PREFABRICATED MODULAR BRIDGES

Kevin Traynor, Business Development Manager

ACROW

OVERVIEW

- About Acrow
- About Acrow Bridges
- Installation
- Acrow 700XS®
- Applications
- Questions

ABOUT ACROW

- Established in 1951
- World leader in design, engineering and manufacture of prefabricated modular steel bridges
- Headquartered in Parsippany, NJ
- Offices across USA, Canada, Italy and UK
- Manufacturing Facilities in Milton, PA, and Lydney, Gloucestershire, UK
- Staging yards in Lafayette NJ, Eden NC and Vancouver WA
- Proprietary steel technology derived from the Bailey Bridge
- 300+ employees

ACROW

WHAT WE DO

PERMANENT

Steel bridges built to last 100 years

TEMPORARY

Gridlocks cost everyone time and money

MILITARY

Strategic and humanitarian missions

EMERGENCY

In-stock bridging ready to deliver

DEVELOPMENT PROGRAMS

Acrow can make your bridge project a reality

ACROW

ACROW FACILITY

- Milton Steel Co.
- 21 acres
- Milton, PA
- Capacity: 25,000 tons of bridging per year
- 95 team members operating over 3 shifts

EQUIPMENT

- 8 robot cells - 26 robots
- Automated vertical and horizontal drill tables
- CNC Plasma cutting and drilling table
- CNC Drill and robotic plasma beam line

QUALITY ASSURANCE

ISO 9001
CERTIFIED

AISC CERTIFIED FABRICATOR

MADE IN USA

SHORT SPAN STEEL BRIDGE ALLIANCE™

CE

NATIONAL STEEL BRIDGE ALLIANCE NSBA FOUNDED 1995

ACROW

FEATURES + BENEFITS

- Made in the USA from high-quality, high-strength, 100% American steel
- Easily customizable solutions to desired length, width and strength
- Precision-engineered and full-scale tested for safety and durability
- Hot-dip galvanized to eliminate corrosion and minimize maintenance
- Rapid installation with minimal labor and equipment
- Installed with support from a team of experienced site technicians
- Delivered in partnership with key stakeholders

ACROW

VALUE PROPOSITION

QUALITY ASSURANCE – AASHTO Designs**;** AISC, ISO and CE accredited

MODULAR AND PRE-FABRICATED – No field welding or fabrication required

ACCELERATED BRIDGE CONSTRUCTION – Rapid installation using local labor and minimal equipment

GALVANIZED – Long-life protection and low-maintenance

VERSATILE – Ease of assembly, erection and disassembly for re-use and re-purpose

ECONOMICAL – Lower Life-Cycle Costs for asset management

SUSTAINABLE – Lighter, longer, made of steel, with minimal sub-structure requirements

INNOVATIVE FINANCING MODELS – Available for purchase or rent

LOCALLY STAGED INVENTORY – Across the USA and Canada

SAFE – Protecting construction workers and motorists

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BRIDGE SPECIFICATIONS

BRIDGE

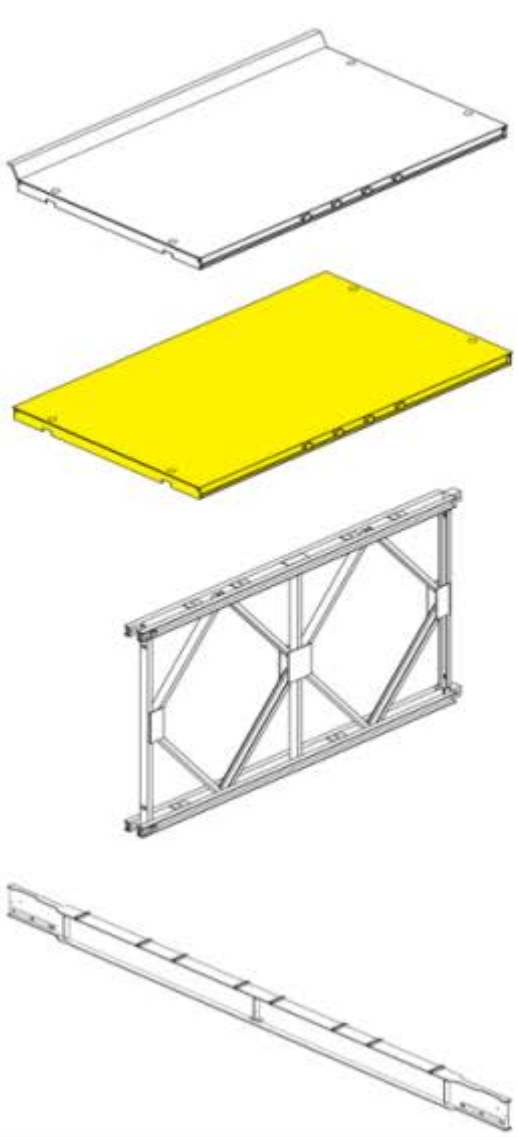
- Designed to meet AASHTO LRFD, ASD, HS-20, HS-25, HL-93 or applicable State and Permit loads
- Bridge roadway widths (12’ through 42’)
- Simple span bridges (10’ through 250’)
- Pedestrian bridges (5’, 6’, 8’,12’ wide - lengths to 200’)
- Single or multiple span (Length unlimited)

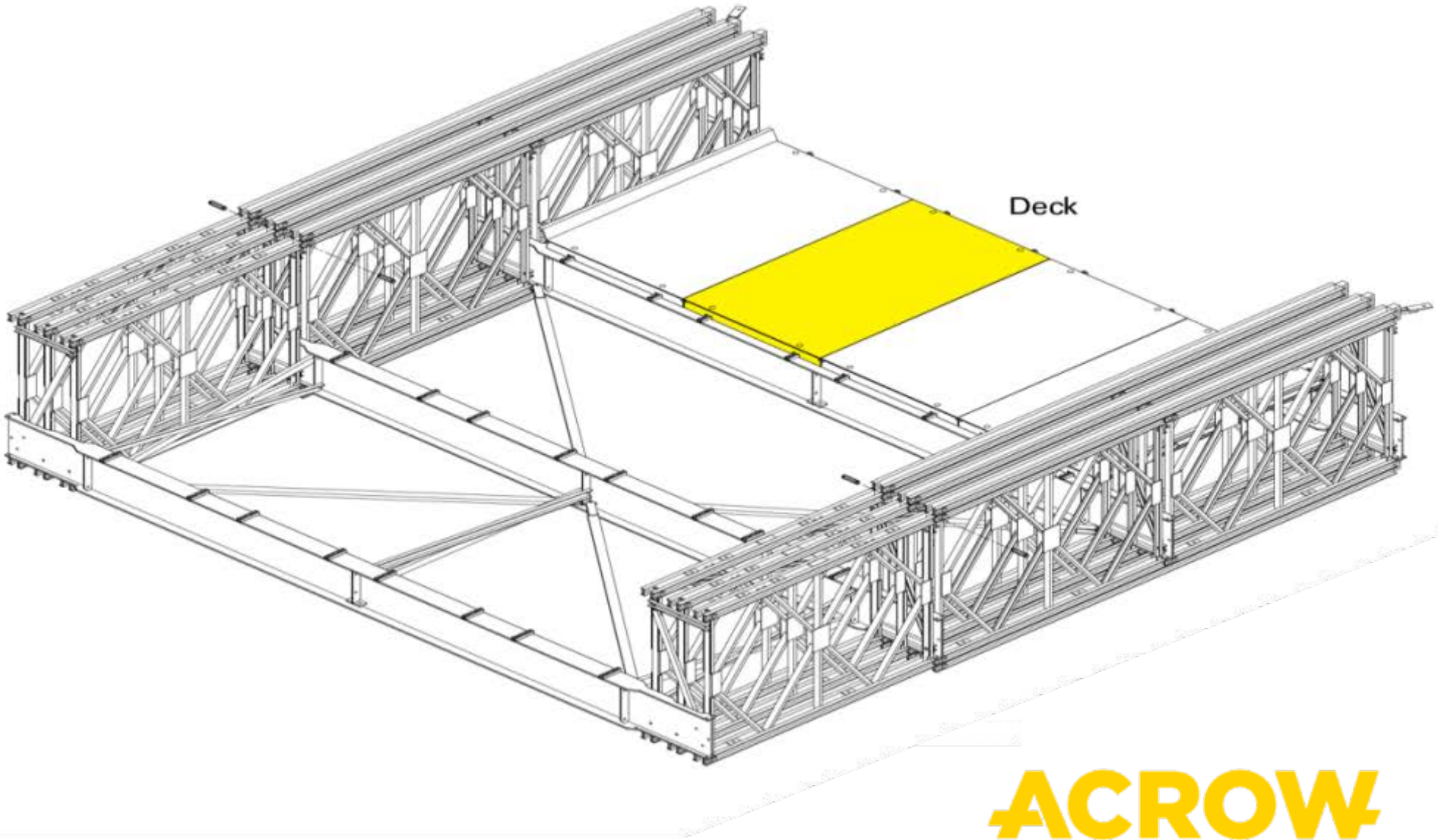
BRIDGE DECK

- Steel orthotropic roadway deck units
- Driving surface options (asphalt, anti-skid, and plain steel)

