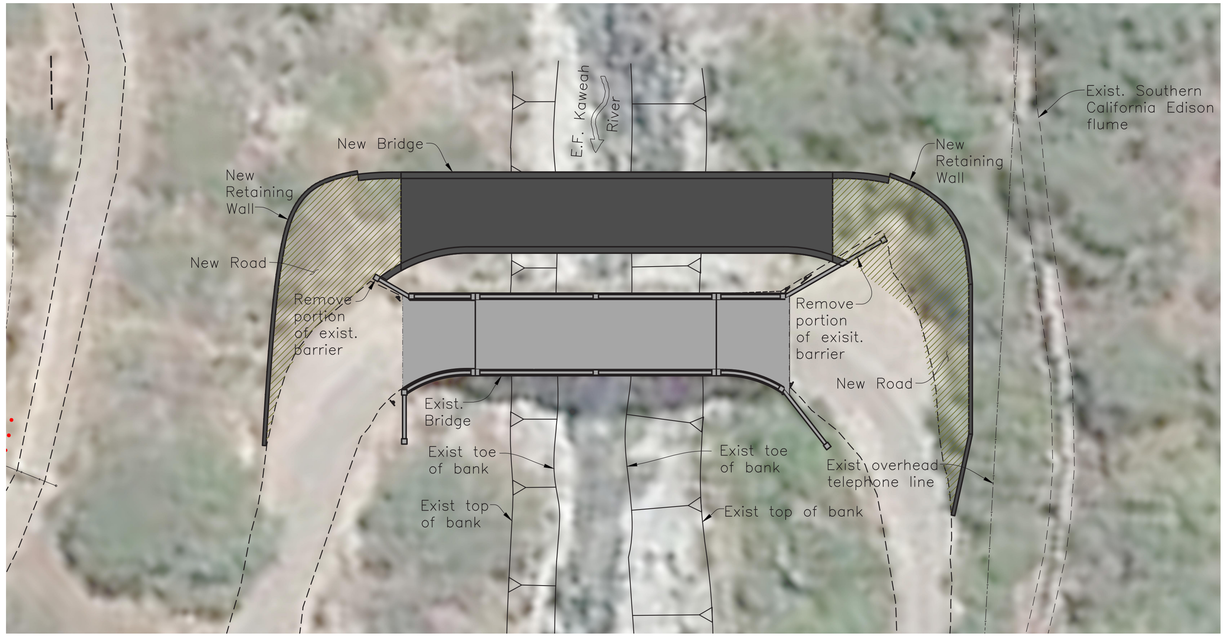
CORNERSTONE structural engineering group

TULARE COUNTY RESOURCE MANAGEMENT AGENCY
5961 SOUTH MOONEY BLVD., VISALIA, CALIFORNIA 93277

ALTERNATIVE 1 - REHAB/RETROFIT
M375A HISTORIC OAK GROVE BRIDGE OVER THE EAST FORK OF THE KAWEAH RIVER



ELEVATION
NO SCALE



PLAN
1"=20'-0"

