

Welcome!

Alaska Railroad Corporation (ARRC) Bridge 227.1 Project Update!



Project Purpose and Need

Originally built in 1923, Bridge 227.1 over the Talkeetna River needs rehabilitation to maintain safe and efficient railroad operations, and to meet modern design standards.

Years of use have damaged the trainman's walkway railings. Additionally, the way the walkway is connected to the bridge structure is increasing wear and tear on the bridge. As a result, ARRC will replace the walkway and connect it in a different way to reduce long-term effects on the existing bridge trusses.

ARRC will:

- Rehabilitate the 406-foot, open-deck, steel through-truss bridge;
- Replace the 400-foot trainman's walkway; and
- Repair and enhance the fence along the track embankment.

Continued Access



The current trainman's walkway allows compact all-terrain vehicles (ATVs) and trailers that are no wider than 47 inches.

ARRC will continue to allow residents to use compact ATVs on the trainman's walkway following its rehabilitation. The main change regarding the walkway will be how it is attached to the bridge structure.

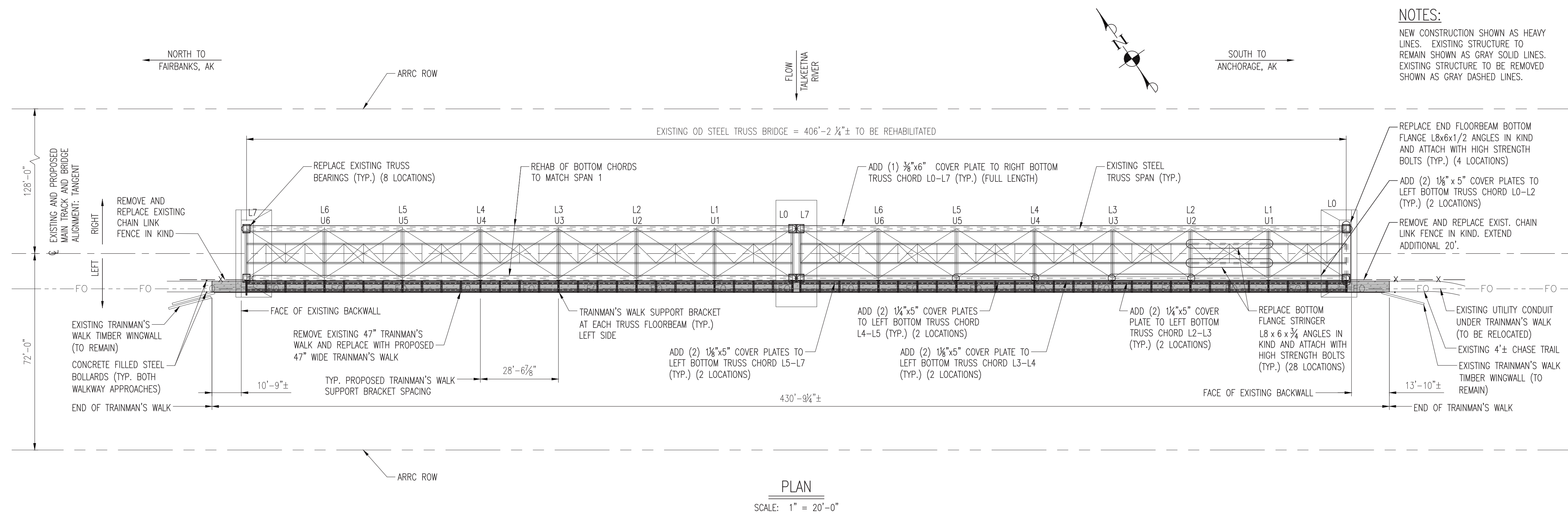
Bridge Design



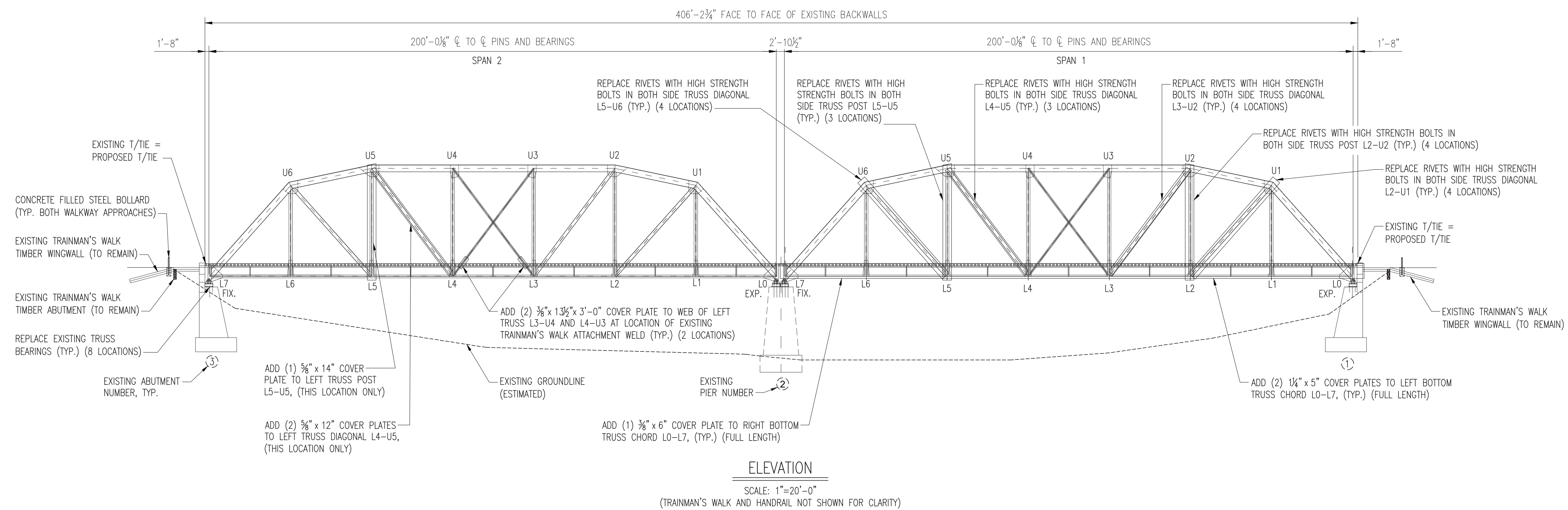
To meet current design standards, bridge repairs will include:

- Strengthening the bridge's truss stringers and floor beams by replacing select components of the truss members;
- Replacing old rivets in critical locations with new high-strength bolts; and
- Adding cover plates to critical truss members to increase the structure's overall strength and to adequately support the new trainman's walkway.

Bridge Typical Cross Section



NOTES:
NEW CONSTRUCTION SHOWN AS HEAVY LINES. EXISTING STRUCTURE TO REMAIN SHOWN AS GRAY SOLID LINES. EXISTING STRUCTURE TO BE REMOVED SHOWN AS GRAY DASHED LINES.



