



SURFACE TRANSPORTATION BOARD
Washington, DC 20423

#EO-1437

Office of Economics, Environmental Analysis and Administration

May 10, 2010

Russell Holter
Project Compliance Reviewer
Washington State Department of Archaeology
and Historic Preservation
1063 S. Capitol Way, Suite 106
Olympia, WA 98504

Re: STB Docket No. AB-1023 (Sub-No. 1X) – Puget Sound & Pacific Railroad Company –
Abandonment Exemption - in Grays Harbor County, Washington;
Log: 092208-01-STB

Dear Mr. Holter:

The Surface Transportation Board's (Board) Section of Environmental Analysis (SEA) has conducted an environmental review for the above referenced abandonment proceeding pursuant to the National Historic Preservation Act (NHPA). The Board has authorized the abandonment by decision served May 19, 2009, subject to various conditions, including the completion of the Section 106 process. SEA has designated the Law Offices of Louis E. Gitomer (Gitomer), who represents Puget Sound & Pacific Railroad Company (PSAP), as our representative for this undertaking to work with your office on moving the Section 106 review process forward. Gitomer has recently provided the Board with additional details (Attachment 1) of the Horn Spur and the Horn Spur Swing Bridge located along the rail line proposed for abandonment in this docket. Photos of the structures and a description of the undertaking are set forth in PSAP's Historic Report (Attachment 2).

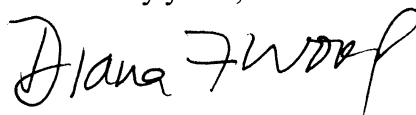
PSAP states that it does not intend to disturb any subgrade or subgrade structures during salvage and would leave bridges in place. If the line is used for interim trail use/rail banking, PSAP indicates that it would salvage the track and materials, but leave the ballast, ties, bridges and culverts in place for the use of the trail. Therefore, pursuant to the Section 106 regulations of the NHPA at 36 CFR 800.5(b), we have determined that the proposed rail abandonment would not affect historic properties listed in or eligible for inclusion in the National Register of Historic

Places located within the area of potential effect (APE)¹ for this undertaking. The documentation for this finding, as specified in 36 CFR 800.11(e), consists of the railroads historic report, all relevant correspondence, and the Environmental Assessment, which have been made available to the public through posting on the Board's website at <http://www.stb.dot.gov>.

Please provide your comment, if any, regarding this undertaking within the 30 days of receipt of this letter. If we do not hear from you within the 30-day time frame specified in the regulations at 36 CFR 800.4(d)(1)(i), we will determine that the Section 106 process is complete and remove the Section 106 condition in this proceeding.

If you have any questions, require additional information regarding this proceeding, or have any concerns, please do not hesitate to contact me at 202-245-0302.

Sincerely yours,

A handwritten signature in black ink that reads "Diana F. Wood". The signature is written in a cursive, flowing style.

Diana F. Wood
Section of Environmental Analysis

cc: Melanie B. Yasbin, Attorney, Law Offices of Louis E. Gitomer

¹ The APE consists of the rail line right-of-way.

LAW OFFICES OF
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Attachment 1

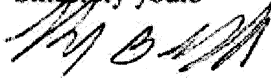
RE: Docket No. AB-1023 (Sub-No. 1X), Puget Sound & Pacific Railroad
Company—Abandonment Exemption—in Grays Harbor County, WA

Dear Ms. Woods:

By decision served in the above-entitled proceeding on May 19, 2009, the Surface Transportation Board imposed a condition requiring Puget Sound & Pacific Railroad Company ("PS&P") to retain its interest in and take no further steps to alter the historic integrity of all sites, buildings, and structures within the project right-of-way that are eligible for listing or are listed in the National Register until completion of the section 106 process of the NHPA. PS&P hired an historic consultant to confer with the SHPO. Attached are the Historic Property Inventory Reports completed by the consultant.

Thank you for your assistance. If you have any questions, please contact me.

Sincerely yours



Melanie B. Yasbin
Attorney for Puget Sound & Pacific Railroad Company

ANDREWS HISTORY GROUP
3035 14th West, Suite 6
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206.524.1426

February 1, 2010

Russell Holter
Project Compliance Reviewer
Department of Archaeology and Historic Preservation
State of Washington
1063 Capitol Way, #106
Olympia, Washington, 98501

RE: Section 106 Review of the Horn Spur, Grays Harbor County, WA

Dear Mr. Holter:

Enclosed is a CD containing Department of Archaeology and Historic Preservation ACCESS database files for the "Horn Spur" railroad line and an associated bridge. The properties are located in Gray Harbor County. They are owned by the Puget Sound and Pacific Railroad Company (PSAP). As you know, PSAP has filed a petition with the Surface Transportation Board (STB) for an exemption to abandon the line.