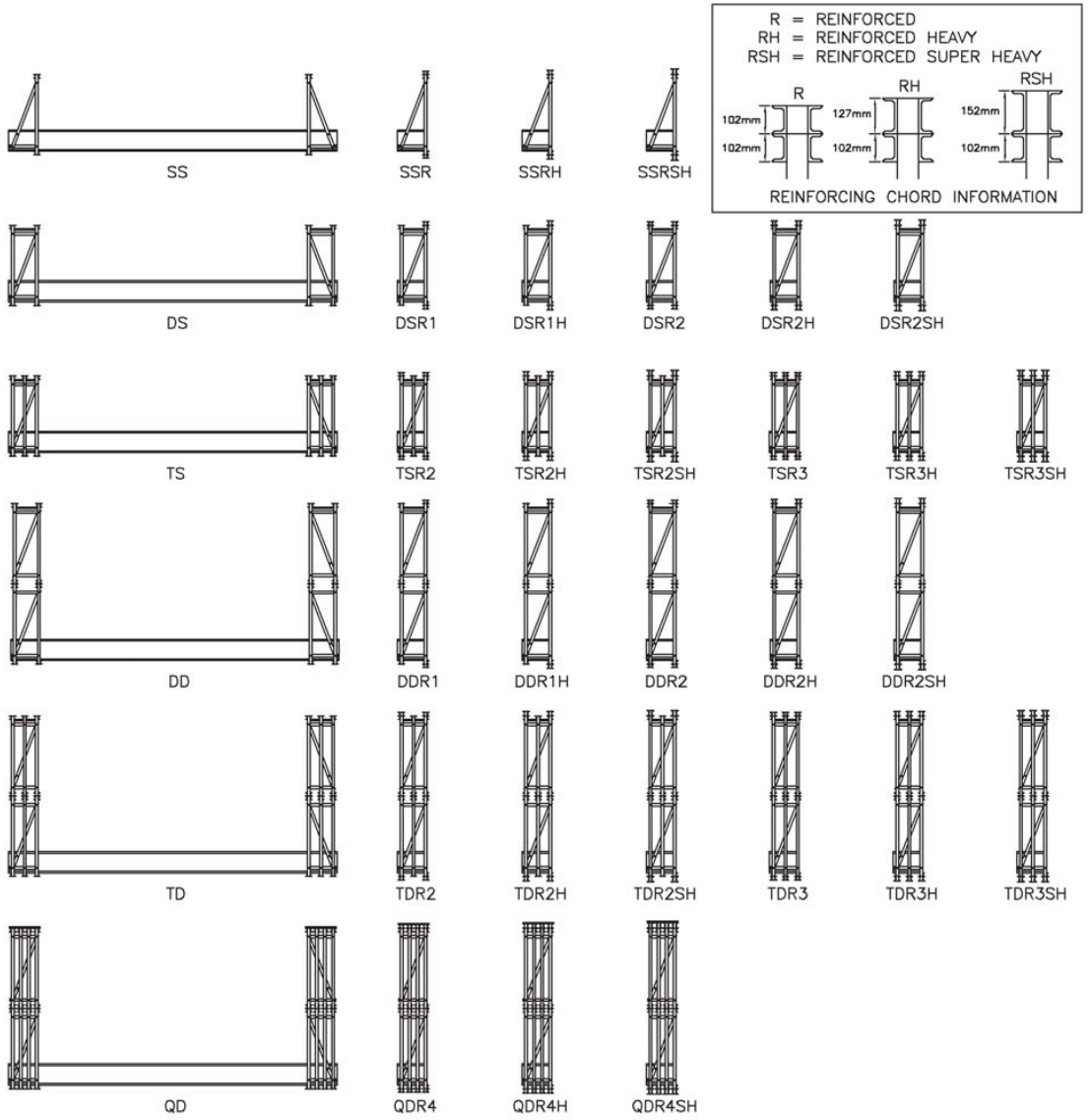
ACROW 700XS ®

ACROW 700XS ®

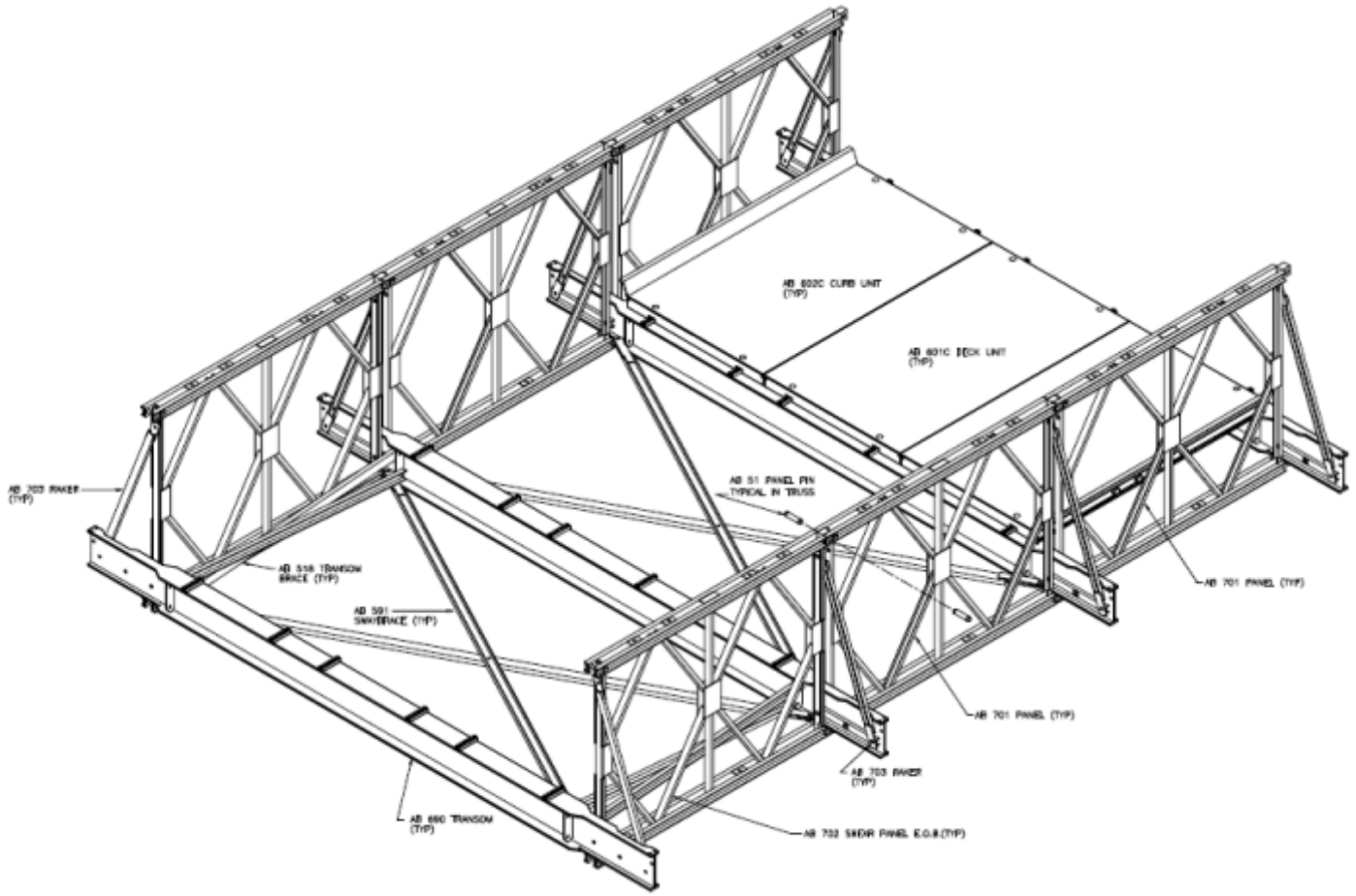




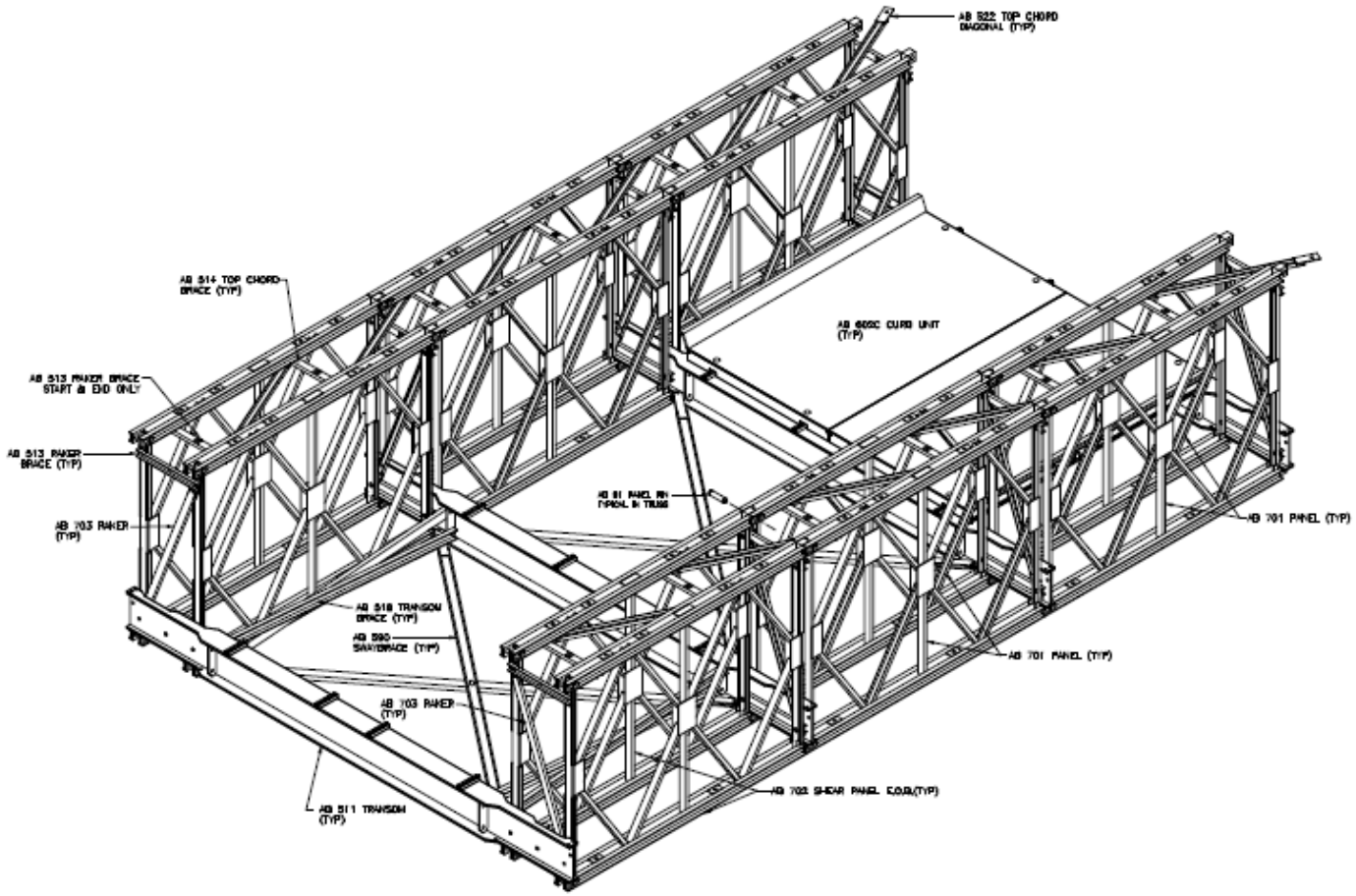
TRUSS CONFIGURATIONS



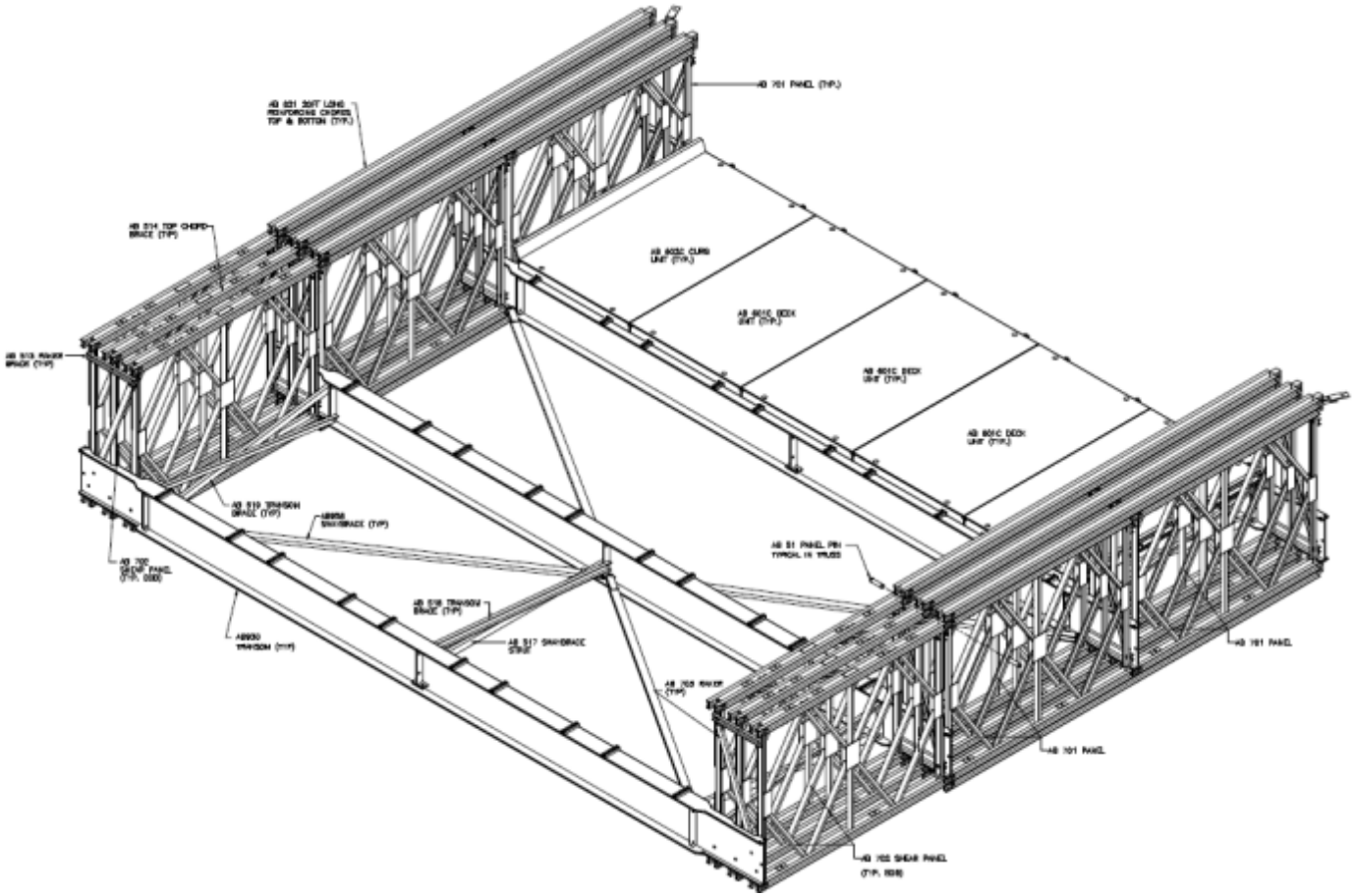
TRUSS CONFIGURATION SINGLE SINGLE (SS)



