

CARBON RIVER ROAD
Mount Rainier National Park
Between Carbon River Entrance and Ipsut Creek
Longmire Vicinity
Pierce County
Washington

HARR No. WA-120

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~~PHOTOGRAPHS~~

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
U.S. Department of the Interior
P.O. Box 37127
Washington, D.C. 20013-7127

HISTORIC AMERICAN ENGINEERING RECORD
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I. INTRODUCTION

Location: Between Carbon River Entrance and Ipsut Creek
Campground, Mount Rainier National Park, Pierce
County, Washington.
Quads: Golden Lakes, Wash.
Mowich Lake, Wash.
UTMs: West End: Carbon River Entrance
10/582600/5204990
East End: Ipsut Creek 10/589000/5203050

Date of Construction: 1921

Owner: Mount Rainier National Park, National Park Service

Use: Park road

Significance: The second road built in Mount Rainier National Park,
this 5-mile unpaved road provides access to the remote
northwest corner of the park. In the late 1920s,
plans were made to connect the road with the planned
West Side Highway but these were never realized.

Project Information: Documentation of the Carbon River Road is part of the
Mount Rainier National Park Roads and Bridges
Recording Project, conducted in summer 1992 by the
Historic American Engineering Record.

Richard H. Quin, Historian, 1992

II. HISTORY

This is one in a series of reports prepared for the Mount Rainier National Park Roads and Bridges Recording Project. HAER No. WA-35, MOUNT RAINIER NATIONAL PARK ROADS AND BRIDGES, contains an overview history of the park roads.

Carbon River Road

The Carbon River Road in the northwest corner of Mount Rainier National Park provides access to a remote corner of the park. Originally built to open up a second area of the park for visitors, in the early 1920s ambitious plans were made to extend the road southwest towards Mowich Lake and then south to a junction with the Nisqually Road, creating a "West Side Highway." Plans were also contemplated to construct another section running east from Carbon River across the northern section of the park. These plans would have formed two-thirds of a contemplated "round-the-mountain" road. Although a portion of the West Side Road [HAER No. WA-122] was built north from the Nisqually Road as far as the North Fork Puyallup River by 1934, no connection was ever made with the Carbon River Road, which today remains a 5-mile unpaved track leading to one of the wildest regions of the national park.

Geologist Bailey T. Willis conducted surveys and did other exploratory work in the Carbon River area in the early 1880s. His work attracted the attention of the Northern Pacific Railway, which hoped to develop the rich coal fields around the present village of Wilkeson, 12 miles outside the present park boundaries. After hearing enthusiastic reports from Willis, the railway company's president, Thomas F. Oakes, accompanied by assistant general manager J. M. Buckley and Vermont Senator George Edmunds, visited the remote northern flank of the mountain. Oakes was convinced that the mountain had great potential for tourism, in the same manner that the company was already profiting from promoting Yellowstone National Park, and believed development or park status would benefit them.¹ The railway was ultimately constructed as far as the coal fields, but never was extended closer to the park boundaries.

Karl von Zittel, a German, and James Bryce, later British ambassador to the United States, visited the north side of the mountain in 1883, and were awed by the massive Carbon and Mowich glaciers, the great stands of tall trees, and the wild and picturesque scenery. The two wrote members of Congress urging the preservation of the mountain country by the creation of a national park along the lines of Yellowstone (1872) or as a national reserve, after the example set by the creation of the Yosemite Valley reserve in 1864.² Despite this early attention to the district, by the time Mount Rainier National Park was established in 1895, public interest had shifted to the south and southwest sides of the mountain, where Longmire Springs and Paradise Valley were becoming the principal tourist destinations for the new park.

A wagon road along the south bank of the Carbon River was constructed in 1907 by the Washington Mining and Milling Company. This mine service road ran from

the company's 38 claims in the park to Montezuma, located a half mile from Fairfax with a connection with the Northern Pacific. The road was inspected by Mount Rainier National Park Ranger Thomas O'Farrell, who noted that the company had violated its permit by cutting live trees for corduroying the road and constructing bridges. The road only existed through the park; outside the boundary, a bridle trail connected with the road to Fairfax. Ranger O'Farrell also discovered that the mining company's manager, William Colegrove, claimed the company was the sole proprietor of the road and forbade the rangers to use it. The company's operations ceased by 1913.³ Although geologists continued to seek out potential claims in the region, little other mining was conducted in this section of the park.

