

**CORVALLIS, BENTON COUNTY, OREGON  
BUILDING AND STRUCTURE  
INVENTORY FORM**

CORVALLIS PRESERVATION SOCIETY, INC.  
CULTURAL RESOURCE SURVEY 1983-1984

INVENTORY NO: 782B  
ROLL/EXP: 25F/18,19,20

Form Prepared By:

NAME: J. Sanders Chapman

DATE: 7-24-84

**identification**

BUILDING ADDRESS: Foot of Van Buren Street  
Corvallis-Lebanon Highway 210

COMMON NAME: Van Buren Street Bridge  
Willamette River, HISTORIC NAME:

BUILDING TYPE/USE: Automobile, wagon, pedestrian bridge

*Legal Description* ADDITION:

MAP NO:

BLOCK/TAX LOT NO:

LOT NO(S):

*Current Owner* NAME: State of Oregon

ADDRESS:

CITY: STATE:

ZIP CODE: PHONE:

**data**

CONSTRUCTION DATE: 1912-1913

ARCHITECTURAL DESIGNATION:

Steel swing-span truss bridge

**a.** RELATED OUTBUILDINGS AND FEATURES

**b.** HISTORIC PHOTO/SOURCE LOCATION

- 1. 1912 Bridge plans, contract #131, Coast Bridge Co; at Oregon Dept. of Transportation, Salem. (see continuation sheet)

**c.** FORMER USE OF LAND

**d.** FORMER USE(S) OF PRESENT BUILDING

SANBORN MAP REPRESENTATION: 1927

**status**

- NATIONAL REGISTER
- STATEWIDE INVENTORY
- 1982 COMPREHENSIVE PLAN
- 1979 WOMANS CLUB SURVEY
- Engineering Antiquities Inventory

**significance**

- NO
- YES
- POTENTIALLY SIGNIFICANT (see continuation sheets)

# CORVALLIS CULTURAL RESOURCE INVENTORY FORM

ARCHITECT: Coast Bridge Company

BUILDER: Andrew J. Porter

## e. physical description

The 708 foot long bridge spanning the Willamette River at the foot of Van Buren Street is a three span steel bridge consisting of one steel through truss swing span, a 171 foot steel through truss (secondary span), a 57 foot steel pony truss at the east end, and nine 19-foot timber spans at the west end, which replaced the original west end 57 foot steel pony truss. The swing span truss is of Pratt configuration; the large through truss is a Parker; and the pony truss is a Warren, with polyginal upper chords. The individual truss members are connected together with steel pins.

The spans rest upon cement piers and drawrest. The piers were repaired in 1940. The original capacity of the bridge (see continuation sheet)

## photograph

INVENTORY NO:  
782B

ADDRESS:

Foot of Van Burer  
Highway 210

ELEVATION:

VIEW TO:  
Northeast



PERIOD: The Automobile Era

THEME: 6a, 8e

## f. historical background

The bridge across the Willamette River at Van Buren Street was contracted for construction in 1912 and completed in 1913. The plans for the bridge were drawn by a Portland engineer from the Coast Bridge Company. The Coast Bridge Company was in operation c. 1910-1917, and acted as a "broker" for regional bridge building. (The Coast Bridge Company files are currently in possession of the Oregon Department of Transportation, Highway division, Salem)

(see continuation sheet)

## continuation sheet

INVENTORY NO: 782B

B. Historic Photo/Source Location:

2. 1913 view, Benton County Historical Museum.
3. 1917 view, OSU Archives

E. Physical Description:

was 24 tons on two axles (10 foot centers), or 100 pounds per square foot on the floor and sidewalk. The width of the bridge is 29 feet, with an 18.5 foot roadway (one travel lane), a 7 foot wide sidewalk on the south side, and 15 feet vertical clearance.

When operable, the draw span swung to clear 102 feet on either side. It was designed to pivot around a central pier. The mechanism to operate the swing span was removed in the 1950's, and the span remains fixed in place.

In 1983, cracks were noticed in one end of a horizontal beam that caps a wooden crib supporting the bridge's western approach. The problem resulted from deterioration of the wood. The timbers had been in place since 1962, replacing the original steel pony truss. Steel I-beam pilings and a steel beam corrected the problem.