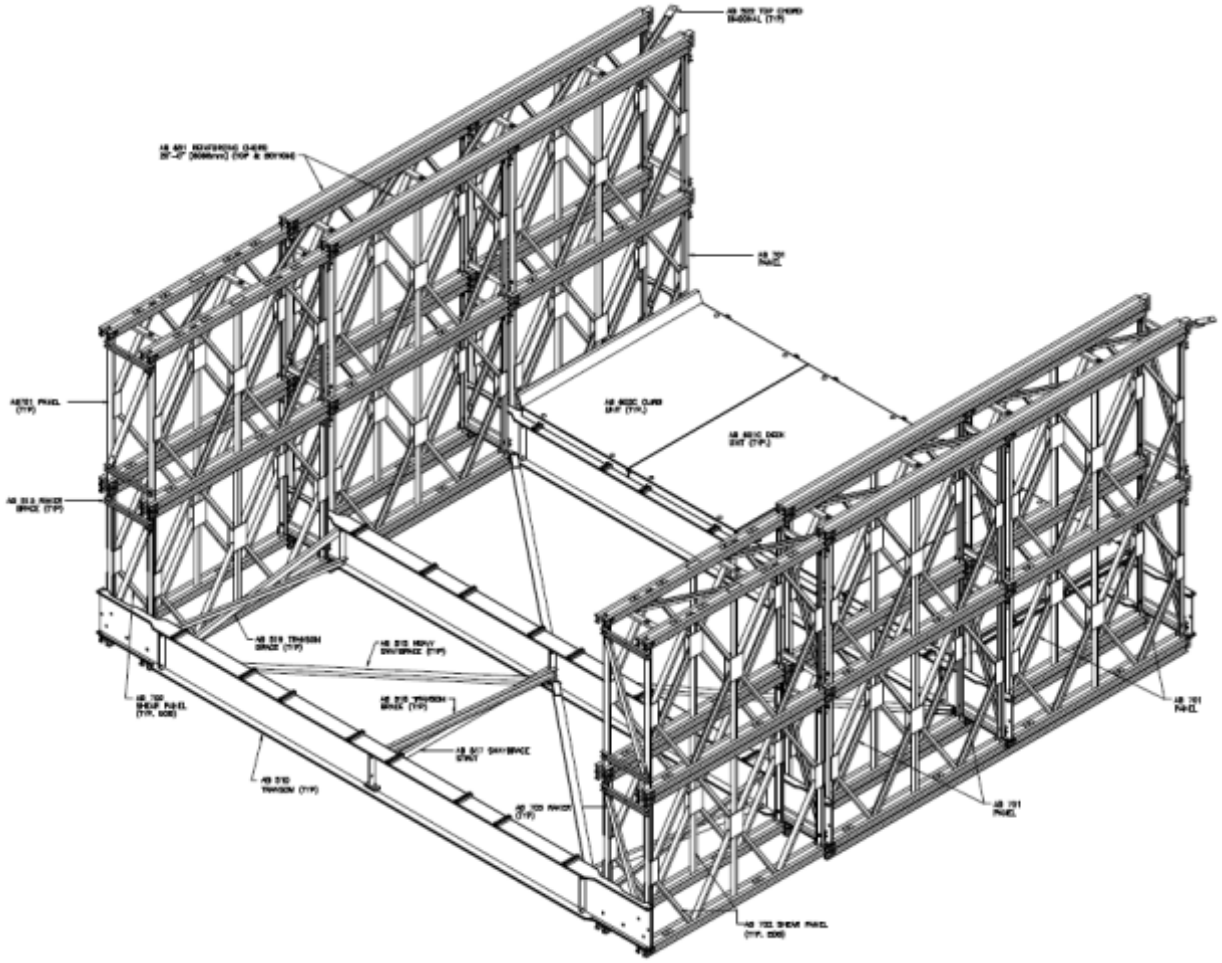
TRUSS CONFIGURATION DOUBLE SINGLE (DS)



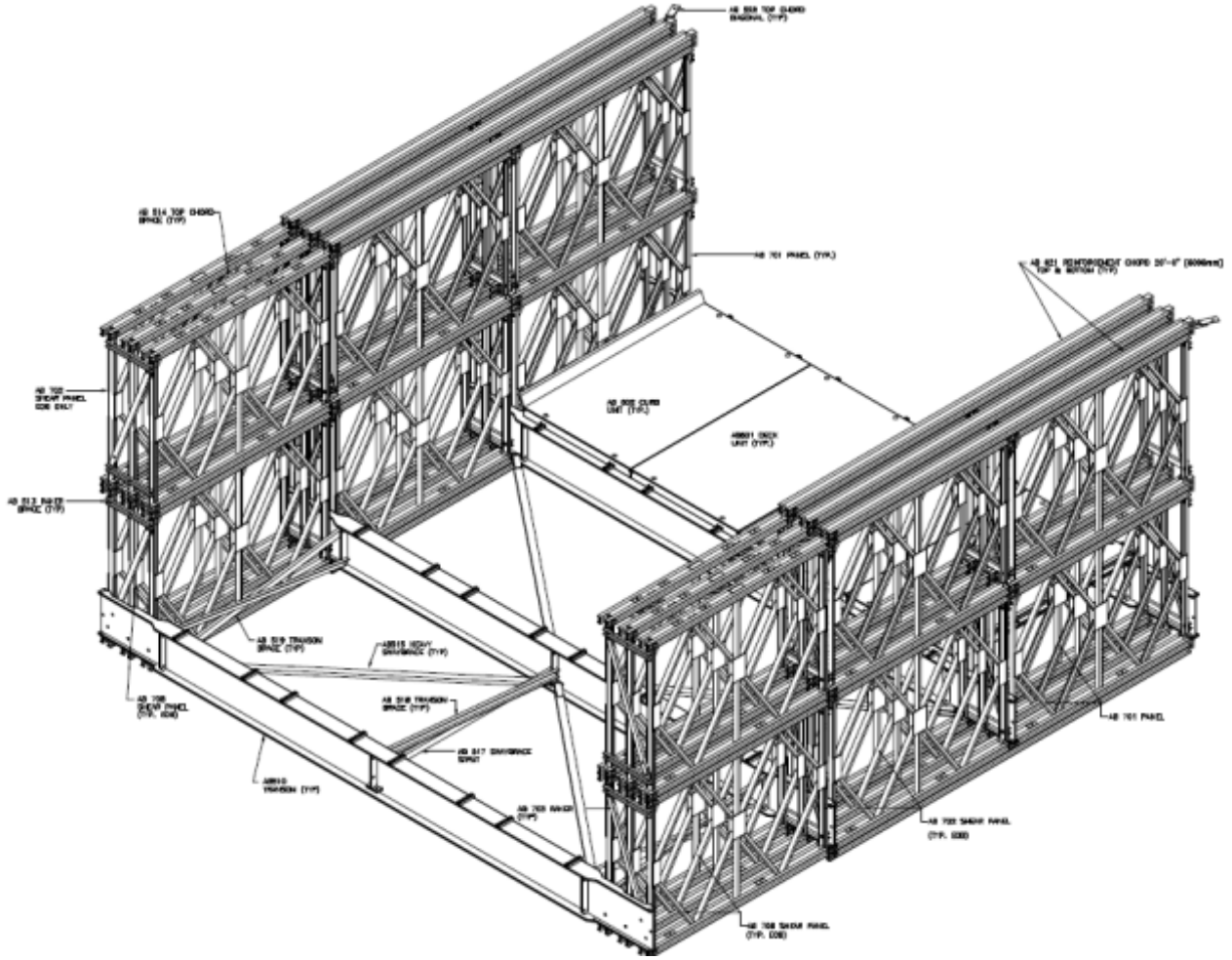
TRUSS CONFIGURATION TRIPLE SINGLE (TS)



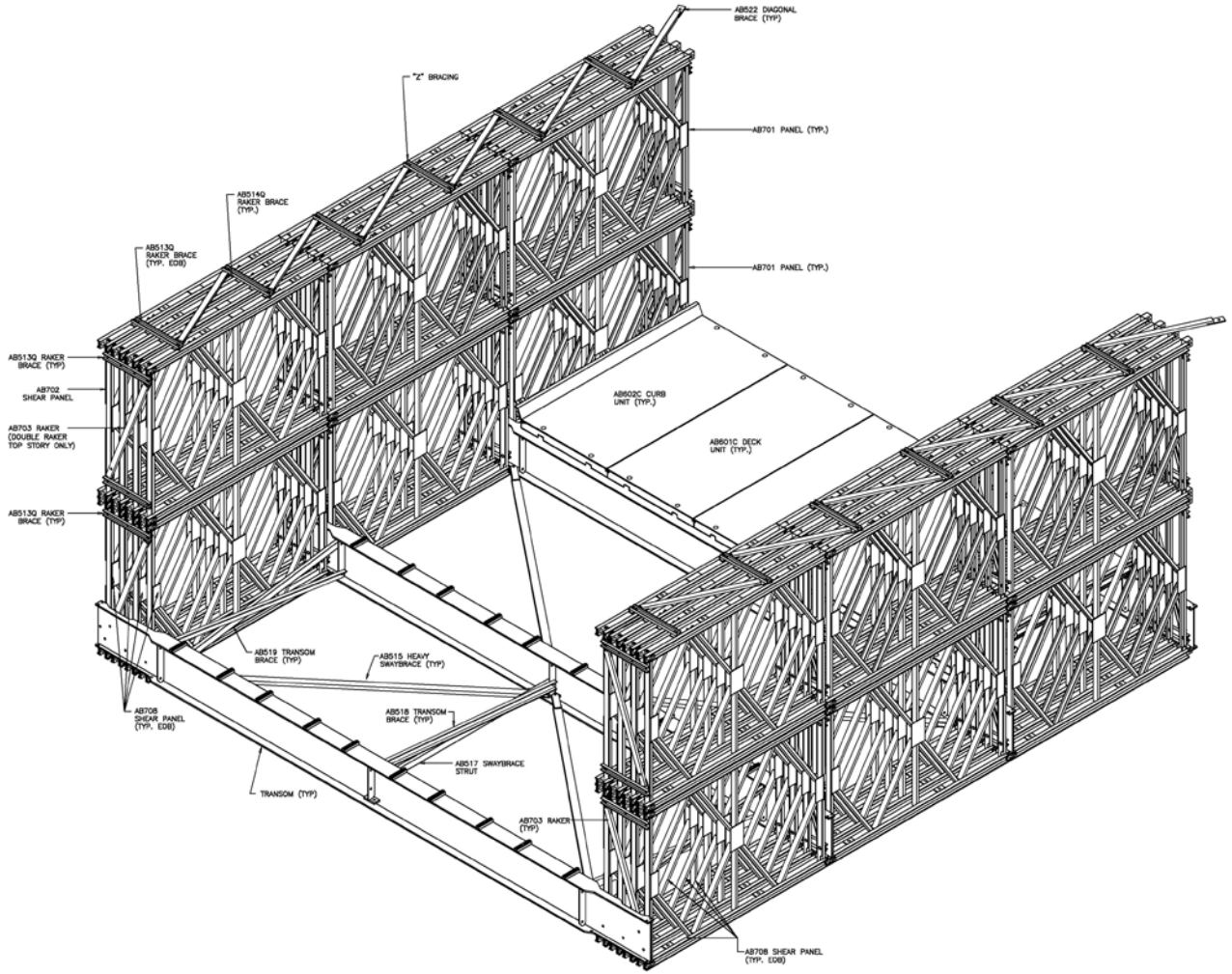
TRUSS CONFIGURATION DOUBLE DOUBLE (DD)



TRUSS CONFIGURATION TRIPLE DOUBLE (TD)



TRUSS CONFIGURATION QUADRUPLE DOUBLE (QD)



DESIGN CRITERIA

Specify:

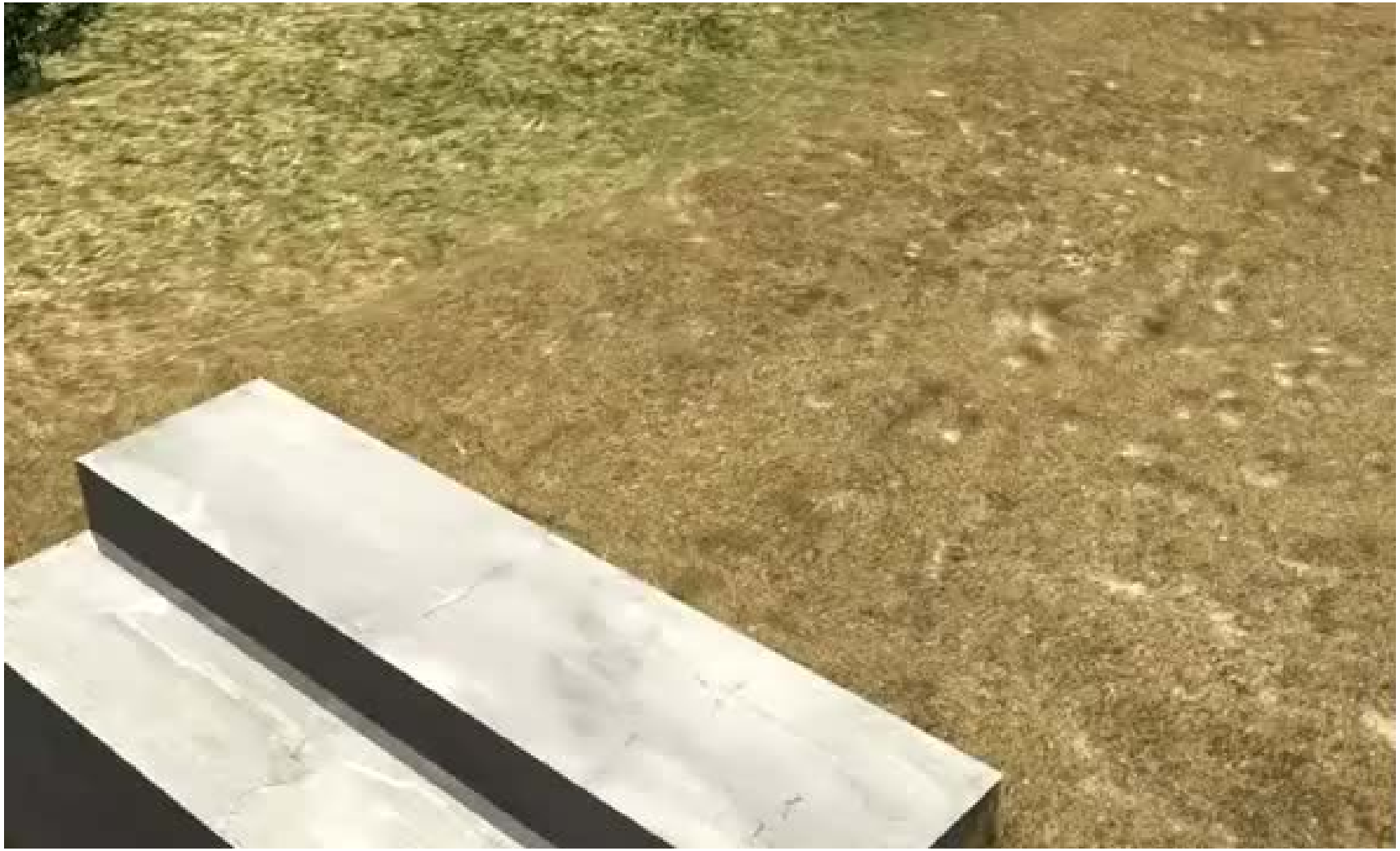
- Bridge span(s) length, roadway width, and loading
- Loading Design - ASD, LRFD, Heavy Haul
- Bridge deck type:
    - Plain steel for Asphalt Overlay
    - Steel deck with shop-applied anti-skid coating
    - Timber decks – Wood locally supplied
- Bridge Rail Test Level Design TL-1 through TL-4

INSTALLATION

- Cantilevered
- Crane-Assisted
- Crane Lift-in

CANTILEVERED

CANTILEVER INSTALLATION



CRANE-ASSISTED

ACROW

CRANE LIFT-IN

VEHICULAR

LONG-SPAN

BEAM

PEDESTRIAN

RAILROAD

DETOUR RENTAL

MOVABLE

SHORING

EXTRACTIVE

HEAVY HAUL

PIPE AND UTILITY

MILITARY

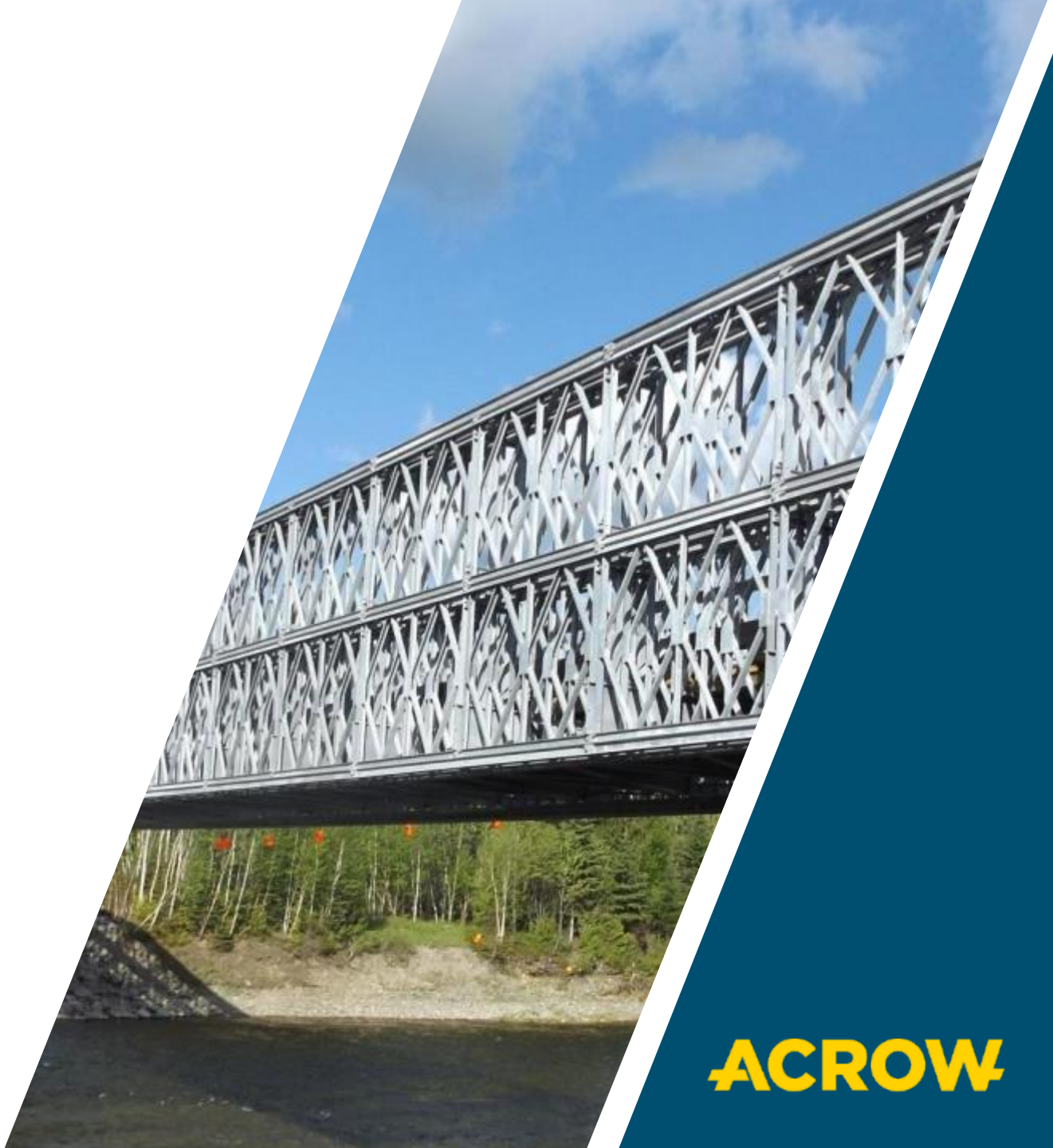
EMERGENCY

OTHER APPLICATIONS

ACROW

VEHICULAR BRIDGES

- Pre-engineered modular solutions
- Length, width and strength are easily customizable
- Conveniently transported
- Fast assembly and installation
- Safe, reliable, durable



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PERMANENT VEHICULAR BRIDGE

Folsom, NJ

Hospitality Road

- Length: 60’
- Width: 13’ 7”
- Design Load: HL-93

PERMANENT VEHICULAR BRIDGE

Old Bridge, NJ

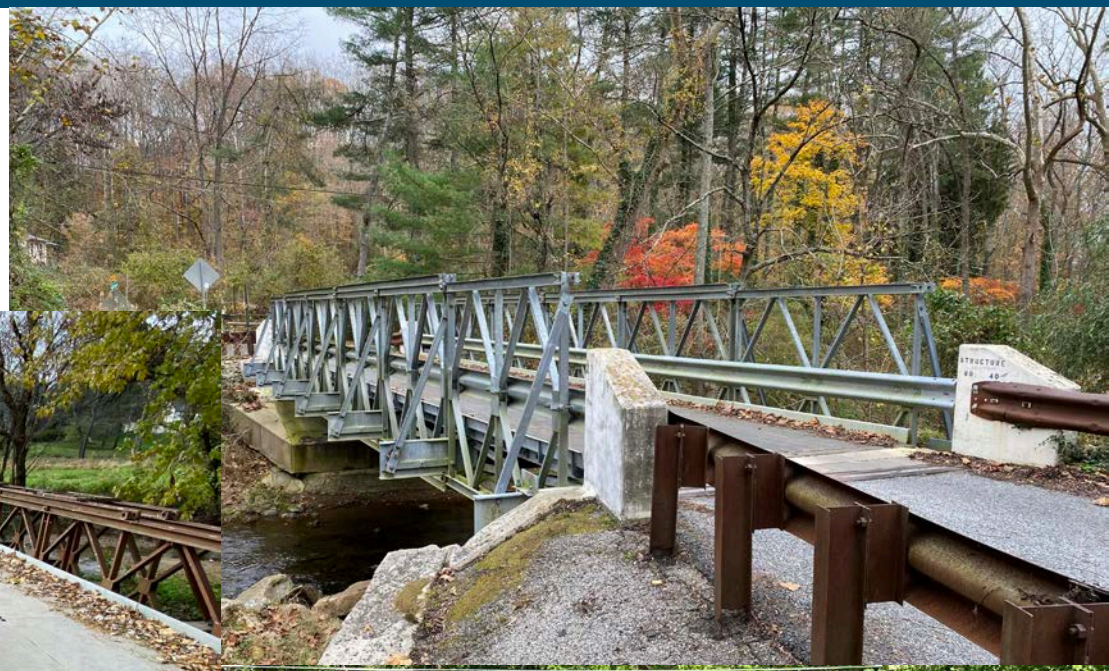
Route 599 over Deep Run

- Length: 80’
- Width: 24’
- Design Load: HL-93

PERMANENT VEHICULAR BRIDGE

Baltimore County MD

- Over 30 bridges in the County
- Many were installed in the 1970’s, after Hurricane Agnes
- Average Length: Approx 70ft
- Widths: Vary from 12ft to 24ft



CAMBERED VEHICULAR BRIDGE

Division St., Chicago, IL

Cambered main span required to match original profile and provide clearance for water traffic

Decorative pedestrian railing

Expected use is 15 + Years

- Length: 3 spans (50’, 140’,50’)
- Width: 36’
- Design Load: HL-93

BENEFITS OF STEEL VS. CONCRETE

- Significantly less time on site due to prefabrication
- No forms to build, and strip
- Better quality control
- No negative impact caused by weather, lighting, etc.
- Fabrication in precision jigs and robotic welding
- Lighter in weight, therefore less expensive substructure required
- Steel is almost 100% recyclable
- Easier to modify
- Historically proven that steel bridges outlive concrete bridges
- Easier maintenance and inspection
- Achieve longer spans, so less expensive if you can eliminate piers
- Rehabilitate to extend life span
- Quicker installation times

DETOUR RENTAL

- Accelerated Bridge Construction
- Economical rental solutions
- Safe detours around construction sites
- Supplied direct from inventory strategically staged across North America
- Compliant with AASHTO and state design codes
- Increased safety for motorists
- Rapidly installed in days
- Expert site support services as required

DETOUR BRIDGE
RTE 40, ELLICOTT CITY MD

Universal Bridge

- Length: 350’ 3-span bridge
- Width: Ea bridge 24ft wide
- Design: Load: HL-93

ARSENAL ROAD
WATERTOWN, NY

Epoxy/aggregate non-skid decks

In place for 2 winters

- Length: Twin 180’ bridges
- Width: 24’ wide each
- Design Load: HS-20

DETOUR BRIDGE

I-10 Tucson, AZ

Asphalt

- Length: 200’ clear span bridge
- Width: 30’
- Design Load: HL-93

DETOUR BRIDGE
LAKE COUNTY IL

Epoxy Antiskid Decks

- Length: 90ft
- Width: 36ft
- Design Load: HL-93

DETOUR BRIDGE
ROCKFORD IL
OVERBRIDGE APPLICATION

- Length: 70ft
- Width: 18ft (2-way traffic with light)
- Design Load: HS-20
- Set between parapets on existing bridge, necessitating a ramp on/off the bridge