Pursuant to your letter of March 16, 2009 to Victoria Rutson, Environmental Section Chief, STB, requesting additional information on the properties, Andrews History Group was retained to complete the work. Per your instructions, two Historic Property Inventory database forms were prepared - one for the Horn Spur and a second for the swing bridge. The spur does not appear to be eligible for listing in the National Register; the swing bridge does appear to meet eligibility criteria.

Thank you for your assistance during the course of this project. Please contact me should you require any additional information.

Sincerely,

[copy sent by email]

Mildred T. Andrews, Principal
Andrews History Group

Enclosure (1 CD)

cc: Melanie Yasbin, Law Offices of Louis E. Gitomer

Historic Property
Inventory Report for

Horn Spur

at Hoquiam, WA

LOCATION SECTION

Field Site No.: 01-10

OAHP No.:

Historic Name: Horn Spur

Common Name:

Property Address: Hoquiam, WA

Comments:

County Grays Harbor Township/Range/EW Section 1/4 Sec 1/4 1/4 Sec Quadrangle HOQUIAM
T18R10E 33

Coordinate Reference
Zone: 10 Spatial Type: Line Acquisition Code: Unknown
Sequence: 1 Easting: 432093 Northing: 5203174
Sequence: 2 Easting: 432924 Northing: 5205817

Tax No./Parcel No.

Plat/Block/Lot

Supplemental Map(s)

Acreage

IDENTIFICATION SECTION

Survey Name: Horn Spur

Field Recorder: Mildred Andrews

Date Recorded: 12/12/2009

Owner's Name:

Owner Address:

City/State/Zip:
Elma WA 98541

Puget Sound & Pacific
Railroad Company

Classification: Structure

Resource Status

Within a District? No

Survey/Inventory

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:

DESCRIPTION SECTION

Historic Use: Transportation - Rail-Related

Current Use: Vacant/Not in Use

Plan:

No. of Stories:

Structural System:

Changes to plan:

Changes to original cladding:

Changes to interior:

Changes to other:

Style

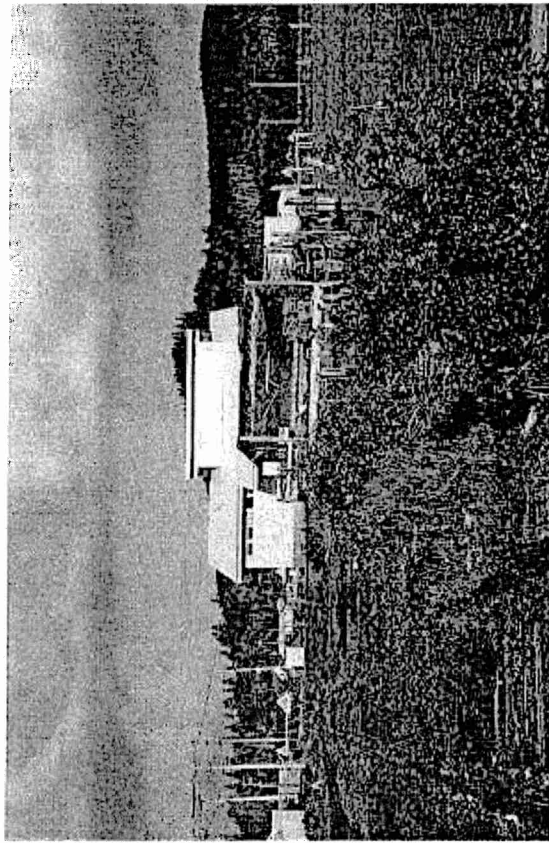
Form/Type

View of tracks looking north

taken 11/22/2009

Photography Neg. No (Roll No./Frame No.):

Comments:



Historic Property Inventory Report for

Horn Spur

at Hoquiam, WA

Changes to windows:

Other (specify):

Cladding

Foundation

Roof Material

Roof Type

NARRATIVE SECTION

Date Of Construction: ca. 1899, ca. 1906

Study Unit

Other

Architect:

Transportation

Builder:

Engineer:

Property appears to meet criteria for the National Register of Historic Places: No

Property is located in a potential historic district (National and/or local): No

Property potentially contributes to a historic district (National and/or local):

Statement of Significance

The "Horn Spur" is a short rail line that starts in the city of Hoquiam, Washington and terminates approximately 1.5 miles to the north in unincorporated Grays Harbor County. The line includes two trestles and a swing bridge. The bridge is documented in a separate database entry (see Horn Spur Swing Bridge - Washington Department of Archaeology and Historic Preservation Historic Property Inventory). The spur is owned and operated by the Puget Sound & Pacific Railroad Company (PSAP), a subsidiary of RailAmerica, Inc. In 1997, PSAP acquired the line from the Burlington Northern & Santa Fe Railway Company. The line is currently proposed for abandonment.

