OREGON STATE HISTORIC RESOURCE DOCUMENTATION

U.S. Department of Energy
Bonneville Power Administration

PENDDLETON 2a LEVEE
UMATILLA COUNTY
OREGON

Prepared in
Partial Fulfillment of a
Memorandum of Agreement
For the UmaBirch Floodplain Restoration Project

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I. IDENTIFICATION

Location:
The Pendleton 2a Levee is located southwest of the town of Rieth, in Umatilla County, Oregon. The levee stretches from the N½ of the irregularly shaped Section 37 of Township 2 North, Range 31 East into the SE¼ of Section 13 Township 2 North, Range 31 East (Figure 1). The levee is situated at the confluence of the Umatilla River and Birch Creek– between Umatilla River miles 47 and 49. It runs parallel to the Umatilla River on the south shore. Birch Creek Road travels over the middle of the levee and the Union Pacific Railroad crosses it to the east. The levee provides a buffer between the river and 9.3 acres of farmland south of the levee.[1]

Local Sponsor: Umatilla County
Landownership: Private
Present Use: Flood Control and Irrigation

Historic Context and Significance:[2]
Pendleton and surrounding communities along the Umatilla River have long been subject to annual flooding in addition to severe flooding events that damaged buildings, structures, agricultural property, and even resulted in the loss of life. *The Eastern Oregonian* described the Umatilla River as a "harmless stream but it can be troublesome at times."[3] In the spring of 1875, "the mercury went up to 90° in the shade and the snow in the mountains was melting rapidly."[4] As a result of this rapid melt, local newspapers reported that the "Umatilla river has overflowed its banks in many places. Some of the ranches on its banks are under water, or, more properly, some portions are inundated, and the crops are either badly injured or destroyed."[5] While not every flood event made front page news, spring melt continued to impact communities along the Umatilla River.

In 1883, *The Eastern Oregonian* proclaimed that the one disadvantage about Pendleton's location was "that a considerable portion of it is liable to be severely injured by the sudden and irresistible floods which occasionally occur in the Umatilla River."[6] The newspaper advocated for studying and surveying the river and constructing some kind of flood protection measure. In April 1887, the Pendleton City Council passed an ordinance to raise funds for the construction of "a levee along the bank of the Umatilla River to protect the town against any possible future floods."[7] That same year "Pendleton people fought off floods by building a solid levee two miles long, at a cost of $40,000. This completely protects the town and makes it safe from floods."[8] While these

[1] Crops include a variety of wheat, hay, and alfalfa (USACE).
[2] Ethnographic contexts of the area are available in Catherine Dickson, *An Archaeological Investigation of the Taylor Property on Birch Creek, Umatilla County, Oregon*, 2012 (on file with the Oregon State Historic Preservation Office) and Carey L. Miller, *A Cultural Resources Survey of the Proposed Removal of Wyss Dam on the Umatilla River above the Mouth of Birch Creek, Umatilla County, Oregon*, 2019 (on file with the Oregon State Historic Preservation Office).
[3] "Plan Umatilla Flood Control, Irrigation Dam," *The Eastern Oregonian,* September 5, 1942.
[4] "High Water," *The Oregonian*, April 27, 1875.
[5] *Pendleton Tribune,* April 24, 1875.
[6] "Penny Wise and Pound Foolish," *The Eastern Oregonian*, January 5, 1883.
[7] "Pendleton News: Protection Against Floods," *The Oregonian*, April 16, 1887.
[8] "Pendleton Prosperous," *The Oregonian*, April 24, 1899.

improvements helped the City of Pendleton, flood events were still common, especially in communities that lacked flood control protection and infrastructure.

Federal studies started in the early 1900s to consider the feasibility of an irrigation project that would divert and store spring floodwaters for irrigation and agricultural purposes.[9] Construction began on what would become the Umatilla Project in 1906. The Project is primarily a collection of dams, canals, and other irrigation features located on the Umatilla River and McKay Creek between Echo, Oregon and the Columbia River – downstream and west of the Pendleton 2a Levee.[10] Even with this new infrastructure introduced to the region, flooding continued in Pendleton and the surrounding areas along the Umatilla River.

