ACROW
BRIDGE

Building Bridges.
Connecting People.

2017 Bridge Conference
March 22, 2017
Crowne Plaza Lansing West, Lansing MI

Tom Pinder, Sales Manager Special and Heavy Bridges Division

Eight North American Offices

Parsippany, NJ - Denver, CO

St. Louis, MO – Fair Hope, AL

Seattle, WA – Montreal, QE

Toronto, ON – Vancouver, BC

Also International Offices in
Poland, Italy and So. Africa

Today's Presentation

- Brief Company History
- Basic Structures
- Project Pictures
- Project Specific Information
- Construction Bridges
- Installation Techniques
- Skagit River Emergency

WW II

EMERGENCY!

MNT. ST Helens:17 Emergency Bridges

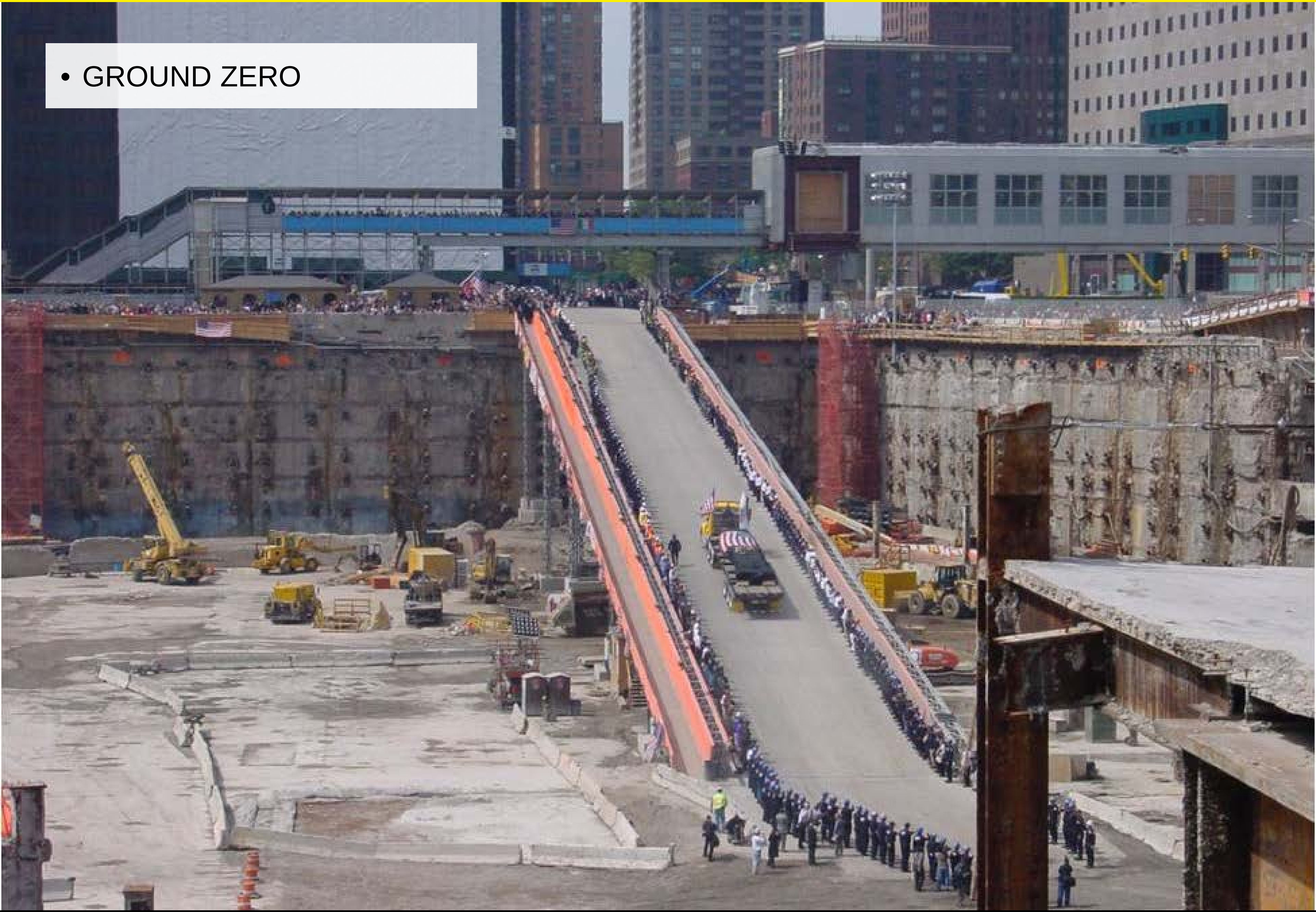
ACROW BRIDGE

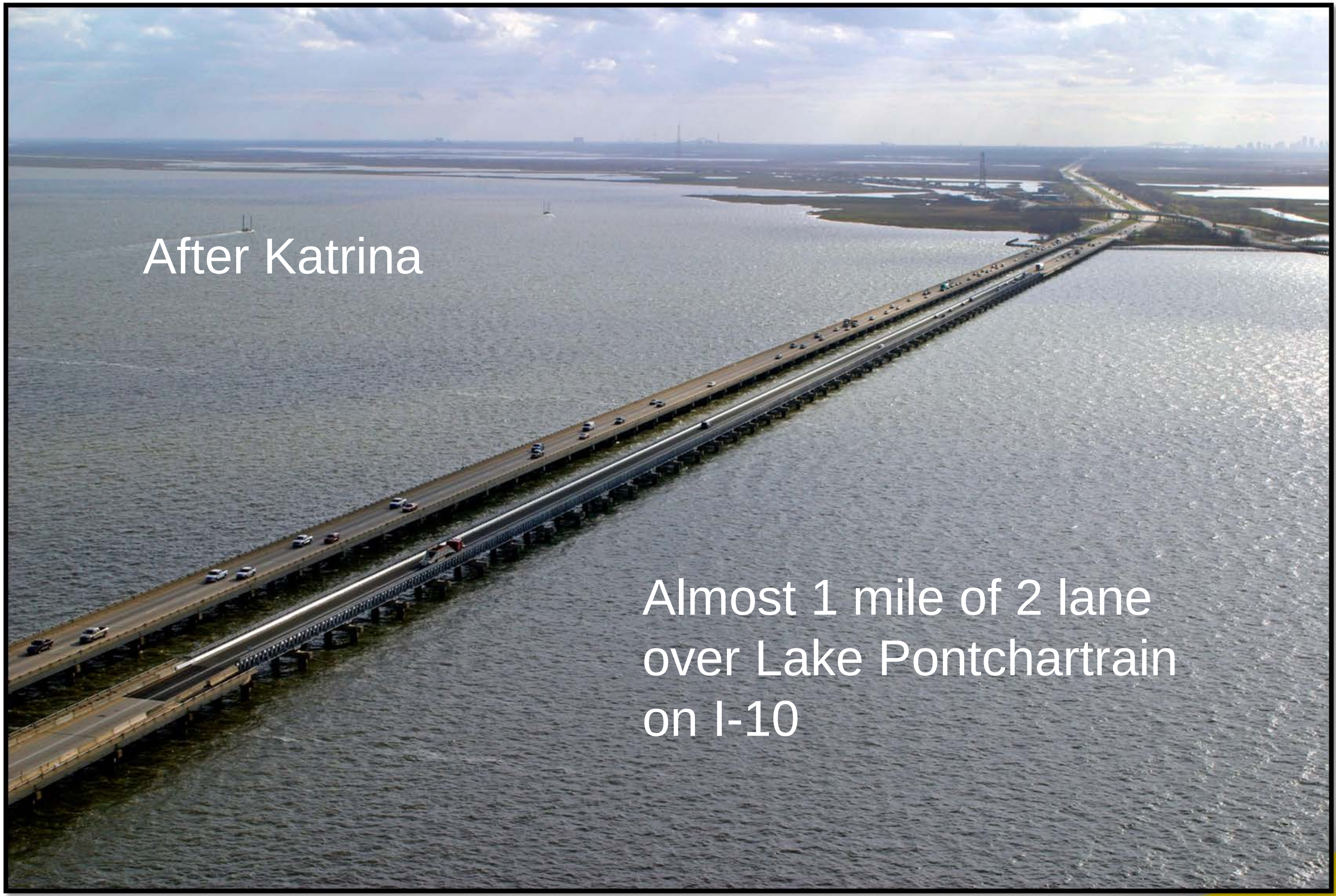
320 FOOT 3-SPAN CONTINUOUS EXTRA WIDE SINGLE LANE BRIDGE
MT. ST. HELENS, WASHINGTON