The Horn Spur was built between approximately 1899 and 1906 by the Northern Pacific Railroad Company (NP) during a boom period in the local lumber industry. Beginning in the 1880s, the region's vaunted timber attracted California lumbermen - notably Captain Asa M. Simpson who bought 300 acres at the mouth of the Hoquiam River and built the North Western Mill, a link in his 900-mile chain of logging operations that stretched from Washington to California. At about the same time, the Polson brothers arrived from Nova Scotia and developed a logging company that included sawmills, a shingle mill, several logging camps and a logging railroad to connect their operations. Between 1889 and 1890, an influx of laborers quadrupled Hoquiam's population from 400 to 1600. But the region remained isolated, even though it exported wood and wood products throughout the Pacific Rim.

In 1892, the NP built a line from Chehalis to Grays Harbor, but it bypassed Hoquiam and other established mill towns to make its way directly to Ocoos, across the bay from Westport on the Pacific Coast south of Hoquiam. Residents of Hoquiam and the neighboring town of Aberdeen banded together to build a connecting line. Local mill and landowners donated tracks and ties and offered a free lot to anyone in exchange for ten days work on the roadbed. In 1895 the track connected with Aberdeen and four years later, it reached Hoquiam. The railroad sparked a regional boom, as lumbermen from the Great Lakes purchased tracts of old growth timber and established logging and lumber operations. California provided a major market for lumber and lumber products via both water- and rail-borne transit. In addition, the NP created access from terminals in Grays Harbor County and Tacoma to eastern markets across the United States. The new transit centers had advantages over Puget Sound's older isolated mill ports of Gamble, Ludlow, Madison, and Blakely, which relied strictly on water-borne trade with California and Pacific Ports.

There is conflicting information regarding the date the Horn Spur was built; however, rails on the line are stamped with the date 1899. An informant from PSAP explained that the rails were often stockpiled for years, meaning that the stamped date might have preceded the date of construction. PSAP informants were unable to provide the exact year of construction for the line, but maintain that it was between 1899 and 1906. Sanborn Fire Insurance maps of Hoquiam are available for the years 1889, 1890, 1891, 1894, 1902, 1907 and 1916. The 1902 map is the first to show the Horn Spur, but without the swing bridge and in a slightly different configuration. PSAP informants say that prior to construction of the bridge (ca. 1906), railroad cargo from the spur was loaded onto barges and freighted across the river to another spur that connected with the main line. Based on available information it would appear that a significant portion of the spur was in place by 1902 and that the bridge and that portion of the spur that runs up the east side of the East Fork of the Hoquiam River were probably built in about 1906.

Between 1894 and 1902, Hoquiam's population swelled from 1750 to 3000 and in 1907, it exploded to 7,500. Most of the newcomers were immigrants and laborers from other parts of the United States who sought employment in lumber, wood products, and related industries. The Horn Spur served large and small industries that flanked the banks of the Hoquiam River. Examples are the Northwest Mill Company's Hoquiam Mills, the Hoquiam Lumber & Improvement Company's Lumber Mill, the Hoquiam Manufacturing

Historic Property Inventory Report for

Horn Spur at Hoquiam, WA

Company (which manufactured dressed lumber, moldings, sash & door, etc.), the Panel & Folding Box Company's Veneer Box Factory, E. K. Wood's Lumber Company and Sawmill, and the Grays Harbor Iron Works. Until 2007, PSAP provided five day per week shipping service to its last major client, Hoquiam Plywood which operated at the north end of the spur for more than 50 years. In 2007 service to the plywood company was reduced to two to three days a week. PSAP embargoed the line due to deteriorating track conditions in February 2008 after which shipments to and from the Hoquiam Plywood Company were made by truck.

Although the Horn Spur played an important role for the small industries that flanked the Hoquiam River in the early to mid 20th century by providing ready transportation for their products, this alone does not constitute a significant contribution to local, state or national history; nor are the materials, design or construction of the line rare or significant examples of the type. In this writer's opinion it is not eligible for listing in the National Register of Historic Places.