While some of the earliest discussions of a large-scale Pendleton flood control and irrigation project date to 1910, studies picked up in the 1930s, likely spurred by a large flood event in 1931. There was strong local support – including from U.S. Senator Charles McNary (R-OR) – for some kind of flood control projects. *The East Oregonian* rhetorically asked "How could money be expended more wisely than for flood control work that will transform a menace [the Umatilla River] into an asset?"[11] Some of these early recommendations included building another flood control dam and reservoir on the Umatilla River ("three miles above Gibbon") similar to the Umatilla Project.[12] During the Great Depression there was support from Oregon's Chairman of the Public Works Administration to carry out the project.[13] The large flood control dam and associated irrigation canals was also recommended as a potential project to be used for post-World War II employment.[14] However, even though Congress appropriated funds to improve the existing levee through the city of Pendleton in 1936-37, the large-scale Pendleton Project never came to fruition.[15]

Following the "disastrous flood of 1948," President Harry Truman directed the U.S. Army Corps of Engineers (USACE) to comprehensively review and recommend flood control plans for the Columbia River Basin.[16] The report, which would eventually be accepted by Congress as House Document (H.Doc) 81-531, was a lengthy list of recommendations for Congress to consider authorizing to address flooding in the Basin. Proposed projects included construction of The Dalles Dam, John Day Dam, and multiple high-head dams in the Willamette Valley Basin. Congress accepted USACE's recommendations and authorized the multiple recommended flood control projects with the passage of the Flood Control Act of 1950 (P.L. 81-516). Specifically, Section 204 of the Flood Control Act authorized USACE to spend a portion of $75,000,000 in appropriated funds for "local flood protection project at Pendleton, Oregon."[17]

[9] "Must Store Floods," *The Oregonian*, January 18, 1904.
[10] Eric A. Stene, *Umatilla Project*, Bureau of Reclamation, 1993. https://www.usbr.gov/projects/pdf.php?id=202, accessed July 17, 2025.
[11] "We May Get It," *East Oregonian*, June 19, 1933.
[12] "Dam, Canals Estimated at Six Million," *The East Oregonian*, May 23, 1935.
[13] "Embarrassing," *The East Oregonian*, August 27, 1934.
[14] "State Projects," *The East Oregonian*, December 18, 1943.
[15] "Approval Given Pendleton Levee," *The Oregonian*, April 24, 1936.
[16] During Memorial Day Weekend 1948, flooding events caused extensive damage throughout the Pacific Northwest. The flood displaced 30,000 people and resulted in more than 50 deaths ("Columbia River Treaty History and 2014/2024 Review," BPA and USACE).
[17] Flood Control Act. Pub. L. 81-516, § 204; 64 Stat, Chap 188.

In H.Doc 81-531, USACE acknowledged that prior flood protection projects – including levee construction in Pendleton – was "based on improving channel conditions and the provision of levees, which give protection only to limited highly developed areas."[18] The Pendleton Flood Control Project consisted of a "system of levees in the Riverside area" upstream, within, and downstream of Pendleton. There was strong local interest in the project, including the willingness to contribute $11,000 in local funds towards project costs. Construction on Zone 1 (which is the larger levee system in the city of Pendleton) started in January 1959 and was completed by November 1959. According to the 1961 USACE Chief's Annual Report, Zone 2 construction was started in May 1960 and completed in October 1960 for a total cost of $96,370.[19]

The Pendleton 2a Levee was constructed in 1960 as part of the Pendleton Zone 2 Flood Damage Reduction Project. The total project costs were $96,370. Construction was federally authorized under Section 204 of the Flood Control Act of 1950 with supplemental authorization provided by the Flood Control Act of 1956.[20] It appears that Floyd Williams, Inc. of Kennewick, Washington was the low bid on the project.[21] There is little mention of Zone 1 and Zone 2 levee construction in any local or statewide newspapers at the time of construction. In fact, while the plans for Zone 1 are included in H.Doc 81-531, there are no plans included for Zone 2. This is likely due to the size of the project and the more minimal engineering and design that was needed. However, in 1949, the U.S. Geological Survey included a summary of flooding at Birch Creek near Rieth, where the Pendleton 2a Levee was constructed.[22] This data likely informed and supported the need for the Zone 2 levee system.