ACROW
BRIDGE

- 21 - Series 300 Acrow Bridges under H3 on Oahu installed almost 30 years ago

- GROUND ZERO





ACROW BRIDGE

- After Katrina

EMERGENCY!

I – 5 Skagit County

ACROW BRIDGE

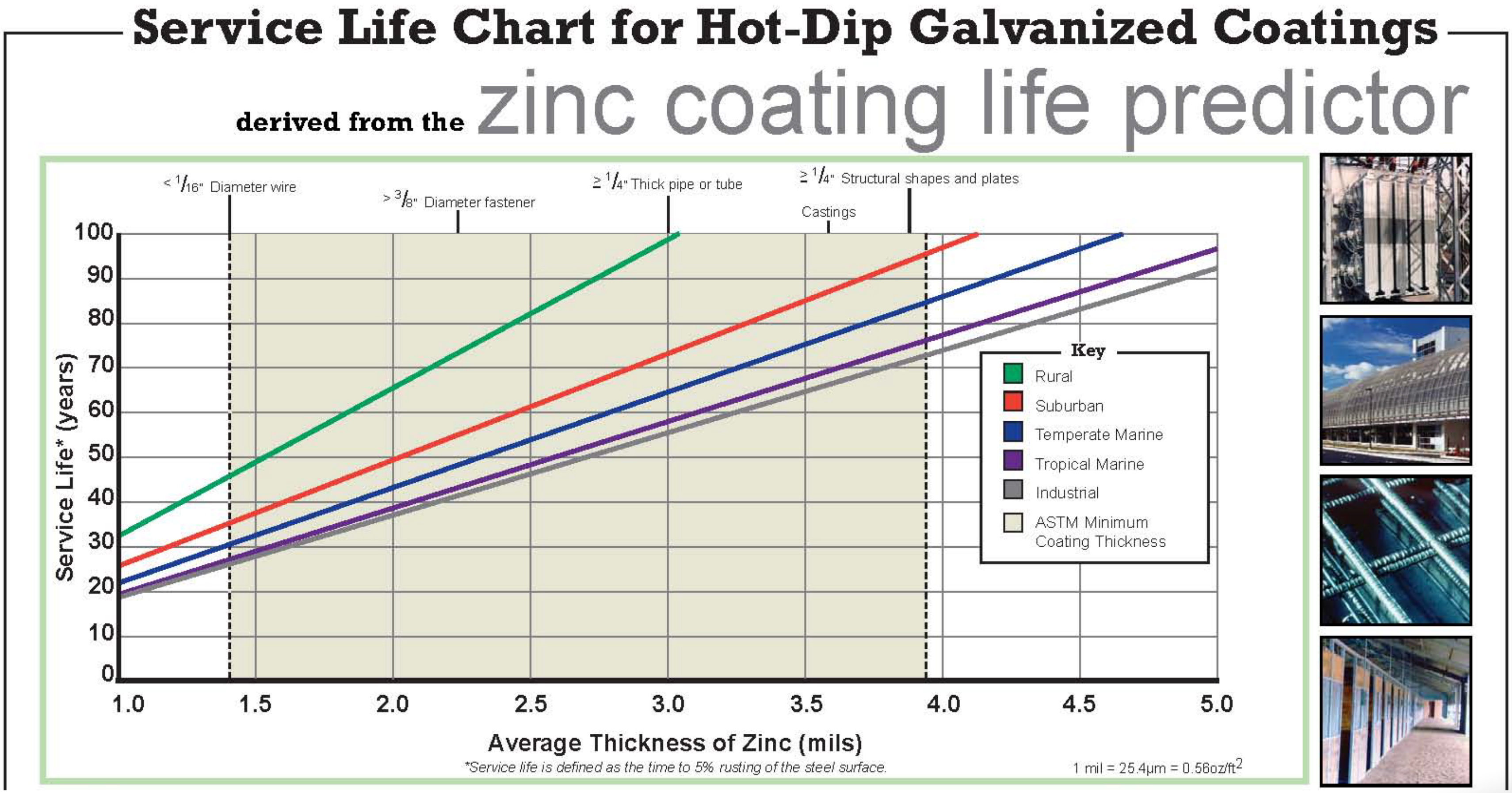
FABRICATION

- AISC Quality Certified

- Quality US made steel
- Advanced Major Steel Bridge
- ISO 9001
- AWS welded & inspected
- CE of Europe