Description of Physical Appearance

The "Horn Spur" is an 8,344 foot long rail line that begins just south of U.S. Highway 101 in the city of Hoquiam, Washington. This point is approximately 3,424 feet north of the main track clearance off of the Elma Main Line. It is a standard gauge track that sits on hardwood ties. The rail weight is 75 lbs. The spur proceeds in a northerly direction until it terminates in Grays Harbor County on property owned by the Hoquiam Plywood Company. The spur includes two trestles and a swing bridge. The bridge is documented in a separate Historic Property Inventory form.

From its point of beginning in Hoquiam, the line runs north along the west side of the Hoquiam River through a mixed use area that includes light industrial and commercial buildings. The first of the two trestles is located at MP 1, approximately 400 feet north of where the Line begins. It is a standard timber trestle with open deck. It extends over the river immediately adjacent to the bank. It is 89 feet in length. The structure appears to be intact as built; however, there are no available records to determine if there have been changes.

The spur follows the river as it turns in a northeasterly direction. It then turns north and runs down Polk Street for five blocks through an historic residential neighborhood. Much of the track in this area is significantly deteriorated or covered over with asphalt. The residential area on either side of the track consists primarily of modest, early 20th century single-family dwellings. Most have been significantly altered and no longer retain physical integrity.

The line then turns slightly to the northwest and runs to the east of and parallel to River Street for another five blocks through an area of mixed residential and industrial use. Before reaching Perry Avenue, the line turns to the northeast, runs parallel to Perry Avenue and then crosses the Hoquiam River on a swing bridge (Bridge 3.2) that was constructed in approximately 1906. After crossing the bridge, the spur turns north and crosses an inlet, via a second trestle, of the East Fork of the Hoquiam River. This trestle, like the first, is a standard timber trestle that appears to be largely intact as built. It is located at MP 3.3, approximately 6,600 feet north of the beginning of the line. The trestle is 155 feet long.

Proceeding north, the line runs along the east side of the East Fork of the Hoquiam River before terminating in the Hoquiam Plywood facility. The plywood facility, still in operation, was established in the 1940s. Portions of the earliest buildings are still extant; however, they have been expanded significantly and no longer retain physical integrity. Overall the track is largely intact although it has been paved over in some stretches. It is significantly deteriorated in other areas.

Major Bibliographic References

- Ficken, Robert E. *The Forested Land: A History of Lumbering in Western Washington*. Seattle: University of Washington Press, 1987
- Franklin, Dave Sr., Track Supervisor, PSAP. Interview with Mildred Andrews, January 2010
- Gitomer, Louis E., Law Offices of. *Combined Environmental and Historic Report -49 C.F.R.1105.7 and 1105.8- Docket No. AB-1023-Sub-No. IX- "Puget Sound & Pacific Railroad Company - Abandonment Exemption - in Grays Harbor County, WA. Towson, Maryland: September 12, 2008*
- Goings, Aaron, "Hoquiam - Thumbnailed History," *Historylink.org* Essay 8652. *Encyclopedia of Washington State History*, October 18, 2008
- Kirk, Ruth and Carmela Alexander. *Exploring Washington's Past: A Road Guide to History*. Seattle: University of Washington Press, 1990
- Lockley, Fred, "Gray's Harbor. The Largest Lumber-Shipping Port in the World," *Pacific Monthly* Vol. 17, No. 6 (June 1907)
- Morgan, Murray. *The Last Wilderness*. Seattle: University of Washington Press, 1955
- Sanborn Map Company. Hoquiam, Washington, Sanborn Fire Insurance maps. New York: 1889, 1890, 1891, 1894, 1902, 1907, 1916

*Historic Property
Inventory Report for*

Horn Spur

at Hoguiam, WA

Schwantes, Carlos A. Railroad Signatures Across the Pacific Northwest: An Interpretive History, Rev. ed. Lincoln: University of Nebraska Press, 1996

Sorensen, Larry. Assistant General Manager, Puget Sound & Pacific Railroad Company, A Rail America Company, Elma, Washington office. Interview by Mildred Andrews. Grays Harbor County, November 2009

Historic Property
Inventory Report for

Hom Spur Swing Bridge

at Hogquiam, WA

LOCATION SECTION

Field Site No.: 02-10

OAHF No.:

Historic Name: Hom Spur Swing Bridge

Common Name: Bridge 3.2

Property Address: Hogquiam, WA

Comments:

County Grays Harbor Township/Range/EW Section 118R10E 1/4 Sec 33 1/4 1/4 Sec HOQUIAM

Coordinate Reference

Zone: 10 Spatial Type: Point Acquisition Code: Unknown
Sequence: 1 Easting: 432924 Northing: 5205817

Tax No./Parcel No.

