

Oregon Historic Site Record

| LOCATION AND PROPERTY NAME | | | |
|--|--|---|--|
| address: | 3010 NW Thurman St Portland, Multnomah County | historic name: | Balch Gulch Bridge |
| assoc addresses: | | current/other names: | Bridge #25B15; Thurman Street Bridge |
| location descr: | | block/lot/tax lot: | |
| | | twshp/rng/sect/qtr sect: | 1N 1E 29 |
| PROPERTY CHARACTERISTICS | | | |
| resource type: | Structure | height (stories): | |
| elig evaluation: | eligible/significant | total elig resources: | 1 |
| prim constr date: | 1905 | second date: | 1914 |
| | | total inelig resources: | 0 |
| | | NR Status: | Individually Listed |
| | | date indiv listed: | 09/23/2025 |
| primary orig use: | Road Related (vehicular) | orig use comments: | |
| second orig use: | | prim style comments: | Pratt Truss |
| primary style: | Other / Undefined | sec style comments: | |
| secondary style: | | siding comments: | |
| primary siding: | Concrete: Other/Undefined | architect: | Lockwood, James B. |
| secondary siding: | Steel | builder: | Lockwood, James B. |
| plan type: | Truss | | |
| comments/notes: | | | |
| Determined eligible by the NPS on 5/2/1985 as part of the Historic Highway Bridges of Oregon Thematic Group submitted by ODOT. Listed in NR on 9/23/2025. | | | |
| GROUPINGS / ASSOCIATIONS | | | |
| Survey/Grouping Included In: | Type of Grouping | Date Listed | Date Compiled |
| Historic Highway Bridges of Oregon MPD | MPS | | 1985 |
| SHPO INFORMATION FOR THIS PROPERTY | | | |
| NR date listed: | 09/23/2025 | 106 Project(s) | Special Assess Project(s): None |
| ILS survey date: | | SHPO Case 13-1093 | Federal Tax Project(s): None |
| RLS survey date: | | Date 07/23/2013 | |
| | | Agency Effect Eval no adverse effect | |
| ARCHITECTURAL / PROPERTY DESCRIPTION | | | |
| <i>(Includes expanded description of the building/property, setting, significant landscape features, outbuildings and alterations)</i> | | | |
| <p>The Balch Gulch Bridge (ODOT Bridge No. 25B15), which was designed by James B. C. Lockwood and completed in 1905, is a pin-connected steel Pratt deck truss that carries NW Thurman Street across Balch Gulch in Portland, Oregon.¹ The bridge is located in the Willamette Heights Addition, a primarily residential neighborhood in Portland's Northwest District, and spans a narrow section of city-owned parkland. The structure consists of two pin-connected Pratt deck truss spans—one 160-foot-long, eightpanel main span and one 60-foot-long, three-panel side span—between three steel towers with concrete footings.² In total, the bridge is approximately 400 feet long and 40 feet wide, including an approximately 27-foot-wide roadway with approximately six-foot-wide pedestrian walkways on either side. The bridge has received a number of alterations and repairs to its original structure, the most noteworthy of which are the removal of streetcar tracks in the early 1950s; the replacement and reinforcement of the pedestrian rail and guardrails in 1955; the addition of steel struts to strengthen truss members in 1978; and a major rehabilitation in 2014 that involved the replacement of the wood decking with form-lock steel planks, in-kind replacement of the steel floor beams, and replication of the original pedestrian rail removed in 1955.³ Despite these alterations, the bridge maintains nearly all its character-defining features, including its Pratt deck truss design, pin connections, original steel trusses and towers with concrete footings, and location spanning Balch Gulch in northwest Portland's Willamette Heights Addition. It therefore retains integrity.</p> | | | |
| HISTORY | | | |
| <i>(Chronological, descriptive history of the property from its construction through at least the historic period - preferably to the present)</i> | | | |