Acrow PA manufacturing Facility

Galvanizing



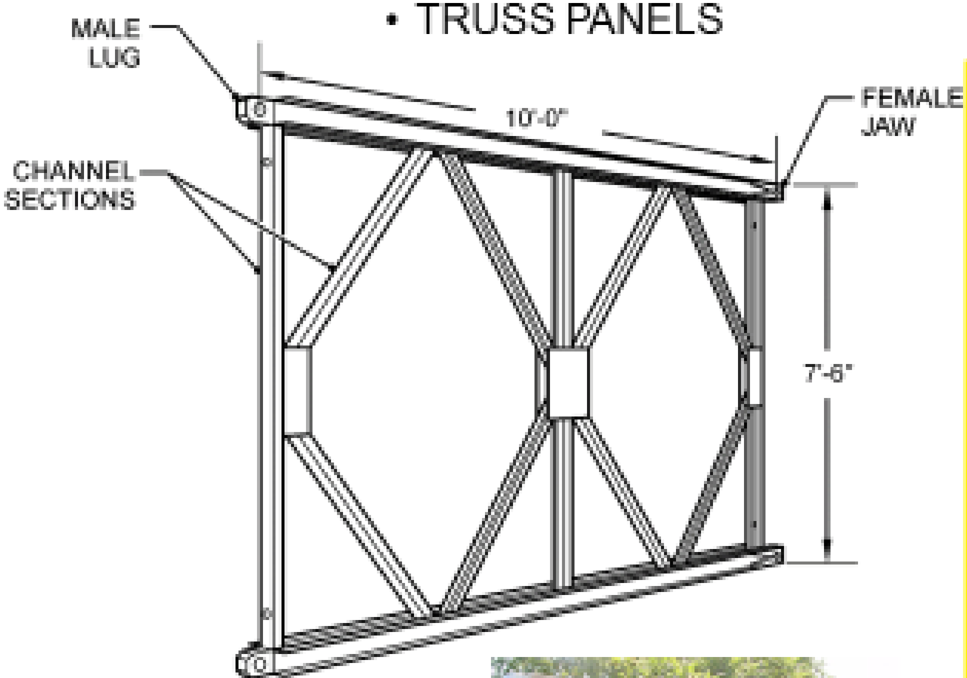
MODULAR BRIDGES

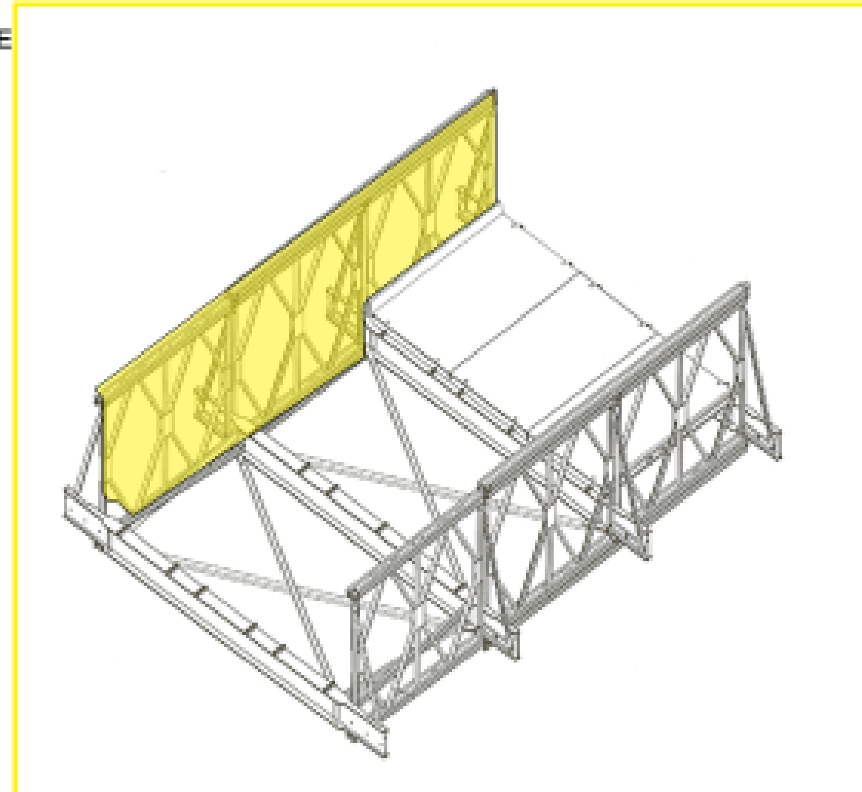
Three Basic Parts

1. Truss panels
2. Floorbeams
3. Steel decking

ACROW BRIDGE

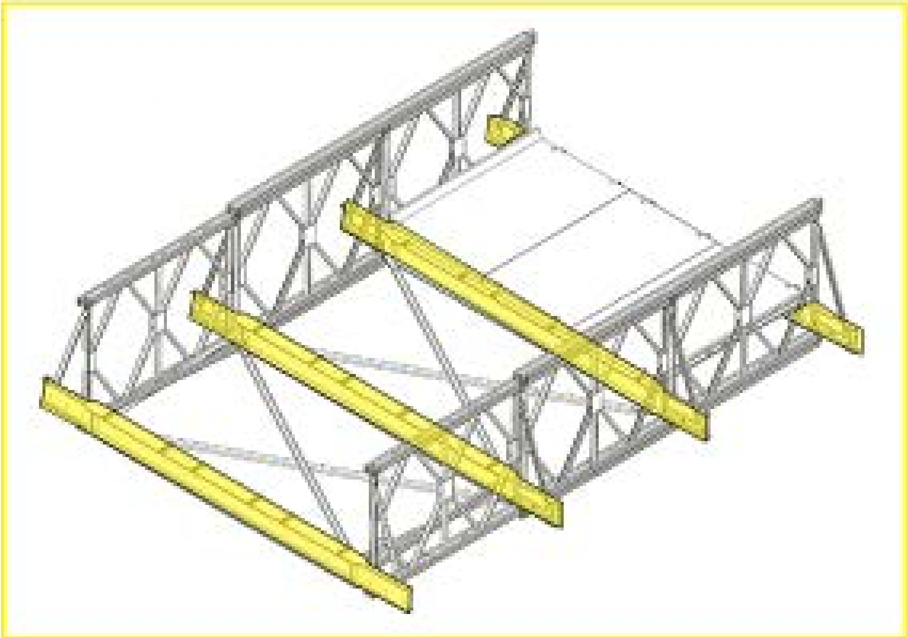
- TRUSS PANELS



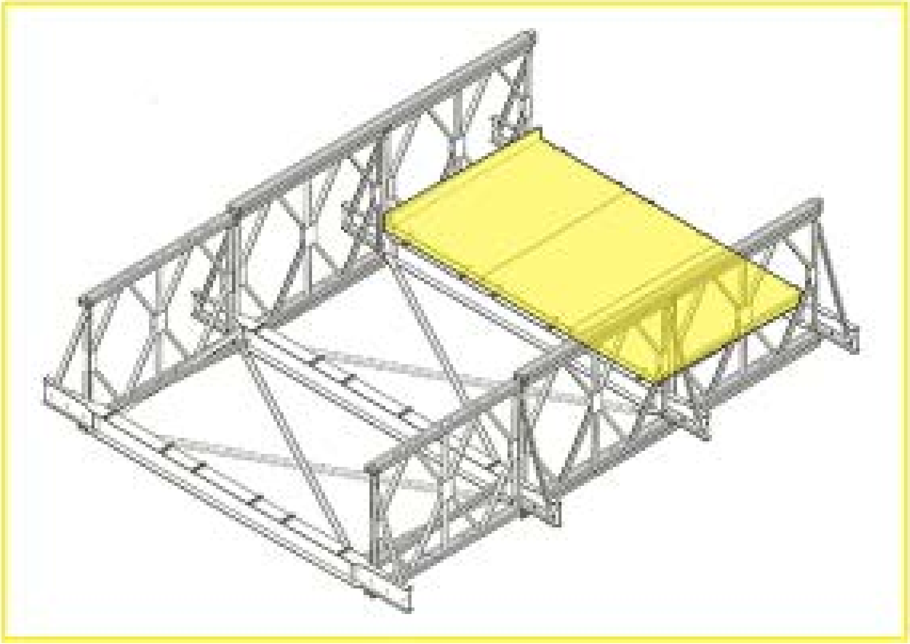



1930ES
JLG
United Rentals
870199
United Rentals
1-800-UR-RENTS
JLG

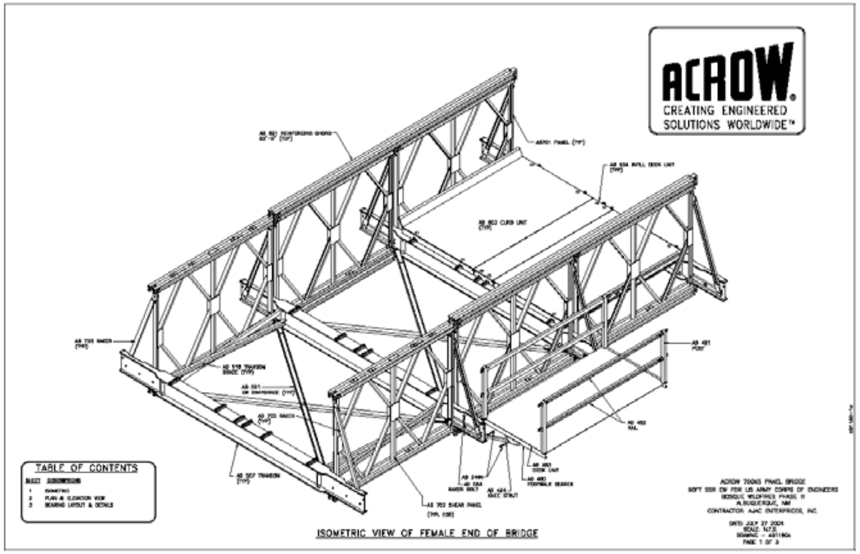
- FLOORBEAMS OR TRANSOMS



• ORTHOTROPIC STEEL DECK



ACROW
BRIDGE



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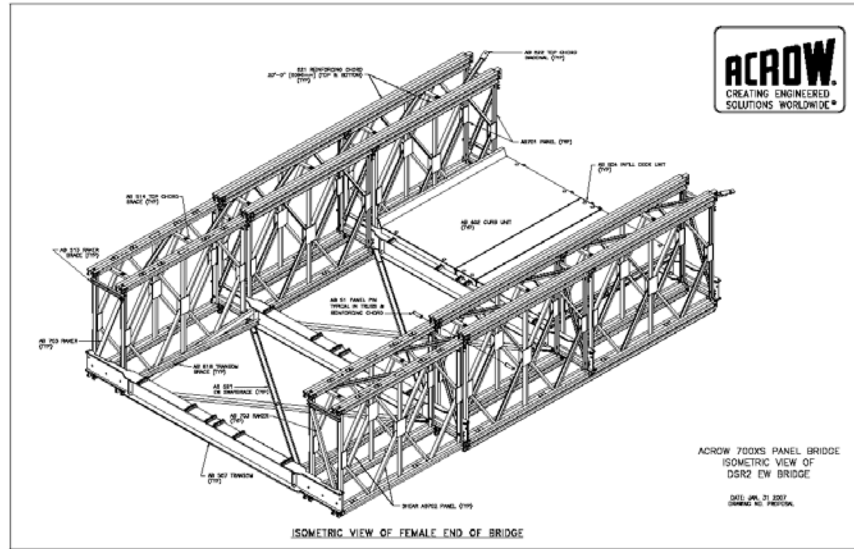
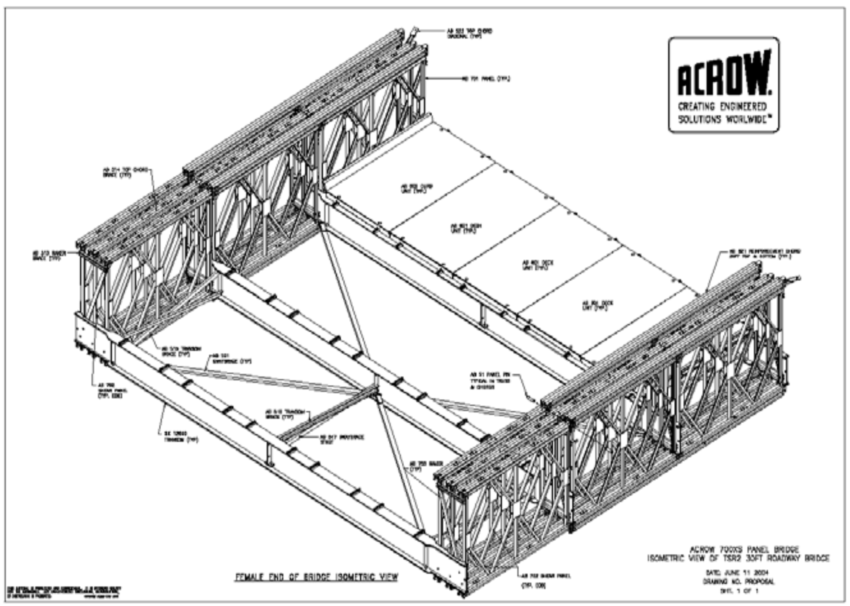
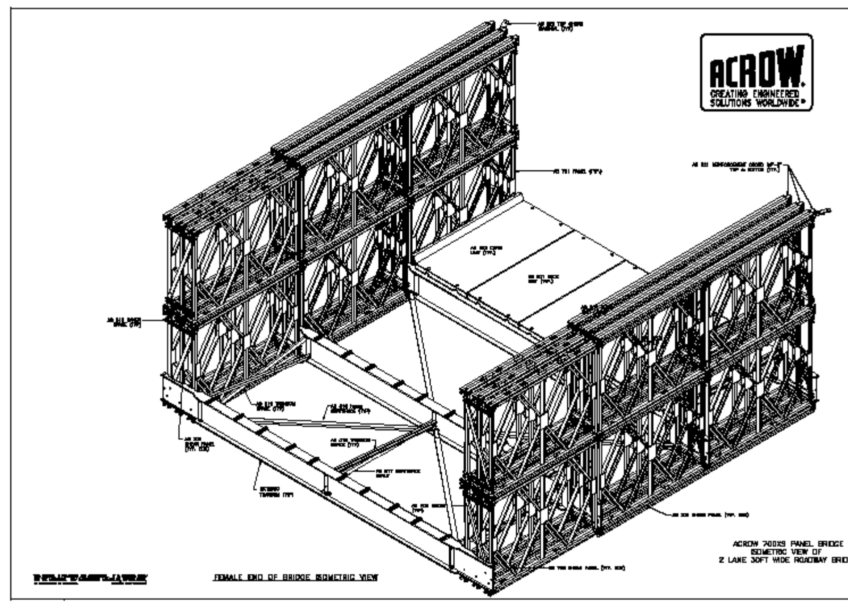
CREATING ENGINEERED SOLUTIONS WORLDWIDE™
TABLE OF CONTENTS
ISOMETRIC VIEW OF FEMALE END OF BRIDGE
ACROW 700XS PANEL BRIDGE



ACROW.
CREATING ENGINEERED SOLUTIONS WORLDWIDE®
ACROW 700XS PANEL BRIDGE
ISOMETRIC VIEW OF
DSR2 EW BRIDGE
DATE: JAN. 31 2007
ISOMETRIC VIEW OF FEMALE END OF BRIDGE



ACROW.
CREATING ENGINEERED SOLUTIONS WORLDWIDE®
ACROW 700XS PANEL BRIDGE
ISOMETRIC VIEW OF TSR2 30FT ROADWAY BRIDGE
DATE: JUNE 11 2004
DRAWING NO. PROPOSAL
SHT. 1 OF 1
FEMALE END OF BRIDGE ISOMETRIC VIEW



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ACROW 700XS PANEL BRIDGE
ISOMETRIC VIEW OF
2 LANE 30FT WIDE ROADWAY BRIDGE
FEMALE END OF BRIDGE ISOMETRIC VIEW