F. Historical Background:

The company delivered the fabricated steel structural material to the construction site, ready for erection. The contract for the sub-structure was let to Beebe and Stevenson (piers, rests, etc.). The Corvallis Lumber Company provided lumber to be used in the bridge. Hardware was supplied by J. R. and Smith and Co.; the gates, by Buxton and Sons; and bolts, hinges, etc., by J. T. Phillips, all local suppliers. When finished, the bridge was expected to provide sufficient capacity for inter-urban, passenger and express traffic. (A ferry had operated in the bridge locality since the 1850's.) The Oregon Electric was expected to build their own bridge.

Funds for building the Van Buren Street bridge were not to exceed \$60,000. Most of the funds came from Benton County, though Linn County contributed \$500. Today, the State of Oregon has ownership of the bridge.

Sources Consulted:

1. Norman, James, Cultural Research Assistant, Environmental Section, Department of Transportation Highway Division, Letter of Information, July 17, 1984.
2. Oregon Department of Transportation Engineering Antiquities Inventory, Historic Bridge Survey Schedule, April, 1981, and April 1983 (Structure #2728).

(see continuation sheet #2)

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continuation sheet #2 INVENTORY NO: 782B

Sources Consulted:

- 3. The Daily Gazette-Times, "Bridge to Be Built at Once", January 26, 1912, Front page, Corvallis, Oregon.
- 4. The Daily Gazette-Times, "Facts About Cost New Bridge", June 20, 1913, Front Page, Corvallis, Oregon.
- 5. Corvallis Gazette-Times, "Cracked Beam Under Van Buren Bridge", article by Pat Kight, Corvallis, Oregon.
- 6. Corvallis Gazette-Times "Bridge Getting Beam", July 12, 1983, Corvallis, Oregon.

G. Significance:

"Until around 1915, Truss bridges were constructed with pin connections, where the individual truss members were connected together with steel pins or bolts. After that time, riveted gusset plates, which formed a rigid joint, were used (The earliest riveted truss in Oregon's highway system dates from 1909). So the Van Buren Street Bridge is also an example of the rare and obsolete pin-connected truss technology."

CORVALLIS CULTURAL RESOURCE INVENTORY FORM

g. significance

INVENTORY NO: 782B

(The following quote is from James Norman, Cultural Resource Assistant at the Oregon Department of Transportation.)

"The Van Buren Street bridge is unique for two reasons-- it is the oldest swing span bridge in Oregon, and the only remaining pin-connected moveable-span truss bridge in the State. The swing span moveable bridge technology was very common until around the turn of the century when the advent of the quicker and more efficient vertical-lift and bascule technologies rendered it obsolete. No swing span bridges have been built in Oregon since 1936 and only three structures remain in Oregon's highway system (Van Buren Street, The Coquille River Bridge at Coquille, and the Umpqua River Bridge at Reedsport). Therefore, the Van Buren Street Bridge is important as a representative of this obsolete moveable bridge technology." (see continuation sheet #2)

h. context

The west end approach of the Van Buren Street Bridge is located just north of downtown Corvallis. The bridge is one-way, spanning the Willamette River, leaving Corvallis to Linn County on the Corvallis-Lebanon Highway 210. The bridge is located at a historic water-route dating from the 1850's.

i. condition

Fair

CURRENT ZONING:

West end approach: Willamette River Greenway

THREATS TO PROPERTY:

j. recommendations

City of Corvallis and State Highway personnel note the bridge has a maintenance, but no safety problem. The state's six-year highway improvement plan notes that the replacement of the bridge is in the "Projects considered, but not included" category. The replacement cost would be considerably high; however, it is also noted that replacement hinges on progress toward a proposed Corvallis highway bypass. The bypass's first phase would include a new bridge south of the downtown area that could reduce the number of vehicles using the Van Buren Bridge. Thus, stress on the bridge would be lessened.

The Oregon Department of Transportation Engineering Antiquities Inventory, Historic Bridges Survey, lists the bridge as possibly eligible for the National Register. The Corvallis Cultural Resource Survey upholds this evaluation.

**ENVIRONMENTAL**

Mgr. MA Res. MSX  
P.M.            Eng.             
Sec.            Staff            Sec.           

