



Arizona Dept. of Transportation

SHRP2 Innovative Bridge Designs for Rapid Renewal Peer Exchange

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Assistant State Bridge Engineer - Design

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Department Experience with ABC Techniques

- ❖ Performed a bridge slide of a single span PT-Box Girder Bridge in 1992.
- ❖ Box Beam Bridges-Qualifying under PBES category
- ❖ Use of Partial depth deck panels as alternative designs in 1990s
- ❖ The innovation came to a halt



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Experience with SHRP2 Toolkit

- ❖ Knowledge of it through various webinars
- ❖ Used as a supplement to investigate potential techniques in scoping bridge projects for ABC approach



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Past Challenges in implementation of PBES/ABC type initiatives and products.

- ❖ **Defined User Costs to Support Selection**
- ❖ **Concerns about quality/durability**
- ❖ **Development of Standards and Specifications**
- ❖ **Concerns about higher costs**
- ❖ **Local construction industry investment/experience**



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Past Contractor Experience and Initiative

- ❖ **Alternative Delivery Proposal Concepts**
- ❖ **Successful bidders have not involved ABC Approach**
- ❖ **Removing roadblocks in Request for Proposals**



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Department's current approach to ABC Projects

- ❖ Evaluate concept in scoping phase
- ❖ Utilize checklists developed by Utah and FHWA
- ❖ Prepare supplemental report evaluating ABC/PBES
- ❖ No projects have selected ABC techniques



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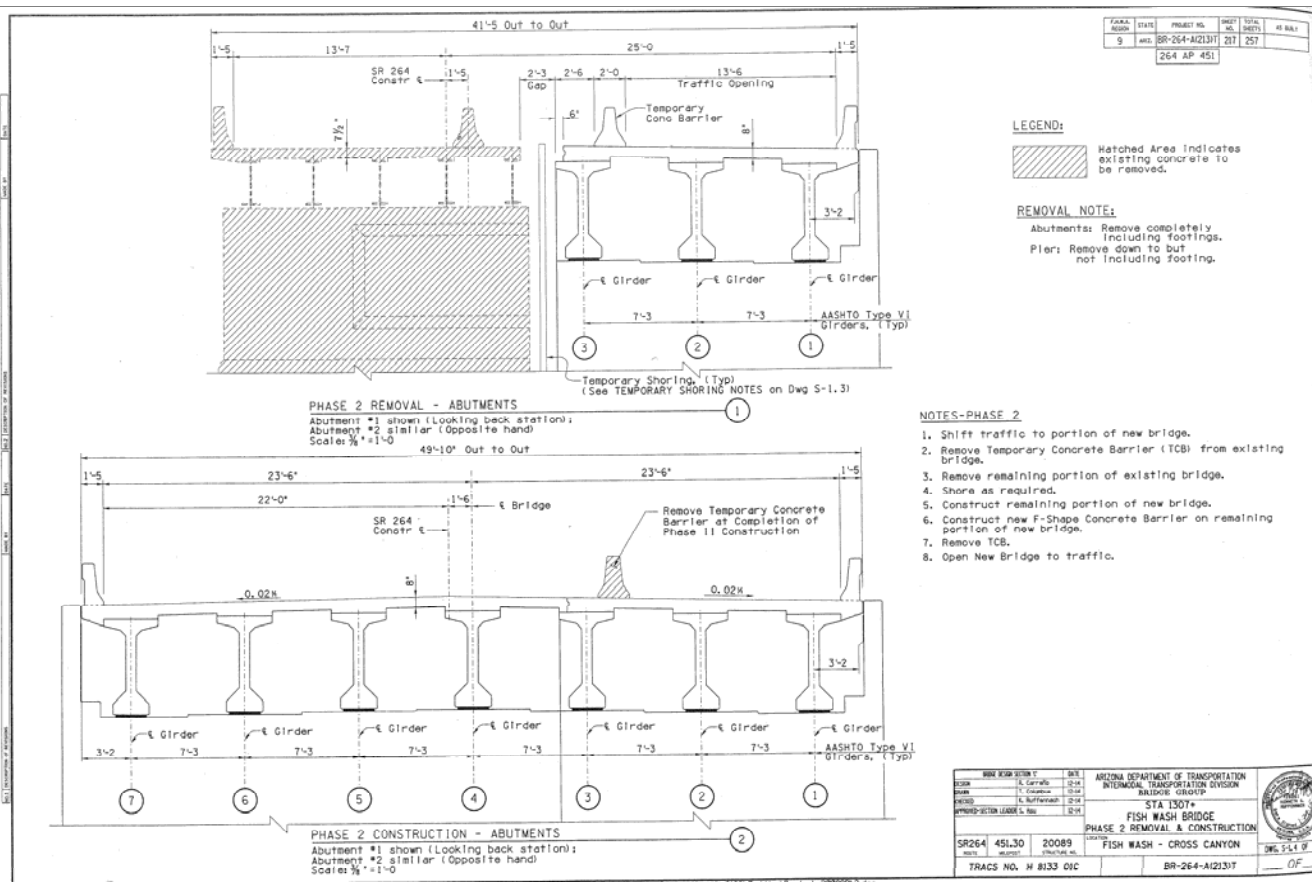
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Recent Contractor Experience and Initiative