• Permanent Bridge – 510’ by 30’ with 8’ sidewalk

Mining Heavy Haul

ACROW
BRIDGE

- Bundled Trusses

MILITARY

ACROW BRIDGE

- 200 ft. by 30 wide HL-93

- Cambered Permanent

Cambered Interim Bridge

VE saved $9 Mil, original price was $34mil down to $25 mil

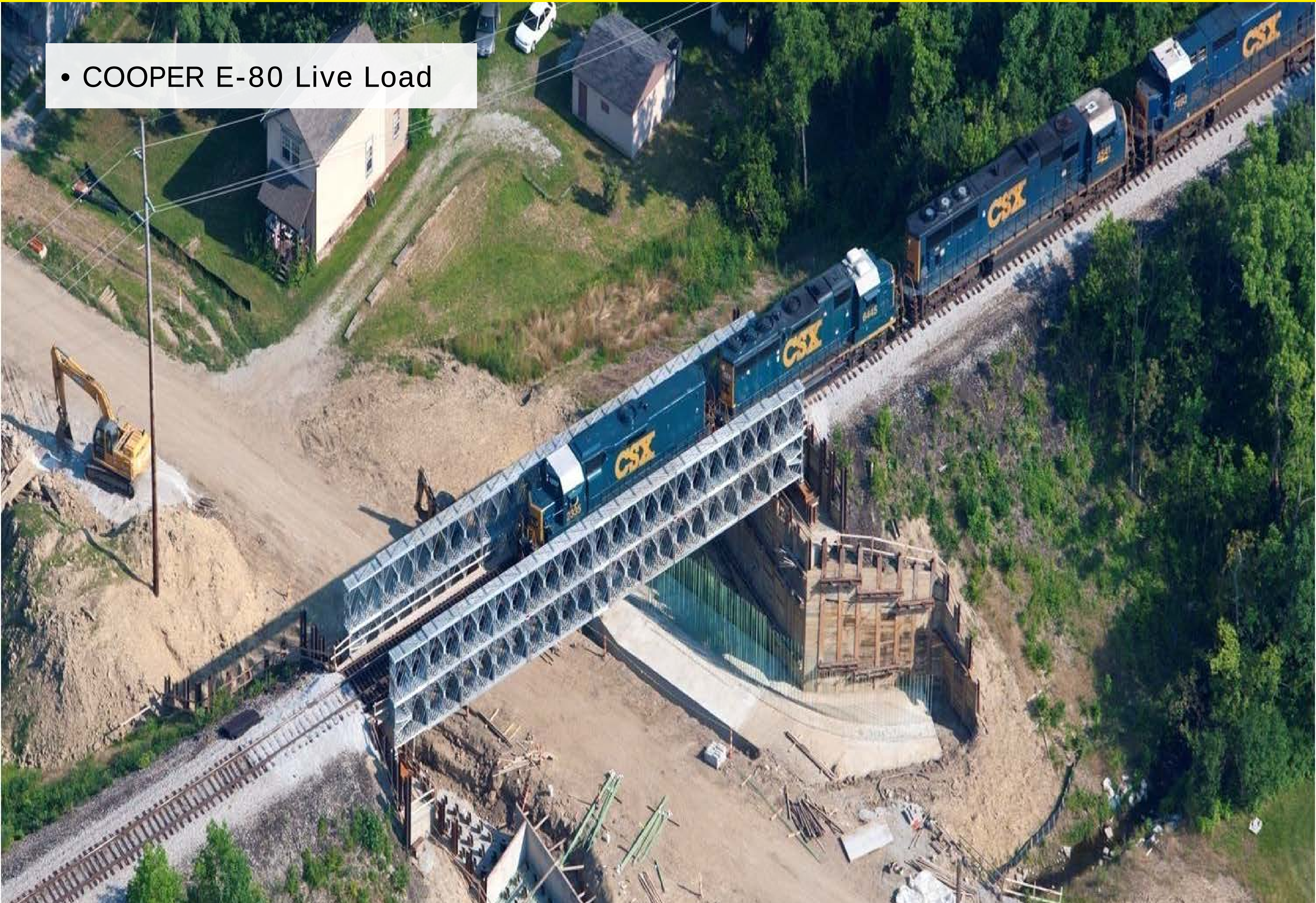
ACROW BRIDGE


• Segmental Splice Beam

- 210 ft by 11 ft tall 358 kips

• RR BRIDGE Cooper E-80

- COOPER E-80 Live Load



- RR BRIDGE


10/27/2011

- MSE and HILFICKER Abutment options

- Tensar Basket

• FORE RIVER – Quincy MA

• Bascule

- OLD GUARDRAIL ATTACHMENT

Stanchion Post with striker

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- Designed to MASH /AASHTO LEVELS