NOV 22 1992

Refer to Julie X

n/r	Act	Info	Post	File	Loss	Return
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

STATE  
HISTORIC  
PRESERVATION  
OFFICE

PARKS & RECREATION  
DEPARTMENT

November 17, 1992

Pieter T. Dykman, Research Supervisor  
Environmental Section  
Highway Division  
324 Capitol Street NE  
Salem, OR 97310

RE: Determination of Eligibility  
Willamette River (Van Buren Street) Bridge, No. 2728  
Corvallis-Lebanon Highway, State Route 34  
Linn and Benton Counties

Dear Pieter:

Thank you for your submission of property documentation for the bridge referenced above.

After review of this information, we determine that the Willamette River Bridge, No. 2728 is "considered eligible" for listing on the National Register of Historic Places.

This determination is primarily based on two facts; the bridge is the oldest swing span truss in the State (1913) and, the only pin connected swing span truss in the State. Also, this bridge is one of two remaining swing span truss bridges in Oregon.

If you should have any further questions, please feel free to contact me, or Henry Kunowski at the SHPO.

Sincerely,



James M. Hamrick, Deputy  
State Historic Preservation Officer

cc: Henry Kunowski  
Elisabeth Potter



**CULTURAL PROPERTY INVENTORY  
AND  
REQUEST FOR A DETERMINATION OF ELIGIBILITY  
STATE PARKS AND RECREATION DEPARTMENT**

**1. NAME OF PROPERTY**

**HISTORIC** Bridge across the Willamette River in Corvallis

**COMMON** Willamette River (Van Buren Street) Bridge

**2. LOCATION**

**STREET ADDRESS** Van Buren Street at the Willamette River

**CITY** Corvallis

**COUNTY** Benton-Linn

**STATE** Oregon

**3. CLASSIFICATION**

CATEGORY (CHECK ONE)	PRESENT USE (CHECK ONE OR MORE AS APPROPRIATE)
<input type="checkbox"/> District <input type="checkbox"/> Buildings <input type="checkbox"/> Site <input type="checkbox"/> Structure <input type="checkbox"/> Object	<input type="checkbox"/> Agricultural <input type="checkbox"/> Government <input type="checkbox"/> Park <input type="checkbox"/> Transportation <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Private Residence <input type="checkbox"/> Other (Specify) <input type="checkbox"/> Educational <input type="checkbox"/> Military <input type="checkbox"/> Religious <input type="checkbox"/> Entertainment <input type="checkbox"/> Museum <input type="checkbox"/> Scientific

**4. OWNERSHIP**

<input type="checkbox"/> Public <input type="checkbox"/> Private <input type="checkbox"/> Quasi-Public	<b>NAME AND ADDRESS OF OWNER</b>  Oregon Department of Transportation 355 Capitol Street, N.E. Salem, Oregon 97310
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**5. AGENCY**

<b>AGENCY NAME</b> Environmental Section, Oregon Department of Transportation	
<b>REGIONAL HEADQUARTERS (IF APPLICABLE)</b>	<b>STREET ADDRESS</b> 1158 Chemeketa Street, N.E.
<b>CITY</b> Salem	<b>STATE</b> Oregon 97310

**6. REPRESENTATION IN EXISTING SURVEYS**

<b>TITLE OF SURVEY</b> ODOT Comprehensive State Highway Bridge Study/ Linn County Survey/ City of Corvallis Survey	
<b>DATE OF SURVEY</b> 1985, 1992, 1992	<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> County <input type="checkbox"/> Local

7. DESCRIPTION

Condition	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Deteriorated	<input type="checkbox"/> Ruins	<input type="checkbox"/> Unexposed
Check One	<input type="checkbox"/> Altered	<input type="checkbox"/> Basically Unaltered	Check One	<input type="checkbox"/> Moved	<input type="checkbox"/> Original Site	

**DESCRIBE THE PRESENT AND ORIGINAL PHYSICAL APPEARANCE (IF KNOWN) AND INTEGRITY**

The Willamette River (Van Buren Street) Bridge is located on Oregon Highway 34, in Benton and Linn Counties. The west approach of the Van Buren Street Bridge is located in the north section of downtown Corvallis. The bridge is now a single lane, one-way bridge, spanning the Willamette River eastbound from downtown Corvallis into Linn County. The Harrison Blvd. Bridge to the north handles the one-way westbound traffic into Corvallis.

