



Prefabricated- Steel Bridges

Oct. 26, 2022



ROADRUNNER
 **BRIDGE**

Troy Henry

President

Roadrunner Bridge

Dan Thompson

Vice President

Roadrunner Bridge

Kevin Gilman

Sr. Director of Construction Management

Roadrunner Bridge



ROADRUNNER
BRIDGE



ROADRUNNER
BRIDGE

- Roadrunner Bridge is a division of The Henry Group, Inc.
- Founded in 1976, we have extensive experience in manufacturing, engineering and commercial construction
- Roadrunner was formed in 2021 to offer bridge sales and installation services to municipal and commercial customers throughout the US
- We provide vehicular, pedestrian and utility bridges



ROADRUNNER
BRIDGE



<https://www.shortspansteelbridges.org/>



Producers



Fasteners



Coaters



Service Centers



Fabricators



Design Firms



Contractors



Bridge Owners



Universities

**SHORT SPAN STEEL
BRIDGE ALLIANCE™**



American Galvanizers Association



American Iron and Steel Institute



Trade Organizations

The Short Span Steel Bridge Alliance (SSSBA) is a group of industry leaders who have joined together to provide educational information on the design and construction of short span steel bridges in installations up to 140 feet in length.

SSSBA's objective is to provide essential information to bridge and highway professionals on the varied and innovative steel solutions available to solve their short span bridge design and construction challenges.

Short span bridges are the most common types of bridge structures. Using steel can save time and costs.

The SSSBA is active in providing:

- Education (webinars, workshops, forums, conferences)
- Technical Resources (standards, guidelines, best practices)
- Case Studies
- Simple Design Tools (eSPAN140)
- Answering Questions (Bridge Technology Center)
- Industry Contacts/Providers
- Innovative & Accelerated Bridge Construction Options









TrueNorth Steel
Bridge™

Daylen Borders

Territory Sales Manager – Texas / Louisiana
True North Steel, LLC



Pre-Engineered Vehicular Bridges

- County Roads
- Public Works, Government & Municipality Projects
- State and National Parks
- Timber Development Locations
- Energy, Mining, Industrial

What advantages do modular steel bridges have over on-site field fabricated construction?

