1. SITE I.D. NO					HAER IN	ENTORY				eering Keco or, Washingt		
2. INDUSTRIAL CLASSIFICATION					3. PRIORITY	4. DANGER OF DEMOLITIO	N?	YES	□ NO	MUNKNOWN		
Bridges, Trestles, and Aqueducts	7	6	5	3	1	(SPECIFY THREAT)						
MOVE: Vertical lift			<u> </u>		5. DATE 1916/59	6. GOVT SOURCE OF THRE	AT	, OWN	IER	ADMIN		
State Designation Number:						7. OWNER/ADMIN						
<u>0500000 5/1E 5/1W</u>						Washington St	ate Depa	<u>rtment o</u>	f Transpo	rtation_		
8. NAME(S) OF STRUCTURE						9. OWNER'S ADDRESS	ictwatio	n Duildi	0.0			
Vancouver-Portland Bridge Columbia River Interstate						Highway Admir			ng			
COlumbia River Titterstate						Olympia, wasi	i i iig con	30304				
	/VICIN	ITY			CONG.	STATE	COUNTY NAME		CITY/VICINITY	7		
COUNTY 0 1 1 Clark Van	2001	WOY			DIST. 0 4	COUNTY			1		CONG. DIST.	
11. SITE ADDRESS (STREET & NO)	ICOL	IVEI				12. EXISTING NR	□NHL	□HABS	 □HAER—I	HAER	□NPS	CL6
Crossing: Columbia River						SURVEYS	CONF	STATE	COUNTY	LOCAL	OTHER	_ !
						13. SPECIAL FEATURES (DI	SCRIBE BELOW)					
						INTERIOR INTAC	Г <u></u>	EXTERIO	R INTACT		☐ ENVIRON:	INTACT
14. UTM ZONE EASTING NORTHING	Т. Т			888	SIGN SCALE	_ ~		QUAI)			
1 0 5 2 4 8 9 0 5 0 5	0	1	7 0)	01011	OTHER		NAM	<u>Portlan</u>	d, Washir	igton/Or	<u>egon</u>
UTM ZONE EASTING NORTHING	1.1				SIGN SCALE	1:24 1:62.5		QUAI				
1 0 5 2 5 6 2 0 5 0 5 15. CONDITION 70 EXCELLENT 71 GOOD	72		6 0		DETERIORATED	☐ OTHER	UNEXPOSED	NAM 76 ☐ ALTE		DESTROYED	05 - D D51	IOLISHED
16. INVENTORIED BY	12 🗆	LAIR		73	AFFILIATION	74 LI HOINS 75 L	JUNEXPOSED	76 ALTE	.DA	<u> </u>	03 1 DEN	IOLISHED
Lisa Soderberg						ashington State	Bridge I	nventory		April 198	0	
17. DESCRIPTION AND BACKGROUND HISTORY, INCLUDING CONSTR	NOT.											
materials.extantequipment.andimportantbuilders.er "With brilliant formality, th	ngine 1e (Colu	imb.	ia I	River Inters	tate bridge yes						
"With brilliant formality, the of commercial and industrial devel	ngine 1e (Lopr	ers. e Colu nent	ETC. umb col	ia l f th	River Inters ne Northwest	tate bridge yes ," reported th	ne Oregon	ian on F	ebruary 1	15, 1917.	The ve	ertical
"With brilliant formality, the of commercial and industrial devel lift bridge, consisting of a serie	ngine 1e (lopm es (cers. Colu Colu nent of t	_{ETC.} umb cot thro	ia l f th ough	River Inters ne Northwest n riveted tr	tate bridge yes ," reported thuss spans with	ne <u>Oregon</u> polygona	<u>ian</u> on F 1 top ch	ebruary 1 ords, was	15, 1917. s the sec	The ve ond high	ertical way
"With brilliant formality, the of commercial and industrial devel lift bridge, consisting of a serie bridge to cross the Columbia River	ngine ne (lopm es (Colument Sof the control of the cont	ETC. umb cont thro king	ia I f th ough g Po	River Inters ne Northwest n riveted tr ortland, Ore	tate bridge yes ," reported thuss spans with gon and Vancou	ne <u>Oregon</u> polygona ver, Wash	ian on F 1 top ch ington.	ebruary 1 ords, was It repla	15, 1917. s the sec aced a fe	The ve ond high rry boat	ertical nway :
"With brilliant formality, the of commercial and industrial devel lift bridge, consisting of a serie bridge to cross the Columbia River which "tooted a mournful salute to	ngine lopm es c o th	ers.e Colument of t link	ETC. umb = chro chec chec	ia l f th ough g Po erin	River Inters ne Northwest n riveted tr ortland, Ore ng thousands	tate bridge yes ," reported th uss spans with gon and Vancous crowded on the	ne <u>Oregon</u> polygona ver, Wash bridge.	ian on F 1 top ch ington. " Const	ebruary 1 ords, was It repla ruction w	l5, 1917. s the sec aced a fe which beg	The vend high ond high rry boat an on tl	ertical nway ; ne bridg
"With brilliant formality, the of commercial and industrial devel lift bridge, consisting of a serie bridge to cross the Columbia River	ngine lopm es c o th	ers.e Colument of t link	ETC. umb = chro chec chec	ia l f th ough g Po erin	River Inters ne Northwest n riveted tr ortland, Ore ng thousands	tate bridge yes ," reported th uss spans with gon and Vancous crowded on the	ne <u>Oregon</u> polygona ver, Wash bridge.	ian on F 1 top ch ington. " Const	ebruary 1 ords, was It repla ruction w	l5, 1917. s the sec aced a fe which beg	The vend high ond high rry boat an on tl	ertical nway ; ne bridg