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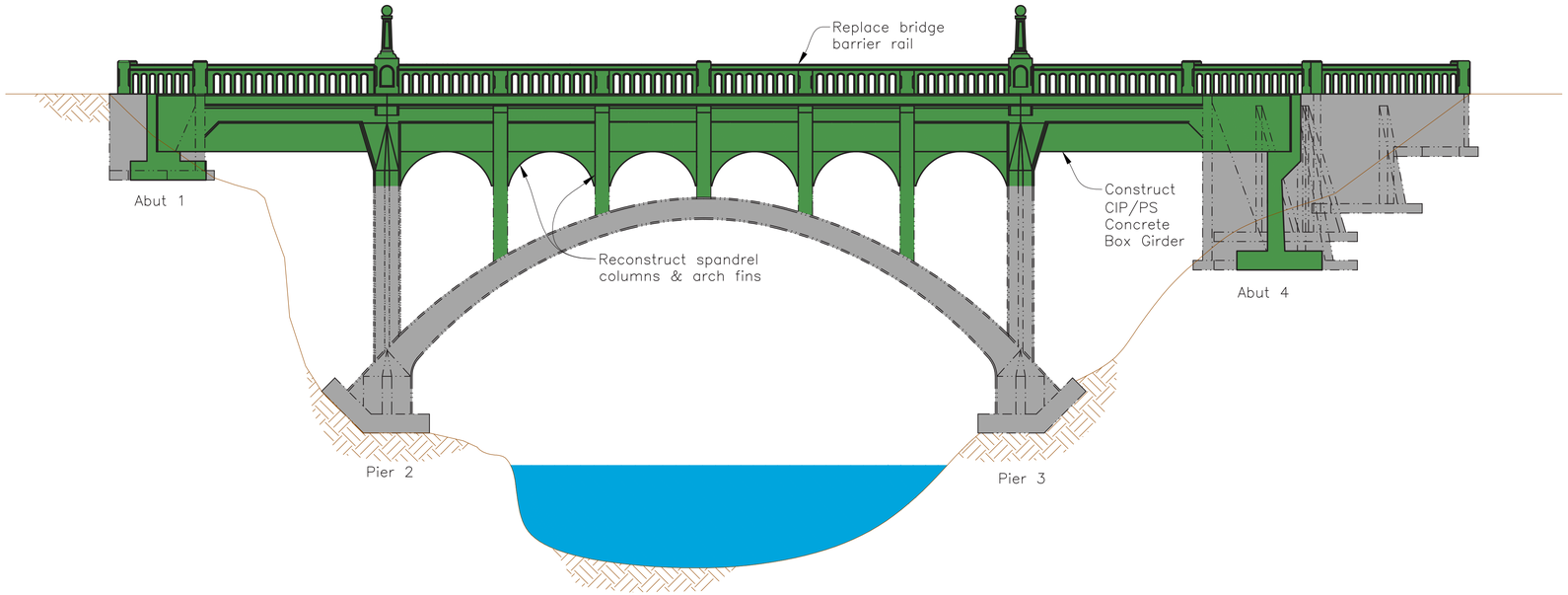
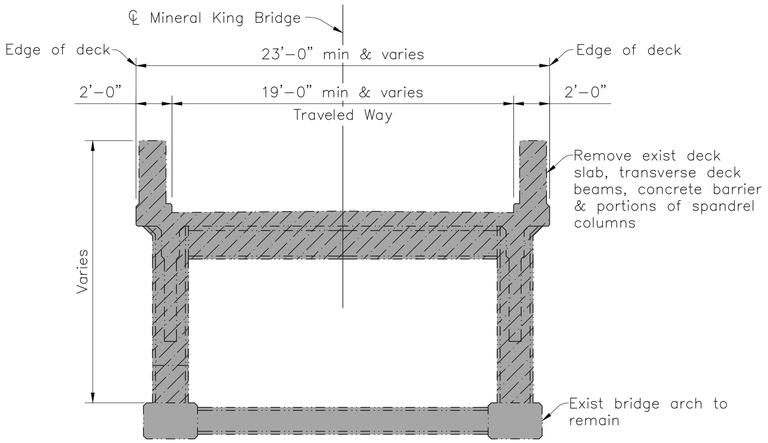
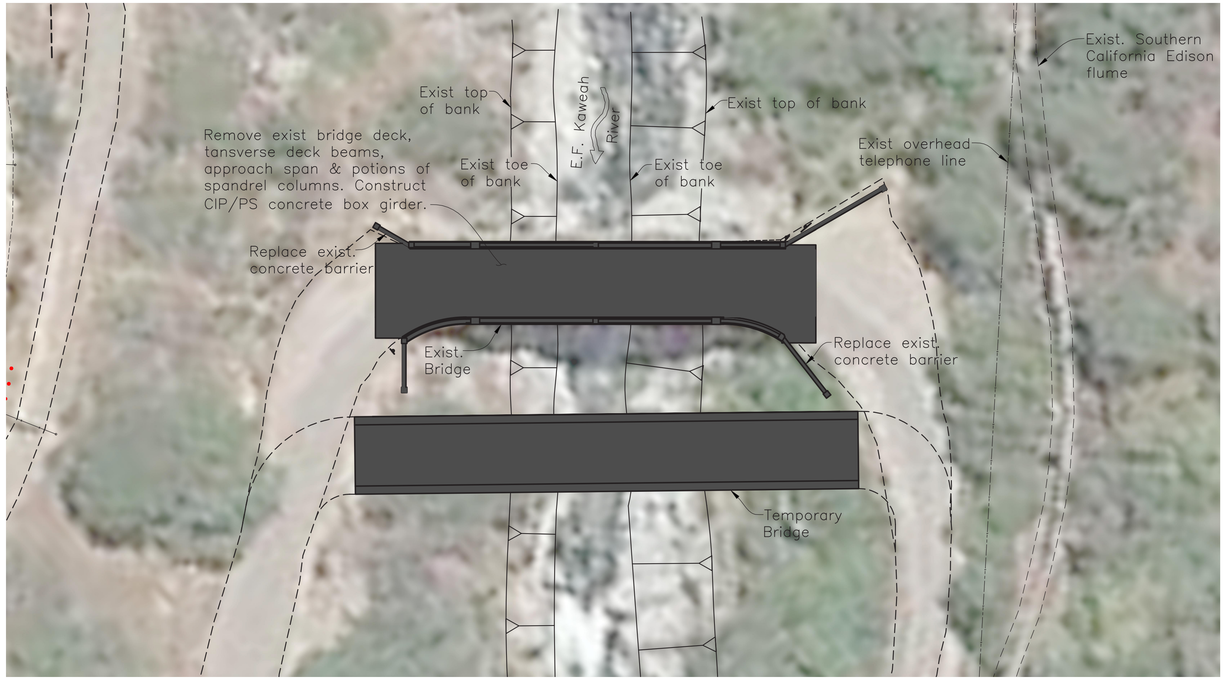
ALTERNATIVE 2B - REPLACEMENT (PRESERVE EXISTING BRIDGE)
M375A HISTORIC OAK GROVE BRIDGE OVER
THE EAST FORK OF THE KAWEAH RIVER