National Register of Historic Places Significance

Based on the historic context of flood control protection development within and adjacent to the City of Pendleton, the Pendleton 2a Levee has been determined eligible for listing in the National Register of Historic Places (NRHP) under Criterion A at the local level for its association with the larger Pendleton flood control system. It is a contributing resource to the larger Pendleton Zone 1 and Zone 2 Levee System. This levee system is historically significant as it provided for increased agricultural development and settlement in the local area. The period of significance is 1960, the year of construction. The historic property boundary (Figure 1) includes the levee embankment.[23] While it took decades of studies, the Pendleton 2a Levee is a physical representation of efforts made throughout the 1900s, especially following World War II, to alter the landscape to accommodate development. Further, it represents the federal government's role

[18] HD 81-531 256

[19] *Annual Report of the Chief of Engineers, U.S. Army on Civil Works Activities 1961* (Washington: Government Printing Office, 1961): 1973.

[20] USACE, 2020. In 1956, Congress amended the Flood Control Act of 1948 increase authorizations for small flood-control projects.

[21] "Washington Firm Low for Umatilla Job," *Statesman Journal,* April 8, 1960.

[22] *Floods of May-June 1948 in Columbia River Basin*, Geological Survey Water-Supply Paper 1080 (Washington: Government Printing Office, 1949): 254.

[23] While the 9.3 acres protected behind the levee are connected to the levee, that acreage is not included in the historic property boundary. Per National Park Service Bulletin 16a, this boundary includes all of the features (the manmade embankment) and does not include any buffer. While the agricultural lands behind the levee are connected to the levee, the lands do not directly contribute to the association with a post-WWII flood control project.

in authorizing and carrying out smaller scale, local projects in response to major flood events. The levee retains all seven aspects of historic integrity. The location and setting along the Umatilla River remain the same. There is no evidence that any alterations have been made to the design, materials, and workmanship of the levee beyond routine maintenance. The levee is still associated with flood control for surrounding agricultural lands and conveys that feeling.

II. DESCRIPTION

The Pendleton 2a Levee is an earthen embankment levee that runs parallel to the south bank of the Umatilla River. It is approximately 0.49 miles long and follows the southeastern bend of the river. The levee averages 6' wide on top (crest), and 16' wide at the base. The height of the levee varies, with an average height of 10', and a maximum height of 26' above ground level (Figure 8). Large basalt boulders (rip rap) are located on the south embankment (Figure 12). A variety of tall grasses, shrubs, and trees cover the top and sides of the levee. The levee remains in its original alignment. Birch Creek Road, a paved two-lane road, crosses over the levee approximately 0.25 miles from the western edge (Figure 18). The Union Pacific Railroad crosses the levee at the eastern boundary.

The Pendleton 2a Levee is part of a larger complex of levees along the Umatilla River, including Zone 1 (1a and 1b in the City of Pendleton) and Pendleton Levee Zone 2 (2b, 2c, and 2d) (Figure 2).[24] Pendleton Zone 1 is located north of Interstate 84 (I-84) and provides protection to the City of Pendleton. Zone 2 is located downstream on the Umatilla River and south of I-84.[25] Zone 2 has approximately 18,780' of earthen levees and 16 drainage structures.[26] "The system provides flood damage reduction to agricultural land and a railroad embankment. The levee is not frequently loaded and when flooding does occur it is high velocity and of short duration."[27] The system is currently operated and maintained by Umatilla County.[28]

In an effort to restore the historic floodplain at the confluence of Birch Creek and the Umatilla River, the Pendleton 2a Levee will be removed and replaced with a levee setback along the western edge of Birch Creek Road. Once this project is carried out, the Pendleton 2a Levee will have lost its historic integrity and will no longer be eligible for listing in the National Register of Historic Places.

III. BIBLIOGRAPHY

Columbia River Treaty History and 2014/2024 Review. U.S. Army Corps of Engineers and Bonneville Power Administration. April 2008.

Dickson, Catherine. *An Archaeological Investigation of the Taylor Property on Birch Creek, Umatilla County, Oregon*. 2012. On file with the Oregon State Historic Preservation Office.

[24] Both zones and their associated features were constructed between 1959 and 1960, as authorized under Section 204 of the Flood Control Act of 1950 (Public Law 516, 81st Congress, 2nd session).
[25] "Pendleton 2a." Levee Database, USACE.
[26] There are no drainage structures associated with the Pendleton 2a levee (USACE).
[27] "Pendleton 2a." Levee Database, USACE.
[28] Ibid.