The Van Buren Street Bridge is a three-span steel bridge consisting of one 249-foot through truss swing span, a 171-foot through truss (secondary span), and a 57-foot steel pony truss at the east end. The swing span truss is of Pratt configuration; the large through truss is a Parker; and the pony truss is a Warren, with polygonal upper chords. Steel pins were used to connect the individual truss members except for the pony truss which has riveted connections. Concrete piers and drawrests (round piers) support the spans.

The width of the bridge is 29 feet, with an 18.5-foot roadway (one travel lane), a five-foot to seven-foot sidewalk on the south side, and 15 feet of vertical clearance. The approach spans are supported by nine 19-foot treated timber pile trestles. Modifications include the addition of steel beams at the east end and three treated timber pile trestles at the west end.

The original bridge consisted of 4 span: one 171-foot span, two 57-foot spans, and one 249-foot steel swing span (drawing attached). The total length of the steel spans, 534 feet, rested on concrete piers. The approach on both ends was 225 feet. The roadway was 20 feet wide with a 6-foot sidewalk on one side. The clearance above the water was 37 feet. The bridge was built for a capacity of 24 tons on two axles (10 foot centers), or 100 pounds per square foot on the floor and sidewalk.

Originally the draw span swung to clear 102 feet of clearance on either side. It was designed to pivot around a central pier of the central pier. The swing mechanism was non-motorized on a circular track.

The original 57-foot steel pony truss at the west end was replaced in 1962 by three treated timber pile trestles. In 1983 these newer timbers were found to have cracks in one end of a horizontal beam that caps a wooden crib that supports the bridge's western approach. The cracked timbers were replaced with steel I-beam pilings and a steel beam. The cement bridge piers, damaged by river traffic, were repaired in 1940. According to original photos, there was wooden cribbing associated with the swing span. The cribbing, sitting perpendicular to the swing span when closed, helped to support the span in an open position. The cribbing has been removed from the bridge. The original wood decking is now covered with asphalt.

The mechanism to operate the swing span motor and some of the gears were probably removed in the 1950's, and the span has remained fixed in place since that time. According to records in the bridge maintenance section the bridge has been modified in its mechanical ability to swing, but with the removal of the portals attached to each end, it can still be opened manually. It was last opened for river traffic in October 5, 1960 for a dredge owned by Willamette Tug and Barge Co. (Kendall). The U.S. Coast Guard requires that all moveable bridges be opened four times a year. The Van Buren Street Bridge received a variance, and the Oregon Department of Transportation is not required to open the bridge on demand or quarterly.

The bridge has been altered by the removal of the west end pony truss, the wooden cribbing, and some of the swing span mechanisms. The wood decking is now covered by asphalt. However, it retains its overall original integrity of the swing span design, its most important historic element.



## 8. STATEMENT OF CONTEXT:

The Van Buren Street Bridge is one of the few surviving moveable bridges built in Oregon during the beginning of the 20th century (see tables attached). It was built when navigable waterways were an important means of transportation. Moveable bridges were constructed during that time in order to enable river navigation as well as road travel. Practically all of Oregon's moveable bridges were constructed prior to the 1940s. Since 1941 only 10 new moveable bridges have been constructed; 5 lift span bridges, 3 drawspan bridges, and two roll-back span bridges. No swing-span bridges have been constructed since the Umpqua River Bridge at Reedsport was completed in 1936.

In Oregon there are only about 20 pin-connected truss bridges. The Van Buren is the only pin connected moveable bridge. The Van Buren Street Bridge is an example of the rare and obsolete pin-connected truss technology.

### Comparative Analysis:

There are no historic bridges similar to the Van Buren Street Bridge currently listed on, or formally determined eligible for the National Register of Historic Places. There are currently only two swing-span bridges that have been determined eligible for the Historic Register. (See the attached table on the moveable bridges in Oregon.)