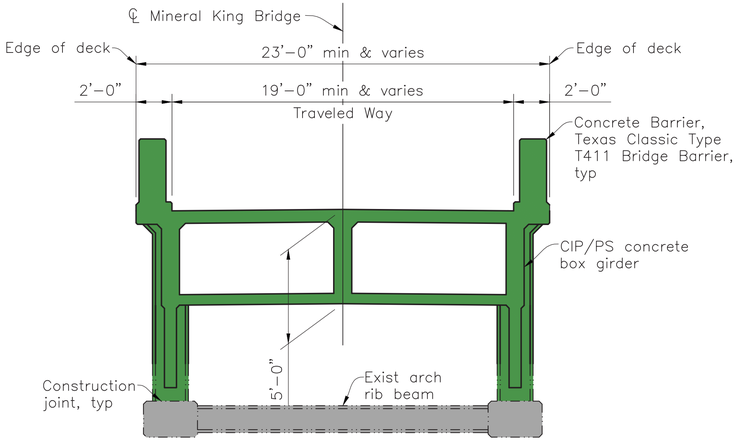
ELEVATION
NO SCALE



Stage 1 – Demo Portion of Existing Bridge



PLAN
1"=20'–0"



Stage 2 – Construct New Superstructure

TYPICAL SECTION
1/4"=1'–0"