Plat/Block/Lot

Supplemental Map(s)

Acreage

IDENTIFICATION SECTION

Survey Name: Hom Spur Swing Bridge

Field Recorder: Mildred Andrews

Date Recorded: 11/22/2009

Owner's Name: Puget Sound & Pacific

City/State/Zip: Elma, WA 98541

Owner Address: 501 N. 2nd Street
Railroad Company

Classification: Structure Resource Status Survey/Inventory

Comments

Within a District? No

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:

DESCRIPTION SECTION

Historic Use: Transportation - Rail-Related

Current Use: Vacant/Not in Use

Plan: No. of Stories:

Structural System:

Changes to plan:

Changes to original cladding:

Changes to windows:

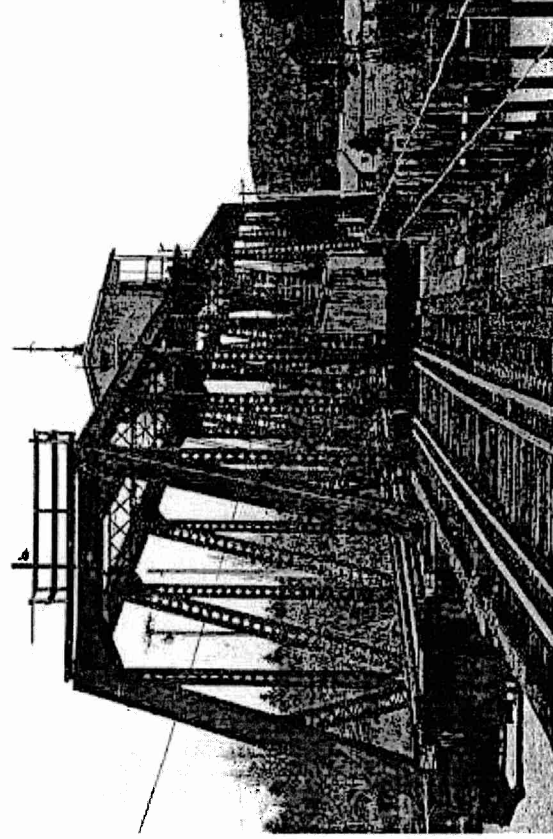
Changes to interior:

Changes to other:

Other (specify):

Style

Form/Type



View of bridge looking east

taken 11/22/2009

Photography Neg. No (Roll No./Frame No.):

Comments:

Historic Property Inventory Report for

Horn Spur Swing Bridge

at Hoquiam, WA

Cladding

Foundation

Roof Material

Roof Type

NARRATIVE SECTION

Study Unit

Transportation

Science & Engineering

Other

Date Of Construction: ca. 1906

Architect:

Builder:

Engineer:

Property appears to meet criteria for the National Register of Historic Places: Yes

Property is located in a potential historic district (National and/or local): No

Property potentially contributes to a historic district (National and/or local):

Statement of Significance

Bridge 3.2 is located on a short rail line known as the "Horn Spur" in the city of Hoquiam, Washington in Grays Harbor County. The Line is owned and operated by the Puget Sound & Pacific Railroad Company (PSAP), a subsidiary of RailAmerica, Inc. In 1997, PSAP acquired the Horn Spur from the Burlington Northern & Santa Fe Railway Company. The Line is currently proposed for abandonment and is not in operation. It includes two trestles and the subject bridge. The Line, and its associated trestles, is documented in a separate database entry (see Horn Spur - Washington Department of Archaeology and Historic Preservation Historic Property Inventory).

Bridge 3.2 is one of three historic swing bridges owned by the PSAP. All three are located in Hoquiam. The other two (Bridge 68.8 and Bridge 72.2) are located downriver from the subject bridge on the Main Line and are still in operation. All three were built at the same approximate time; however, PSAP personnel believe that Bridge 3.2 is slightly older than the others. It is distinguished from them in several significant ways.

In this writer's opinion, Bridge 3.2 is eligible for listing in the National Register of Historic Places because it is a rare intact example of an early swing bridge that retains integrity of location, materials and setting; and because it embodies distinctive features, including a 360 degree manual turning system, the original locking mechanism, and a steel turret on wood pilings, which are rare, if not singular examples of these features in the region, and perhaps the state. Bridges 68.8 and 72.2 do not have these features. In addition, according to one informant, it is quite likely a singular example of a swing bridge in the state, if not the nation, that has never been upgraded with signalization, which was commonly added as a safety feature.

The Horn Spur was built ca. 1899 by the Northern Pacific Railroad Company (NP) during a boom period in the local lumber industry. Beginning in the 1880s, the region's abundant timber attracted lumbermen and sawmills, shingle mills, and logging camps proliferated in the area. Between 1889 and 1890, an influx of laborers quadrupled Hoquiam's population from 400 to 1600. But the region remained isolated, even though it exported wood and wood products throughout the Pacific Rim.