- Time
- Quality



Pre-Engineered Vehicular Bridges

Designed to AASHTO Code

- Pre-engineered and stamped by a professional engineer

Meets the Buy American Act

- Material melted and manufactured in the USA

Low-Maintenance

- Manufactured from weathering steel

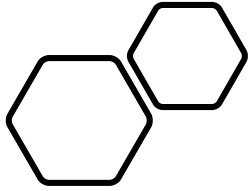
Steel is 100% recycled vs Concrete





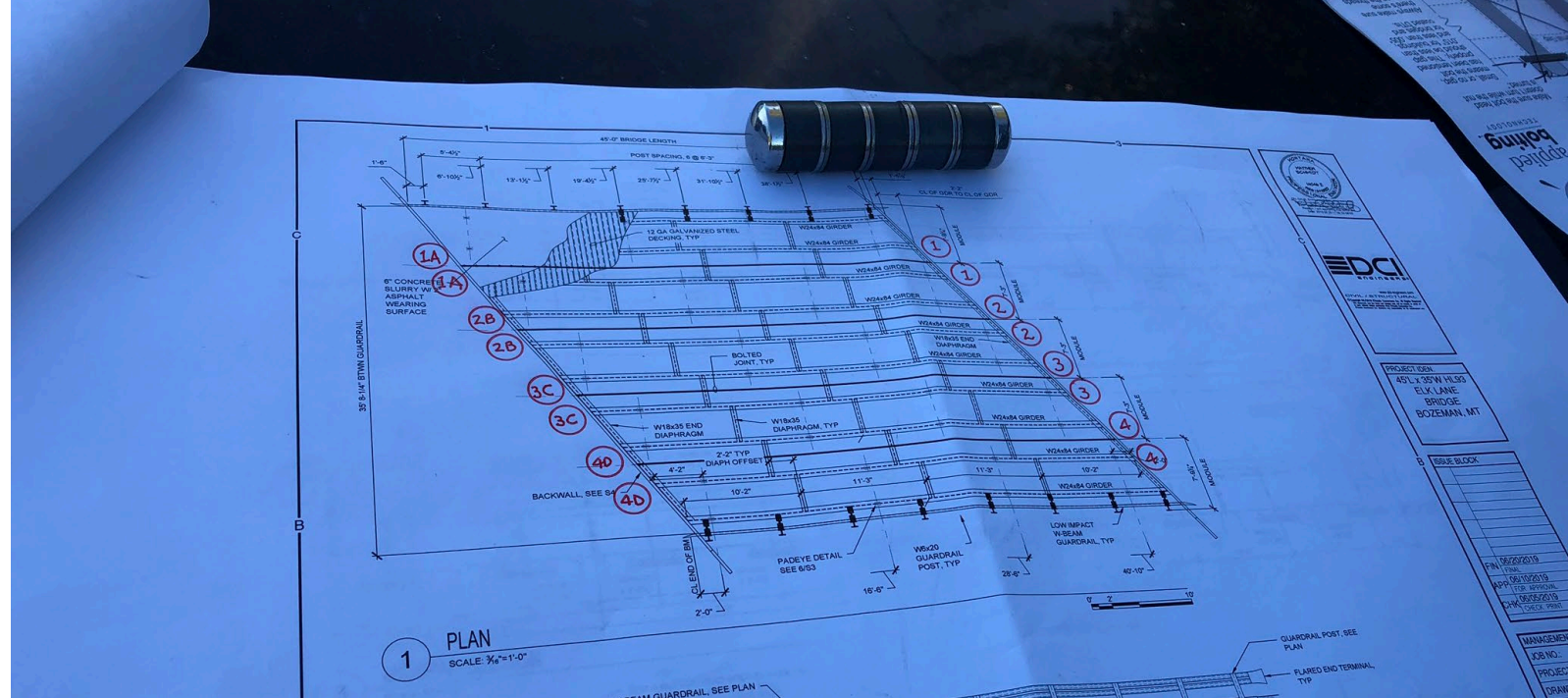
Length and Width

- Virtually Any Width
 - Standard modules widths: 7', 8', & 12'
 - Standard travel way between the Guardrail: 14', 16', 21', 24', 28', & 32'
- Clear Spans up to 140 Feet Utilizing Rolled Beams
- Clear Spans up to 240 Feet Utilizing Plate Girders
 - Install up to 50-feet with excavators



Skew

45-degree max



Low Profile

Minimize approach grade by:

Decreasing girder spacing

Decreasing girder depth





Wearing Surface

- Gravel
- Douglas Fir Running planks
- Full Timber
- Concrete
- Asphalt





Deck Drainage

Guide Rail

Engineered to test level 1-5

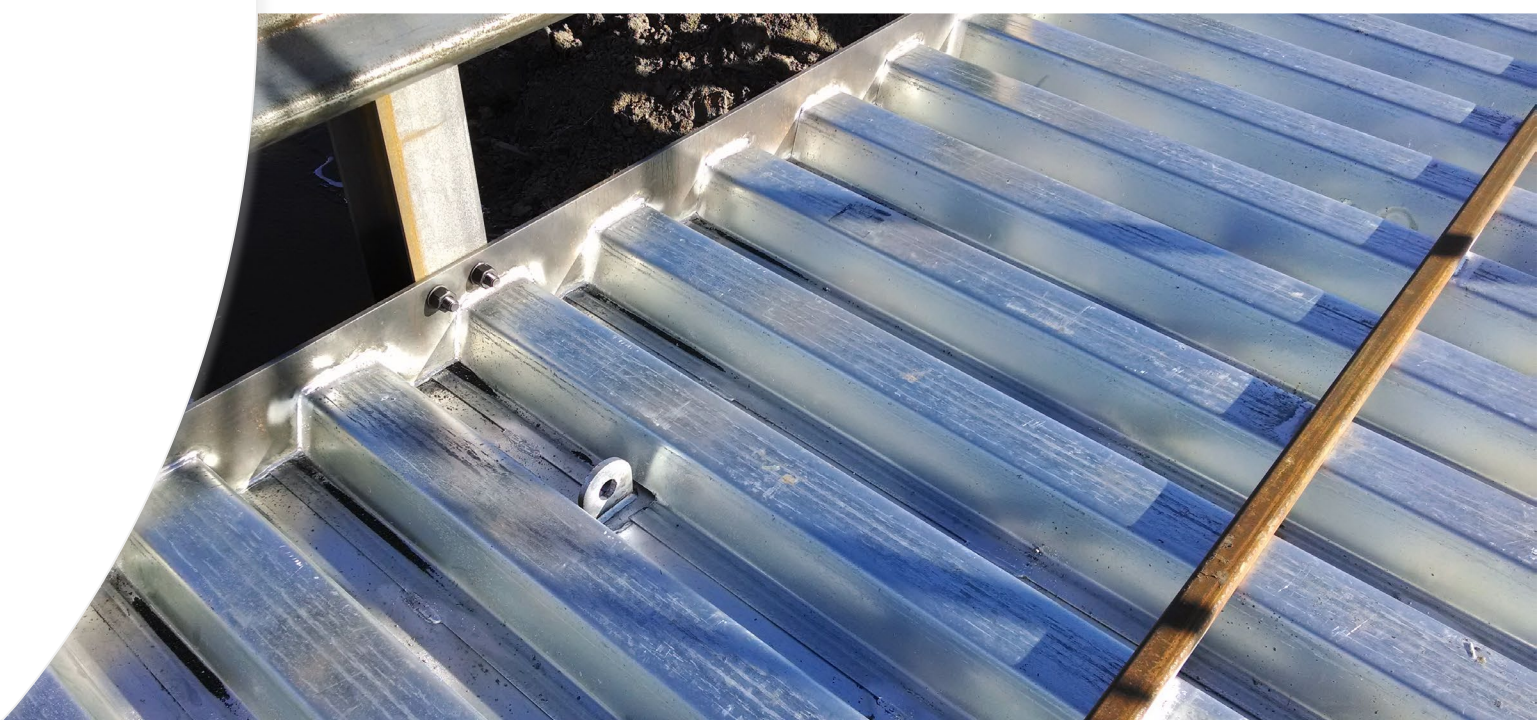
Multiple guide rail materials available, including weathering steel, timber, & galvanized.

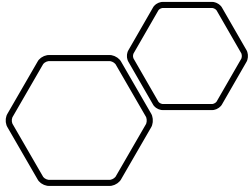


Gravel Deck Blade Runners

Tube Steel

Angle





Prefabricated Steel Backwall





SuperSill® Abutment System

The SuperSill® is a steel concrete abutment form.

It applies a corrugated sheet, wide-flanged W-beam and welded supports to a heavy duty, high quality frame.

Pre-engineered and standardized to eliminate unique abutment design fees



TrueNorth Steel Abutment Design Options

Pre-cast concrete and cast-in place (CIP) abutments

Driven steel pile foundations

Pre-Engineered Pedestrian Truss Bridge

Standard travel way widths: 3'-0" through 20'-0"

Clear spans up to 250'

Truss splices are required above 80'-0"