Following the U.S. Army Corps of Engineers' completion of the "Government Road" between the Nisqually Entrance and Paradise Valley in the summer of 1915, the park administration began considering the development of other areas of the park. Due to its proximity to the Puget Sound cities, the Carbon River area in the park's northwest corner was the first section to be considered. As access was then very limited, a new road would be required, and a survey was authorized.

In October and November 1915, a survey party under the charge of Engineer J. G. Morgan conducted a location survey for an automobile road up the Carbon River valley. The line followed close to water level up the south bank of the stream to Cataract Creek near the snout of the glacier, a distance of 8 miles. The grade would vary from 2.5 percent at the lower end to about 6 percent at the upper end. Total cost of the survey was \$1,075.51, or \$134.44 a mile.⁴

Mount Rainier National Park Supervisor Dewitt L. Reaburn, in his 1916 annual report, stated that the road, when constructed, would shorten the distance to the national park boundary from Tacoma by 21 miles and from Seattle by 41 miles (in contrast to the route through Ashford). The road would also open what he called "the most rugged side of the mountain."⁵ Reaburn suggested that the costs of construction would not exceed \$6,000 to \$7,000 per mile.⁶

The Pierce County government in 1919 appropriated funds to construct a paved road to Fairfax, just outside the park boundaries. In his annual report that year, Park Superintendent Roger W. Toll estimated that the work would be completed in two years.⁷ The county also announced plans to extend its road to connect with the proposed park road up the Carbon River valley.

Construction of 5 1/2 miles of road within the park boundaries began in 1921, although the county's approach road had not yet been built. The former mine road may have provided access for the construction equipment. Contractors White, Brown & Leahy did the work on the park section. The road was completed to Ipsut Creek in 1921 and surfaced with gravel. The Park Service then began preparing to issue contracts for the extension of the road as far as the snout of the Carbon Glacier.⁸

In October 1922, the contract for the next 2 1/2 miles, extending the road as far as Cataract Creek near the snout of the glacier, was issued to contractors Ward & Strahm.⁹ The company began work the following spring. Much of the construction was let to a subcontractor, Knute Olson. Work, however, did not progress very rapidly, and in September 1923 National Park Service Chief Civil Engineer George E. Goodwin warned that the contractors should increase their work force and push the work more rapidly, or else action would be taken toward terminating the contract.¹⁰

The National Park Service initiated surveys for the West Side Road, the first link of the proposed circuit road, in 1922. The survey line began at Ipsut Creek on the Carbon River Road and would have followed the creek up towards Ipsut Pass, where a long tunnel would be required to reach the Mowich Lake basin. On account of the tunnel and the excessive grades and curves which would have been required, this survey line was rejected.¹¹

The survey report also included recommendations for a "North Side Road," which would start at Carbon River (where a new hotel was proposed) and head east via Crescent Lake, Moraine Park, Mystic Lake, the snout of Winthrop Glacier, Grand Park and Frozen Lake, to connect with the Starbo Mining Company road at Glacier Basin. The 30-mile road would also have a maximum grade of 6 percent and cost about \$15,000 per mile.¹² This route, too, was ultimately rejected, and the Carbon River Road remains an isolated section unconnected to the main park road system.

While the work was being finished on the road in the park boundaries, the county's progress on the approach road fell behind schedule. In December 1923, T. H. Martin, General Manager of the Rainier National Park, reported to Park Superintendent Owen A. Tomlinson on a conference he had with County Commissioner Henry Ball, in whose district lay the Carbon River area. Ball stated that he had recently been in a reelection campaign and had to promise the completion of roads serving farming communities over the road to the national park. Martin suggested that the National Park Service or the U.S. Forest Service should fund the remaining costs of construction of the connecting road.¹³

Tomlinson, however, then wrote Engineer Goodwin to state that he understood the county would take steps to complete the road the following spring in time for the coming tourist season. The road would be sufficient for "summer travel condition." He also understood the County Commission would then budget funds for graveling (but not paving) the approach road by the opening of the 1925 season. Tomlinson suggested that the Park Service should continue with the work on the Carbon River Road and the planned construction of the West Side Road.¹⁴

The park road was completed to Cataract Creek in summer 1924, making for a total of 8 miles within the park. However, flood waters that February severely damaged the new road, forcing the park to plan more extensive

revetment work along the river. A mile of the county approach road remained incomplete, severely hindering travel.¹⁵

Although the road had just been constructed, Superintendent Tomlinson reported that it was only suitable for fair-weather travel.

