

1. SITE I.D. NO

HAER INVENTORY

Historic American Engineering Record
Department of the Interior, Washington, D.C.

2. INDUSTRIAL CLASSIFICATION Bridges, Trestles, and Aqueducts				3. PRIORITY 1		4. DANGER OF DEMOLITION? (SPECIFY THREAT) <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> UNKNOWN					
TRUSS: steel				5. DATE circa 1909		6. GOVT SOURCE OF THREAT OWNER ADMIN					
8. NAME(S) OF STRUCTURE Penstock Bridge				7. OWNER/ADMIN Chelan County PUD #1							
10. STATE COUNTY WA 007				COUNTY NAME Chelan		CITY/VICINITY Leavenworth		CONG. DIST. 04			
11. SITE ADDRESS (STREET & NO) Crossing: Wenatchee River 2 miles north of Leavenworth on U.S. 2				12. EXISTING SURVEYS <input type="checkbox"/> NR <input type="checkbox"/> NHL <input type="checkbox"/> HABS <input type="checkbox"/> HAER-I <input type="checkbox"/> HAER <input type="checkbox"/> NPS <input type="checkbox"/> CL6 <input type="checkbox"/> CONF <input type="checkbox"/> STATE <input type="checkbox"/> COUNTY <input type="checkbox"/> LOCAL <input type="checkbox"/> OTHER				13. SPECIAL FEATURES (DESCRIBE BELOW) <input type="checkbox"/> INTERIOR INTACT <input type="checkbox"/> EXTERIOR INTACT <input type="checkbox"/> ENVIRONS INTACT			
14. UTM ZONE 10		EASTING 672350		NORTHING 5272850		SIGN		SCALE <input type="checkbox"/> 1:24 <input checked="" type="checkbox"/> 1:62.5 <input type="checkbox"/> OTHER			
UTM ZONE		EASTING		NORTHING		SIGN		SCALE <input type="checkbox"/> 1:24 <input type="checkbox"/> 1:62.5 <input type="checkbox"/> OTHER			
15. CONDITION 70 <input type="checkbox"/> EXCELLENT 71 <input type="checkbox"/> GOOD 72 <input type="checkbox"/> FAIR 73 <input type="checkbox"/> DETERIORATED 74 <input type="checkbox"/> RUINS 75 <input type="checkbox"/> UNEXPOSED 76 <input type="checkbox"/> ALTERED 82 <input type="checkbox"/> DESTROYED 85 <input type="checkbox"/> DEMOLISHED											
16. INVENTORIED BY Lisa Soderberg				AFFILIATION HAER/Washington State Bridge Inventory				DATE September 1979			
17. DESCRIPTION AND BACKGROUND HISTORY, INCLUDING CONSTRUCTION DATE(S), HISTORICAL DATE(S), PHYSICAL DIMENSIONS, MATERIALS, EXTANT EQUIPMENT, AND IMPORTANT BUILDERS, ENGINEERS, ETC. This riveted steel Baltimore Petit truss was built by the Great Northern Railroad Company as part of the Tumwater Hydroelectric Plant. The hydroelectric installation was built in 1909 under the direction of J.T. Fanning to power the Great Northern trains over the mountain division which extended from Leavenworth to Skykomish, a distance of 57 miles. This extensive system which required the building of conductors and additional power stations, was to be undertaken in a series of stages. The first stage entailed the production of electricity to power the trains through the 2.6 mile Cascade tunnel. Previously, of course, steam power had been used. However, steam power proved difficult, and was frequently dangerous because of the heat and gases emitted from the locomotives. The temperature in the locomotive cab was known to rise as high as 200°F. It was the dangerous conditions within the tunnel that limited the Great Northern's capacity for hauling freight through the mountains, and it was hoped that the load capacity would be increased through the electrification of the tunnel. (CONT OVER)											
18. ORIGINAL USE carry penstock				PRESENT USE carry penstock				ADAPTIVE USE			
19. REFERENCES—HISTORICAL REFERENCES, PERSONAL CONTACTS, AND/OR OTHER Earl J. Beery, "The Electrical Development of the State of Washington," University of Washington thesis, 1915, pp. 92-96. Cary T. Hutchinson, "Generating System for the Electrification of the Great Northern Railway," <u>Railroad Age Gazette</u> , Vol. XLVII, No. 26, 24 December 1909. Cary T. Hutchinson, "The Electric System of the Great Northern at Cascade Tunnel," <u>Railroad Age Gazette</u> , Vol. XLVII, No. 23, pp. 1090-1092. (CONT OVER)											
20. URBAN AREA 50,000 POP. OR MORE? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				21. HCRS REGION NW		22. PUBLIC ACCESSIBILITY <input type="checkbox"/> YES, LIMITED <input checked="" type="checkbox"/> YES, UNLIMITED <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN				23. EDITOR INDEXER	
24. LOCATED IN AN HISTORIC DISTRICT? <input type="checkbox"/> YES <input type="checkbox"/> NO				NAME		DISTRICT I.D. NO					