"With brilliant formality, the of commercial and industrial devel lift bridge, consisting of a serie bridge to cross the Columbia River which "tooted a mournful salute to in March 1915, was completed in Jatraffic. The bridge was built by the process to the control of the con	ne (lopmes of, lopmes of the l	Colument of t link ne c ary	erc. umb thro king chee 191	ia I f th ough g Po erin 17.	River Inters ne Northwest n riveted tr ortland, Ore ng thousands On Februar	tate bridge yes," reported thuss spans with gon and Vancous crowded on the y 14, 1917, the	ne <u>Oregon</u> polygona yer, Wash bridge. vertica under th	ian on F l top ch ington. " Const l lift s	ebruary 1 ords, was It repla ruction v pan was 1	15, 1917. The secaced a fewhich begformally The Columb	The vented in The vente	ertical nway : ne bridg :o
"With brilliant formality, the of commercial and industrial devel lift bridge, consisting of a serie bridge to cross the Columbia River which "tooted a mournful salute to in March 1915, was completed in Jatraffic. The bridge was built by the printerstate Bridge Commission.	ne (lopmes con the lopmes con the lo	cers.colument of t link ne c ary	throched	ia I f though g Po erin 17. Cla	River Inters ne Northwest n riveted tr ortland, Ore ng thousands On Februar ark and Mult	tate bridge yes," reported thuss spans with gon and Vancous crowded on the y 14, 1917, the	ne Oregon polygona ver, Wash bridge. vertica under th	ian on F l top ch ington. " Const l lift s e direct	ebruary 1 ords, was It repla ruction v pan was 1 ion of th	15, 1917. Is the sec Acced a fe Which beg Formally The Columb	The ventond high rry boat an on the opened to the counties of	ertical nway ; ne bridg ; ;
"With brilliant formality, the of commercial and industrial devel lift bridge, consisting of a series bridge to cross the Columbia River which "tooted a mournful salute to in March 1915, was completed in Jatraffic. The bridge was built by the process in the structure is reflected in the structure is reflected.	ne (lopmes con the lopmes con the lo	cers.colument of t link ne c ary	of	ia I f though g Po erin 17. Cla tal	River Inters ne Northwest n riveted tr prtland, Ore ng thousands On Februar ark and Mult importance	tate bridge yes," reported thuss spans with gon and Vancous crowded on the y 14, 1917, the	ne Oregon polygona ver, Wash bridge. vertica under th	ian on F l top ch ington. " Const l lift s e direct le of Cl critic, J	ebruary 1 ords, was It repla ruction v pan was 1 ion of th ark and N ohn Rusk	15, 1917. Is the sec Acced a fe Which beg Formally The Columb	The ventond high rry boat an on the opened to the counties of	ertical nway ; ne bridg ; ;
"With brilliant formality, the of commercial and industrial devel lift bridge, consisting of a serie bridge to cross the Columbia River which "tooted a mournful salute to in March 1915, was completed in Jatraffic. The bridge was built by the process of the Commission.	ne (lopmes con the lopmes con the lo	cers.colument of t link ne c ary	throchec of nent	ia l f though g Po erin 17. Cla tal	River Inters ne Northwest n riveted tr ortland, Ore ng thousands On Februar ark and Mult	tate bridge yes," reported thuss spans with gon and Vancous crowded on the y 14, 1917, the nomah Counties and pride that the 19th cents	ne Oregon polygona ver, Wash bridge. vertica under th	ian on F l top ch ington. " Const l lift s e direct	ebruary 1 ords, was It repla ruction v pan was 1 ion of th ark and N ohn Rusk	15, 1917. Is the sec Acced a fe Which beg Formally The Columb	The ventond high rry boat an on the opened to the counties of	ertical nway ; ne bridg ; ;
"With brilliant formality, the of commercial and industrial devel lift bridge, consisting of a serie bridge to cross the Columbia River which "tooted a mournful salute to in March 1915, was completed in Jatraffic. The bridge was built by the process of the commission. The instilled in the structure is reflected to the control of the	ngine (lopmes of, lothanua	cers. Colument ment link ne cary ole onum ted	of	ia l f th ough g Po erin 17. Cla tal a (River Inters ne Northwest n riveted tr prtland, Ore ng thousands On Februar ark and Mult importance quotation by	tate bridge yes," reported thuss spans with gon and Vancous crowded on the y 14, 1917, the nomah Counties and pride that the 19th cents	ne Oregon polygona ver, Wash bridge. vertica under th	ian on F l top ch ington. " Const l lift s e direct le of Cl critic, J	ebruary 1 ords, was It repla ruction v pan was 1 ion of th ark and N ohn Rusk	15, 1917. Is the sec Acced a fe Which beg Formally The Columb	The ventond high rry boat an on the opened to the counties of	ertical nway ; ne bridg ; ;