- ❖ **Local Agency Use of SHRP2 Funding on CMAR Project**
 - ❖ **Gila River Indian Community – Gila River Bridge Slide**
- ❖ **Lessons Learned have spurred recent Value Engineering Proposal**

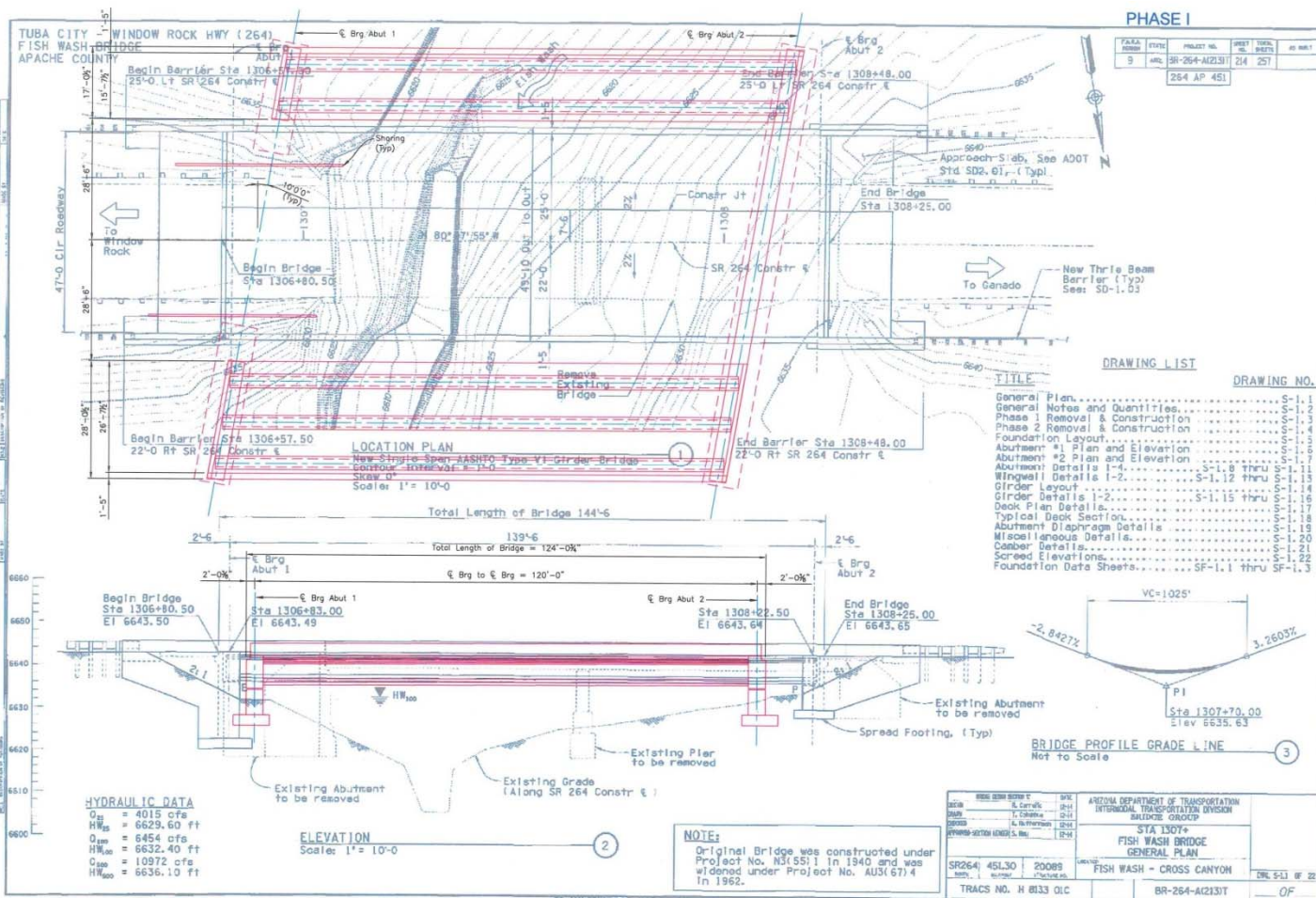
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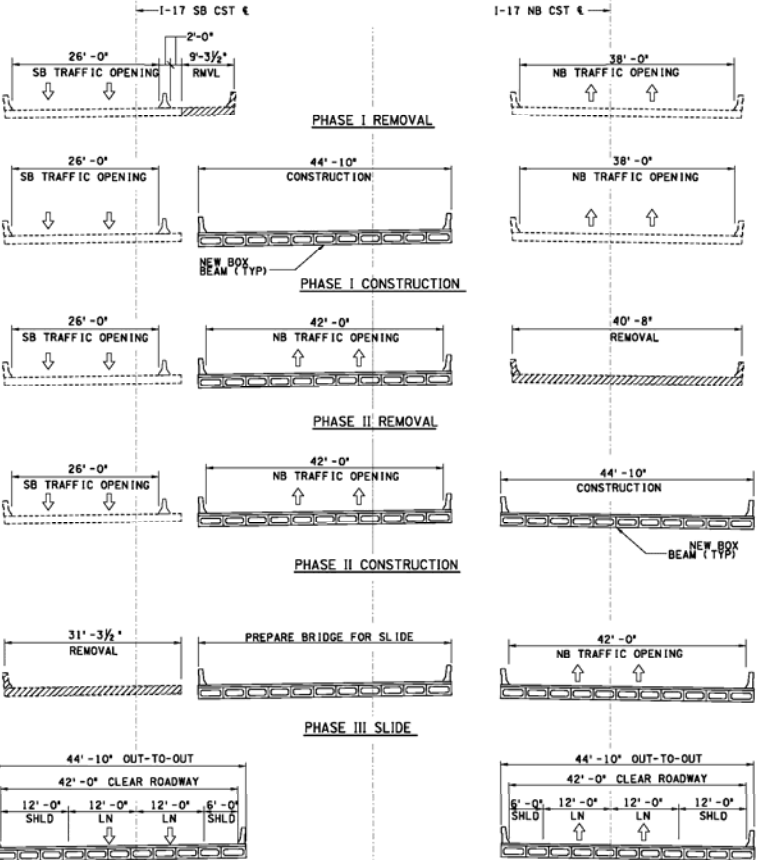
Future ADOT Projects with ABC Concept

- ❖ **Interstate 17 Willard Springs TI**
 - ❖ **Scoping Phase of Bridge Slide**
 - ❖ **Potential to pursue IAP Funding through SHRP2**

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FED. ROAD DISTRICT	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



ALTERNATIVE 4 - COMPLETE REPLACEMENT WITH PRECAST BOX BEAMS (SLIDE-IN)

DESIGN	DATE	BY	ARIZONA DEPARTMENT OF TRANSPORTATION	PRELIMINARY
DESIGN	09-14	WK	INTERNAL TRANSPORTATION DIVISION	STAGE I
CHECKED	09-14	RE	BUILDING GROUP	Noted
	09-14	CM		NOT FOR CONSTRUCTION OR RECORDING
PARSONS BRINCKERHOFF STA 6645+ WILLARD SPRINGS RD TI OP CONSTRUCTION PHASING				DWG NO.
1-17	326.20	1583/1584	WILLARD SPRINGS TI OP	07
TRACS NO. H8721 OIC				