During rainy weather, and for some time after, this road must be kept closed to traffic. When wet it is impossible for automobiles to go thru. Even in dry weather it is only with great difficulty that cars can go over it and then generally with damage to road and machines. This road requires surfacing, which should be done before it is open to the public as otherwise \$500 or \$600 per mile will be required to maintain it in passable condition.¹⁶

Tomlinson also provided a description of the road's two segments and their conditions. From the Carbon River Entrance to Ipsut Creek, a distance of 5 1/2 miles, the road was 20' wide, graded and drained. There were several wash-outs where the river overflowed the banks, and no surfacing. From Ipsut Creek to the end of the road, 2 1/2 miles, the road was graded and shaped, but unsurfaced. One mile under construction would be completed in June. He recommended construction of wing dams and revetments to protect the road along the river, and urged its surfacing early the next season before travel was permitted over it.¹⁷

The county approach road was completed in 1925, and the road was in good condition for summer travel as far as Ipsut Creek. The 3-mile section above this point to Carbon Glacier had not been repaired and was in poor condition. A "public auto camp" was constructed at Ipsut Creek that summer.¹⁸ [Although the upper section of the road was repaired, it was quickly damaged again, and was closed to vehicular traffic soon afterwards. Today, part of the Wonderland Trail now follows the route between Ipsut and Cataract creeks.]

In 1932, \$6,000 was allocated for improvements to the road. Superintendent Tomlinson hailed the appropriation, citing the road's importance for administration and fire protection and for its access to the Wonderland Trail. At the same time, the state began reconstruction of the approach road from Fairfax. The Morrison-Knudson Company of Boise, Idaho had sixty men at work on that project in March.¹⁹

Floods in October 1934 destroyed a 3,000' section of road at "Six-Mile Creek" [apparently Cataract Creek]. Emergency Conservation Works personnel constructed a temporary detour, but Superintendent Tomlinson warned that permanent repairs would be useless unless the road were to be protected by revetments.²⁰ The revetments were soon rebuilt, but the upper part of the road above Ipsut Creek was permanently closed.²¹

In 1933, Camp N.P.3 of the Emergency Conservation Works (a division of the Civilian Conservation Corps public relief program) was established at Ipsut Creek. Over the next several summers, recruits from the camp carried out a program of roadside cleanup along the five miles of maintained road and did miscellaneous other related work, including repairs of the above revetments. However, most of their work

concerned trail improvements and forestry work.²² Workers from ECW Camp 5 constructed a "rustic style" log entrance arch, like that at the Nisqually Entrance, over the road at the park boundary in 1933.²³ [The structure is no longer extant.]

Storms in October 1955 washed out two sections of the road. The park requested \$7,500 for repairs. Hauling of backfill began in April 1956. The work was completed in short order.²⁴ At the same time, park crews began work on minor changes of alignment, raising the road from two to five feet, and the installation of culverts. Log bridges at Fall Creek, Ranger Creek, the Chenuis Crossing and Ipsut Creek were replaced with corrugated multi-plate culverts. Following the reconstruction work, the entire road (that is, the remaining section to Ipsut Creek) was surfaced with gravel.²⁵

Another storm in October 1959 washed out another 800' of road, in some places to a depth of 10'. The washout was located just above the Falls Creek crossing. Another stretch at Chenuis crossing was washed out for fifteen feet, as was a 300' stretch at the last curve before Ipsut Creek Campground. The Ipsut Creek culverts were washed 60' downstream and all fill material was swept away.²⁶

Culverts at Ipsut Creek were again washed out by floods in December 1977. A prefabricated "Bailey Bridge" borrowed from the military was installed across the creek as a temporary measure until the road could be repaired. A new concrete structure was completed over the creek in 1979.²⁷ Floods continue to cause occasional damage, as the road is located for much of its distance on a low bench on the south bank of the river.