Pedestrian Bridges

Pre-engineered and stamped by a registered engineer

Material melted and manufactured in the USA

Finishes include galvanized, painted, or weathering steel



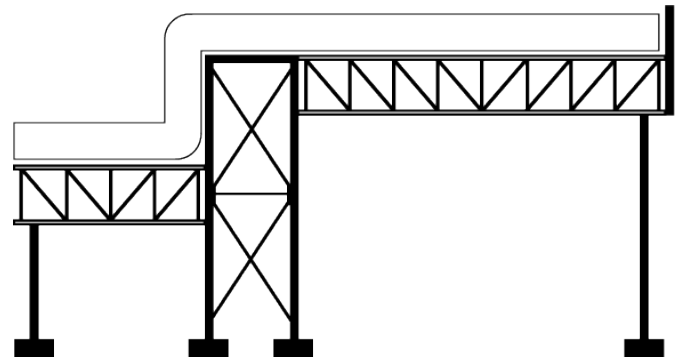
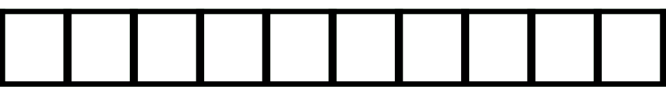
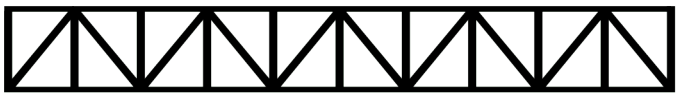
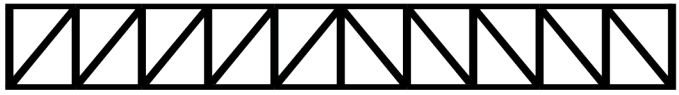
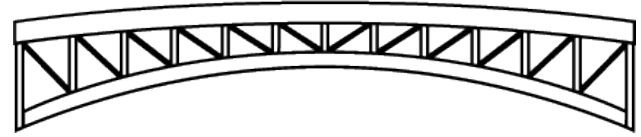
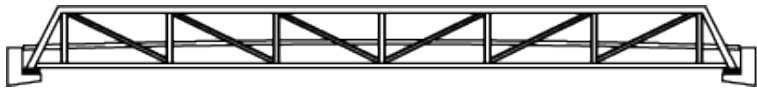


Pre-Engineered Pedestrian Truss Bridge

- Common Design Loads
- Pedestrian 90PSF
- H5 (10,000 #'s)
- H10 (20,000 #'s)
- We can design to any design load

Style

- Pratt Truss
- Arch Truss
- Beam Stringer
- Bowstring
- Brown Truss
- Modified Bowstring
- Howe Truss
- Warren Truss
- Viereendeel Truss
- Pipeline Support