The Oregon Department of Transportation's Historic Highway Bridges of Oregon (Smith, Norman, Dykman, 1989) identified three bascule, three vertical lift and two swing-span bridges as eligible for the National Register. The Umpqua River (Reedsport) Bridge, and the Coquille River Bridge are the only swing-spans listed as eligible. The Coquille River Bridge has since been replaced with a new structure. An effort to preserve the bridge in place or arrange for it to be moved to a different location was not successful. Therefore, the bridge will shortly be dismantled. Portions of the bridge will be saved and displayed at the ODOT museum at Salem and at Coquille. The loss the Coquille River Bridge makes the Umpqua River Bridge the only swing-span remaining on the eligible list.

The Coquille River Bridge was designed under the auspices of Conde B. McCullough and constructed by local contractor A. B. Gidley. The bridge is a 235-foot steel through truss swing span. It was constructed in 1921. This structure is unique in its asymmetrical characteristics. Commonly referred to as a "bobtail" design, the swing span pivots on an off-center axis to obtain the maximum lateral waterway clearance. Once a busy commercial river site, the bridge was rarely opened. The moveable span was operated (at one time on a 48-hour notice) from the operating house located above the roadway over the central pier. A small riverside county park is near the structure.

The Umpqua River (Reedsport) Bridge is one of the five major structures built during Oregon's Coast Bridges project. The bridge is another important example of Conde B. McCullough's bridge engineering accomplishments. It was constructed in 1936. The steel through truss central span, at 430 feet, is the largest swing span structure in Oregon and is notable as a representative of this outdated moveable technology. Two 154-foot reinforced concrete through tied (or bowstring type) arch spans are on either side of the central truss swing span. The swing span is electrically operated through duplicate controllers, one mounted in the operating house above the roadway, and another alongside the sidewalk and roadway level. Though not as ornate as some of McCullough's bridges, the Reedsport Bridge has decorative railings, bracketing, and approach pylons. The bridge was built by Teufel and Carlson, Seattle.

There were several moveable bridges listed in the 1989 document that were included in a reserve category. These included; the Willamette River (Van Buren Street) Bridge, Old Young's Bay Bridge, Columbia River (White Salmon) Bridge, and the Lewis and Clark River Bridge. Of these, only the Van Buren Bridge is a swing-span with pin construction. The others are vertical lift or bascule which are both more common types.

There were 5 additional swing span bridges existing prior to the publication of the 1989 document but since that time they have been replaced. These included; the Nehalem River Bridge, the John Day River Bridge, the South Slough Bridge, the Walluski River Bridge, and the Catching Slough Bridge.

9. SIGNIFICANCE/HISTORY

<b>PERIOD (CHECK ONE OR MORE AS APPROPRIATE)</b>			
<input type="checkbox"/> Paleo-Indian	<input type="checkbox"/> Middle Archaic	<input type="checkbox"/> Contact Period	<input type="checkbox"/> 19th Century
<input type="checkbox"/> Early Archaic	<input type="checkbox"/> Late Archaic	<input type="checkbox"/> 18th Century	<input type="checkbox"/> 20th Century
<b>SPECIFIC DATES (IF APPLICABLE, IF KNOWN)</b> 1912-1913		<b>BUILDER/ARCHITECT</b> Coast Bridge Company (for Benton County)	
<b>AREAS OF SIGNIFICANCE (CHECK ONE OR MORE AS APPLICABLE)</b>			
<input type="checkbox"/> Archaeology-Prehistoric	<input type="checkbox"/> Community Planning	<input type="checkbox"/> Invention	<input type="checkbox"/> Politics/Government
<input type="checkbox"/> Archaeology-Historic	<input type="checkbox"/> Conservation	<input type="checkbox"/> Landscape Architecture	<input type="checkbox"/> Religion
<input type="checkbox"/> Agriculture	<input type="checkbox"/> Economics	<input type="checkbox"/> Law	<input type="checkbox"/> Science
<input type="checkbox"/> Architecture	<input type="checkbox"/> Education	<input type="checkbox"/> Literature	<input type="checkbox"/> Sculpture
<input type="checkbox"/> Art	<input type="checkbox"/> Engineering	<input type="checkbox"/> Military	<input type="checkbox"/> Social/Humanitarian
<input type="checkbox"/> Commerce	<input type="checkbox"/> Exploration/Settlement	<input type="checkbox"/> Music	<input type="checkbox"/> Theater
<input type="checkbox"/> Communications	<input type="checkbox"/> Industry	<input type="checkbox"/> Philosophy	<input type="checkbox"/> Transportation
<input type="checkbox"/> Other _____			

