Form 1366 XM 5-26 6

NORTHERN PACIFIC RAILWAY COMPANY

AUTHORITY FOR EXPENDITURE

1926

Year: 1926

A.F.E. No. 70

Dept. No.

Superintendent's No. N.P.C. No.

Engineering Dept. No. 22

Rocky Mountain Div. First

District Branch. State Montana Val. Sec. No. 4

AUTHORITY IS REQUESTED FOR A NET EXPENDITURE OF $ 83 680.

Accounting distribution as follows: (Distribution to be made in General Office.)

	Operating Expenses	Profit and Loss	Net Operating Expenses	Net Profit and Loss
Cost of property retired	$ 17 700	$		$
Value of salvage	9 800		9 800	
Incidental costs			6 890	
Total to Operating Expenses				$ 16 790
Total to Profit and Loss				9 800
To Material and Supplies				
To Bills for Collection				
To Other Accounts				66 890
Net charge to investment account—Additions and Betterments				$ 93 480
Total of distribution				

Original Cost Adjustment Made in 1917

Budget reference: In 1926 Budget - Item 124

Closing Work: No. 4

Joint facility contract reference: None.

Original Cost Adjustment Made in 1917 (Cost nothing)

The location is - - - on this company's property. To secure rights, it will be necessary to

Location: Skyline, Montana, Bridge 17, Greenhorn Gulch

Title: Reinforce Steel Viaduct

Reason: The present structure consists of a steel viaduct 570 feet long and 98 feet high on concrete masonry. Built in 1896. It was designed for a typical load of 2-115 ton locomotives. Class W-3 engines weighing 275 tons and Class Z-8 engines weighing 295 tons are now being operated at reduced speed. The structure is overloaded and it is urgent that it be reinforced to eliminate the hazard of an accident to the structure or train and prevent a further deterioration of the structure from overload.

It is proposed to reinforce the viaduct towers by the addition of metal to tower posts and bracing; replace the girders with new girders of heavier design and place a slab deck and ballasted floor.

The old girders will be used in replacing timber bridges on branch lines.

Work to be done by company forces under charge of District Engineering Dept.

Accounting to concentrate in the office of District Engineering Dept.

Signature and Title: W. S. Clemmons Bridge Engineer. Date November 18, 1925.

APPROVED:

General Superintendent. Pres. Chief Engr. or Engr. Maint. of Way. Assistant General Manager.

Mech. Engr. Supt. Tele. or Signal Engr.