Although the road is the closest entrance to Mount Rainier National Park from the Puget Sound cities, the lack of major developments along the dead-end track, and the road's unpaved condition, tend to discourage use. Nevertheless, during the summer and early falls seasons when the road is open for travel, hundreds of visitors make the trip to Ipsut Creek. Some make the journey simply because the road is the closest access to the park from the Sound, but others are attracted to the region to see the temperate rain forest characteristic of the section, to use the Wonderland Trail and other foot trails in the area, or to avoid the more congested sections of the park. In recent years, the area has become so intensely used that the Ipsut Creek Campground is filled most weekends, and cars are sometimes parked along the road for a quarter-mile or so from the ranger station.

Description

The second road constructed in Mount Rainier National Park, and the only one built by the National Park Service itself, the Carbon River Road was completed in 1921 from the park's northwest corner to a point near the foot of the Carbon Glacier. Early surveys for the West Side Road project considered the Carbon River road as the northern terminus of the new project, and also as a stepping-off place for a road across the northern flank of the mountain. However, the difficult terrain, projected huge expenses, and changes in park environmental policy led to the abandonment of the "round-the-mountain"

scheme, and the present Mowich Lake Road was begun as an alternative north end of the West Side project. The upper 3 miles of the road was abandoned due to poor construction and perennial flooding, and the road now ends at the Ipsut Creek Campground.

The 5-mile park segment of the Carbon River Road begins at 1,880' elevation at the park boundary with the adjacent Snoqualmie National Forest. A "rustic style" log portal once marked the Carbon River Entrance, but it is no longer extant, and the rustic ranger station burned. The road follows the Carbon River east and southeast, keeping to its south side, at varying distances because the silt-laden glacial stream often shifts its position dramatically.

Running along a low bench above the river, the road climbs very little in its first 3 miles. For the initial mile and a half, the road holds to a due eastward course, after which it gradually curves, following the river, to the southeast. Florence Peak (5,508'), Arthur Peak (5,483'), and Gove Peak (5,310') tower over the road to the south but are unseen by motorists due to the dense canopy of trees. Mount Rainier is invisible from this point. The rocky streambed on the north and northwest side provides visual relief.

At the end of the second mile, the Green Lake Trail leads off to the southeast. A quarter mile further east on the northeast side of the road is the trailhead for the Chenuis Falls trail. A footlog crosses the river just below the bridge. The Carbon River Road continues another 2 miles southeast to its terminus at the Ipsut Creek Campground. The small campground features a rustic style cabin for the campground ranger and a small campfire circle with mossy log seats.

The chief attraction of the Carbon River area is the lush forest, considered a temperate rain forest by some naturalists. The northwest corner of the mountain receives the greatest amount of rainfall, and the dense stands of trees are festooned in mosses, ferns and worts. The presence of a "rain forest" so far inland in the Pacific Northwest is an anomaly, and draws a large number of visitors. The area is also popular for its access to the Wonderland Trail. The trail strikes off southeast and then east towards Sunrise and southwest over Ipsut Pass to Mowich Lake. The latter part was considered as the route for a connecting link with the West Side Road but this plan was rejected because of the necessary steep grades and a required tunnel in an area prone to heavy snowfall. The proposed "North Side Road" from the Carbon River area to Sunrise was likewise rejected in part due to rough terrain.

No "rustic" amenities survive along the road. The several short reinforced concrete and steel girder bridges are 1950s or later replacements. The upper section of road above the Ipsut Creek Campground has been abandoned and is now used as a connecting link of the Wonderland Trail between Ipsut and Cataract creeks. The road is open from late spring to late fall.