| <p>The Balch Gulch Bridge is of statewide significance under Criterion C in the area of Engineering as Oregon's only surviving example of a pin-connected steel Pratt deck truss bridge. Designed by J.B.C. Lockwood and constructed for the City of Portland in 1905, the bridge demonstrates a design thoughtfully tailored to its location and functional demands. Its siting over Balch Gulch in Northwest Portland provided the necessary vertical clearance for its deck truss design, which in turn enabled the bridge to support the weight of electric streetcars and accommodate associated overhead catenary systems. The bridge's use of pin connections rather than rivets is also notable, as it reflects the dominant connection method for truss bridges erected in the late nineteenth and very early twentieth centuries. By the early 1910s, most new bridges employed riveted joints, and over time Oregon's inventory of pin-connected bridges has declined. The Balch Gulch Bridge is now one of just thirteen extant pin-connected highway bridges in the state. Its configuration as a deck truss further distinguishes it: only four such bridges remain in Oregon, and of these, the Balch Gulch Bridge is the only one that is pin-connected. As such, the bridge is a singular example of both a rare structural type and a historically significant bridge construction technology. The Balch Gulch Bridge is also locally significant under Criterion A in the area of Community Planning and Development for its role in shaping the growth and accessibility of the Willamette Heights neighborhood between 1905 and 1914, and in supporting Portland's efforts to market itself during the 1905 Lewis and Clark Centennial and American Pacific Exposition and Oriental Fair. Constructed just a few months before the exposition, the bridge extended continuous streetcar service over Balch Gulch to Willamette Heights, enhancing the neighborhood's appeal and accelerating a period of intensive development (especially along the streetcar route) that lasted through 1914.³¹ The increased accessibility to Willamette Heights benefited more than just the neighborhood itself, however; it was also integral to Portland's broader marketing strategy during the exposition, which aimed to showcase the city's scenic and residential appeal to tourists and potential new residents. The streetcar route made possible by the Balch Gulch Bridge was prominently advertised to fair visitors, and several vantage points in Willamette Heights, accessible only by crossing the bridge, were used for promotional images of the nearby exposition grounds (Figures 16 through 18). As an investment in anticipated growth, and as a practical asset that accelerated the first and most intensive phase of development in a young Portland neighborhood, the Balch Gulch Bridge is significant for its role in promoting the growth of Willamette Heights and Portland overall.</p> | | | |
| RESEARCH INFORMATION | | | |
| Title Records | Census Records | Property Tax Records | Local Histories |
| ✓ Sanborn Maps | Biographical Sources | ✓ SHPO Files | Interviews |
| Obituaries | ✓ Newspapers | State Archives | ✓ Historic Photographs |
| City Directories | ✓ Building Permits | State Library | |
| Local Library: | Multnomah County Library | University Library: | |
| Historical Society: | Oregon Historical Society | Other Respository: | Portland Archives & Records Center |

Bibliography:

Abbott, Carl. "Lewis and Clark Fair." Oregon Encyclopedia. Accessed April 14, 2025. https://www.oregonencyclopedia.org/articles/lewis_clark_exposition/. Abbott, Carl. The Great Extravaganza: Portland and the Lewis and Clark Exposition. Portland, OR: Oregon Historical Society, 1981. "Auto Crash Victims, Son Retain Morale Tough Pair to Be in Hospital for Months." Oregonian (Portland, OR). December 23, 1954. "Balch Creek Sewer Done." Morning Oregonian (Portland, OR). February 15, 1932. Balch Creek Trash Rack Replacement and Repair. City of Portland Bureau of Environmental Services. Accessed March 11, 2025. <https://www.portland.gov/bes/improvements/construction/balch-creek-trashrack-replacement-and-repair>. Balch Gulch Bridge: NW Thurman Street over Macleay Park (PowerPoint presentation). 