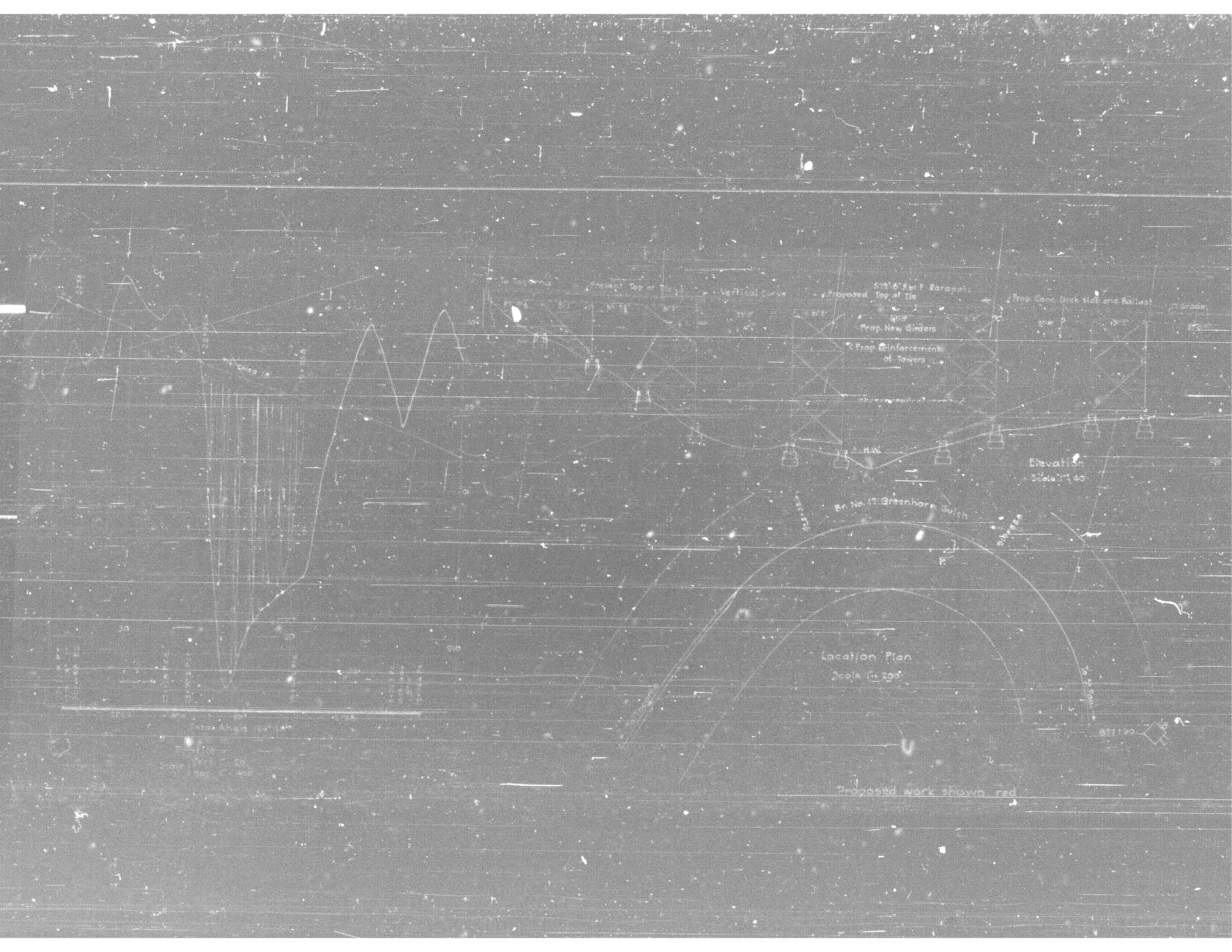
Chief Engineer. General Manager. Vice President.