"With brilliant formality, the of commercial and industrial devel lift bridge, consisting of a series bridge to cross the Columbia River which "tooted a mournful salute to in March 1915, was completed in Jatraffic. The bridge was built by the prince of the bridge Commission. The instilled in the structure is reflected in the structure is reflected bridge of the b	ngine (lopmes of the control of the	colument of the cary	enc. control of the c	ia l f th ough g Po erin 17. Cla tal a C RESEN Brio	River Inters ne Northwest n riveted tr ortland, Ore ng thousands On Februar ark and Mult importance unotation by dge/vehicula	tate bridge yes," reported thuss spans with gon and Vancous crowded on the y 14, 1917, the nomah Counties and pride that the 19th cents	ne Oregon polygona ver, Wash bridge. vertica under th	ian on F l top ch ington. " Const l lift s e direct le of Cl critic, J	ebruary 1 ords, was It repla ruction v pan was 1 ion of th ark and N ohn Rusk	15, 1917. Is the sec Acced a fe Which beg Formally The Columb	The ventond high rry boat an on the opened to the counties of	ertical nway ; ne bridg ; ;
"With brilliant formality, the of commercial and industrial devel lift bridge, consisting of a series bridge to cross the Columbia River which "tooted a mournful salute to in March 1915, was completed in Jatraffic. The bridge was built by the prince and the structure is reflected in the structure in the structure is reflected in the structure in the structure in the structure is reflected in the structure in the struc	NGINE (I OPTION OF THE CONTROL OF TH	EERS.I. COlument Dof t link Hine Column Donum Led DOOR	of nential	ia I f th cough erin 17. Cla a (RESEN Brion	River Inters ne Northwest n riveted tr ortland, Ore ng thousands On Februar ark and Mult importance quotation by dge/vehicula	tate bridge yes," reported thuss spans with gon and Vancouver crowded on the y 14, 1917, the nomah Counties and pride that the 19th centur	ne Oregon polygona ver, Wash e bridge. e vertica under th the peop	ian on F l top ch ington. " Const l lift s de direct le of Cl critic. J	ebruary 1 ords, was It repla ruction was 1 ion of th ark and M ohn Rusk	15, 1917. Is the sec aced a fe which beg formally ne Columb Multnomah in, mount	The ventond high rry boat an on the opened to the counting and the counting and on a counting and on a counting and on a counting and and a counting	ertical nway ; ne bridg ; ;
"With brilliant formality, the of commercial and industrial devel lift bridge, consisting of a series bridge to cross the Columbia River which "tooted a mournful salute to in March 1915, was completed in Jatraffic. The bridge was built by the prince in the structure is reflected in the structure in the structure is reflected in the structure in the structure in the structure is reflected in the structure in t	NGINERING NO	EERS.E. COLUMN TERRITORY TO THE COLUMN TERRITORY TO TH	in PI	ia I f th cugh g Po erin 17. Clo tal a co a Brio n idgo	River Inters ne Northwest n riveted tr ortland, Ore ng thousands On Februar ark and Mult importance quotation by dge/vehicula files. e," Pacific	tate bridge yes," reported thuss spans with gon and Vancous crowded on the y 14, 1917, the nomah Counties and pride that the 19th centure. Builder and English and English and English centure.	ne Oregon polygona ver, Wash e bridge. e vertica under th the peop ary art o	ian on F l top ch ington. " Const l lift s e direct le of Cl critic. J	ebruary 1 ords, was It repla ruction w pan was 1 ion of th ark and M ohn Ruski	15, 1917. Is the sec aced a fe which beg formally ne Columb Multnomah in, mount	The ventond high rry boat an on the opened to the counting and on a second seco	ertical nway ne bridg to