DETOUR BRIDGE
ROCKFORD IL
OVERBRIDGE APPLICATION

DETOUR BRIDGE
RYE, NY

Route 287 EB to I-95 NB

Heavily-travelled interstate traffic

In place for 2 years

4% cross slope, Asphalt

- Length: 390’ multi-span
- Width: 36’
- Design Load: HS-25

DETOUR BRIDGE JEFFERSON, NJ

Interstate I-80 over the Rockaway River

Asphalt overlay with paving membrane

- Length: 270’ – 2 spans
- Width: 36’ – 3 lanes for Eastbound and Westbound traffic
- Design Load: HS25-44

DETOUR BRIDGE INTERSTATE I-280

Parsippany, NJ

Double Single (DS) Approach Spans

Double Double (DDR2) Center Span

- Length: 280’ - 3 Span bridge
- Width: 24’ - 2 lanes of traffic
- Design: Load: HL-93

DETOUR BRIDGE BINGHAMTON, NY

Route I-81/Route 17 Interchange

Main Span over Norfolk Southern RR

7 sets of shoring towers

- Length: 990’ (6 spans)
- Width: 18’
- Design Load: HS-20

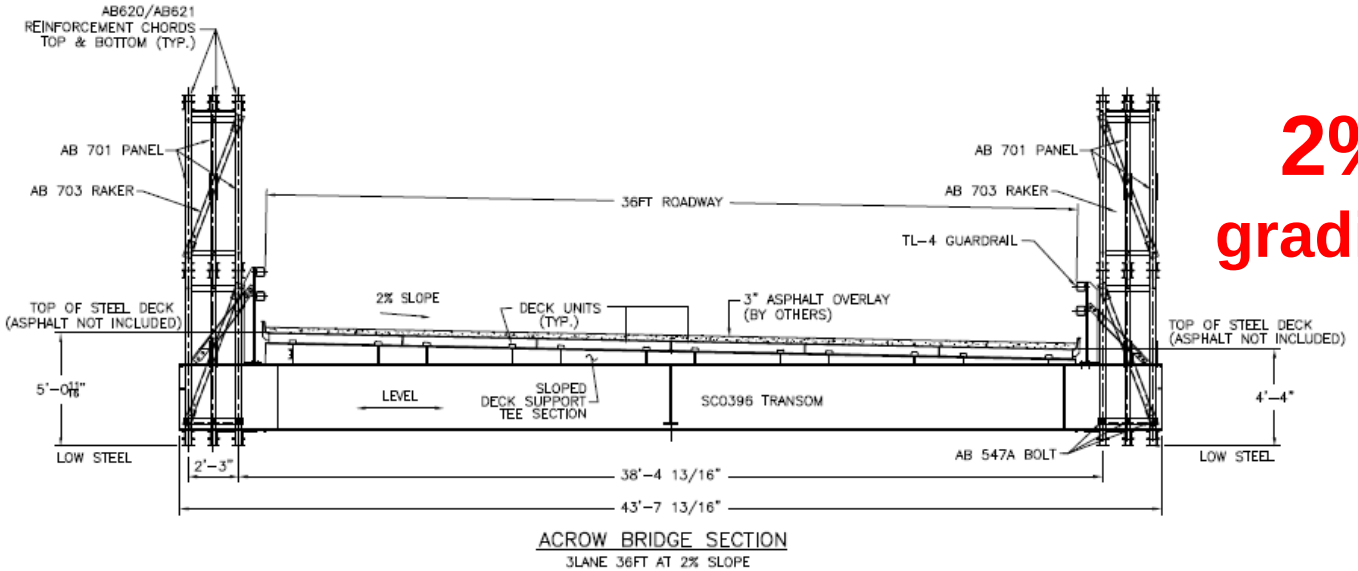
AGOURA, CA

Cantilevered footwalk with special (non-standard) AASHTO safety railing

STANDARD FOOTWALK RAIL

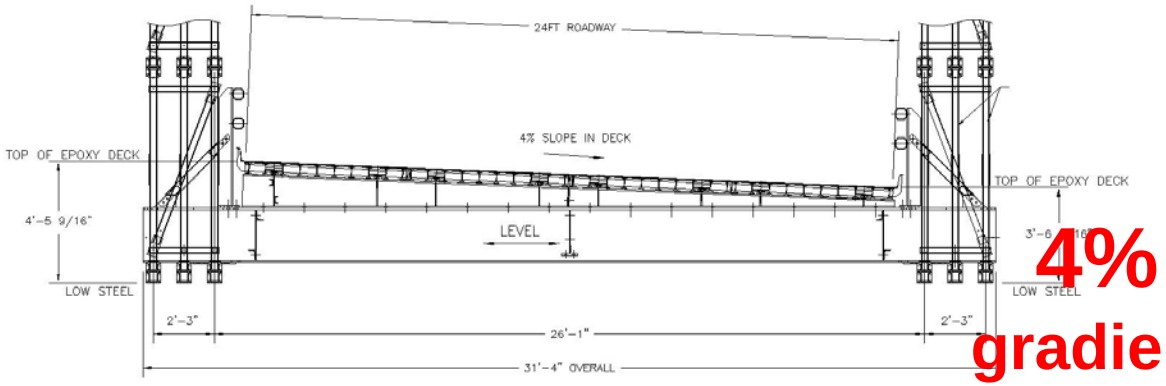
SUPER ELEVATED ROADWAYS

SUPER ELEVATED ROADWAYS

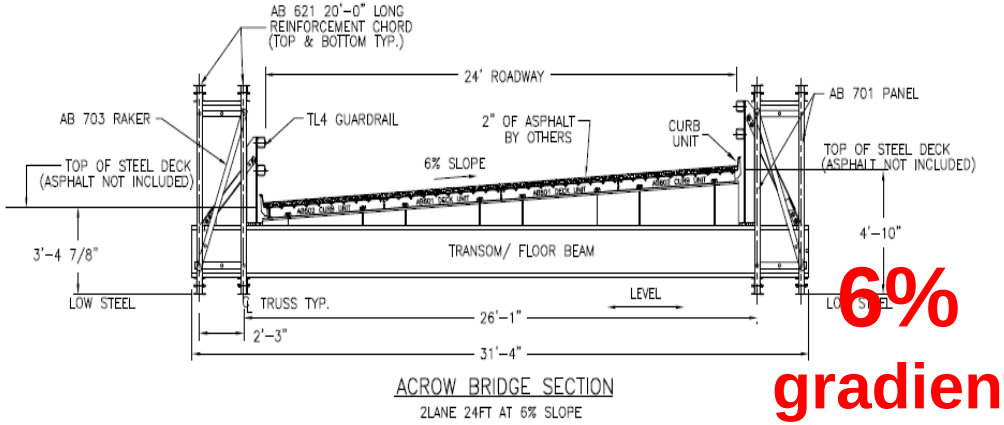


ACROW BRIDGE SECTION
3LANE 36FT AT 2% SLOPE

2% gradient



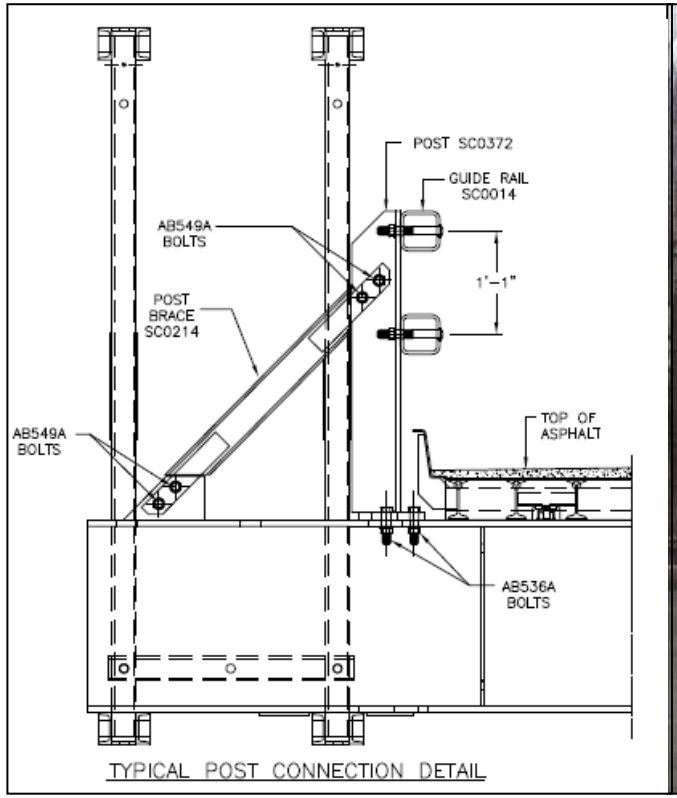
4% gradient



ACROW BRIDGE SECTION
2LANE 24FT AT 6% SLOPE

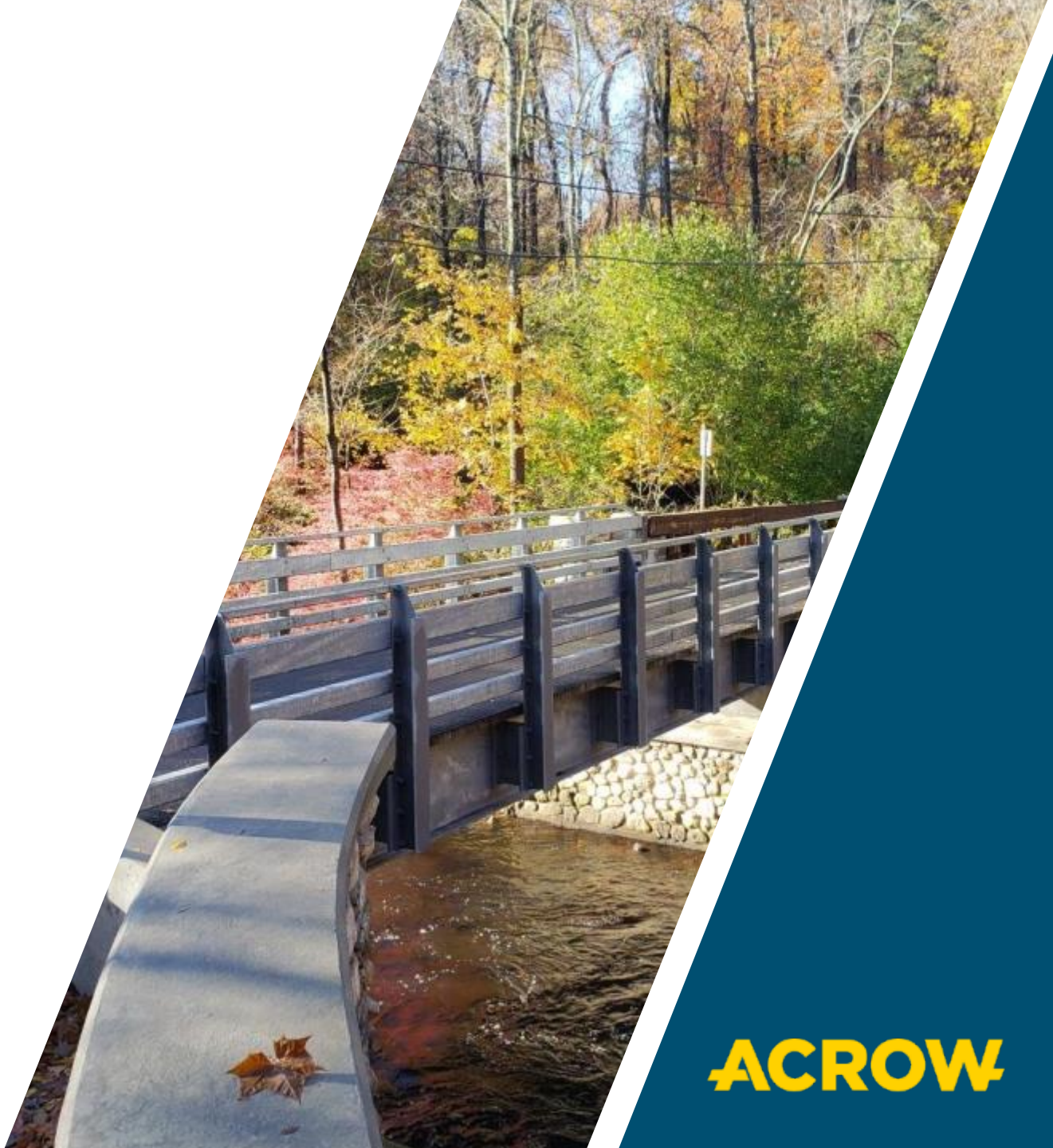
6% gradient

2 TUBE BRIDGE RAIL



BEAM BRIDGES

- Designed for short-span applications
- No field welding, cutting or fabrication
- Spans: 25’, 35’, 45’
- Width: 5.9’ to unlimited
- Design Loads: HS-20, HS-25, HL-93, Construction Access
- Decks ship with factory-applied non-skid
- Multiple bridge rail options
- Installed within hours using minimal equipment and labor
- Delivered complete on site, and lifted directly onto bridge abutments