In 1892, the NP built a line from Chehalis to Grays Harbor, but it bypassed Hoquiam and other established mill towns to make its way directly to Ocosta, across the bay from Westport on the Pacific Coast, south of Hoquiam. Residents of Hoquiam and the neighboring town of Aberdeen banded together to build a connecting line. In 1895 the track connected with Aberdeen and four years later, it reached Hoquiam. The railroad sparked a regional boom. California provided a major market for lumber and lumber products via both water- and rail-borne transit. In addition, the NP created access from terminals in Grays Harbor County and Tacoma to eastern markets across the United States.

There is conflicting information regarding the date the Horn Spur was built; however, rails on Bridge 3.2 are stamped with the date 1899. An informant from PSAP explained that the rails were often stockpiled for years, meaning that the stamped date could precede the date of construction. PSAP informants were unable to provide the exact year of construction for the Line, but confirmed that it was between 1899 and 1906. Railroad staff located schematics and "manufacturer's plates" (which were riveted to the end of the spans at the time the bridges were constructed) for the two bridges that are still in use. One of the plates reads: "Made for the NP Railroad by American Bridge Company, T.J.H. [initials not identified], 11.22.1906." The second bridge was also built in late 1906. Schematics and plates for Bridge 3.2 have not been found; the manufacturer's plate which should have been riveted to the end of the span is gone and all that remains is a hole. Railroad staff maintain that Bridge 3.2 is the oldest of PSAP's three swing bridges, but do not know the exact date of construction.

The American Bridge Company was formed in 1900, by the same interests that controlled the United States Steel Corporation. In an attempt to monopolize the nation's bridge-building industry. Within a few years of its founding, American Bridge had acquired 28 other bridge-building companies and could claim over half the structural-steel fabricating

capacity of the country. American Bridge was organized as a wholly owned subsidiary of U.S. Steel, and from 1904 on, had its headquarters in Pittsburgh, Pennsylvania. The company was the single most important bridge fabricator of the early 20th century, and it is likely that it constructed Bridge 3.2.

Sanborn Fire Insurance maps of Hoquiam are available for the years 1889, 1890, 1891, 1894, 1902, 1907 and 1916. Of these, the 1916 map is the only that shows the Horn Spur and all three of the swing bridges. Since at least two of the swing bridges were constructed in late 1906, it is likely that data was not available at the time the 1907 Sanborn map was published. Available information suggests that Bridge 3.2 was probably built in 1906.

Bridge 3.2 falls within the category of moveable bridges. The technology to swing, lift or open a bridge is the distinguishing feature of moveable bridge spans. There are three main types: swing, bascule, and vertical lift. Dating primarily from the 1850s through the 1920s, swing spans were the earliest of the three bridge types. The earliest swing span was reportedly built in 1857 in Chicago. Swing bridges were simpler to construct and operate than the others, but they were slow to open and required large piers in the center of the river. Swing spans were gradually supplanted throughout the country by bascule and vertical lift designs which posed less obstruction to river traffic.

Swing bridges are sub-divided into three types: rim bearing, center pivot, and combination (rim bearing and center pivot). The latter type is uncommon. The subject bridge is a center pivot type. In this type, the span turns on a central pin or pivot, which bears the entire dead load of the span and most of the live load. Part of the live load may be transmitted to adjacent fixed spans through a locking mechanism when the span is in the closed position. This is the case with the subject bridge. Usually there are two trusses making up the span -- although single truss designs were also found in smaller bridges. The power of a swing bridge is usually supplied by electric or hydraulic motors. The other PSAP swing bridges in Hoquiam are of this type. Older, smaller bridges were sometimes turned by manual power. Bridge 3.2 is a rare, intact example of a manually powered swing span.

Swing spans tend to resemble fixed spans in that they are likely to be trusses or girders; however, the operation of a swing span creates stresses that would not occur in a fixed span. Often the trusses are more robust than in fixed spans with heavier structural members and more braces. Connections are usually made with bolts or rivets in older spans. Bridge 3.2 embodies these characteristics having strong truss members held together by rivets.

Bridge 3.2 is of further interest because it has never been upgraded with signalization features, a very rare example of such. It is unclear why it was never upgraded.

Bridge 3.2 is eligible for listing in the National Register of Historic Places as a rare, well-preserved, and excellent example of an early railroad swing bridge which retains integrity of location, materials, feeling, association, and workmanship.