III. ENDNOTES

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2. Martinson, 18-19.
3. Thomas E. O'Farrell, Ranger, Mount Rainier National Park, to Edw. S. Hall, Superintendent, Mount Rainier National Park, 26 August 1911, 4, attached to Hall, Superintendent's Annual Report, 1911. MORA Archives, Box H2621; Edwin N. Thompson, *Mount Rainier National Park, Washington: Historic Resource Study* (Denver, CO: National Park Service, Denver Service Center, 1978), 114.
4. Dewitt L. Reaburn, Supervisor, Mount Rainier National Park, Annual Report, in *Annual Report of the Superintendent of the National Parks to the Secretary of the Interior, 1916* (Washington, D.C.: Government Printing Office, 1916), 54-55; Idem, "Unit Cost Data on Expenditures from the 1916 Appropriation for and Revenues of Mount Rainier National Park," May 1916, 2. MORA Archives, Box H2615, Superintendents Monthly Reports 1913-1919 file.
5. Idem, *Annual Report*. . . , 55.
6. Idem, "Annual Report to the Secretary of the Interior, 1916," 8. Typed MSS, Mount Rainier National Park Archives Box H2621.
7. Roger W. Toll, Superintendent's Annual Report, 1919. MORA Archives, Box H2621, Superintendents' Annual Reports 1917-1925 file.
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9. George E. Goodwin, Chief Civil Engineer, National Park Service, Portland, OR to R. D. Hill Company, Tacoma, WA, 28 October 1922. National Archives, RG 79 Entry 22 Box 16.
10. Goodwin to W. R. Barclay, Assistant Engineer, National Park Service, Ashford, WA, 14 September 1923; Goodwin to Stephen T. Mather, Director, National Park Service, 25 September 1923. National Archives, RG 79 Entry 22 Box 16, Carbon River Road file.
11. W. T. Utz, Assistant Highway Engineer, Bureau of Public Roads, "Final Construction Report (1934-35) on West Side Highway, Mt. Rainier National Park Project NR-2-E2, Grading" (Portland, OR: Bureau of Public Roads, District No. 1, 1936), 1.

12. *Ibid.*, 10.
13. T. H. Martin, General Manager, Rainier National Park Company, Tacoma, WA to O. A. Tomlinson, Superintendent, Mount Rainier National Park, 20 December 1923.
14. Tomlinson to Goodwin, 23 December 1923. National Archives, RG 79 Entry 22 Box 16, Carbon River Road file.
15. W. H. Peters, Superintendent, Mount Rainier National Park, Superintendent's Monthly Report, September 1921, 3. MORA Archives, Box H2615, Superintendents' Monthly Reports 1920-1923 file; Tomlinson, Superintendent's Annual Report, 1924, 3. MORA Archives, Box H2621, Superintendents' Annual Reports 1917-1925 file.
16. Tomlinson to Mather, 28 August 1924. MORA Archives, File D22, Construction Program 1924.
17. Thompson, 205-06.
18. Tomlinson, Superintendent's Annual Report, 1925, 3a. MORA Archives, Box H2621, Superintendents' Annual Reports 1917-1925 file; Idem, Superintendent's Monthly Report, July 1925, 7. MORA Archives, Box H2615, Superintendents' Monthly Reports 1924-1927 file.
19. Idem, Superintendent's Annual Report, 1932, 13. MORA Archives, Box H2621, Superintendents' Annual Reports 1926-1932 file; Idem, Superintendent's Monthly Report, March 1932, 5. MORA Archives, Box H2615, Superintendents' Monthly Reports 1932-1935 file.
20. Idem, Superintendent's Annual Report, 1935, 35. MORA Archives, Box H2621, Superintendents' Annual Reports 1933-1935 file.
21. Thompson, 206.
22. C. E. Drysdale, Supervising Engineer, Emergency Conservation Works, "Final Report on E.C.W. Activities, Third Enrollment Period, Season of 1934," 31-32. MORA Archives, File H14, ECW Activities 1934.
23. Halsey M. Davidson, Associate Landscape Architect, Mount Rainier National Park, "ECW Report to the Chief Architect through the Superintendent of Mount Rainier National Park, Season Ending Oct. 31, 1933," 4. MORA Archives, Box 414, ECW 1933 file.
24. Leroy S. Augden, Landscape Architect, Mount Rainier National Park, "Completion Report of Construction Project, Carbon River, Storm Damage," 24 February 1958, 2.
25. Idem, "Completion Report on Construction Project, Improvement, Carbon River Road," 15 April 1958. MORA Archives, Roads and Trails Box 1.

26. Martin N. Benham, Carbon River Area Ranger, to Park Engineer, 30 November 1959. MORA Archives, Roads and Trails Box 1.

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