2015. <https://www.oregon.gov/ODOT/LocalGov/Documents/04-Balch-Gulch-Bridge-Project-at-Thurman-Street-09-16.pdf>. Oregon Department of Transportation Records (355 Capitol St. NE, MS11, Salem, OR 97301). "Big Fills Help East Side." Morning Oregonian (Portland, OR). March 14, 1909. "Bird Alliance of Oregon Wildlife Sanctuary." Bird Alliance of Oregon. Accessed March 19, 2025. <https://birdallianceoregon.org/our-work/steward/portland-audubon-wildlife-sanctuary/>. "Born in 1897 - Lewis-Clark fair early day dream." Oregon Journal (Portland, OR). August 19, 1977. "Bridge Open to Travel." Morning Oregonian (Portland, OR). January 16, 1903. "Bridges Well Built: Expert Bihler Reports on His Investigation." Morning Oregonian (Portland, OR). January 6, 1905. Burrow, Rebecca, Chris Bell, and Chris Leedham. Oregon's Historic Bridge Field Guide. Salem, OR: Oregon Department of Transportation, 2013. "City News in Brief: Bridge Repairs Begun." Morning Oregonian (Portland, OR). December 23, 1921. "City News in Brief: Mr. Macleay the Donor." Morning Oregonian (Portland, OR). May 1, 1897. Commonwealth of Pennsylvania. "History and significance of bridge building technology in Pennsylvania from the earliest days until 1956." March 1997. Accessed online April 9, 2025. <https://www.pa.gov/content/dam/copapwp-pagov/en/pennidot/documents/programs-and-doingbusiness/cultural-resources/documents/3-bridge-technology-context.pdf>. Donovan, Sally, and Sharr Prohaska. "Grant, Henry M., House." National Register of Historic Places Nomination Form. Washington, DC: U.S. Department of the Interior, National Park Service, 1991. https://heritagedata.prd.state.or.us/historic/index.cfm?do=v.dsp_siteSummary&resultDisplay=49267. "Dying Statements of Danford Balch." Weekly Oregonian (Portland, OR). October 22, 1859. "Early Transit Companies Recalled as Streetcars Make Last Runs." Oregonian (Portland, OR). February 19, 1950. "Electric Railway Bridge Over the Clackamas River Near Portland, Oregon." Street Railway Journal vol. XXXI, no. 19 (May 9, 1908): 790. "Few Bridges Open." Oregonian (Portland, OR). November 5, 1902. Flores, Trudy, and Sarah Griffith. "Central Vista, Lewis & Clark Centennial Expo." Accessed April 14, 2025. <https://www.oregonhistoryproject.org/articles/historical-records/central-vista-lewis-amp-clark-centennialexpo/>. Foster, Laura O. Portland Hill Walks: Twenty Explorations in Parks and Neighborhoods. Portland, OR: Timber Press, 2005. "Fund Planned for Masseys." Oregonian (Portland, OR). December 25, 1954. Gaston, Joseph. Portland, Oregon, Its History and Builders in Connection with the Antecedent Explorations, Discoveries and Movements of the Pioneers That Selected the Site for the Great City of the Pacific, vol. II. Chicago, IL: S.J. Clarke Publishing Co., 1911. Gerald, Paul. 60 Hikes Within 60 Miles: Portland: Including the Coast, Mount Hood, St. Helens, and the Santiam River. Birmingham, AL: Menasha Ridge Press, 2014. Hadlow, Robert. "Oregon Inventory of Historic Properties Section 106 Level of Effect Form: Balch Gulch Bridge No. 25B15." Oregon Department of Transportation/NW Thurman St.: Macleay Park Bridge Rehabilitation Project, ODOT Key No. 18340, Fed.-Aid No. 5900(259). July 7, 2013. Oregon Department of Transportation Records (355 Capitol St. NE, MS11, Salem, OR 97301). Harden, Kevin. "Historic Makeover Will Close Thurman Street Bridge." Portland Tribune (Portland, OR). September 6, 2013. Identifier Jwpic_001065. "Laying of the Corner-Stone of the Lewis and Clark Monument by the President of the United States" (Portland, Oregon). May 21, 1903. Shelf location OREGON 606 P85, Multnomah County Library Gallery. <https://gallery.multcolib.org/document/lewis-and-clark-monument>. Identifier JJWTxt_00001. Lewis and Clark Journal vol. 1, no. 1 (January 1904). Shelf location OREGON 606 P85, Multnomah County Library Gallery. <https://gallery.multcolib.org/document/lewis-and-clark-journal-january-1904>. Identifier JJWTxt_00014. Col. L.L. Hawkins, "Along the Wildwood Trail of Macleay Park: Virgin Beauties of a Walk from the Exposition Grounds to the City Park through Balch Gulch." Lewis and Clark Journal vol. 3, no. 2 (February 1905). Shelf location OREGON 606 P85, Multnomah County Library Gallery. <https://gallery.multcolib.org/document/lewis-clark-journal-february-1905>. Jackson, W. Turrentine. The Enterprising Scot: Investors in the American West. Edinburgh: Edinburgh University Press, 1968). Kaye, Ted. "The Pattern of Development in Willamette