"With brilliant formality, the of commercial and industrial devel lift bridge, consisting of a series bridge to cross the Columbia River which "tooted a mournful salute to in March 1915, was completed in Jatraffic. The bridge was built by the prince of the bridge Commission. The instilled in the structure is reflusively entire the structure of the bridge of the bridge of the bridge of the structure of the bridge of the br	NGINE NO	EERS.I. COLUMENT MENT MINE MINE MINE MINE MINE MINE MINE MINE	of the tat: Bright Bri	ia I f though g Po eerin 17. Cla tal a (RESSEN ion idgo Br	River Inters ne Northwest n riveted tr ortland, Ore ng thousands On Februar ark and Mult importance quotation by dge/vehicula files. e," Pacific idges," Engi	tate bridge yes," reported thuss spans with gon and Vancouverowded on the y 14, 1917, the nomah Counties and pride that the 19th centure. Builder and Engering News-Research	ne Oregon polygona ver, Wash e bridge. e vertica under th the peop ry art c	ian on F l top ch ington. " Const l lift s e direct le of Cl critic. J	ebruary 1 ords, was It repla ruction w pan was 1 ion of th ark and M ohn Ruski	15, 1917. Is the sec aced a fe which beg formally ne Columb Multnomah in, mount	The venue ond high rry boat an on the opened on the counting ed on the	ertical nway ; ne bridg ; ;
"With brilliant formality, the of commercial and industrial devel lift bridge, consisting of a seriest bridge to cross the Columbia River which "tooted a mournful salute to in March 1915, was completed in Jatraffic. The bridge was built by the prince of the bridge Commission. The instilled in the structure is reflated in the structure is reflated. Bridge/vehicular 19 REFERENCES—HISTORICAL REFERENCES. PERSONAL CONTACT Washington State Department of Trade Bridge Plate E.E. Howard, "Columbia River Inter "State of Washington Moves to Abola Our Banance 50,000" 20 URBANAREA 50,000 21 HCSS REGIONAL CONTACT RESEARCH STATE OF THE STATE OF WASHINGTON MOVES TO ABOLA CONTACT RESEARCH STATE OF	NGINE NEIGH NE NEIGH NEIGH NEIGH NE NEIGH NEIGH NE NEIGH NEIGH NEIGH NE NEIGH NEIGH NE NEIGH NE NEIGH NE NEIGH NE NEIGH NE NEIGH NE	EERS.I. COLUMENT MENT MINE MINE MINE MINE MINE MINE MINE MINE	of the tat: Bright Bri	ia I f though g Po eerin 17. Cla tal a (RESSEN ion idgo Br	River Inters ne Northwest n riveted tr ortland, Ore ng thousands On Februar ark and Mult importance quotation by it use dge/vehicula files. e," Pacific idges," Engi	tate bridge yes," reported thuss spans with gon and Vancouverowded on the y 14, 1917, the nomah Counties and pride that the 19th centure Builder and Elepton News-Royes, LIMITED MYES, L	ne Oregon polygona ver, Wash e bridge. e vertica under the peopury art conditions and the peopury art cond, 89	ian on F l top ch ington. " Const l lift s e direct le of Cl critic. J	ebruary 1 ords, was It repla ruction w pan was 1 ion of th ark and M ohn Ruski	15, 1917. Is the sec aced a fe which beg formally ne Columb Multnomah in, mount	The venue ond high rry boat an on the opened on the counting of the counting o	ertical nway ne bridg to
"With brilliant formality, the of commercial and industrial devel lift bridge, consisting of a seriest bridge to cross the Columbia River which "tooted a mournful salute to in March 1915, was completed in Jatraffic. The bridge was built by the prince in the structure is reflected in the structure is reflected in the structure is reflected. Washington State Department of Transpirity Plate E.E. Howard, "Columbia River Interstate of Washington Moves to Abole Urban Area 50,000	NGINE	EERS.I. COLUMENT MENT MINE MINE MINE MINE MINE MINE MINE MINE	of the tat: Bright Bri	ia I f though g Po eerin 17. Cla tal a (RESSEN ion idgo Br	River Inters ne Northwest n riveted tr ortland, Ore ng thousands On Februar ark and Mult importance quotation by it use dge/vehicula files. e," Pacific idges," Engi	tate bridge yes," reported thuss spans with gon and Vancouverowded on the y 14, 1917, the nomah Counties and pride that the 19th centure. Builder and Engering News-Research	ne Oregon polygona ver, Wash e bridge. e vertica under the peopury art conditions and the peopury art cond, 89	ian on F I top ch ington. " Const I lift s e direct le of Cl ritic. J ADAPTIVE US 29 June 29 June	ebruary 1 ords, was It repla ruction w pan was 1 ion of th ark and M ohn Ruski	15, 1917. Is the sec aced a fe which beg formally ne Columb Multnomah in, mount	The venue ond high rry boat an on the opened on the counting ed on the	ertical nway ne bridg to