• HEAVY SHORING – Towers and SuperProps


PETERSON - CHASE
35

PANEL TOWERS

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Towers / Shores

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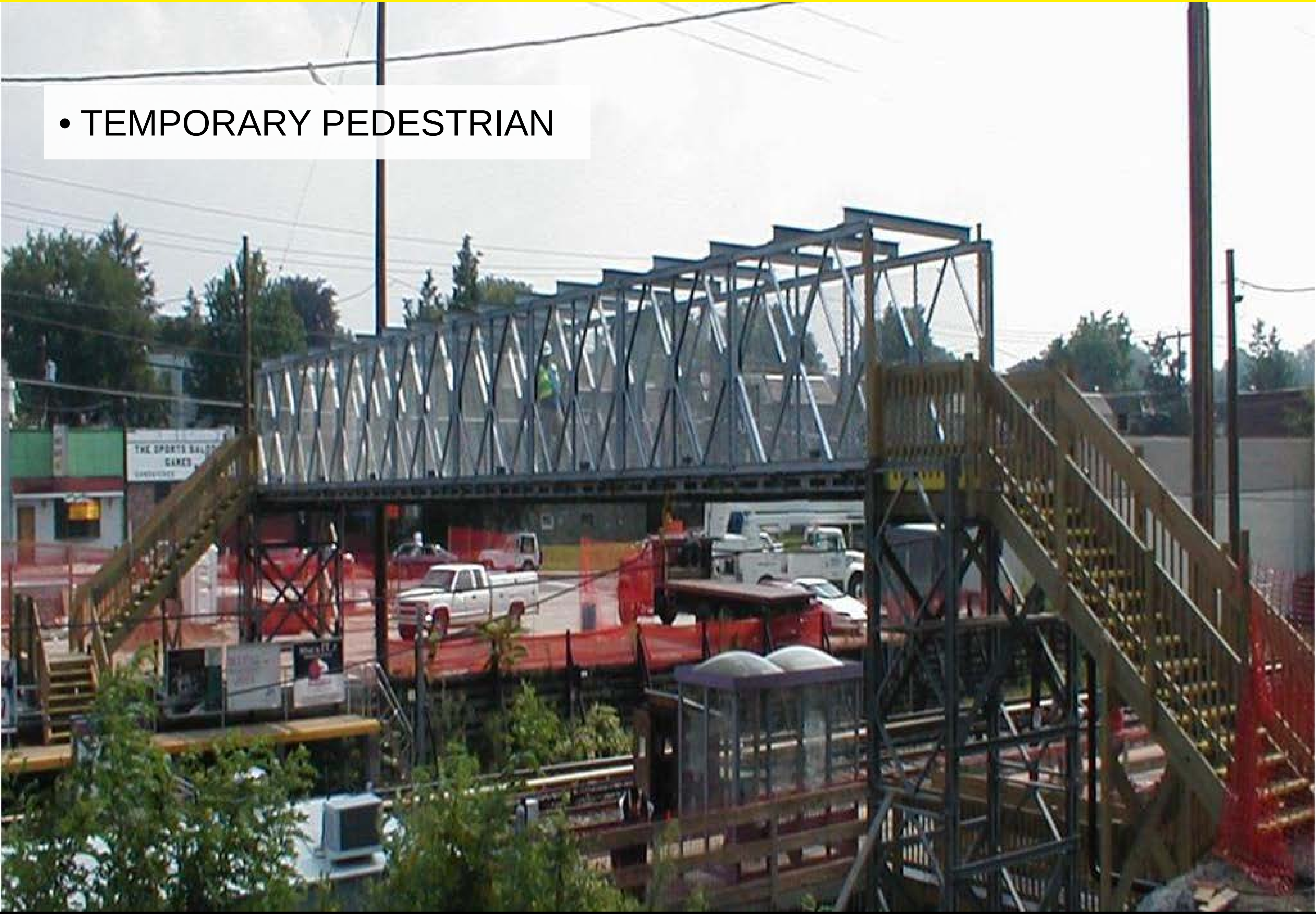
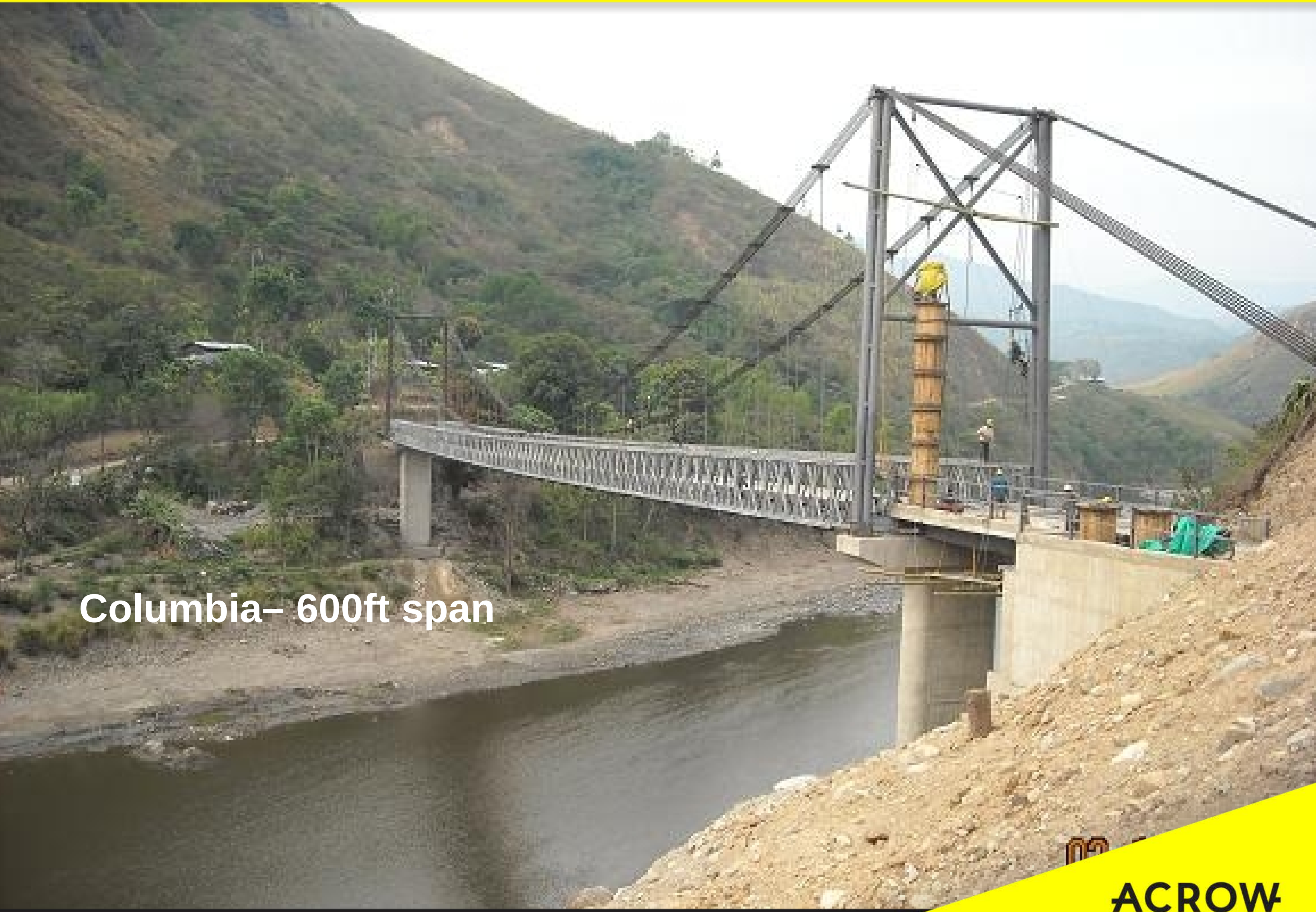
• Beam Bridges

- TEMPORARY PEDESTRIAN





Columbia– 600ft span

ACROW BRIDGE

ENGINEERING

1. **Design / Layout**
2. **Launching Drawings**
3. **State Stamp**
4. **Inspections**