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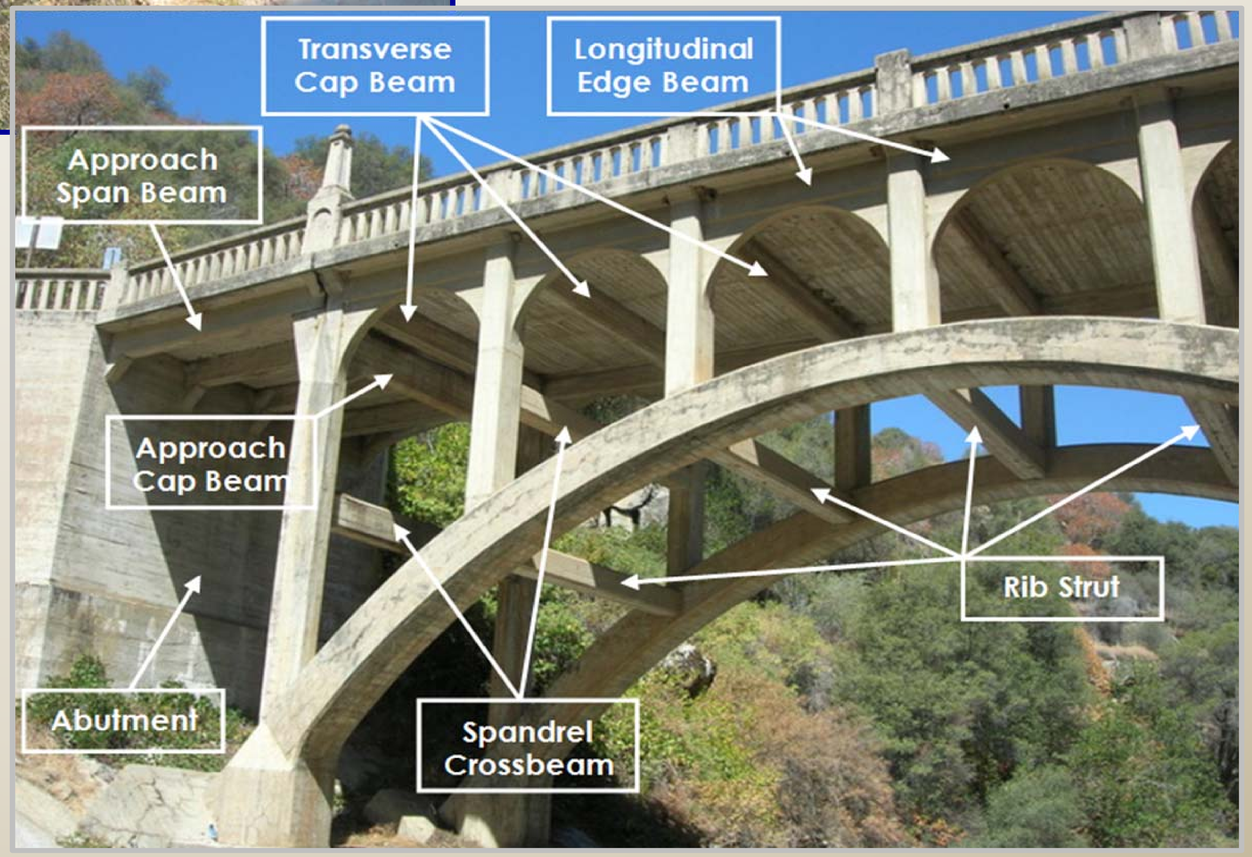
ALTERNATIVE 3 - HYBRID REHAB/REPLACEMENT M375A HISTORIC OAK GROVE BRIDGE OVER THE EAST FORK OF THE KAWEAH RIVER