Surfacing Types

Concrete
Asphalt
Wood / Timbers
Composite





Combination Vehicular and Pedestrian

Separate Pedestrian Access

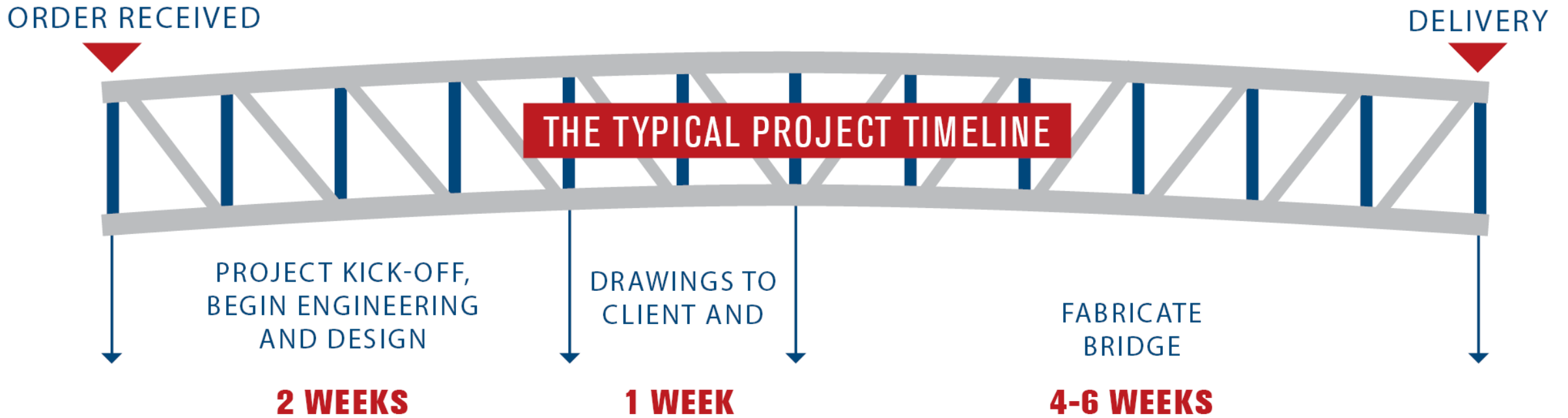


Where You Will Find TNS Bridges

- County Roads
- Fish Enhancement Areas
- Golf Courses
- Commercial and Residential Development
- Private Properties
- Trail Systems
- Public Works, Government & Municipality Projects
- Resorts
- State and National Parks
- Timber Development Locations
- Educational Campuses



CONSULTATION TO INSTALLATION IN AS LITTLE AS 7 WEEKS

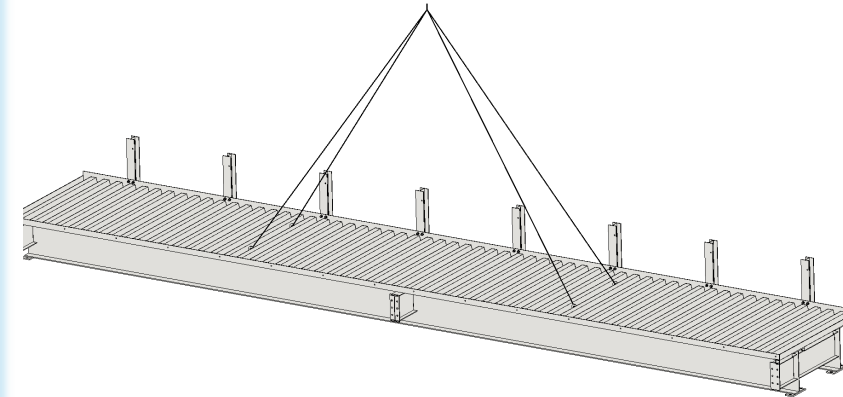




Lifting Lugs

Minimum of 4

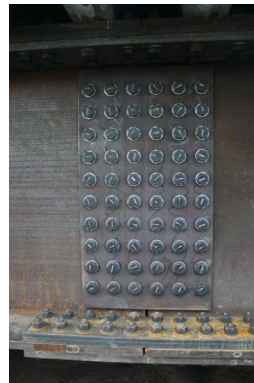
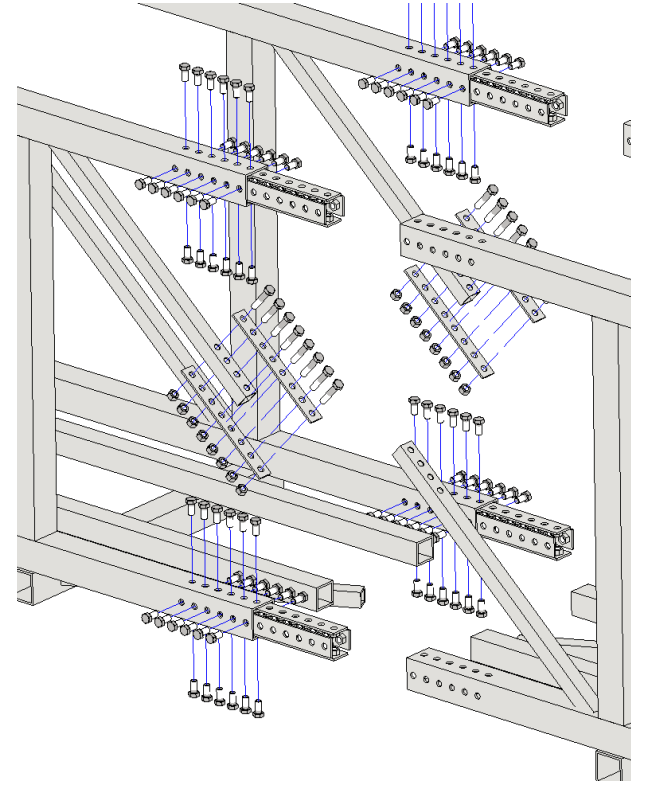
Angles not less than 45 degrees