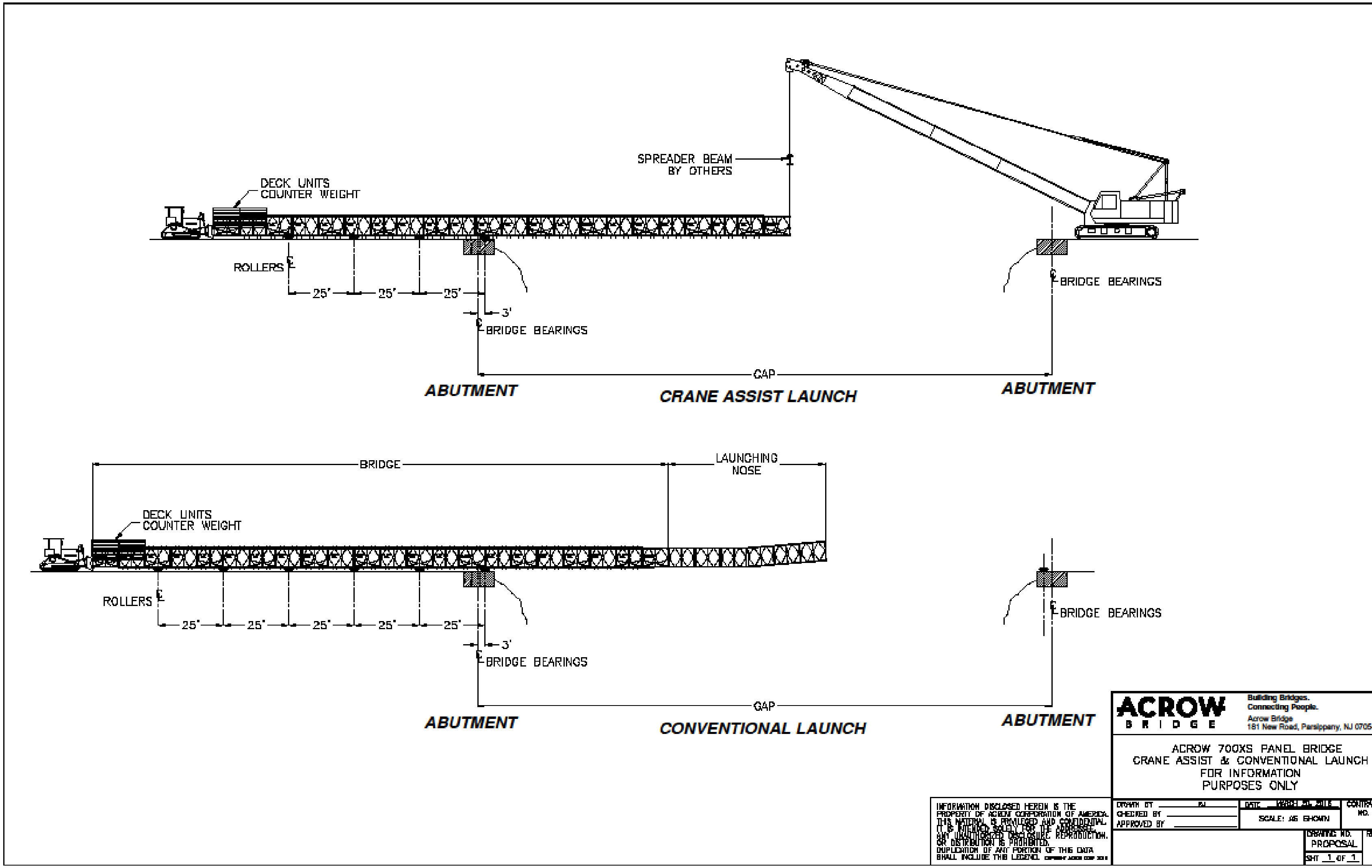
- **Crane Pick – Yosemite CA**

ACROW BRIDGE


06/15/2013


ROLLERS

LAUNCHING OPTIONS



BRIDGE INSTALLATION

Assisted Launch

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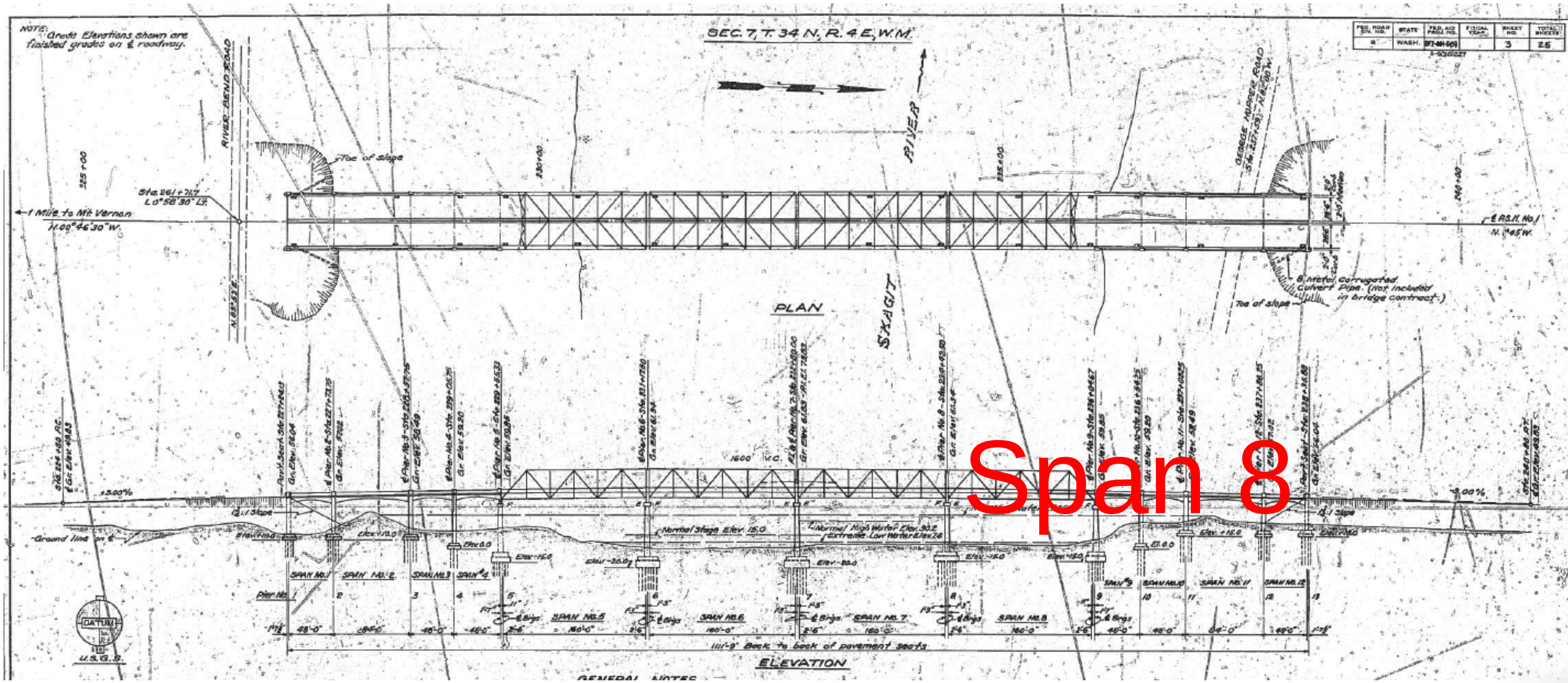
I-5 Bridge Emergency

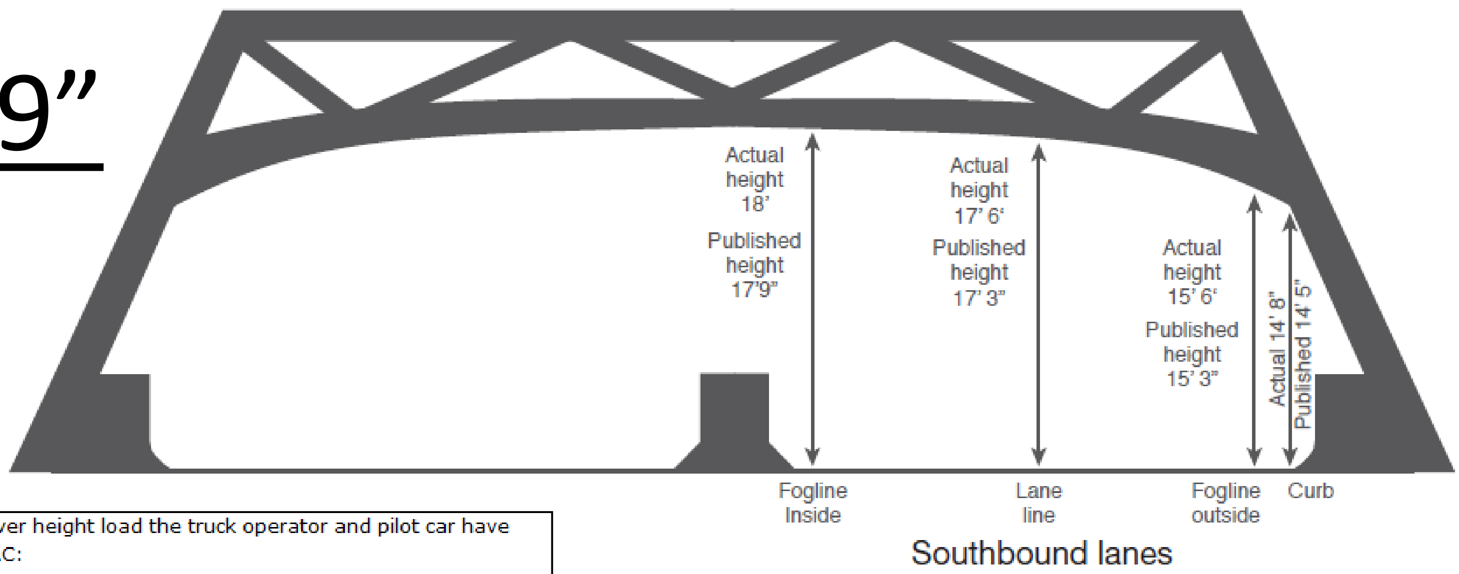
- Constructed mid 1950s
- 1111’ total bridge length including 4- 160’ truss spans



Vertical height clearance

As an extra measure of precaution, the Bridge and Structures office of the Washington State Department of Transportation publishes bridge clearance heights up to 3 inches less than actual heights. For example, if the actual vertical clearance is 15 feet 3 inches, it may be listed in WSDOT's Bridge List as 15 feet. It is the responsibility of the driver or freight hauler to consult the Bridge List or visit the oversize/overweight restrictions web page found on WSDOT's website.