Heights." In Willamette Heights Chronicles, ed. Miranda Weigler. Portland, OR: privately published, 2009. "Kelly Resigns: J. B. C. Lockwood Will Take Charge of Port of Portland Dredging." Morning Oregonian (Portland, OR). January 10, 1903. "Lockwood Gets It." Morning Oregonian (Portland, OR). January 2, 1903. "Lockwood Works Manager." Sunday Oregonian, (Portland, OR). July 28, 1918. MacColl, Kimbark D. The Shaping of a City: Business and Politics in Portland, Oregon 1885 to 1915. Portland, OR: The Georgian Press Co., 1976. "North Myrtle Park Bridge." Bridgehunter.com. Accessed April 10, 2025. <https://www.bridgehunter.com/bridge/29944>. "Nostalgic Souvenir Hunters Crowd Streetcars on Final Portland Runs." Oregonian (Portland, OR). February 27, 1950. "NW Thurman St Bridge | Portland, OR." Cascade Bridge LLC. Accessed April 8, 2025. <https://www.cascadebridge.com/projects/rehabilitation/nw-thurman-st-bridge-rehab.html>. "One More Bridge Closed." Morning Oregonian (Portland, OR). November 8, 1902. Oregon Serial Patent 3881. Genealogical Forum of Oregon Research Library (2505 SE 11th Ave., Ste B018, Portland, OR 97202). Oregon State Highway Division, Oregon Department of Transportation. "Historic Highway Bridges of Oregon Thematic Group." Cultural Property Inventory and Request for a Determination of Eligibility. Washington, DC: U.S. Department of the Interior, National Park Service, 1984. https://heritagedata.prd.state.or.us/historic/index.cfm?do=v.dsp_siteSummary&resultDisplay=673150. Orloff, Chet. "Willamette Heights: A History." M.A. Thesis. Portland State University, 1980. Smith, Dwight A. James B. Norton, Pieter T. Dykman. Historic Highway Bridges of Oregon. Salem, OR: Oregon Department of Transportation, 1985, updated with 2018 bridge status information. Parsons Brinckerhoff and Engineering and Industrial Heritage. "A Context for Common Historic Bridge Types." NCHRP Project 25-25, Task 15, prepared for the National Cooperative Highway Research Program, Transportation Research Council, and National Research Council. October 2005. Accessed April 2, 2025. https://deldot.gov/environmental/archaeology/historic_pres/bridges/pdf/context/context_cov_abs.pdf?ca che=1744306436254. Petroski, Henry. To Engineer is Human. New York: Vintage Books, 1992. Portland Streetcar LLC. "Design Development Standards." Accessed March 20, 2025. <https://www.portland.gov/sites/default/files/2020-08/streetcar-dev-stds-v7.pdf>. Project No. STP-5900 (260) NW Thurman St. Macleay Park Bridge Rehab. "Sheet BR-1: Plan & Elevation." Approved August 2013. Portland Bureau of Transportation Records (1120 SW Fifth Ave., Ste. 1331, Portland, OR 97204). Provost, Libby. "Forest Park." Oregon Encyclopedia. August 29, 2022. March 20, 2025. https://www.oregonencyclopedia.org/articles/forest_park/. Record no. AD/16208. "Portland Railway Company Promotional Brochure: Lewis & Clark Exposition." November 1904. Record date March 23, 1907. In "Lewis and Clark Exposition articles," Portland City Archives & Records Center (1800 SW 6th Ave., 550, Portland, OR 97201). <https://efiles.portlandoregon.gov/record/16743825/>. Record no. AF/65860. "R - Reed, Sanderson and Taylor, Douglas W - City Engineer." "From D. W. Taylor, City Engineer to Mayor Harry Lane regarding correspondence of Sanderson Reed," Document #1. Record date December 31, 1906. Personal correspondence regarding cleaning of drains and gutters on NW Thurman St. From D. W. Taylor, City Engineer to Harry Lane, Mayor, Portland City Archives & Records Center (1800 SW 6th Ave., 550, Portland, OR 97201). <https://efiles.portlandoregon.gov/record/104045/>. Record no. AF/65860. "R - Reed, Sanderson and Taylor, Douglas W - City Engineer." "Correspondence between Reed, Taylor and Lane concerning drains, poles, Thurman St Bridge, sidewalks, and trolley poles." Record Date December 31, 1906. Portland City Archives & Records Center (1800 SW 6th Ave., 550, Portland, OR 97201). <https://efiles.portlandoregon.gov/record/104045/>. Record no. AP/28388. "A2000-025.2367 : Steel pipe by men and crane laying new deck for reconstruction of NW Thurman St Bridge." Record date August 28, 1951. Portland City