**STATEMENT OF SIGNIFICANCE/HISTORY**

**Brief History of moveable bridges.**

Moveable bridges were first developed in response to the need to provide sufficient vertical clearance for river navigation. River navigation was a primary method of transporting goods during the 1800's and early 1900's. There are three general types of moveable span bridges; the swing span bridge, balanced on a central pier and rotating about a vertical axis; the vertical lift, which raises vertically in a horizontal position; and the bascule, developed from the medieval drawbridge, which swings upward. There are other less common moveable bridge types, including the roll-back spans.

The railroad system in Oregon played an important part in the development of moveable bridges. There are five swing span railroad bridges that were built in the 1800s, and eight railroad swing spans were built in the early 1900s. Vertical lift railroad spans were introduced later and two were constructed prior to the 1940s and one in 1957, which was a rebuild of one constructed in 1870 in Celilo, Oregon. There are three removeable spans built in the 1950s. These bridges are listed through the 13th Coast Guard District in the Pacific Northwest (U.S. Coast Guard, 1973).

In the late 19th century new technological advances brought major changes in the design of moveable bridges. Originally when the railroads and canal systems spread across the United States in the 1830s, the importance of moveable bridges increased also. The earliest moveable bridges, built in 1830-40s, were all swing span designs. The earliest swing span was built in Boston across the Charles River. This span was constructed of crude timber trusses hinged at one corner. In 1850, the center pivot swing design was developed and was used almost exclusively until the end of the century. (Smith, et al)

Around 1890, practical methods of counterbalancing the enormous weight of the span, mechanics and the electric motor, led to the development of the modern lift and bascule bridges. When the bascule and lift spans were introduced, the swing span tended to disappear because the new moveable types opened faster. The first major

lift-span bridge was built in 1892 in Chicago. It had a 130-foot moveable span which could be raised 155 feet. Chicago was also the city where the first modern bascule type, the South Halstead Street Bridge was built in 1893 (Smith, et al. 1989)

Until around 1915, most truss bridges for highway use were constructed with pin connections, a technique where the individual truss members were connected together with steel pins or bolts. The process of connecting with pins or bolts enabled the bridge to be manufactured by a bridge company offsite and assembled onsite. The pin construction also made it easier to relocate later, if necessary. Early bridges were often moved due a change in needs, river channel change, and flooding. Later riveted gusset plates which formed a rigid joint were used. (The earliest riveted truss on Oregon's highway system dates from 1909).

### **Brief History of the Van Buren Street Bridge.**

The site of the bridge has been a river crossing since about 1854 when a ferry transported people and goods between Benton and Linn Counties. A permit to construct a bridge at this location was issued in 1911. The construction of the Van Buren Street Bridge was completed in 1913. At the time of the bridge opening the ferry was discontinued.

The bridge across the Willamette River at Van Buren Street was contracted for construction in 1912 and completed in 1913. It was designed by a Portland engineer, Andrew J. Porter, from the Coast Bridge Company. The Coast Bridge Company was in operation from about 1910-1917, and acted as a "broker" for regional bridge building. The Oregon Department of Transportation maintains a copy of the Coast Bridge Company bridge plans in Salem.

Most materials for construction were supplied by local businesses. The Coast Bridge Company delivered the fabricated steel structural material to the construction site in preparation for the erection of the bridge. Because of the strength and availability of steel during the construction period, it was utilized as a replacement for wood and wrought iron in the construction of many bridges. The truss members of early all-metal bridges were connected with steel pins or bolts. Beebe and Stevenson was the company that contracted for the substructure (foundations, piers, rests, etc.). The Corvallis Lumber Company provided lumber to be used in the bridge. Hardware was supplied by J.R. and Smith and Co.; the gates, by Buxton and Sons; and bolts, hinges, etc. by J.T. Phillips. The bridge was expected to provide sufficient capacity for passenger and express traffic and even an inter-urban line. (Gallagher) Previously a ferry at this location had fulfilled crossing needs since the 1850's.

