



LPB-53/80

City of Seattle
Department of Community Development/Office of Urban Conservation

Landmark Nomination Form

Name Fremont Bridge Year Built 1917
(Common, present or historic)

Street and Number Fremont Avenue North over Lake Washington Canal

Assessor's File No. City Bridge Engineer's File # 12

Legal Description Plat Name _____ Block _____ Lot _____

Present Owner City of Seattle Present Use drawbridge:vehicular over water traffic

Address _____

Original Owner City of Seattle Original Use same

Architect F.A. Rapp, City Bridge Engineer under Builder substructure: Pacific States Constr.
A.H. Dimock, City Engineer; architectural Co.
treatment of piers by D.R. Huntington, City Architect superstructure: US Steel Products Co.

Description: Present and original (if known) physical appearance and characteristics

Dwarfed by the Aurora Bridge to the east, the Fremont Bridge, its 1973 coat of orange paint faded to a dull coral, has been opening and closing its double leaf gates more often than any other Seattle drawbridge since its erection in 1917. Three drawbridges were erected on the Lake Washington Ship Canal between 1917 and 1919, employing technology developed in Chicago in 1898 by Chicago city engineer John Erickson. The Ballard and University Bridges (originally the 15th Avenue Northeast Bridge and the Eastlake Bridge, respectively) measuring 218 feet each, between trunnions, are shorter in length than the 242-foot Fremont Bridge, but at 52 feet from the water line, they are 15 feet higher in closed position than the Fremont Bridge, and consequently are not opened and closed as frequently. The principle of the bascule bridge is that of a counterweight balancing the leaf of the bridge at a point called the trunnion, located in each of these bridges 13 feet behind the actual pivot of operation, creating a longer lever-arm in closed than in open position.

The cantilevered leaves of the Fremont Bridge are 108 feet each, the length from trunnion to anchor brackets 38 feet 6 inches. Counterweight pits of 13-foot depth are necessary only in this bridge of the three, due to its shorter height and greater span. Dead-load stresses are computed with the bridge is balanced on the trunnion; whereas the dead- and live-load stresses are assumed carried on the forward pivot.

The trusses of the draw-span are "of half-through type, with trusses having horizontal top chords and curved bottom chords." All structural steel joints are riveted. The mechanism of operation and the counterweight pits are housed in two concrete piers, each with two windowed towers. The southeast tower has been modernized, and a second story added, in 1960. The towers of the others,

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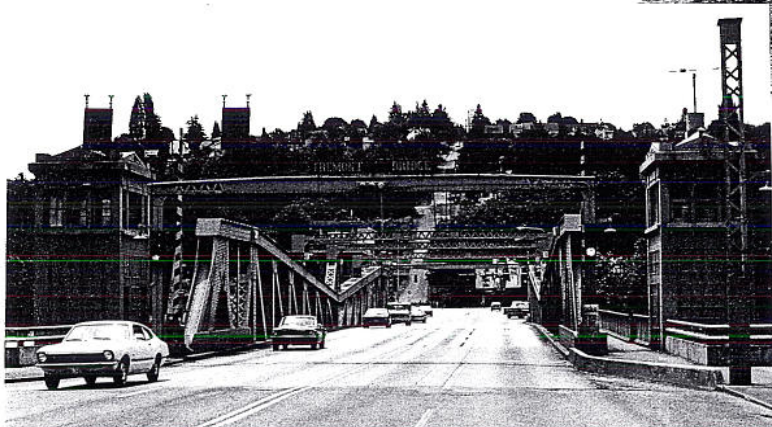
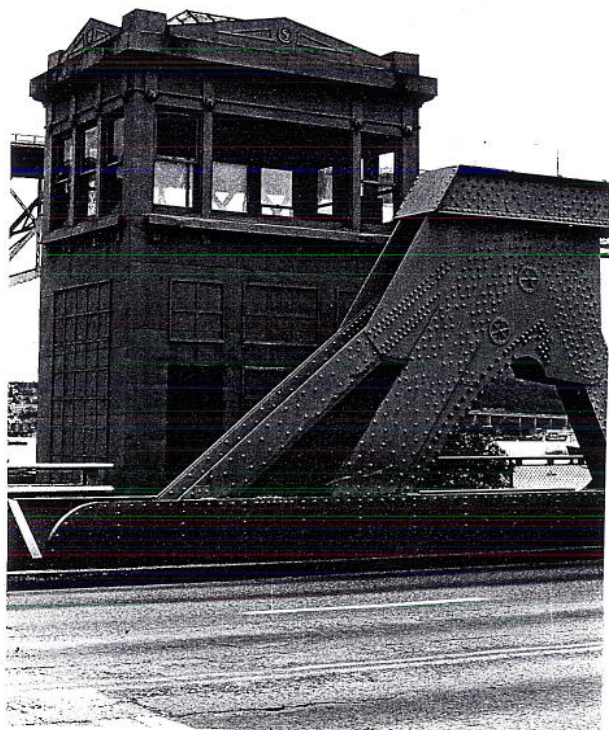
no longer in use, have been restored, their glass being replaced with plexiglass, in 1973. On the north bank, the Fremont side, industries crowd up to both sides of the abutments; and some storage space is utilized underneath. The south abutment rests in a more naturalistic setting, extending in a muddy path to the west and toward the West Lake Union houseboat community to the east.

Statement of significance

When the Lake Washington SHip Canal was constructed, making possible the passage of ocean-going ships into Lakes Union and Washington, the creek which carried a small trickle of run-off from Lake Union into Salmon Bay was greatly enlarged. A dam regulated flow of water temporarily while the water levels were being altered during the course of construction of the Fremont cut. The Latona and Stoneway bridges which had formerly carried traffic on timber trestles from central Seattle to Fremont and Wallingford were no longer realistic in face of the anticipated increase of large water craft through the canal. The three draw-span bridges based on a Chicago model of 1898¹⁸⁹⁸ were conceived as a set, introducing that technology to Seattle with the advent of ship canal traffic.

More than most bridges, the Fremont Bridge is embraced by members of the community it serves and is named for as a treasured landmark, to the extent that they petitioned the city in 1972 to allow the residents a voice in the selection of the bridge's color. The city presented the Fremont Community Council with a selection of 4 colors from which to choose: the utilitarian green typically given to the city's steel bridges, a deep blue, gold, and the orange that was finally selected. The reopening of the bridge in its new garb was attended by enthusiastic Fremont residents also dressed in orange.

Photographs:



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Date January 2, 1980

Reviewed

[Signature]
Historic Preservation Officer

Date

15 Jan 1980