Bearing Plates



Transverse Splicing



Match Mark

Information provided on the
plans

Each bridge module is
marked for ease of installation



Certifications & Capabilities

AISC-Certified Intermediate Bridge Fabricator

* Certified Advanced Bridge Fabricator in 60 Days

Fracture Critical Fabrication

Sophisticated Paint Endorsement

Designed and fabricated to applicable AASHTO/ASTM Standards

AWS Certified Welding Fabricator





Installation

- Survey site and order a geotechnical soil study
- Design new bridge foundation system
- Remove Existing Structure & Abutments
- Prepare Subbase
- Set and fill SuperSill Abutments or piers if necessary



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Installation

- Place riprap or concrete designed erosion control
- Set bearing plates
- Place bridge modules



Installation

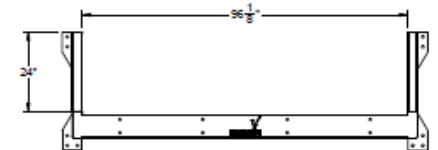
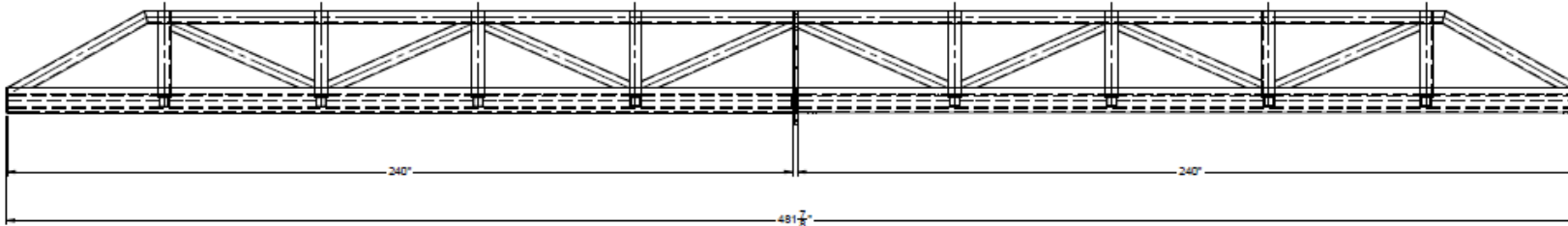
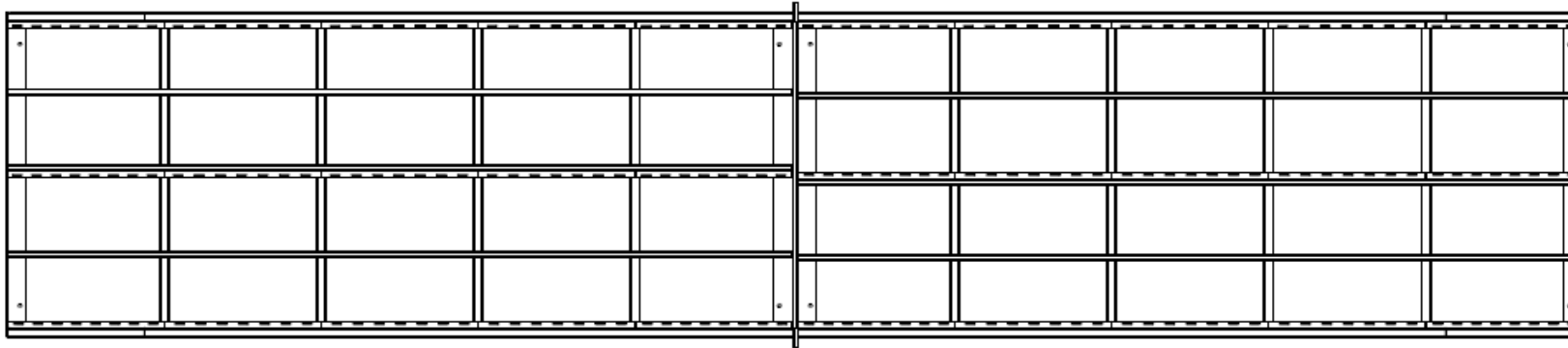
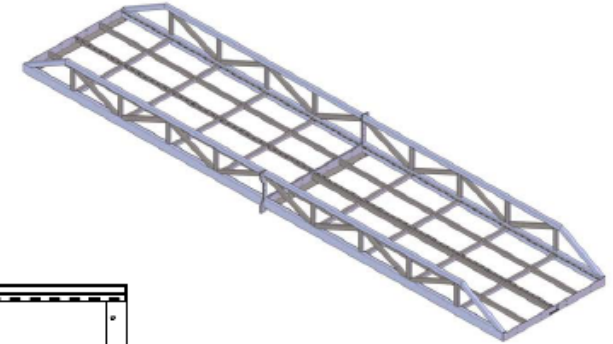
- Bridge modules bolted together
- Guiderail attached
- Welding
- Backwalls placed
- Approaches built
- Wear surface installed