The bridge's funding came mostly from Benton County, with smaller contributions by Linn County, private citizens of Linn County, the City of Corvallis and even one contractor. Because of the funding Benton County was the first official owner if the bridge. When the construction costs were found to be higher than other projects during that time period, the costs were reviewed. There was an overcharge to Benton County of \$17,532 on a total bill for structural steel of only \$31,407. The main area of overcharge was the cost of the steel itself. Generally the price of steel was \$75 a ton, whereas, the County paid \$169.76 a ton. The county also seemed to have overpaid for the erecting of the superstructure at a cost of \$24 a ton. The average cost of this was usually only \$20 a ton. The contract for the substructure was let to Beebe and Stevenson for \$29,483.50. This cost was not analyzed for possible overcharges.

The State of Oregon took possession of the bridge on November 18, 1938, with the establishment of the road as a State Highway according to U.S. Coast Guard Permits (Kendall). The Albany-Corvallis road followed the present route of Highway 34 and Riverside Drive to Albany. The Riverside portion of the highway was vacated by the State in 1960 at the same time the Orleans-Lebanon Road was transferred from the County to the State.

Prior to the 1940's structural concrete was not strong enough for long and high spans. It was easier and cheaper to construct the moveable bridge. But with the development of higher strength structural concrete after World War II the bridges could be constructed with sufficient height to accommodate the river traffic. America's road and highway systems continued to grow during the 1940s and the number of people and vehicles on the roadways made it inefficient to hold up road traffic by opening a moveable bridge for river traffic. With the increased traffic volume and the advanced concrete technology, moveable bridges were on their way out. All moveable

bridges slow traffic movement but the swing-span was by far the slowest of the moveable bridges. The swing process turns at a much slower rate than the lift or draw-span bridge move. This slowness, as well as the restrictions on horizontal clearance from the central pivot pier, are primary reasons for the swing-span reaching obsolescence faster than other moveable bridges.

## **SIGNIFICANCE**

The Van Buren Bridge was the first bridge constructed over the Willamette River in Corvallis. This construction was very important to the development of the town of Corvallis as well as the area in Linn County to the east of the river. It reflects unique elements of the transportation history of Corvallis, Benton and Linn Counties. The bridge served as a bond between the city of Corvallis and the countryside of Linn County. It is an important link to the past of this area of Oregon.

The Van Buren Bridge is unique for two reasons - it is the oldest of the only two remaining swing-span bridges in Oregon, and it is the only remaining pin-connected moveable-span truss bridge in the state. The swing-span moveable bridge technology was very common until around the turn of the century when the advent of the quicker and more efficient vertical-lift and bascule technologies rendered it obsolescent. No swing span bridges have been built in Oregon since 1936 and only two such structures remain on Oregon's highway system (Van Buren Street, and the Umpqua River at Reedsport). Therefore, the Van Buren Street Bridge is important as a representative of this obsolete moveable bridge technology.

The Van Buren Bridge illustrates unique characteristics of bridges constructed during the late 19th and early 20th century throughout the United States. These unique characteristics include the use of steel as the main building material, a pin connected truss, and a swing span to make the bridge moveable. This type of construction, at one time common, now one of the few remaining examples of this construction type in the state.

In order to preserve examples of the bridge-building tradition in Oregon representative examples of all types of bridges are allowed to remain for all our future generations. The Van Buren Bridge constitute a valuable legacy to the art, engineering, and technology of bridge construction. This is the only example of a swing-span, pin constructed bridge remaining in Oregon.

## **SUMMARY OF NATIONAL REGISTER ELIGIBILITY**

- CRITERION A:** The Van Buren Street Bridge was the first bridge across the Willamette River at Corvallis and provided a new regional transportation link.
- CRITERION B:** Not Applicable.
- CRITERION C:** This bridge is the third oldest extant highway bridge across the Willamette River (Hawthorne, 1910; Steel, 1912) and the oldest swing span highway bridge. Swing span highway bridges are an obsolete design type, replaced by other types of moveable mechanisms. Only 2 other swing span highway bridges exist (Coquille River, 1922; Umpqua River at Reedsport, 1936). The Coquille River Bridge at Coquille is scheduled for demolition in 1993. The Van Buren Street Bridge was built by the Coast Bridge Company of Portland, a prolific early bridge building company in Oregon.
- CRITERION D:** Not applicable.