**Description of
Physical
Appearance**

Bridge 3.2 is a 231-foot long swing bridge that carries the "Horn Spur" track across the the Hoquiam River in Grays Harbor County, Washington. The main components of the bridge are two 115 foot-long, riveted steel, Howe through truss spans which swing open as a unit around a center bearing wooden pier with a steel turret, allowing maritime traffic to pass through. The approach to the west end of the truss is a 312-foot long timber span. The east approach consists of a single 85-foot, 6-inch timber span. A small bridge tender's house (also called the "crow's nest") is located on top at the center of the span. Two small storage sheds sheathed in corrugated metal are located on the deck. A navigation light is located at the top of each end of the span; ladders at the ends of the bridge provide access, and there are railings around each light for workers' safety. The lights are now electric but originals were probably kerosene.

In the closed position, the swing unit is supported at its ends by live load bearings, located under each truss and at the central pier by a live load bearing under each side of the truss. The span is opened manually. There are jack stands (large rollers) that come down and rest the bridge into its "in" position. "Easer bars" (rail locks) lock the jacks in place. The easer bars are hand operated and run by gears and chains. The only change is to the turning mechanism (wheel in the crow's nest with two chains that extend down to a pulley and connect with the easer bars) which was originally manual and is now electric. Originally, four workers had to turn a T-bar. The mechanism was electrified sometime prior to 1976 to enable one person, rather than four, to turn the wheel. As it opens, the span disengages contact with the live load bearings and the entire weight of the moveable unit is transferred to the center bearing. The bridge swings to an angle of 90 degrees with respect to the waterway. The bridge is designed to turn 360 degrees -- and is the only one on the PSAP line with this capability. In the open position, the bridge rests on a timber draw. A 250-foot dolphin runs the full length of the bridge to protect it from collisions. Maintenance crews can stand on the dolphin to work on the bridge ends.

Controls for the bridge are located in the bridge tender's house, located at the centerline of the bearing pier of the swing unit. This location provided good visibility for the bridge operator up and down the river. The house is constructed of wood. The roof and walls are sheathed in corrugated metal.

In its open position the bridge is accessed from the east bank of the river by a narrow, cable suspension bridge. It is supported by steel cable ropes on each side of the wooden deck, which is made up of 110 wood planks. At the shore, concrete slabs hold the bridge in place. The low point of the suspension bridge is submerged at high tide.

According to PSAP informants almost all original bridge components remain in place. Maintenance repairs have been made over the years; however, these have had minor effect

**Historic Property
Inventory Report for**

Horn Spur Swing Bridge

at Hoquiam, WA

on bridge appearance. Most bridge components are currently in fair shape according to PSAP personnel.

**Major
Bibliographic
References**

- Ficken, Robert E. *The Forested Land: A History of Lumbering in Western Washington*. Seattle: University of Washington Press, 1987
- Franklin, Dave Sr., Track Supervisor, PSAP. Interview with Mildred Andrews, January 2010
- Gitomer, Louis E., Law Offices of. *Combined Environmental and Historic Report --49 C.F.R.1105.7 and 1105.8-- Docket No. AB-1023--Sub-No. IX-- "Puget Sound & Pacific Railroad Company -- Abandonment Exemption -- in Grays Harbor County, WA. Towson, Maryland: September 12, 2008*
- Goings, Aaron, "Hoquiam - Thumbnail History," Historylink.org Essay 8652, Encyclopedia of Washington State History, October 18, 2008
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- Kirk, Ruth and Carmela Alexander. *Exploring Washington's Past: A Road Guide to History*. Seattle: University of Washington Press, 1990
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- Morgan, Murray. *The Last Wilderness*. Seattle: University of Washington Press, 1955
- Parsons Brinkerhoff and Engineering and Industrial Heritage. *A Context for Common Historic Bridge Types, NCHRP Project 25-25, Task 15*. National Cooperative Highway Research Program, Transportation Research Council, October 2005.
- Polk's Grays Harbor Cities Directory, 1911. Seattle: R.L. Polk & Co., 1911.
- Sanborn Map Company. Hoquiam, Washington, Sanborn Fire Insurance maps. New York: 1889, 1890, 1891, 1894, 1902, 1907, 1916
- Schwantes, Carlos A. *Railroad Signatures Across the Pacific Northwest: An Interpretive History*. Rev. ed. Lincoln: University of Nebraska Press, 1996
- Sorensen, Larry, Assistant General Manager, Puget Sound & Pacific Railroad Company, A Rail America Company, Elma, Washington office. Interview by Mildred Andrews. Grays Harbor County, November 2009

13. Photographs of all structures and trestles that are 50 years old or older.

Bridge 2 of 3. Swing Bridge.