15ft 9”



Once a permit is issued for an over height load the truck operator and pilot car have responsibilities as defined in WAC:

- It is the responsibility of the permit applicant to check or rerun the route to insure it is free of overhead obstructions. WAC 468-38-100. Pilot cars are required for any load that exceeds 14'6" in height.
- Pilot cars are to be equipped with a height measuring device to detect overhead clearances. The device must be extended between 3 and 6 inches above the maximum height of the load.
- The pilot car must be far enough in front of the over height vehicle allow the over height vehicle to stop in a safe and timely manner if needed.

IMAGE CREDIT: WSDOT VISUAL ENGINEERING RESOURCE GROUP

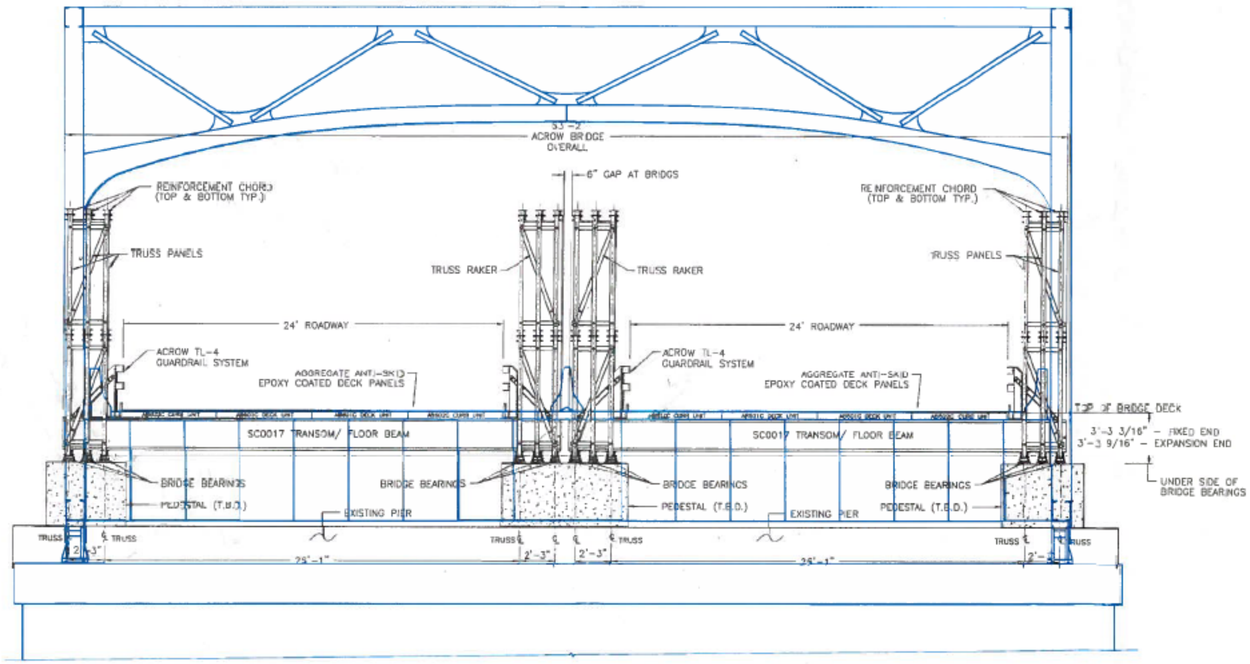
ACROW BRIDGE

IMAGE CREDIT: WSDOT VISUAL ENGINEERING RESOURCE GROUP

ACROW BRIDGE


IMAGE CREDIT: WSDOT VISUAL ENGINEERING RESOURCE GROUP

ACROW
BRIDGE



ELEVATION
ACROW BRIDGE
PIER 8

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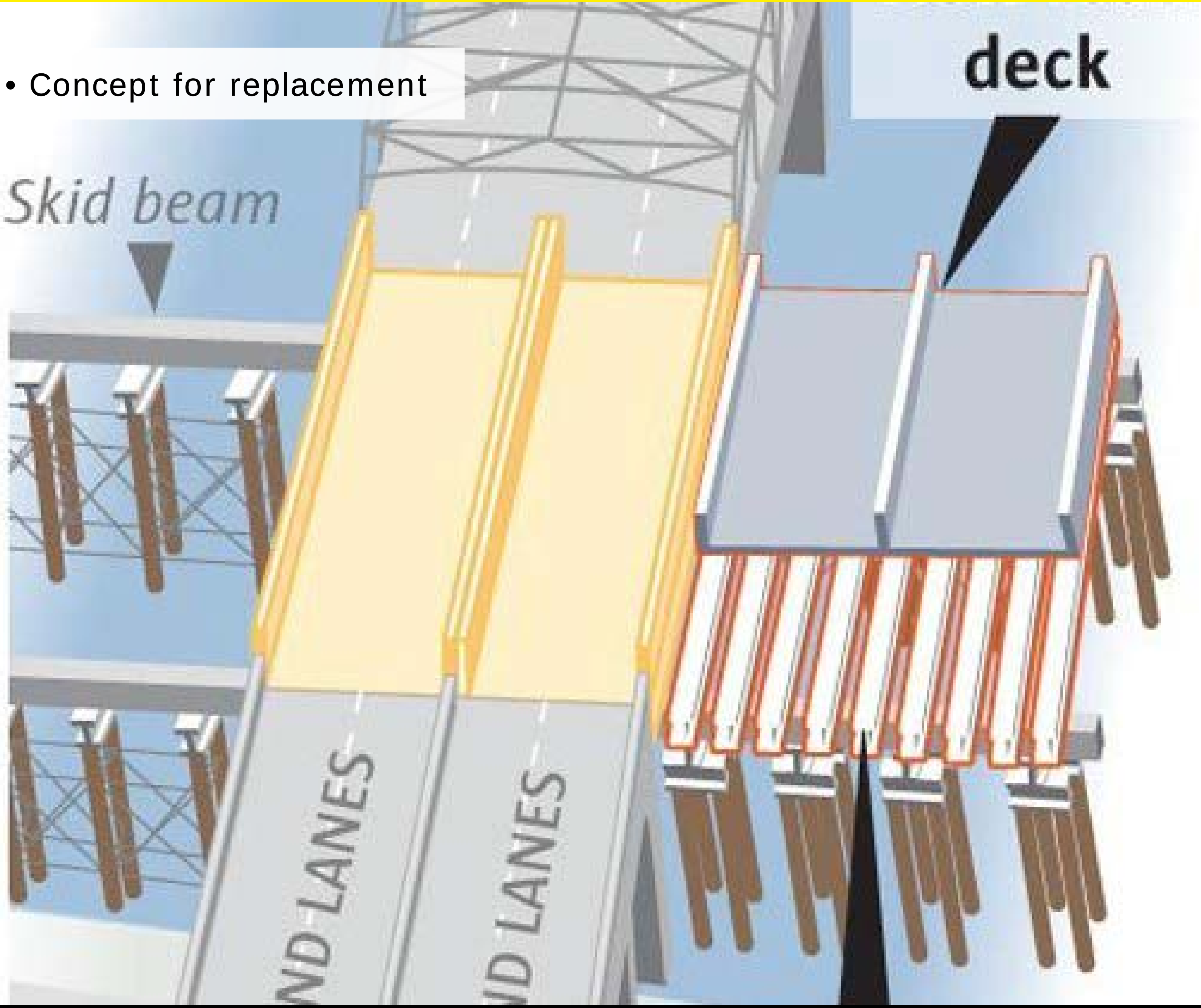
- Concept for replacement



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• Open I-5 looking SB in typical weather

DAMAGED IN ACTION

Damaged 2 bays of inside Truss line

ACROW BRIDGE

Easy Fix – Not Fracture Critical


THE END

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- Max Kuney Const. replacement

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