Trainman's Walkway Design

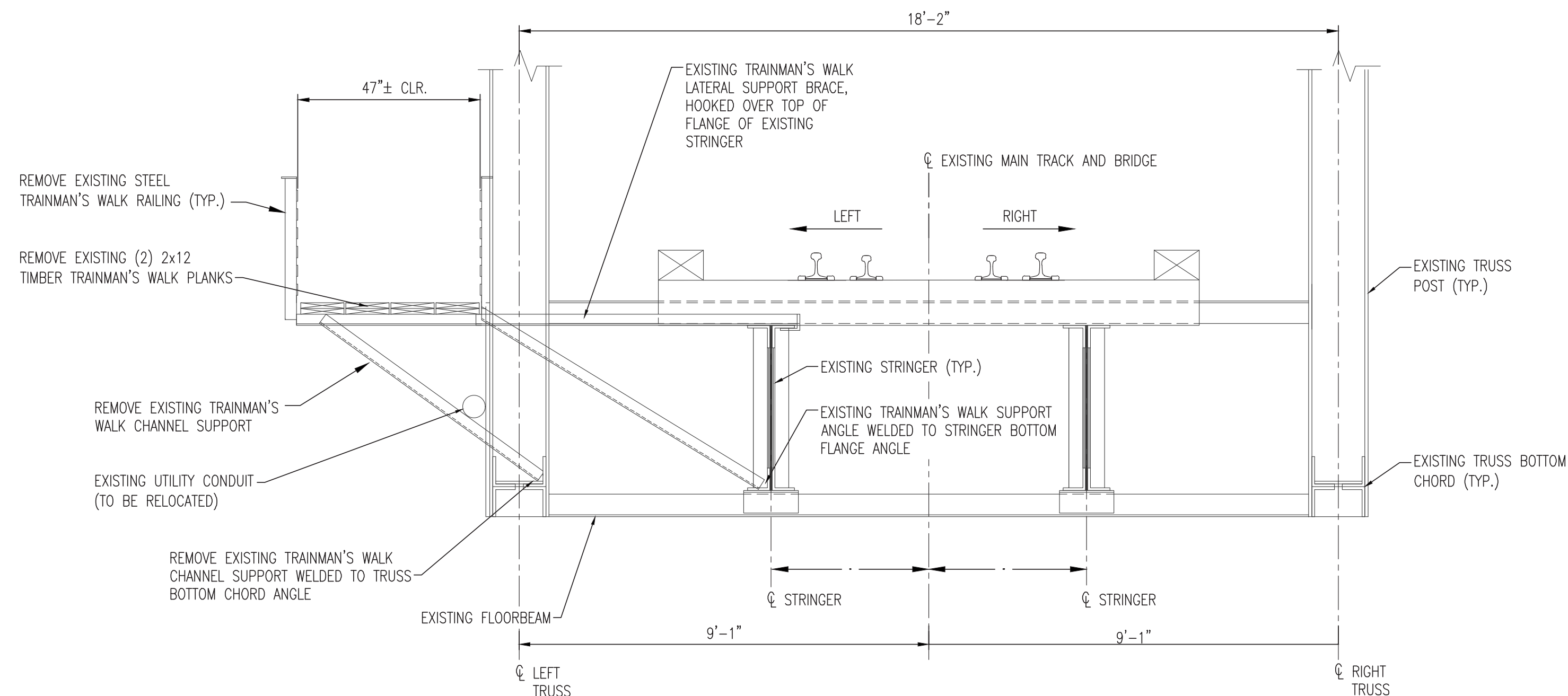


To meet safety standards, the new trainman's walkway will:

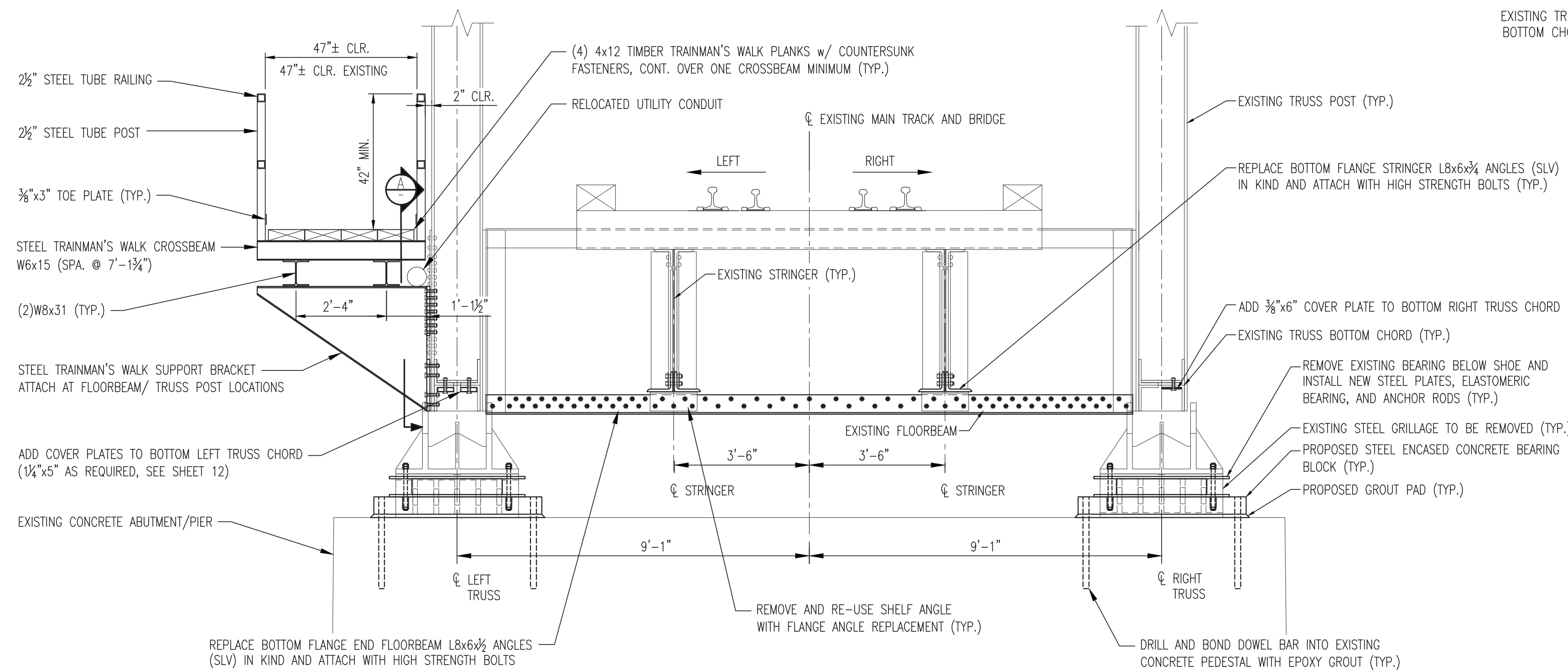
- Maintain the current 47-inch walkway access restriction (compact ATV and trailer use only);
- Include protective 42-inch-high bollards at walkway entrances to protect the walkway railing from damage and to enforce 47-inch clearance requirements;
- Maintain current walkway weight restriction at 2,000 pounds (1 ton); and
- Reconfigure the walkway's structural connection to the bridge to better distribute loads.

Full-size ATVs and trailers wider than 47 inches will not be able to access the trainman's walkway.