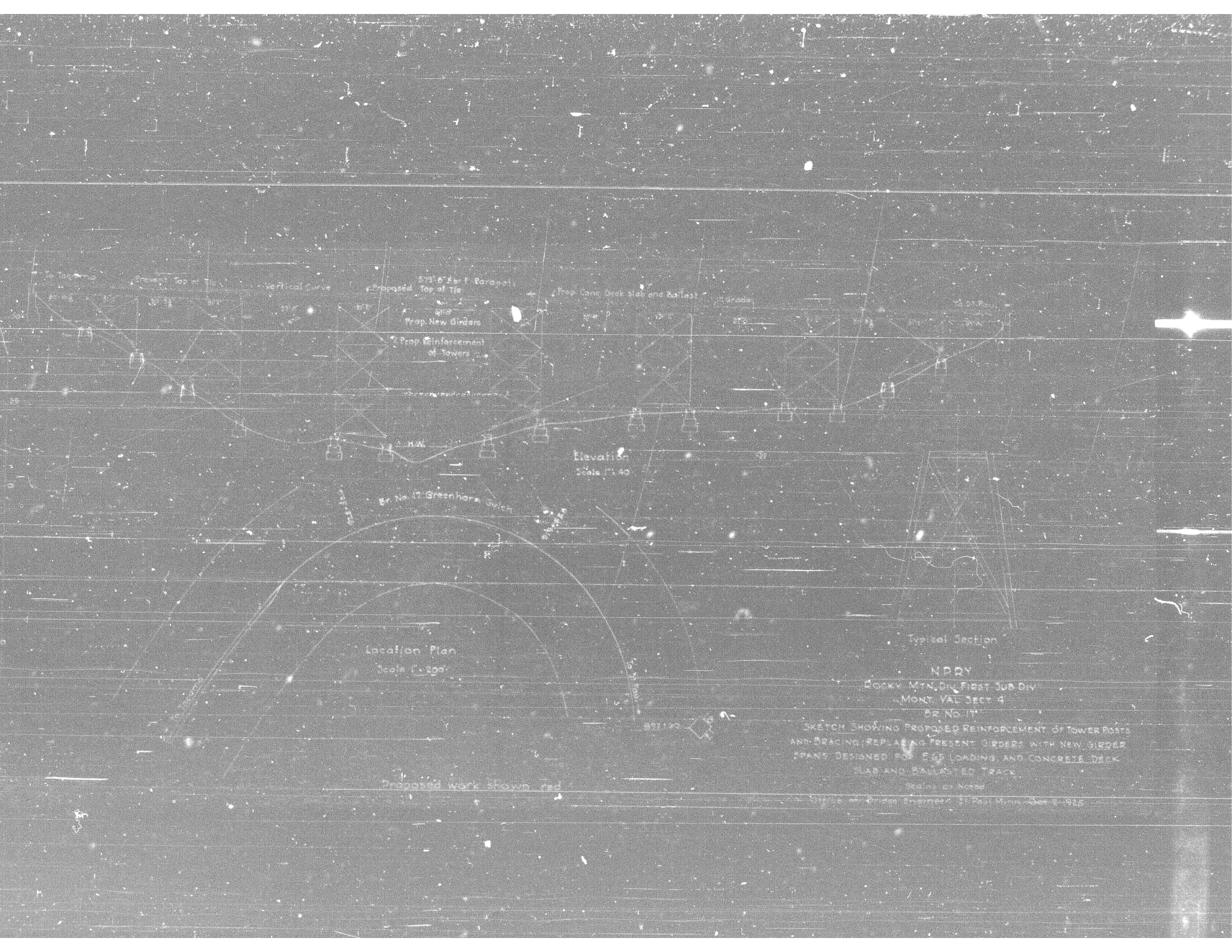
Date of Final Approval JAN 2 1926 19

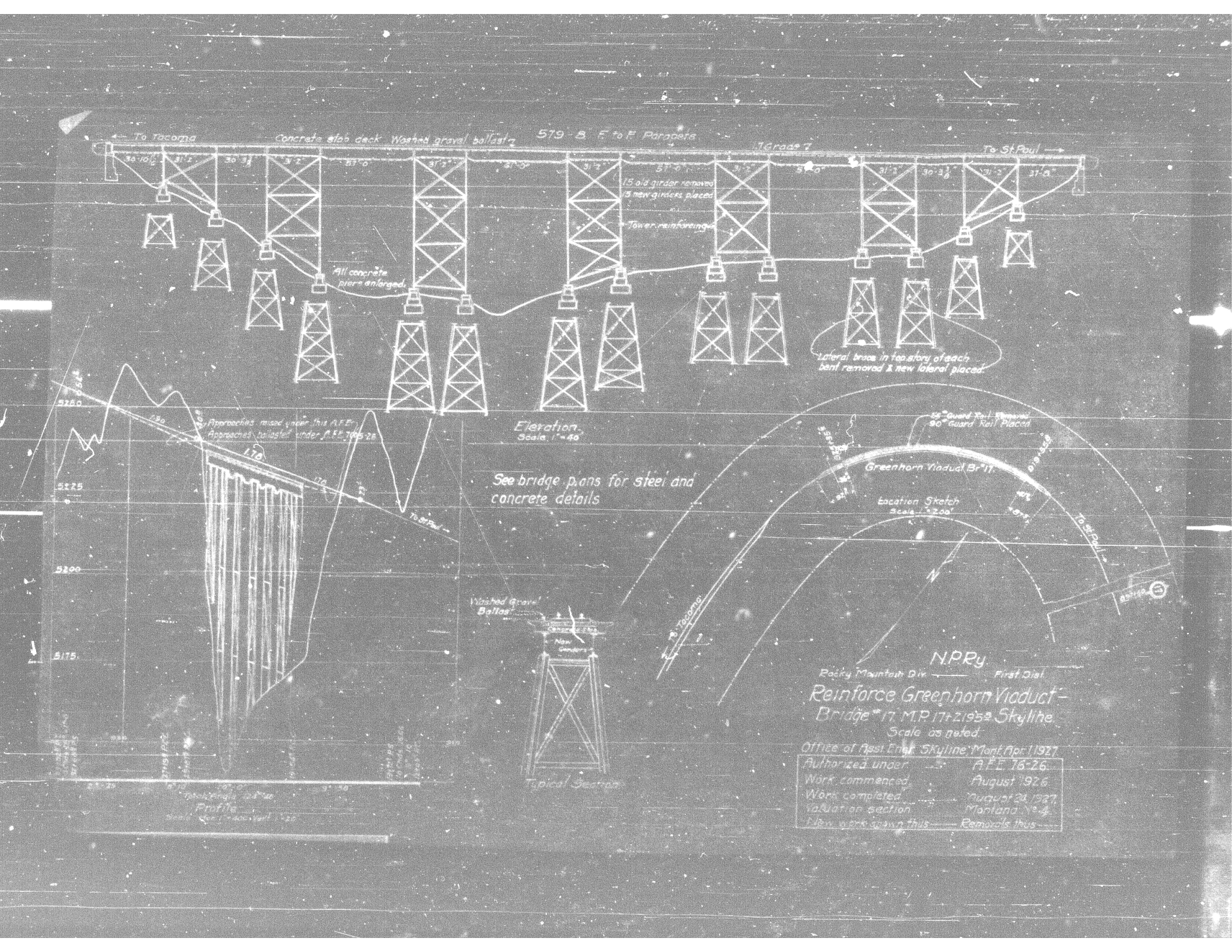
For Comptroller. Comptroller.