Located 9306 feet North of clearance point of main.

Photo taken 2/8/08 looking north.

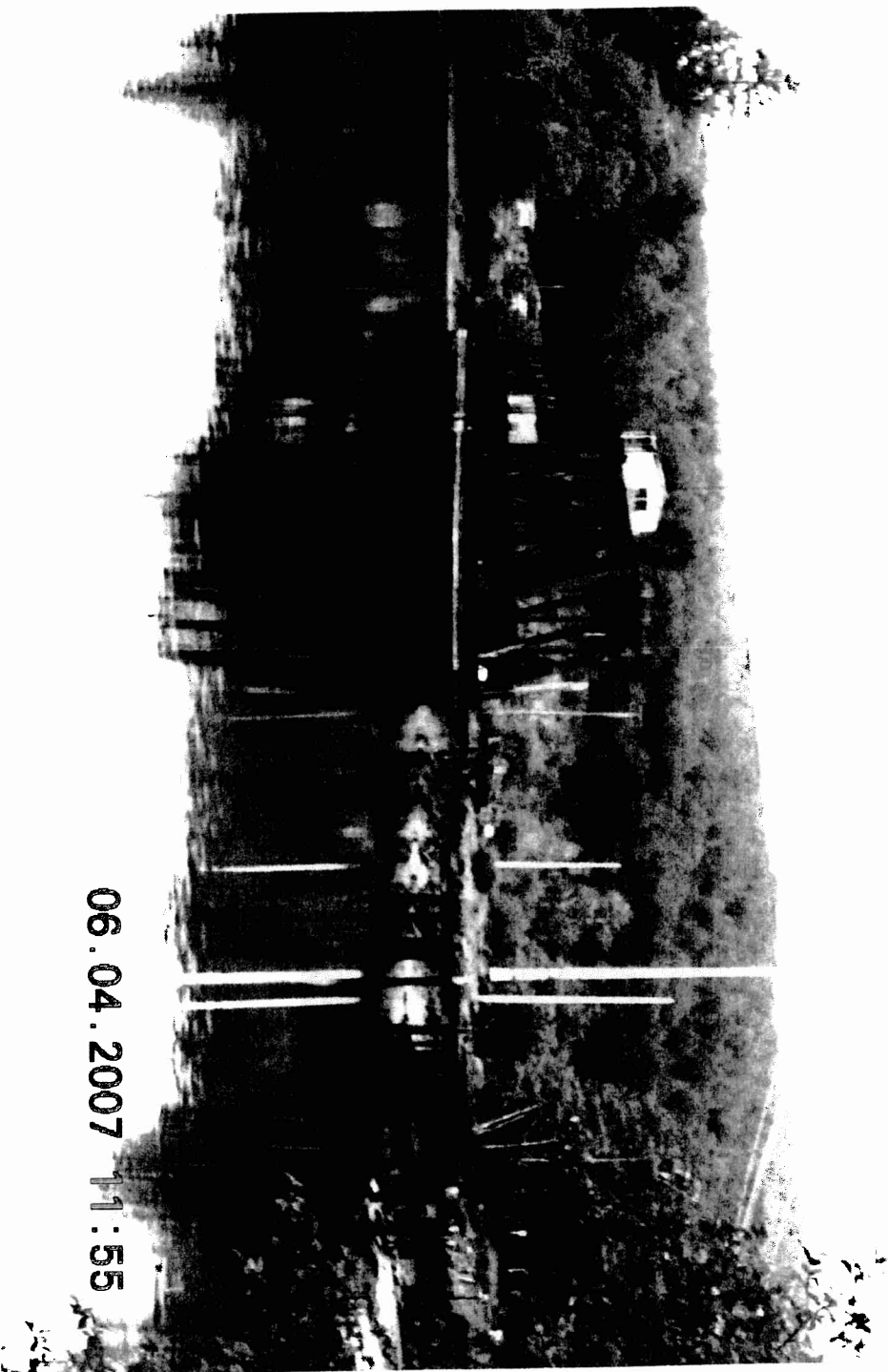
Bridge is 231 feet long.

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3.2 BRIDGE/HORN SPUR

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06.04.2007 11:55

13. Photographs of all structures and trestles that are 50 years old or older.

Bridge 3 of 3 on Horn Spur.

Located 10,036 feet north of clearance of main.

Photos taken on 2/8/08 looking north.



13. Photographs of all structures and trestles that are 50 years old or older.

Bridge one of three on Horn Spur.

Located 3827 feet north of clearance point off of main.

Photo taken on 2/8/08 looking north.