BEAM BRIDGE

Birdsboro, PA

- Length: 45’
- Width: 18’
- Loading: PHL-93 + P82

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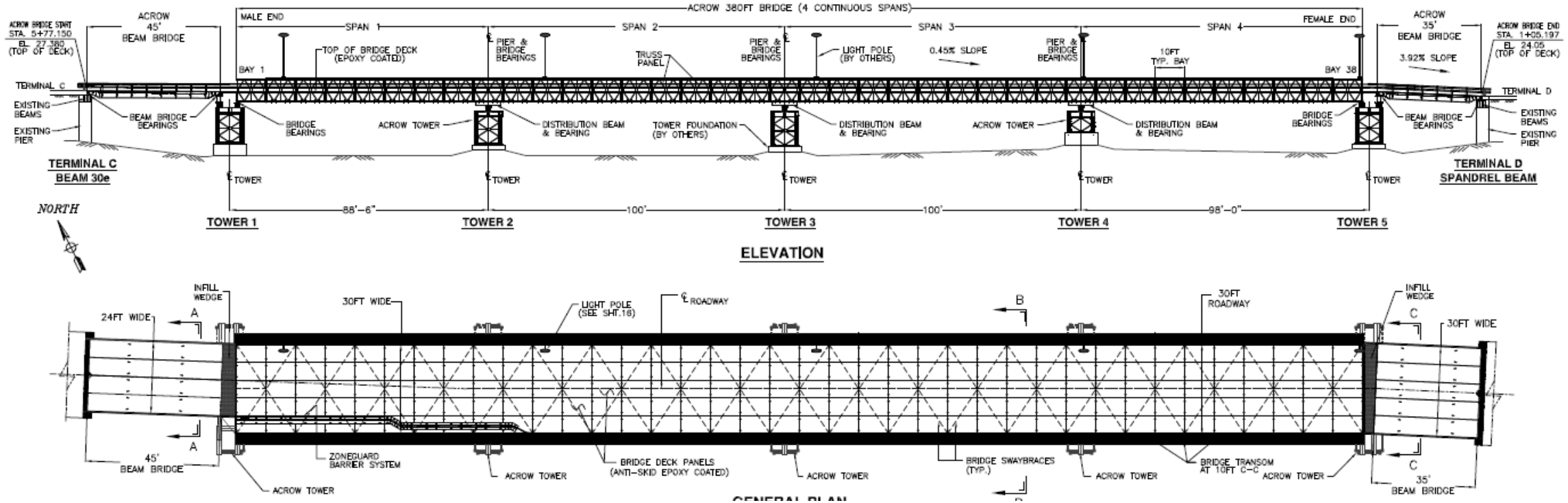
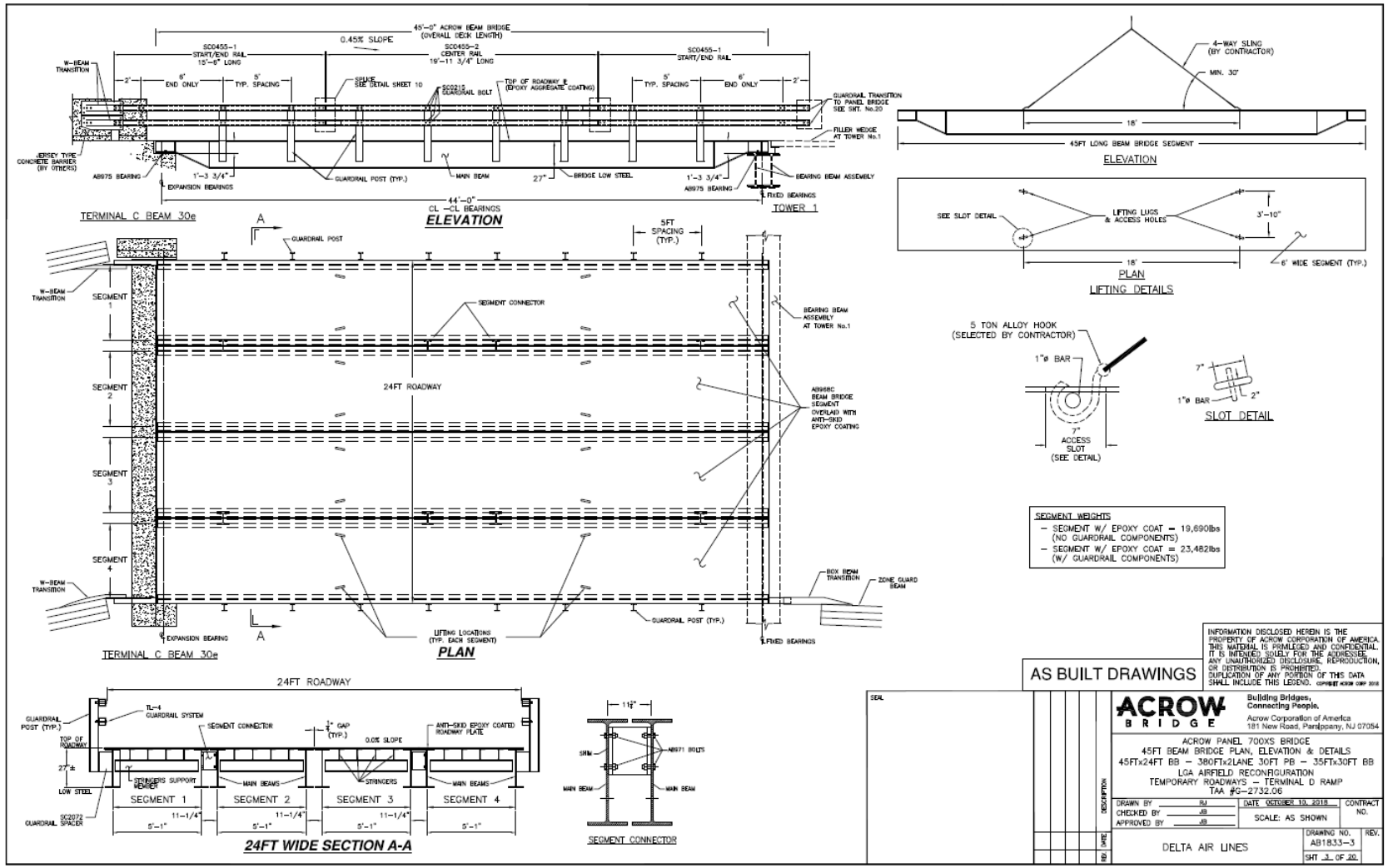
LaGuardia Airport, NYC – Delta Terminal

- Beam bridges were used as approach transitions between a 700XS panel bridge and the existing concrete terminals
- West transition was 24ft x 45ft
- East transition was 30ft x 35ft
- Special bearing beams were fabricated to allow the beam bridges to interface with the 700XS


ACROW 380FT BRIDGE (4 CONTINUOUS SPANS)
ACROW BRIDGE START STA. 5+77.150 EL. 27.380 (TOP OF DECK)
ACROW 45' BEAM BRIDGE
MALE END
SPAN 1
SPAN 2
SPAN 3
SPAN 4
FEMALE END
ACROW 35' BEAM BRIDGE
ACROW BRIDGE END STA. 1+05.197 EL. 24.05 (TOP OF DECK)
TOP OF BRIDGE DECK (EPOXY COATED)
PIER & BRIDGE BEARINGS
TRUSS PANEL
LIGHT POLE (BY OTHERS)
0.45% SLOPE
10FT TYP. BAY
3.92% SLOPE
BAY 1
BAY 38
TERMINAL C
TERMINAL D
EXISTING BEAMS
EXISTING PIER
BEAM BRIDGE BEARINGS
BRIDGE BEARINGS
ACROW TOWER
DISTRIBUTION BEAM & BEARING
TOWER FOUNDATION (BY OTHERS)
TOWER
TERMINAL C BEAM 30e
TERMINAL D SPANDREL BEAM
NORTH
88'-6"
100'
100'
98'-0"
TOWER 1
TOWER 2
TOWER 3
TOWER 4
TOWER 5
ELEVATION
INFILL WEDGE
24FT WIDE
30FT WIDE
LIGHT POLE (SEE SHT.16)
ROADWAY
30FT ROADWAY
45' BEAM BRIDGE
ZONEGUARD BARRIER SYSTEM
BRIDGE DECK PANELS (ANTI-SKID EPOXY COATED)
BRIDGE SWAYBRACES (TYP.)
BRIDGE TRANSOM AT 10FT C-C
35' BEAM BRIDGE
GENERAL PLAN


45'-0" ACROW BEAM BRIDGE (OVERALL DECK LENGTH)
0.45% SLOPE
SC0455-1 START/END RAIL 15'-6" LONG
SC0455-2 CENTER RAIL 19'-11 3/4" LONG
SC0455-1 START/END RAIL
W-BEAM TRANSITION
END ONLY
TYP. SPACING
SPLICE SEE DETAIL SHEET 10
SC0212 GUARDRAIL BOLT
TOP OF ROADWAY (EPOXY AGGREGATE COATING)
GUARDRAIL TRANSITION TO PANEL BRIDGE SEE SHT. No.20
FILLER WEDGE AT TOWER No.1
JERSEY TYPE CONCRETE BARRIER (BY OTHERS)
AB975 BEARING
EXPANSION BEARINGS
GUARDRAIL POST (TYP.)
MAIN BEAM
BRIDGE LOW STEEL
BEARING BEAM ASSEMBLY
FIXED BEARINGS
TOWER 1
44'-0" CL -CL BEARINGS
TERMINAL C BEAM 30e
ELEVATION
4-WAY SLING (BY CONTRACTOR)
MIN. 30'
45FT LONG BEAM BRIDGE SEGMENT
ELEVATION
SEE SLOT DETAIL
LIFTING LUGS & ACCESS HOLES
3'-10"
6' WIDE SEGMENT (TYP.)
PLAN
LIFTING DETAILS
GUARDRAIL POST
5FT SPACING (TYP.)
SEGMENT 1
SEGMENT 2
SEGMENT 3
SEGMENT 4
SEGMENT CONNECTOR
24FT ROADWAY
BEARING BEAM ASSEMBLY AT TOWER No.1
ABSBRC BEAM BRIDGE SEGMENT OVERLAID WITH ANTI-SKID EPOXY COATING
BOX BEAM TRANSITION
ZONE GUARD BEAM
LIFTING LOCATIONS (TYP. EACH SEGMENT)
EXPANSION BEARING
FIXED BEARINGS
TERMINAL C BEAM 30e
PLAN
5 TON ALLOY HOOK (SELECTED BY CONTRACTOR)
1"ø BAR
7" ACCESS SLOT (SEE DETAIL)
SLOT DETAIL
SEGMENT WEIGHTS
– SEGMENT W/ EPOXY COAT = 19,690lbs (NO GUARDRAIL COMPONENTS)
– SEGMENT W/ EPOXY COAT = 23,462lbs (W/ GUARDRAIL COMPONENTS)
24FT ROADWAY
TL-4 GUARDRAIL SYSTEM
GUARDRAIL POST (TYP.)
TOP OF ROADWAY
SEGMENT CONNECTOR
1" GAP (TYP.)
0.0% SLOPE
ANTI-SKID EPOXY COATED ROADWAY PLATE
27" ±
LOW STEEL
STRINGERS SUPPORT BRACKET
MAIN BEAMS
STRINGERS
SC2072 GUARDRAIL SPACER
SEGMENT 1
SEGMENT 2
SEGMENT 3
SEGMENT 4
11-1/4"
5'-1"
24FT WIDE SECTION A-A
SHIM
AB971 BOLTS
MAIN BEAM
SEGMENT CONNECTOR
AS BUILT DRAWINGS
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SEAL
ACROW BRIDGE
Building Bridges, Connecting People.
Acrow Corporation of America
181 New Road, Parsippany, NJ 07054
ACROW PANEL 700XS BRIDGE
45FT BEAM BRIDGE PLAN, ELEVATION & DETAILS
45FT x 24FT BB – 380FT x 2 LANE 30FT PB – 35FT x 30FT BB
LGA AIRFIELD RECONFIGURATION
TEMPORARY ROADWAYS – TERMINAL D RAMP
TAA #G-2732.06
DRAWN BY RJ
CHECKED BY JB
APPROVED BY JB
DATE OCTOBER 10, 2018
SCALE: AS SHOWN
CONTRACT NO.
DELTA AIR LINES
DRAWING NO. AB1833-3
SHT 3 OF 20
REV.
DESCRIPTION
DATE