COMPTROLLER'S RECORD OF NOTICE OF APPROVAL AND OF COMPLETION

Form No. 1345 issued 19 Work begun 19 Work finished 19


To Tacoma
Present Top of Tie
Vertical Curve
Proposed Top of Tie
Prop. New Girders
Prop. Reinforcement of Towers
Prop. Conc. Deck Slab and Ballast
H.W.
Elevation
Br. No. 17 Greenhorn Gulch
Location Plan
Proposed work shown red


Vertical Curve
Proposed Top of Tie
Prop. New Girders
Prop. Reinforcement of Towers
Prop. Conc. Deck Slab and Ballast
Grade
Elevation
Scale 1" = 40'
Br. No. 17 Greenhorn Gulch
Location Plan
Scale 1" = 200'
Proposed work shown red
Typical Section
N.P.R.Y.
Rocky Mtn. Div. First Sub Div.
Mont. Val. Sect. 4
Br. No. 17
Sketch Showing Proposed Reinforcement of Tower Posts and Bracing; Replacing Present Girders with New Girder Spans Designed for E60 Loading and Concrete Deck Slab and Ballasted Track
Scale as Noted
Chief Bridge Engineer, St. Paul, Minn. Oct. 2, 1926


To Tacoma
Concrete slab deck Washed gravel ballast
579-8" F to F Parapets
17 Grade 7
To St Paul
15 old girder removed
15 new girders placed
Tower reinforcing
All concrete piers enlarged
Lateral brace in top story of each bent removed & new lateral placed
Elevation
Scale 1" = 40'
See bridge plans for steel and concrete details
Approaches mised under this A.F.E.
Approaches ballasted under A.F.E. 7605-28
Profile
Washed Gravel Ballast
New Girders
Typical Section
Location Sketch
Scale 1" = 200'
Greenhorn Viaduct Br. 17
To Tacoma
To St Paul
N
N.P.Ry.
Rocky Mountain Div. — First Dist.
Reinforce Greenhorn Viaduct
Bridge 17 M.P. 17+2195.8 Skyline
Scale as noted
Office of Asst Engr. Skyline, Mont. Apr. 1 1927
Authorized under — A.F.E. 76-26
Work commenced — August 1926
Work completed — August 24 1927
Valuation section — Montana No. 4
New work shown thus — Removals thus