New York State Department of Transportation Red Flag 3B190TW044

By: Thomas Barrell

Flag Date: September 12, 2019

Superseding Information:

No Flags Superseded

Structure Information

BIN: **3209800** Region: 03 - SYRACUSE

Feature Carried: FREESE ROAD County: TOMPKINS

Feature Crossed: FALL CREEK Political Unit: Town of DRYDEN
Orientation: 8 - NORTHWEST Approximate Year Built: 1920

Posted Load Matches Inventory: Yes

Bridge Load Posting (Tons): 15

Primary Owner: 30 - County

Primary Maintenance Responsibility: 30 - County

Typical or Main Span Type: 3 - Steel, 10 - Truss - Thru

This Bridge is not a Ramp Number of Spans: 2

Verbal Notification Information

Person Notified: Arthur Petrozzi Date: September 12, 2019 2:30:00 PM

Of: NYSDOT Region 3

Signature Information

Signature: Thomas Barrell, P.E. 087058-1 Date: September 17, 2019

Reviewed By: Glenn Klein Date: September 17, 2019

Attachments: 5

Flagged Elements

Parent Element	Element	Total Quantity	Unit
Span Number : 1			
	113 - Steel Stringer	331	ft

Flagged Condition Description

Subject: Cracked, Crippled, and Buckled Stringer Webs in Span 1

Structure Information:

This structure is a two span continuous pony truss with a floorbeam and stringer floor system supporting an open steel grate deck (photo 1). The stringers are noted to be 12"27#WF in the plans in the BIN folder (tw=0.24" and tf=0.4").

2019 Conditions:

The stringer webs over the floorbeams in span 1 exhibit lower web section loss, cracks, and web crippling/buckling at several locations. All locations listed below are newly discovered:

- -Stringer 2, Panel 1 at Floorbeam 1: 3/8" long crack to the lower web and it appears that the web has slightly crippled at the base. (photo 2)
- -Stringer 2, Panel 2 at Floorbeam 1: 1/8" long crack to the lower web and it appears that the web has slightly crippled at the base. (photo 2)
- -Stringer 3, Panel 1 at Floorbeam 1: 5/8" long crack to the lower web.
- -Stringer 4, Panel 2 at Floorbeam 1 is buckled 5/16" to the Right at approx. mid-height. There is no section loss to the web. (photo 3)
- -Stringer 2, Panel 2 at Floorbeam 2: 2" long crack surrounded by approx. 50% section loss to the lower web. There is also a hole to the Right side bottom flange at the floorbeam. Overall bottom flange section loss is approx. 50%. (photo 4)
- -Stringer 2, Panel 3 at Floorbeam 2: 1" long crack surrounded by approx. 50% section loss to the lower web. (photo 4)
- -Stringer 2, Panel 4 at Floorbeam 3: 1/2" long crack surrounded by approx. 50% section loss to the lower web. (photo 5)

Note:

Two apparent overloads crossed the bridge during this inspection (large box trucks).

Flag Photographs

Photo Number: 1 Photo Filename: 19-3209800-DSCF0288.JPG



Attachment Description: General View of Underside of Span 1, Looking Back

Photo Number: 2 Photo Filename: 19-3209800-DSCF0264.JPG



Attachment Description: Stringer 2 Lower Webs at Floorbeam 1 (Panels 1 and 2), Looking Right

Photo Number: 3 Photo Filename: 19-3209800-DSCF0259.JPG



Attachment Description: Stringer 4, Panel 2 at Floorbeam 1, Looking Ahead

Photo Number: 4 Photo Filename: 19-3209800-DSCF0265.JPG



Attachment Description: Stringer 2 Lower Webs and Bottom Flanges at Floorbeam 2 (Panels 2 and 3), Looking Left

Photo Number: 5 Photo Filename: 19-3209800-DSCF0283.JPG



Attachment Description: Stringer 2 Lower Web at Floorbeam 3 (Panel 4), Looking Left and Ahead