Roadrunner can also provide emergency services for communities that have experienced local flooding or catastrophic issues with small bridges.





We have recently created a new utility bridge with a patent pending design.



- NOTES:
 1. CITY REQ'D.
 2. REMOVE ALL SHARP EDGES & CORNERS.
 3. FINISH.

ROUTING:

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FINISHES: GALV. = GALV. POLY. = POLY. WOOD = WOOD CONCRETE = CONCRETE ALL DIM. = ALL DIM.	DATE: _____ DRAWN BY: _____ CHECKED BY: _____ PROJECT: _____ REVISIONS: NO. DATE DESCRIPTION _____ _____ _____	THE HENRY GROUP 2100 S. 104th Street, Suite 100 Omaha, NE 68147 TEL: 402.491.2210 FAX: 402.491.2211 WWW: www.thehenrygroup.com EMAIL: engineering@hgroup.com
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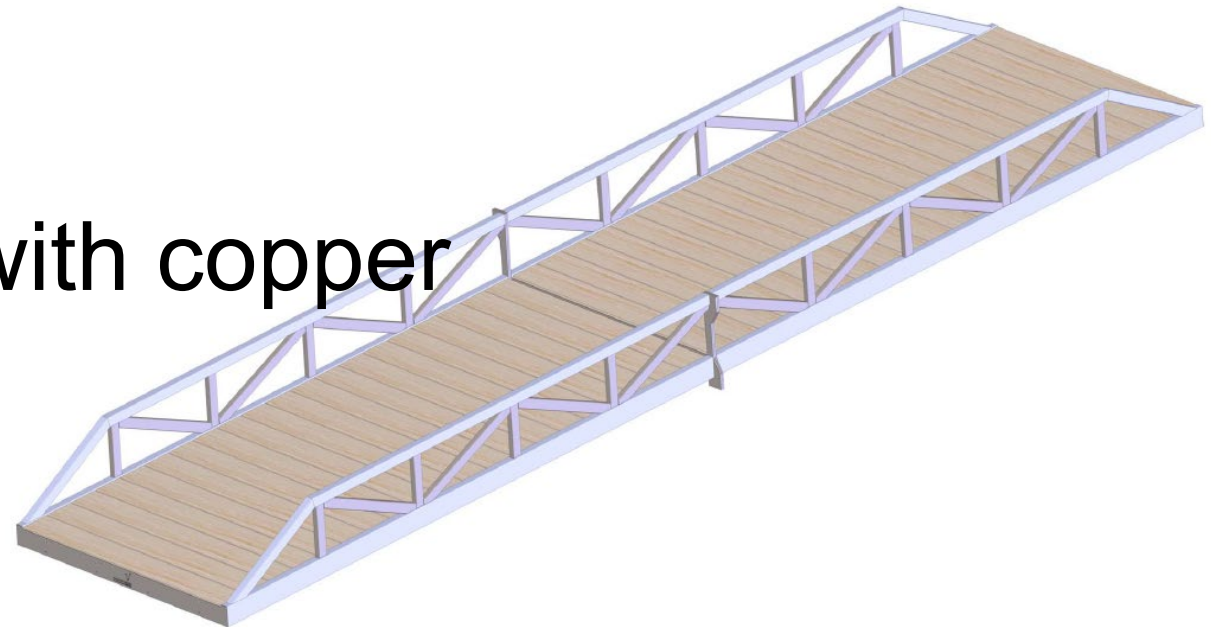
**3" Douglas Fir
Planking**