plaque at the bridge's entrance: "Therefore when we build, let us think that we build forever, let it not be for present use alone, let it be such work as our descendants will thank us for...and that men will say as they look upon the labor and wrought substance of (the stones). See! This our fathers did for us."

The bridge was indeed one of enormous magnitude. The total length of the bridge is 23,000 feet, including all approaches. The main channel spans over the Columbia River are a total of 3,531 feet long and include seven 265' Parker truss spans; two 275' Parker truss spans; one 531' Petit truss; four concrete T-beams; 50, 60, 75, and 56 feet in length; and one 275 foot vertical lift draw span. The draw span provides a vertical clearance of 150 feet above ordinary high water, and creates a channel 250 feet wide.

The steel for the bridge was fabricated by the United States Steel Products Company and the Northwest Steel Company and was erected by the Porter Brothers. Because of the vast length of the bridge, and the difficulty of building falsework in the river, and erecting the spans with a traveler, all but one span was erected on falsework on shore, and transferred to four barges, which floated them to the respective piers.

To the south of the main channel steel structure, Hayden Island is crossed on an embankment 1480 feet long. The Oregon Slough was bridged by 11-plate girder spans, 1140 feet long. From the south side of the Oregon Slough there are two approaches, one about 10,800 feet long, and the other about 5,800 feet long. These two approaches are resting on embankments averaging about 24 feet in height. The embankments were constructed by the Tacoma Dredging Company, and the Standard American Dredging Company. Suction dredges and pumps deposited and transported most of the 1,500,000 cubic yards of material to the two approaches through 9,000 feet of pipe. The article in the Pacific Builder and Engineer claimed that "such long distance dredging into an embankment so comparatively narrow and high is believed to mark a record for work of this character."