Archives & Records Center (1800 SW 6th Ave., 550, Portland, OR 97201). <https://efiles.portlandoregon.gov/record/3918221/>. Record no. AP/4535. "A2001-008.153 : From temporary trestle looking northeast at south abutment, south wing walls poured, #1 Unit hand rail completed except two south panels, showing one lamp post completed without bronze head [Union Ave]." Record date July 18, 1916. Portland City Archives & Records Center (1800 SW 6th Ave., 550, Portland, OR 97201). <https://efiles.portlandoregon.gov/record/2656089/>. Record no. AP/98743. "Maintenance : Thurman Bridge : Steel (5/7)." Record date May 1, 1979. Portland City Archives & Records Center (1800 SW 6th Ave., 550, Portland, OR 97201). <https://efiles.portlandoregon.gov/record/17173583/>. Record no. APF/161. "The Scenic Line of Portland." In "Souvenir book - Portland 1905 - What To See And How To See It : Hand Book and Guide, Containing Valuable Information About Portland and Vicinity." Record date December 31, 1905. Portland City Archives & Records Center (1800 SW 6th Ave., 550, Portland, OR 97201). <https://efiles.portlandoregon.gov/record/2953507/>. Record no. D/75780. "186215 NW Thurman Street Balch Gulch Bridge over Macleay Park contract ordinance." Record date September 4, 2013. Portland City Archives & Records Center (1800 SW 6th Ave., 550, Portland, OR 97201). <https://efiles.portlandoregon.gov/Record/6024819>. Record no. F/4539719. "Stairway S052A, 052B - 1/4-2826 - Thurman Street Stairs." May 16, 1950. Record date March 27, 2012. Portland City Archives & Records Center (1800 SW 6th Ave., 550, Portland, OR 97201). <https://efiles.portlandoregon.gov/record/11720868/>. Record no. M/1155. "Bird's-eye view of Lewis and Clark Centennial Exposition and Oriental Fair." Record date May 1, 1905. Portland City Archives & Records Center (1800 SW 6th Ave., 550, Portland, OR 97201). <https://efiles.portlandoregon.gov/record/2682231/>. Record no. M/14875. "20345 - NW Thurman St Bridge." Record date August 27, 1892. Portland City Archives & Records Center (1800 SW 6th Ave., 550, Portland, OR 97201). <https://efiles.portlandoregon.gov/record/2764905/>. Record no. M/20178. "Stairway replacement S - 52 , Northwest Thurman Street Bridge to Balch Gulch." Record date December 31, 1984. Portland City Archives & Records Center (1800 SW 6th Ave., 550, Portland, OR 97201). <https://efiles.portlandoregon.gov/record/5197317/>. Record no. M/22396. "Transportation Engineering - Structural Maintenance - Structural Plans & Drawings - B015 - Northwest Thurman Street Bridge over Balch Gulch," "Erection Diagram, Thurman Street Bridge Crossing Balch Gulch, Portland Oregon, Sheet 1 of 20, Riverside Bridge Co., Wheeling, W.V." 1904. Record date July 28, 1950. Portland City Archives & Records Center (1800 SW 6th Ave., 550, Portland, OR 97201). <https://efiles.portlandoregon.gov/record/12122251/>. Record no. M/22396. "Transportation Engineering - Structural Maintenance - Structural Plans & Drawings - B015 - Northwest Thurman Street Bridge over Balch Gulch," "Details of NW Thurman St. Bridge over Balch Gulch." Original plans July 1950, revised April 30, 1974. Record date July 28, 1950. Portland City Archives & Records Center (1800 SW 6th Ave., 550, Portland, OR 97201). <https://efiles.portlandoregon.gov/record/12122251/>. Record no. M/22396. "Transportation Engineering - Structural Maintenance - Structural Plans & Drawings - B015 - Northwest Thurman Street Bridge over Balch Gulch," "Details of Railing & Flex-Beam Support, N.W. Thurman St. Bridge, Sheet 1 of 1." January 24, 1955. Record date July 28, 1950. Portland City Archives & Records Center (1800 SW 6th Ave., 550, Portland, OR 97201). <https://efiles.portlandoregon.gov/record/12122251/>. Record no. M/22396. "Transportation Engineering - Structural Maintenance - Structural Plans & Drawings - B015 - Northwest Thurman Street Bridge over Balch Gulch," "Details of Handrail Replacement, N.W. Thurman St. Bridge, Sheet 1 of 6." August 10, 1955. Record date July 28, 1950. Portland City Archives & Records Center (1800 SW 6th Ave., 550, Portland, OR 97201). <https://efiles.portlandoregon.gov/record/12122251/>. Record no. M/22396.