ARCH BRIDGE NOMENCLATURE



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ALL PROJECT ALTERNATIVES

- Alternative 1: Retrofit/Rehabilitate Existing Bridge
- Alternative 2A: Replace with Arch Bridge Upstream (Remove Existing Bridge)
- Alternative 2B: Replace with Girder Bridge Upstream (Preserve Existing Bridge)
- Alternative 3: Hybrid Rehab/Replacement
- Alternative 4A: Replace with Arch Bridge Downstream (Remove Existing Bridge)
- Alternative 4B: Replace with Girder Bridge Downstream (Preserve Existing Bridge)
- Alternative 5: New East Alignment (Preserve Existing Bridge)
- Alternative 6: New West Alignment (Preserve Existing Bridge)
- Alternative 7: Do Nothing

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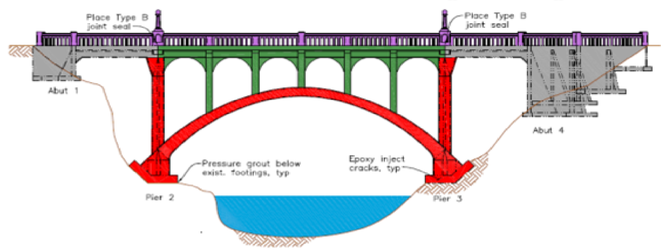
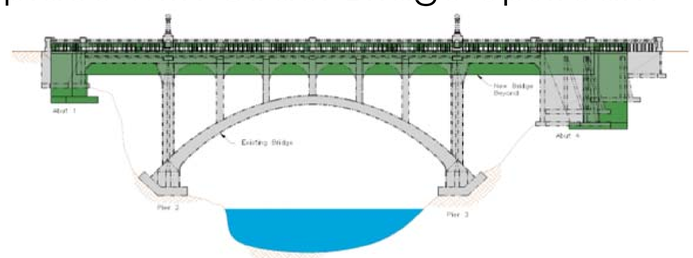
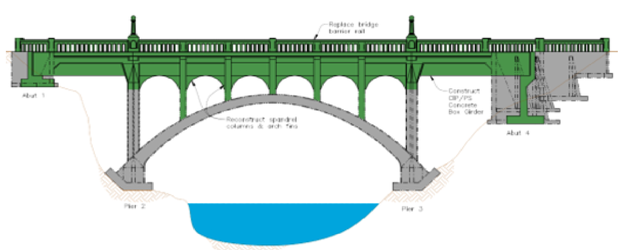
SUMMARY OF REMAINING ALTERNATIVES

Alternative	Estimated Cost	PROS	CONS
Alternative 1 Retrofit/Rehabilitate Existing Bridge  	$4.5 Million	• Preserves Original Structure • Preserves Existing Aesthetics • Maintains Existing Alignment	• High Initial Cost • High Engineering Risk • High Risk of Unknowns During Construction • High Risk of Increasing Construction Costs • High Future Maintenance Costs • Short Design Life • Requires Temporary Bridge • Requires Significant Retrofit/Rehab Work • Requires Replacement of Barrier
Alternative 2B Replace with Girder Bridge Upstream 	$4.0 Million	• Provides New, Low Maintenance Bridge • Preserves Existing Bridge • Preserves View Shed of Existing Bridge • Lower Cost • Low Risk of Unknowns During Construction • Low Risk of Increasing Construction Costs	• Requires Maintenance on Two Bridges • Existing Bridge No Longer Eligible for Federal Funding • Requires Right-of-Way • More Environmental Impact • Requires New Retaining Walls
Alternative 3 Hybrid Rehab/Replacement 	$5.0 Million	• Essentially Preserves Existing Aesthetics • Provides New, Low Maintenance Bridge • Only One Bridge • Lower Maintenance Costs • Maintains Existing Alignment • Minimizes Environmental Impact • Minimal Road Work	• Requires Temporary Bridge • High Construction Cost • Replaces Existing Bridge • Medium Risk of Unknowns During Construction • Medium Risk of Increasing Construction Costs

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