DELTA
DELTA
ABLE
EQUIPMENT RENTAL
LIFT
ABLE
EQUIPMENT RENTAL
1-866-GOT-BOOM
AB
EQUIPMEN


DELTA

BEAM BRIDGE

PSE&G Construction Access

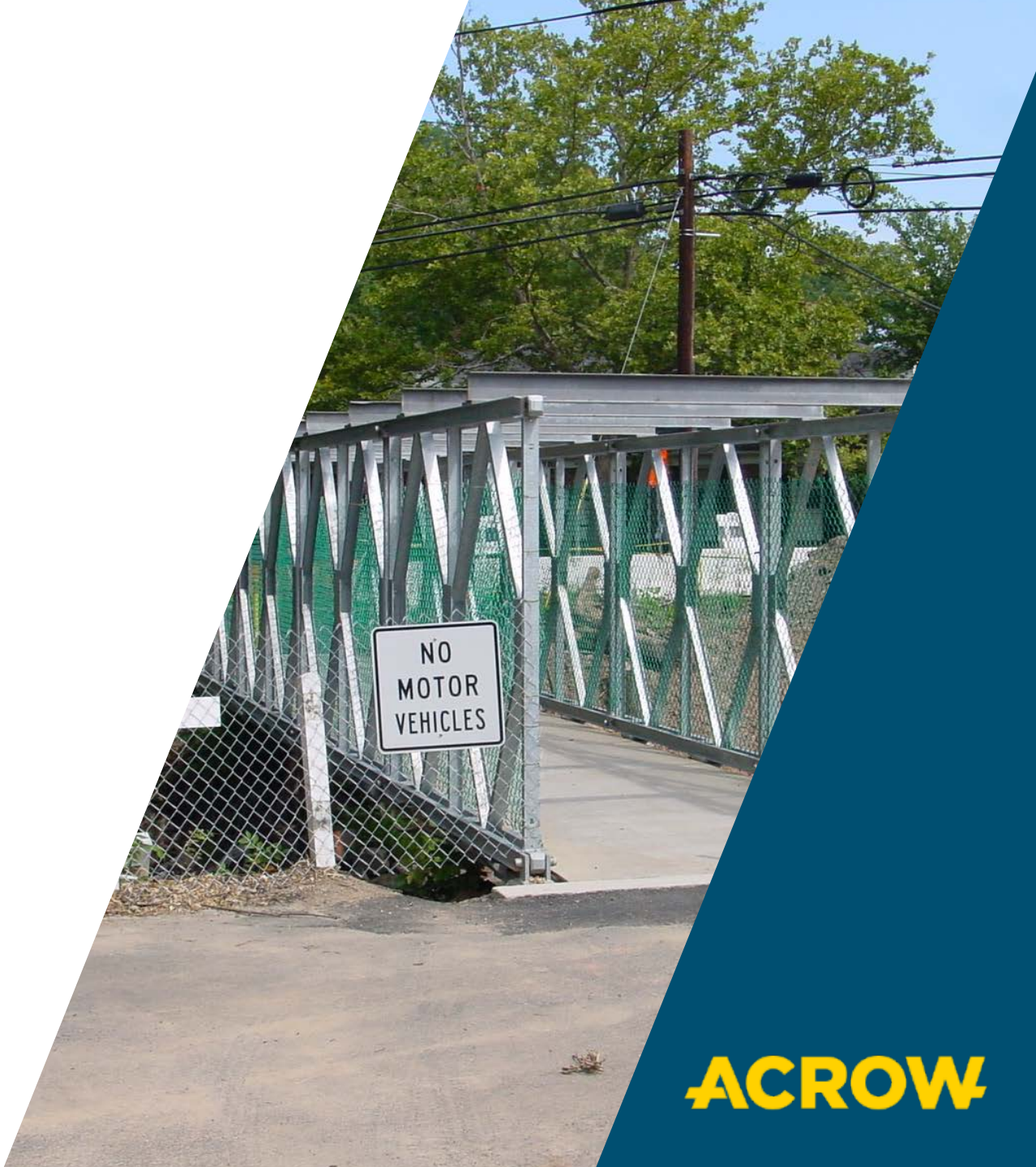
Timber crane mats used to close the gap.

Barclays Center, Brooklyn NY

Beam Bridges capable of supporting omni-directional traffic (both parallel and perpendicular to main girders)

PEDESTRIAN BRIDGES

- Quick and easy installation
- Available in weathering steel for improved aesthetics
- Supplied with a choice of timber, steel or reinforced concrete deck
- Hot-dip galvanized with minimal maintenance requirements



ACROW

PERMANENT PEDESTRIAN BRIDGE

West Penn Rail Trail in Blairsville, PA

Ideal application for modular bridges due to limited site access in remote location

- Length: 4 x 150’ continuous spans
- Width: 8’
- Design Load: Pedestrian

PEDESTRIAN BRIDGE

- Length: 70’
- Width: 5’ Box Bridge
- Design Load: 85 PSF

PEDESTRIAN BOX BRIDGE

- Available in 5ft and 8ft widths
- Clear spans up to 150ft (longer spans and multi-spans possible)
- Timber deck and safety fencing by contractor

PEDESTRIAN BRIDGE

- Length: 80’
- Width: 8’ Box Bridge
- Design Load: 85 PSF

PEDESTRIAN BRIDGE

Orange Co. NY over Route 9

- Length: 240’ total, 2 spans (2 x 120’)
- Width: 8’
- Design Load: 90 PSF

RAILROAD BRIDGES

- Engineered to accommodate both freight and passenger trains
- Designed to support American and European railway loadings
- Available for rapid deployment, and can be installed in days
- Suitable for permanent applications, or to enable temporary access during time-critical rail bridge repair

ACROW

ACROW


7564
7564
WE SERVE WITH PRIDE
Long Island Rail Road
MTA
Long Island Rail Road

RAIL BRIDGE

CSX Railroad, Ohio

- Length: 125’
- Width: 18’
- Design Load: Cooper E-80

RAIL BRIDGE

CSX Railroad, Ohio

- Length: 125’
- Width: 18’
- Design Load: Cooper E-80

RAIL BRIDGE

Atlantic Yards

Brooklyn, NY

Reconstruction of MTA Yard

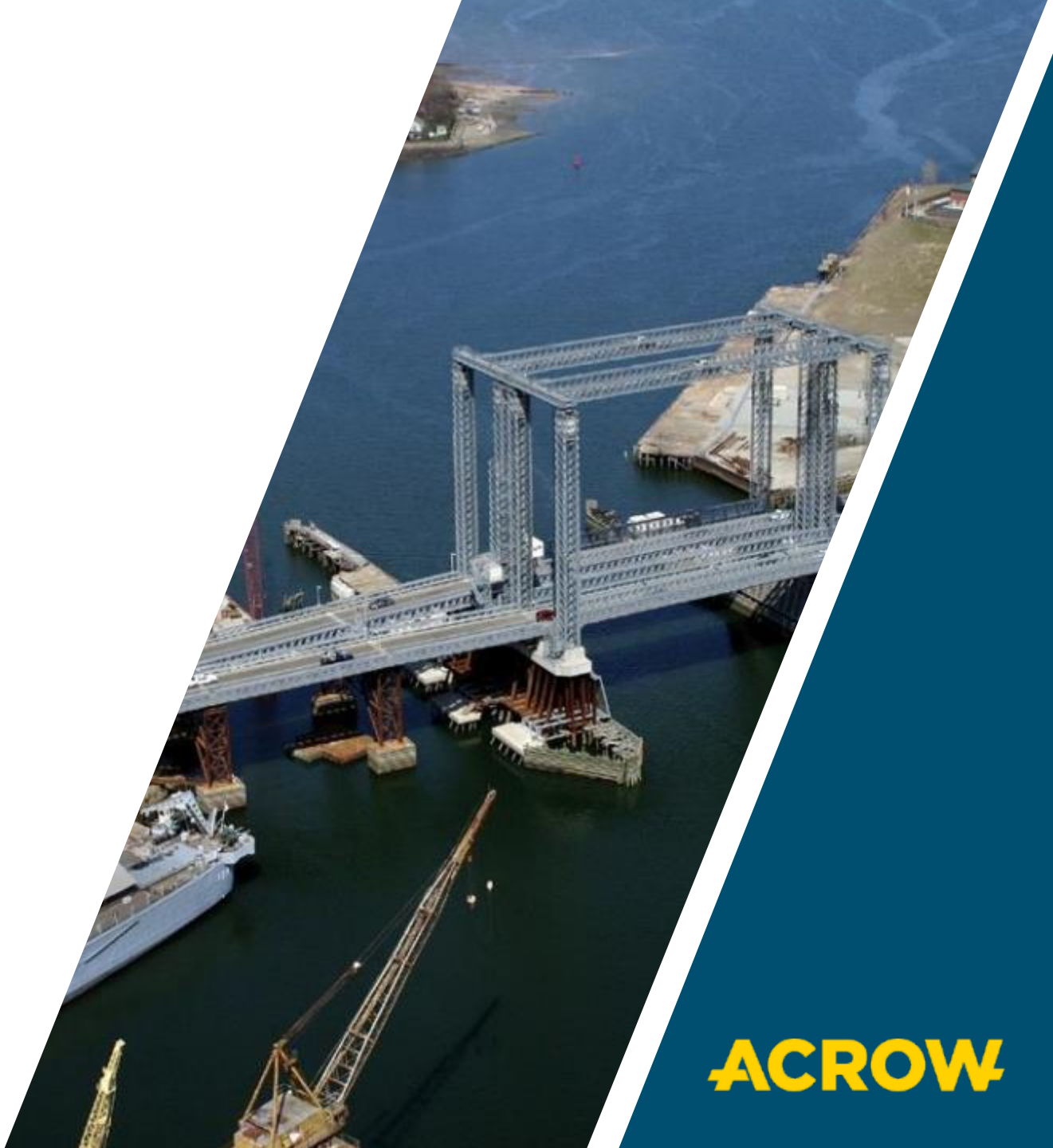
- Length: 4 span continuous bridge (90’-90’-90’-80’)
- Design load: Cooper E-60

RAIL BRIDGE

CP Railway, London, ON

MOVABLE BRIDGES

- Innovative solutions to maintain vehicular and vessel traffic
- Deep expertise in structural, mechanical and electrical engineering
- Expert in complex bascule and vertical lift bridge solutions
- Modular, interchangeable components
- Full highway load-carrying capability to support both standard and heavy-duty applications
- On-site Acrow technicians to support installation, start-up and commissioning

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MOVABLE BRIDGE

Quincy MA

Fore River Bridge

In place 14 years

2 – 2L bridges side by side

20 approach spans also provided

Vertical lift of 90’ to provide clearance for large ships

- Length: 210’
- Width: 2 x 2 Lane – 24’
- Design Load: HS 20

MOVABLE BRIDGE
UNIONPORT, NY

NB+SB Bruckner Blvd.

First Hydraulically-Driven Temporary Lift Bridge in the U.S.