Walkway Typical Cross Section



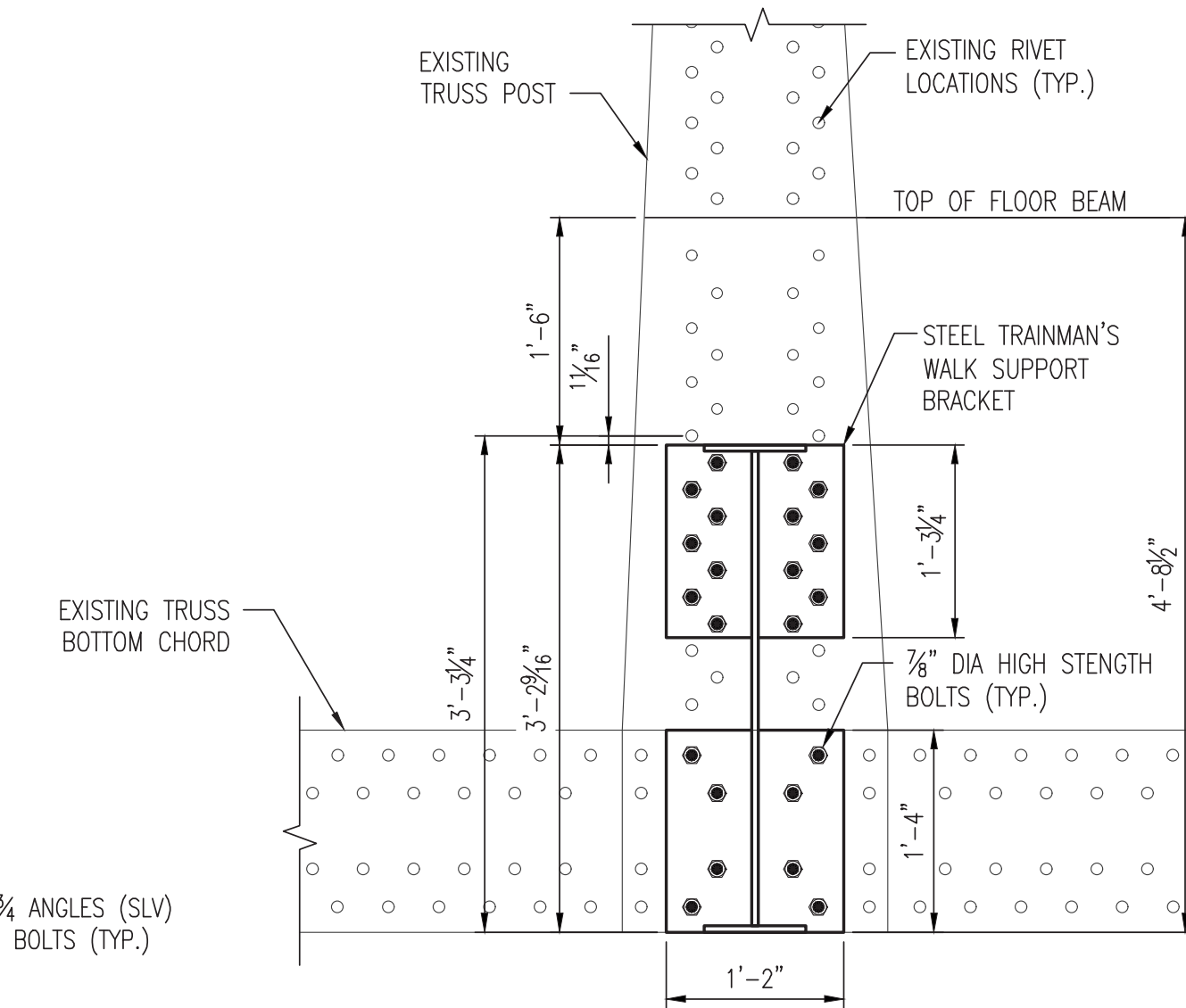
TYPICAL SECTION-EXISTING
SCALE: 1/2"=1'-0"



TYPICAL SECTION-PROPOSED
SCALE: 1/2"=1'-0"

ESTIMATED WEIGHT OF STEEL FOR TRUSS REPAIRS (TOTAL BETWEEN BOTH SPANS)	
TRUSS MEMBER	WEIGHT (LBS)
LO-L6 (RIGHT TRUSS)	3070
LO-L6 (LEFT TRUSS)	15760
POST L5-U5 (SPAN 2 LEFT TRUSS)	1140
DIAGONAL L4-U5 (SPAN 2 LEFT TRUSS)	2150
DIAGONAL L4-U3/L3-U4 (LEFT TRUSS)	210
STRINGERS	54020
END FLOORBEAMS	3090
TOTAL EST. STEEL WEIGHT = 79440	