**8' wide by 20'
long utility
bridge**

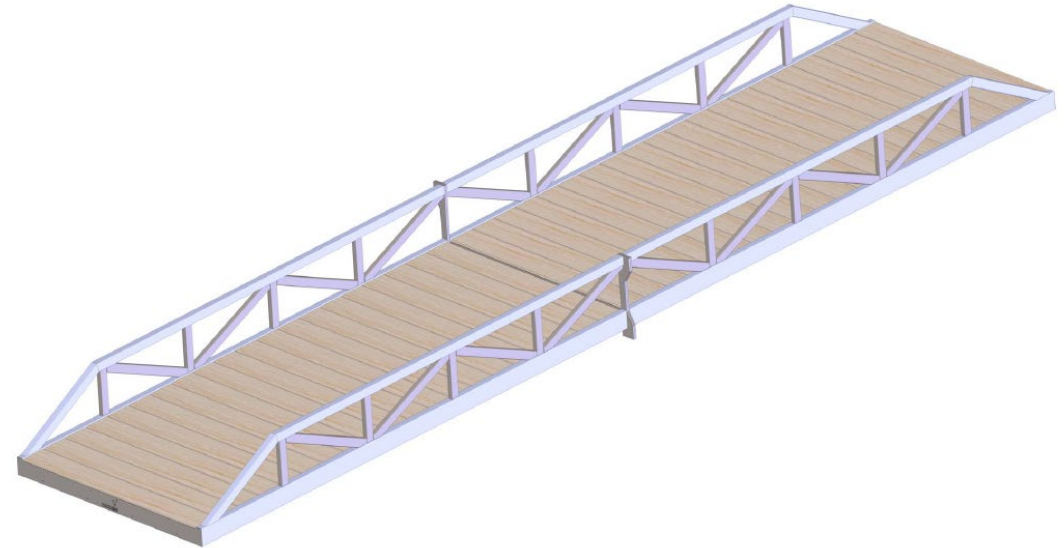


- Available in 4', 6', 8' and 10' widths and lengths of 20' and 40' clear span
- Engineered to carry loads up to 16,000 lbs.
- Heavy duty steel tubing with full moment connections
- Powder coated finish
- 3" Douglas Fir planking with copper naphthenate protection



Width	Length	Price
4'	20'	\$11,950
6'	20'	\$13,950
8'	20'	\$15,950
10'	20'	\$17,950
4'	40'	\$27,900
6'	40'	\$31,900
8'	40'	\$35,900
10'	40'	\$39,900

- Open roads quicker for emergency access
- Can be stockpiled for disaster planning
- Easy to install
- Can be used multiple times
- Very affordable pricing
- Leasing and rental options





Questions or
Comments?



**Thank you for your time
and attention**