"Transportation Engineering - Structural Maintenance - Structural Plans & Drawings - B015 - Northwest Thurman Street Bridge over Balch Gulch," "B-015-03-1978: Eyebar Repair to the Thurman St. Bridge, Sheet 1 of 1." 1978. Record date July 28, 1950. Portland City Archives & Records Center (1800 SW 6th Ave., 550, Portland, OR 97201). <https://efiles.portlandoregon.gov/record/12122251/>. Record no. M/22396. "Transportation Engineering - Structural Maintenance - Structural Plans & Drawings - B015 - Northwest Thurman Street Bridge over Balch Gulch," "B-015-03-1978: Strengthening Truss Members, Sheet 2 of 2." August 1978. Record date July 28, 1950. Portland City Archives & Records Center (1800 SW 6th Ave., 550, Portland, OR 97201). <https://efiles.portlandoregon.gov/record/12122251/>. Robbins, William G. "The Growth of Portland." Oregon Historical Society, Oregon History Project. Accessed April 15, 2025. <https://www.oregonhistoryproject.org/narratives/this-land-oregon/the-rural-urbaninterface/the-growth-of-portland/>. Seward, Derek W. Understanding Structures. New York, NY: Macmillan Publishers, 1998. "Skid on Icy Pavement Sends Car through Guard Rail on N.W. Thurman Viaduct." Oregonian (Portland, OR). December 17, 1954. "Some Picturesque Hillside Homes in Portland: Residences on Terraces at Willamette Heights Overlooking Guild's Lake and the River." Sunday Oregonian (Portland, OR). June 5, 1904. "Street Cars Clang Death Knell." Oregonian (Portland, OR). February 27, 1950. "Street Committee to Rescue: Residents on Willamette Heights in Danger of Isolation." Morning Oregonian (Portland, OR). October 28, 1904. "Supple-Ballin Make Change." Morning Oregonian (Portland, OR). August 2, 1918. Thompson, Richard. Slabtown Streetcars. Charleston, SC: Arcadia Publishing, 2015. "Transportation Facilities at the Portland Fair." Street Railway Journal vol. XXVI, no. 8 (August 19, 1905): 266- 267. "Trunk Sewer Finished: Balch Creek Project Is Difficult Job." Morning Oregonian (Portland, OR). September 10, 1921. U.S. Department of Transportation, Federal Highway Administration, Office of Bridges and Structures. "Service Life Design Reference Guide." November 2022. Accessed April 15, 2025. <https://www.fhwa.dot.gov/bridge/preservation/docs/hif22052.pdf>. "Untitled." Public Art Archive. Accessed April 16, 2025. <https://publicartarchive.org/art/Untitled/4ca4881e>. Warren, Dr. James R. Puget Sound Business Journal. February 17, 1986. "Will Build Bridge: Lockwood Gets Contract on Balch." Morning Oregonian (Portland, OR). March 5, 1904. "Will Get a Foot-Bridge: Residents of Willamette Heights Not to Be Incommoded." Morning Oregonian (Portland, OR). November 9, 1904. Wortman, Sharon Wood, with Ed Wortman (authors), Norman, James (photographer). The Portland Bridge ~~Book~~ 3rd ed. Portland, OR: Urban Adventure Press, 2006.