10. BIBLIOGRAPHICAL REFERENCE

See Attached Bibliography

11. GEOGRAPHICAL DATA

UTM COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY				O R	UTM COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES		
	ZONE	EASTING	NORTHING		ZONE	EASTING	NORTHING
A	---	-----	-----		---	-----	-----
B	---	-----	-----		---	-----	-----
C	---	-----	-----		---	-----	-----
D	---	-----	-----		---	-----	-----

APPROXIMATE ACREAGE OF PROPERTY      One bridge with approximately 1 acre of land at T 11 S, R 5 S, Sec 35

ATTACH MAP (U.S.G.S. QUAD) AND/OR LOCATION DIAGRAM      Attached

12. PHOTOGRAPHS

ATTACH See Photographic Documentation Section

13. FORM PREPARED BY

NAME AND TITLE Julie Bunnell, Assistant Project Manager		DATE October 1992
AGENCY Environmental Section, Oregon Department of Transportation		
STREET ADDRESS 324 Capitol Street N.E.		TELEPHONE (503) 378-8486
CITY Salem	STATE Oregon	97310

RECORD OF COORDINATION

## BIBLIOGRAPHY

### PUBLICATIONS

Daily Gazette-Times, "Facts About Cost New Bridge". June 20, 1913, Front Page, Corvallis, Oregon.

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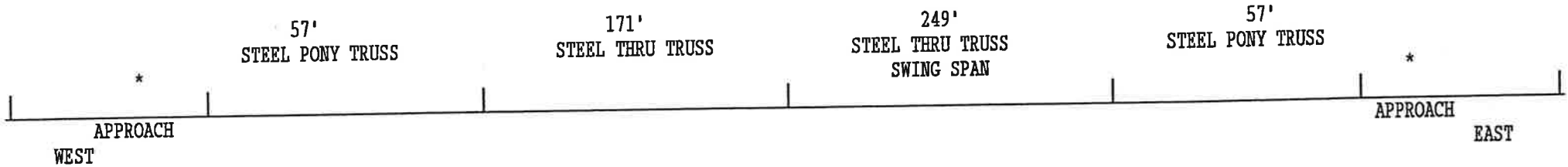
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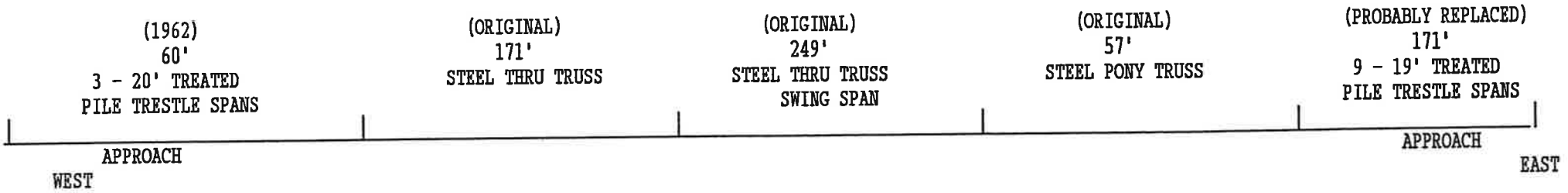
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TYPICAL SECTIONS OF BRIDGE



ORIGINAL BRIDGE (1913)  
TOTAL LENGTH - 759 FEET

\* total length of both approaches 225'



CURRENT BRIDGE  
TOTAL LENGTH - 708 FEET

**MOVEABLE HIGHWAY BRIDGE CONSTRUCTION BY DECADE  
(EXISTING BRIDGES ONLY)**

	( — Historic Period — )			( — Modern Period — )					TOTAL	
	1910-19	1920-29	1930-39	1940-49	1950-59	1960-69	1970-79	1980-89		1990—
<b><u>TYPE OF SPAN</u></b>										
SWING	1	1	4							6
VERTICAL LIFT	3	1	1		3	2				10
BASCULE DRAW	1	3	2	1	4					11
ROLL-BACK		1	1				1	1		4
TOTALS	<u>5</u>	<u>6</u>	<u>8</u>	<u>1</u>	<u>7</u>	<u>2</u>	<u>1</u>	<u>1</u>	=	<u>31</u>