Approaches on NB 60’ & 100’

Approaches on SB 80’ & 100’

Cantilevered sidewalk

Installed between the piers of I-278 Bruckner Expressway

- Span: Two Bridges 70’ & 90’
- Width: 2 Lane 24’ & 2 Lane 30’
- Design Load: HS-25

MOVABLE BRIDGE

Martha’s Vineyard, MA

Bascule/draw bridge

Acrow provided the approaches and the bascule

Full package, including mechanical, electrical and control systems

- Spans: 80’ / 60’ / 90’
- Width: 2 Lane – 24’
- Design Load: HS-20

MOVABLE BRIDGE
WEST PALM BEACH, FL

Bridge Opening: Every 30 minutes

Included design and supply of bridge, mechanical, electrical and control systems

- Towers: 75’
- 170’ cambered lift span
- 30’ 2-lane roadway
- Live Load: AASHTO HL-93

MOVABLE BRIDGE

St. Augustine, FL

Bridge of Lions

Acrow supplied the towers, the overhead gantry, crossheads, sheaves, mechanical drive systems, electrical controls and platform for control house

- Length: 130’
- Width: 2 Lane – 24’
- Design Load: HS-20

N WASHINGTON ST BRIDGE, BOSTON MA

Two Universal Bridges

- Ea multi-span bridge over 700ft long
- Utility bridge carries gas, electric and water for the City
- Vehicular bridge is 36ft wide, plus an 8ft wide cantilevered footwalk carrying the Freedom Trail

PIPE & UTILITY BRIDGE

Utilized a bridge to carry gas pipes

- Length: 140’
- Width: 8’
- Design Load: Pipe loading

INDUSTRIAL PIPE BRIDGING AND RACKS


METROPLEX CORP
JLG LIFT
ACROW

EMERGENCY WORLD TRADE CENTER 9/11

Worker access sidewalk and five support piers.

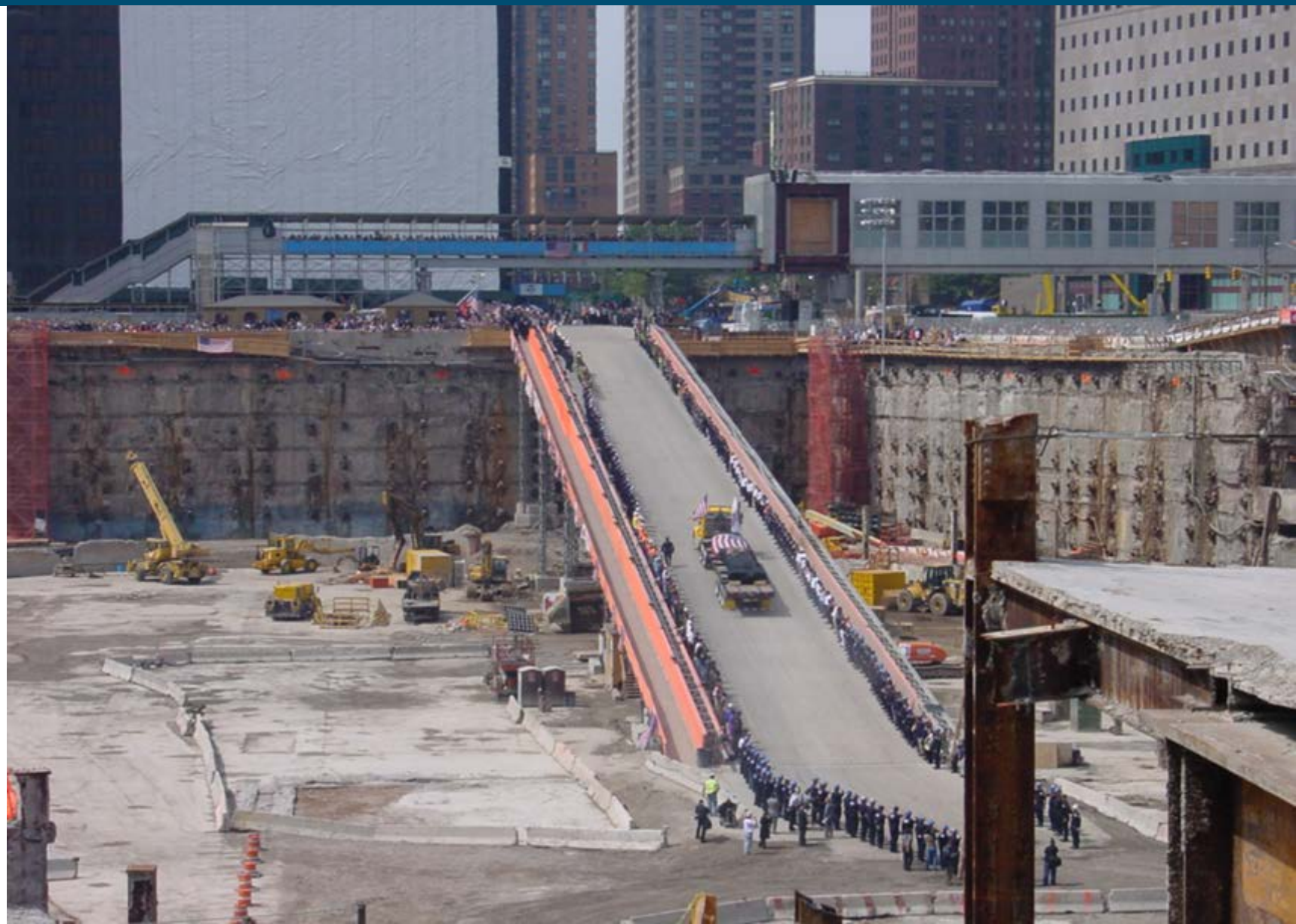
Epoxy deck.

Cantilevered walkway.

Was utilized for several years.

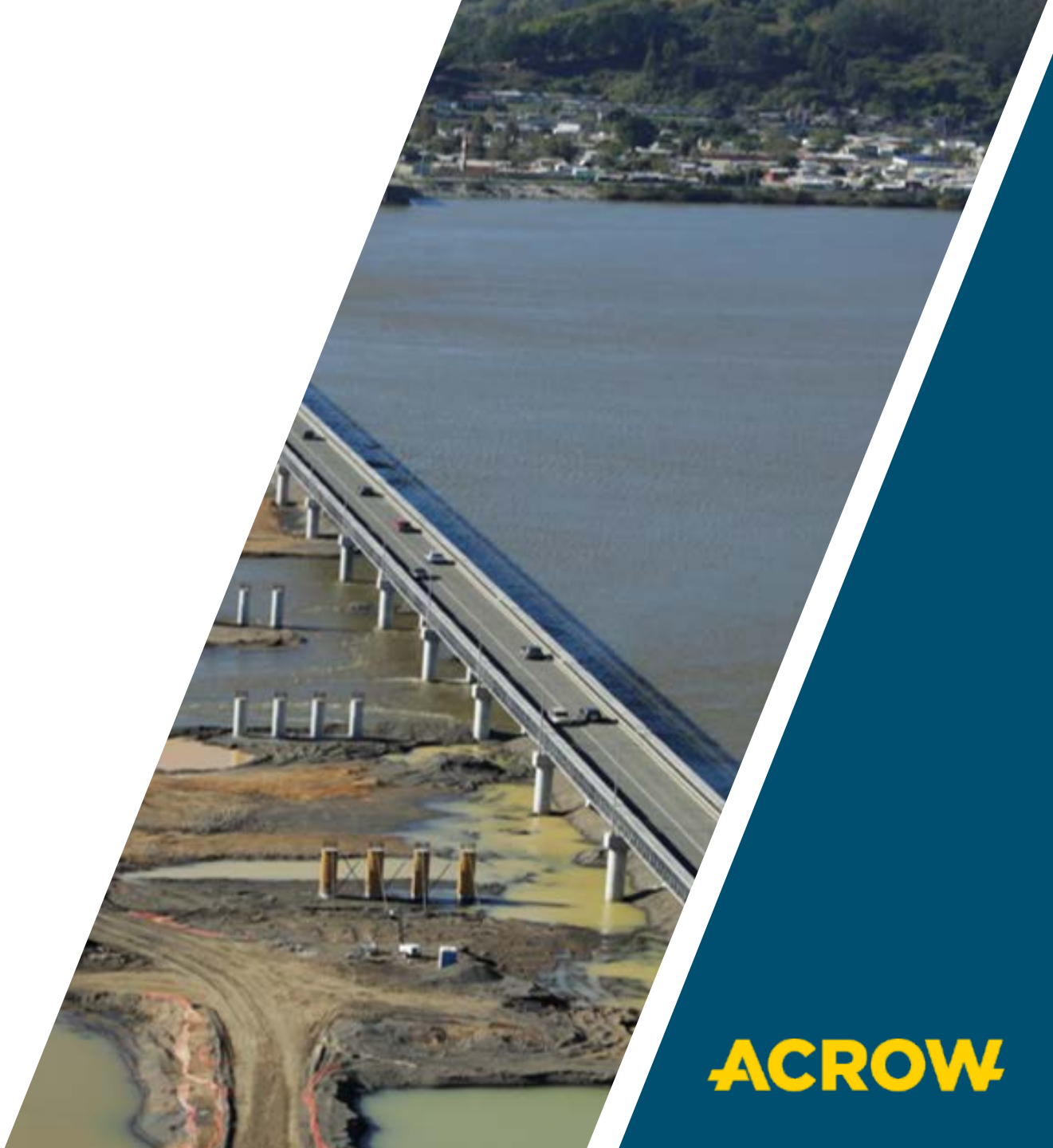
- Length: 460’ long
- Width: 30’ wide

Photo shows final 80 ton column transported between honor guard.



EMERGENCY

- Rapid Response Team to deliver restored infrastructure
- Proven in humanitarian aid and disaster-relief applications
- Bridging in-stock, ready to deliver anywhere in the world
- Length, width and load design as required
- Rapidly assembled and installed
- Easily uninstalled to facilitate safe, rapid re-deployment
- Suitable for use in seismic areas



ACROW


ACROW

EMERGENCY

US 85. Lusk, WY

3 weeks before the 75th Anniversary of the Sturgis, SD motorcycle rally this major artery from I-25 and I-80 to Sturgis was shut down

EMERGENCY FIXED IN TIME

US 85. Lusk, WY

Built with WYDOT owned Acrow bridging, WYDOT crews and Contractor + Acrow support

- Length: 200’ clear span
- Width: 2 Lane – 24’
- Design Load: HL-93

EMERGENCY

Spencer Dam, NE

Route 281 over the Niobrara River

- Length: 600’ multi-span bridge
- Width: 18’

EMERGENCY

Route 12 also by Niobrara, NE

- Length: 600’
- Width: 24’

EMERGENCY
I-95 BRIDGEPORT, CT

Tanker truck fire shut down I-95

Triple Single Reinforced (TSR3)

- Length: 80’
- Width: 36’

EMERGENCY

Wantagh State Parkway

Long Island, NY

Material is now in NY State DOT inventory for emergencies

- Length: Twin multi-span bridges
- Width: 2 Lane – 24’
- Design Load: HS-20

EMERGENCY
SKAGIT RIVER, WA

I-5 Bridge Collapse

Acrow provided 2x 2-lane bridges within a week

Start to finish and opened in 15 days

- Length: 2 spans, each 160’
- Width: 2 Lane – 24’
- Design Load: HL-93

EMERGENCY BRIDGE CHILE

8.8 Magnitude Earthquake

2 cities were cut off because existing bridge was damaged.

Installed in 88 days!

Spans preassembled on causeway and lifted in

- Length: 4,594’
- Width: 2 Lane – 24’
- Design Load: HS-25

EMERGENCY GARDEN STATE PARKWAY

Lacey Township, NJ

Excavator damaged a beam

- Length: 4 spans
- Width: 2 Lane – 24’
- Design Load: HS-25

EMERGENCY HURRICANE KATRINA

New Orleans, LA

Most aggressive bridge project at the time (2005) – supplied in 3 months!

Existing spans were 65ft.

Water damaged piers and we filled in with Acrow Bridge

- Length: 4,220’
- Width: 2 Lane – 24’
- Design Load: HS-25

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The Bailey Bridge

- Needed to carry the Churchill Tank (39T)
- Multiple manufacturers of individual components- 650 different manufacturers in the UK alone!
- Transportable in a 3T truck
- Needed to be man-handleable

- **An actual “back of the envelope” bridge**
- Design work started in December 1940
- Testing started in May 1941
- Production started in July 1941
- In the field with Royal Engineers in December 1941

QUIZ: QUESTION #1

What are the three major components of a modular panel bridge?

1. Transoms or Floorbeams
2. Trusses
3. Deck Units

QUIZ: QUESTION #2

What is one major benefit of a panel bridge?

1. Pre Engineered
2. Modular
3. Prefabricated
4. No welding or on site fabrication

QUIZ: QUESTION #3

Name two standard configurations of a modular bridge?

1. Single Single – SS
2. Double Single – DS
3. Triple Single – TS
4. Double Double – DD
5. Triple Double – TD

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