The substructure of the bridge was constructed by the Pacific Bridge Company. The piers constructed of concrete, are of the open crib type. They are resting upon exceptionally long piles, sunk by means of water jets to a depth of about 110 feet below low water. The ease in securing these unusually long piles at a reasonable cost was a major factor in determining the type of piers to be used. The piles were jetted through open cribs of timber, about 90 piles to each crib. When this concrete had hardened, the water in the crib was pumped out, and the remainder of the concrete was poured. The upper ends of the piles are embedded in the concrete bases of the piers. Due to the depth of penetration of the piles, and to the rigidity of the concrete crib, the pier could withstand, and would remain stable through unusual amounts of scour. In the June 29, 1917 issue of Pacific Builder and Engineer, an article describing the bridge construction asserts that the "handling of these large open cribs and the sinking of the piles, constitute one of the most interesting features of the work." About 23,000 cubic yards of concrete, 1,800,000 feet of timber, and 222,000 linear feet of piling, were used in the construction of the piers.

The bridge has a 38 foot wide roadway which originally included one 5 foot sidewalk, two 10 foot roadways for slower traffic, and one 22 foot roadway for street cars and faster traffic. The bridge was designed to carry six lines of rails for both standard and narrow-gauge double-track electric railways.

Concrete handrails which terminated in ornamental columns supporting lamps, stood at the two entrances of the steel span. The Washington Chapter of the Daughters of the American Revolution donated a drinking fountain which was embedded in the handrail at the Vancouver end of the bridge. The horns of bronze buffalo skulls which decoratively balanced drinking cups, were above a plaque marking the old Oregon Trail.

Mr. F.M. Cortelyon was the resident engineer throughout construction. The consulting engineers for (continued)

ABSTRACT

HAFR NO LC TECH REPORT HIST REPORT CONTEMP PHOTO HIST PHOTO CONTEMP DRWG HIST DRWG COLOR PLATE PHOTOGRAM SW FILM

Description (continued)

the design and construction of this vertical lift bridge was the renowned engineering firm of Harrington, Howard, and Ash of Kansas City, Missouri. It was John Lyle Harrington who worked with J.A.L. Waddell to design and construct the two vertical lift bridges in Tacoma during the early teens.

The total cost of the bridge, including all approaches was \$1,683,000. The toll bridge was owned jointly by Clark and Multnomah Counties until January 1, 1929, when Washington and Oregon purchased the bridge from the counties, and

subsequently removed the tolls.

In 1958, the bridge was reconstructed, and a vertical lift bridge was built parallel to the existing bridge.

Currently, the cost of maintaining the bridge is shared by the two states, and the maintenance is supervised by Oregon.

The Vancouver-Portland Interstate Bridge was the second highway bridge to be constructed across the Columbia River, and the first one of such magnitude to be erected. Firmly linking Puget Sound to Portland by automobile, the bridge became one of the first discernible signs of a new era in transportation in the Pacific Northwest.

25. Photos and Sketch Map of Location