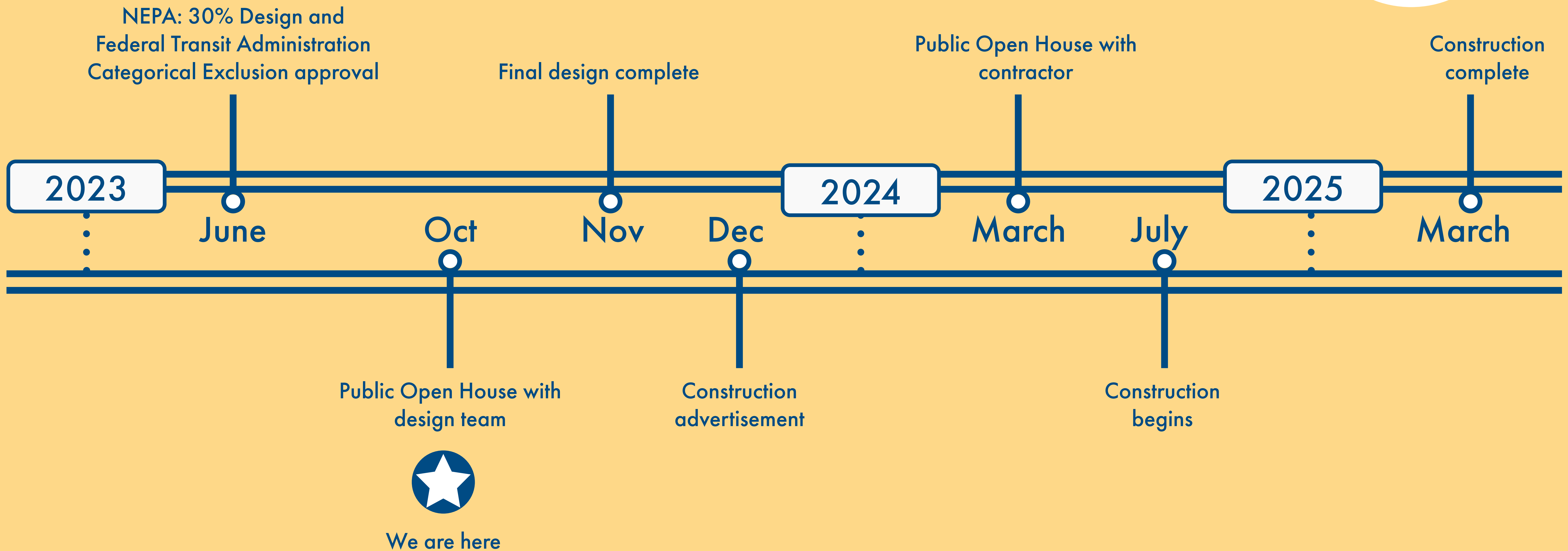
NOTE: WEIGHT OF STEEL FOR TRUSS BEARINGS, AND TRAINMAN'S WALK NOT INCLUDED.



SECTION A-A

SCALE: 1"=1'-0"
LEFT SIDE TRUSS POSTS ONLY
END FLOORBEAM/LO CONNECTION SIMILAR

Schedule



Construction



Construction is anticipated to begin in July 2024 and continue through March 2025. Residents can expect:

- Periodic closures of the trainman's walkway during active construction to maintain public safety:
 - » Flagging personnel will be on site to direct traffic during working hours.
 - » Emergency access will be maintained throughout construction.
- Increased construction noise.

Residents are encouraged to transport heavy loads and supplies during and after construction via ARRC flagstop train, ARRC tundra truck delivery, or local boat services.

Comments

Construction is currently planned to begin in July 2024. Please share:

- How do you currently use the trainman's walkway?
- What does ARRC need to know about your day-to-day access needs during construction?



Sign up for the project
mailing list!



Submit comments to
info@arrcbridge227.com



Learn more!
View the Project Fact Sheet



Mailing List URL: <http://eepurl.com/izLFJ-/>

Fact Sheet URL: https://www.alaskarailroad.com/sites/default/files/Communications/FCTSHT_2023_Bridge_227.1_Rehabilitation.pdf

Bridge 227.1 Update