Miller, Carey L.. *A Cultural Resources Survey of the Proposed Removal of Wyss Dam on the Umatilla River above the Mouth of Birch Creek, Umatilla County, Oregon*. 2019. On file with the Oregon State Historic Preservation Office.

Morton, Ashley M.. *A Cultural Resource Survey for the Proposed Uma Birch Restoration Project, Umatilla County, Oregon*. Submitted to the CTUIR Fisheries and BPA for the Confederated Tribes of the Umatilla Indian Reservation. 2020.

Stene, Eric A.. *Umatilla Project*. Bureau of Reclamation, 1993. https://www.usbr.gov/projects/pdf.php?id=202, accessed July 17, 2025.

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"Pendleton Prosperous." *The Oregonian*. April 24, 1899.

Pendleton Tribune. April 24, 1875.

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"State Projects." *The East Oregonian*. December 18, 1943.

"Washington Firm Low for Umatilla Job." *Statesman Journal.* April 8, 1960.

"We May Get It." *The East Oregonian*. June 19, 1933.

IV. Graphics

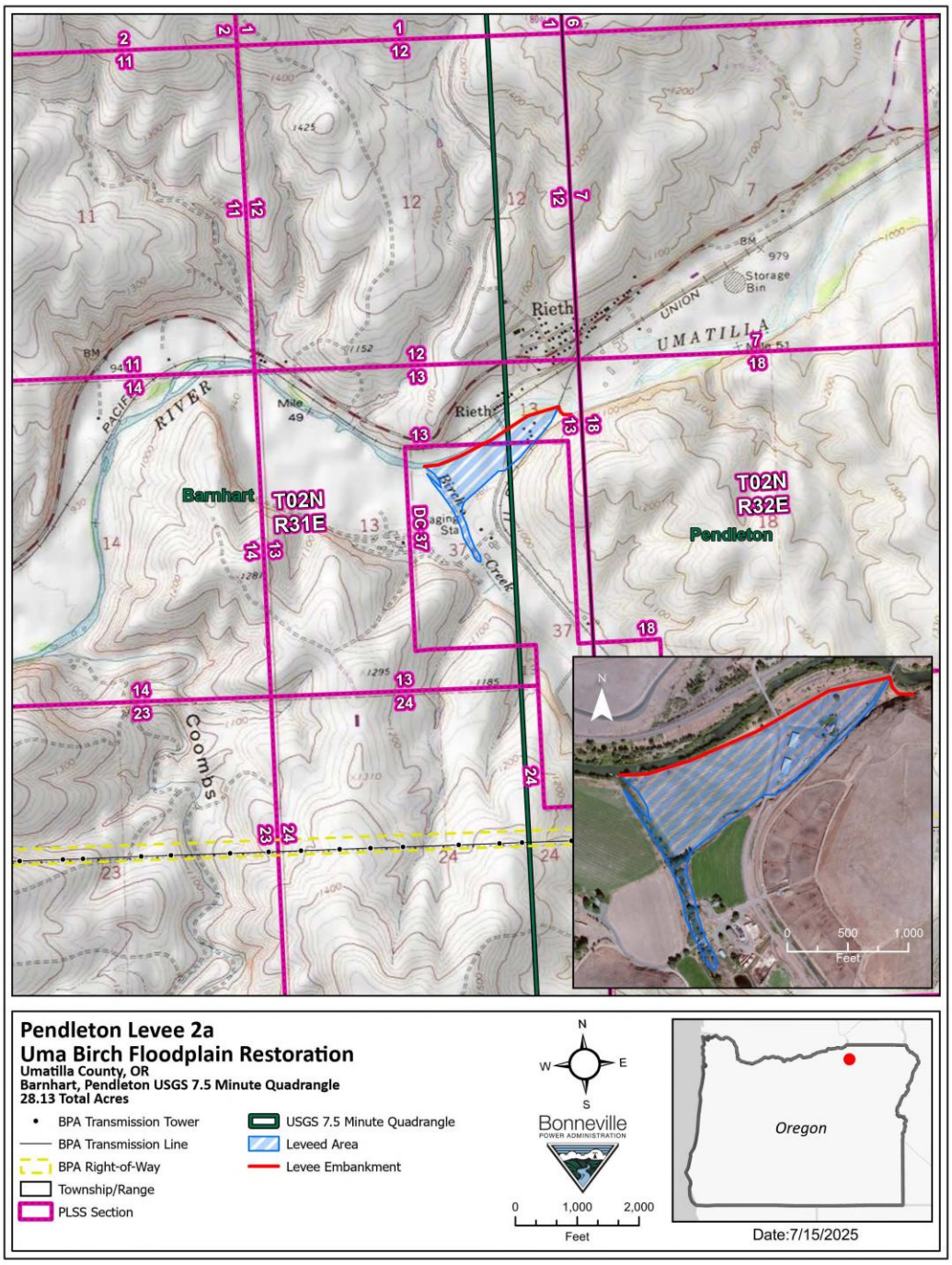

Figure 1: Pendleton 2a Levee. Levee Embankment is the historic property boundary.

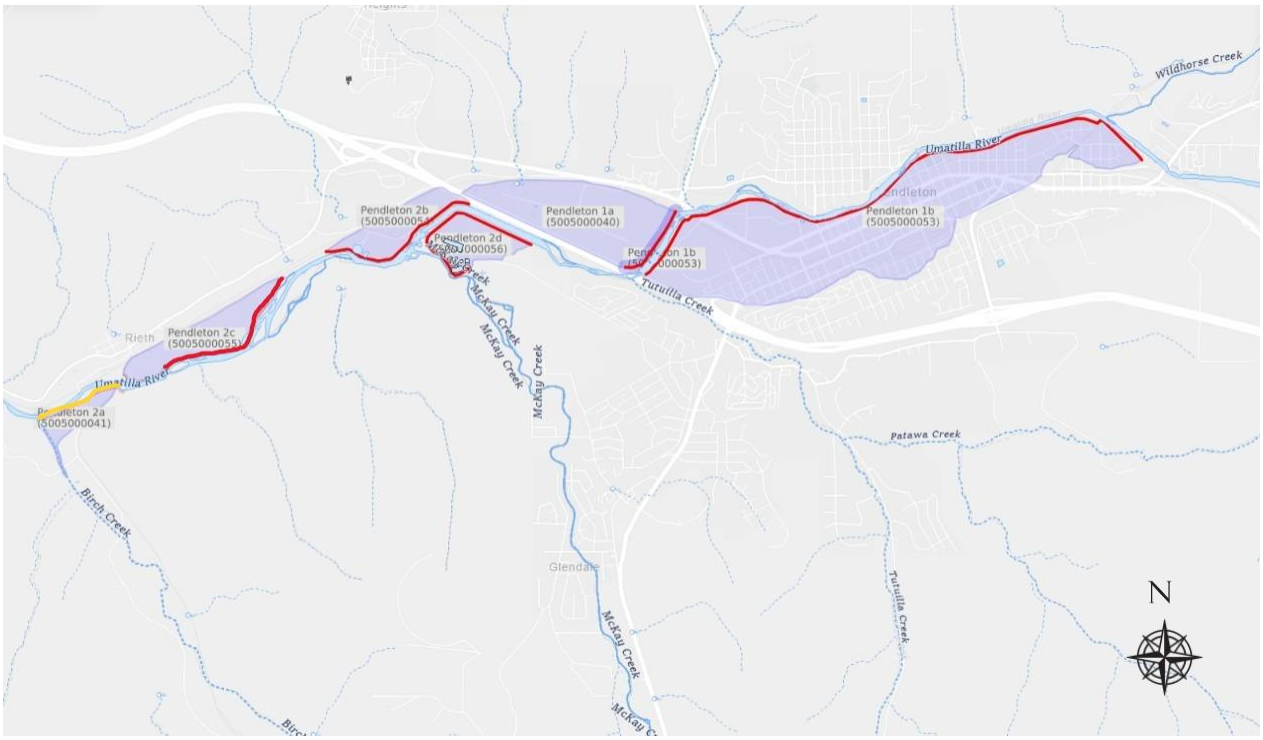

Figure 2: Pendleton Zone 1 and Zone 2 Levee Systems (USACE National Levee Database). The Pendleton 2a Levee is located at the far left in yellow.

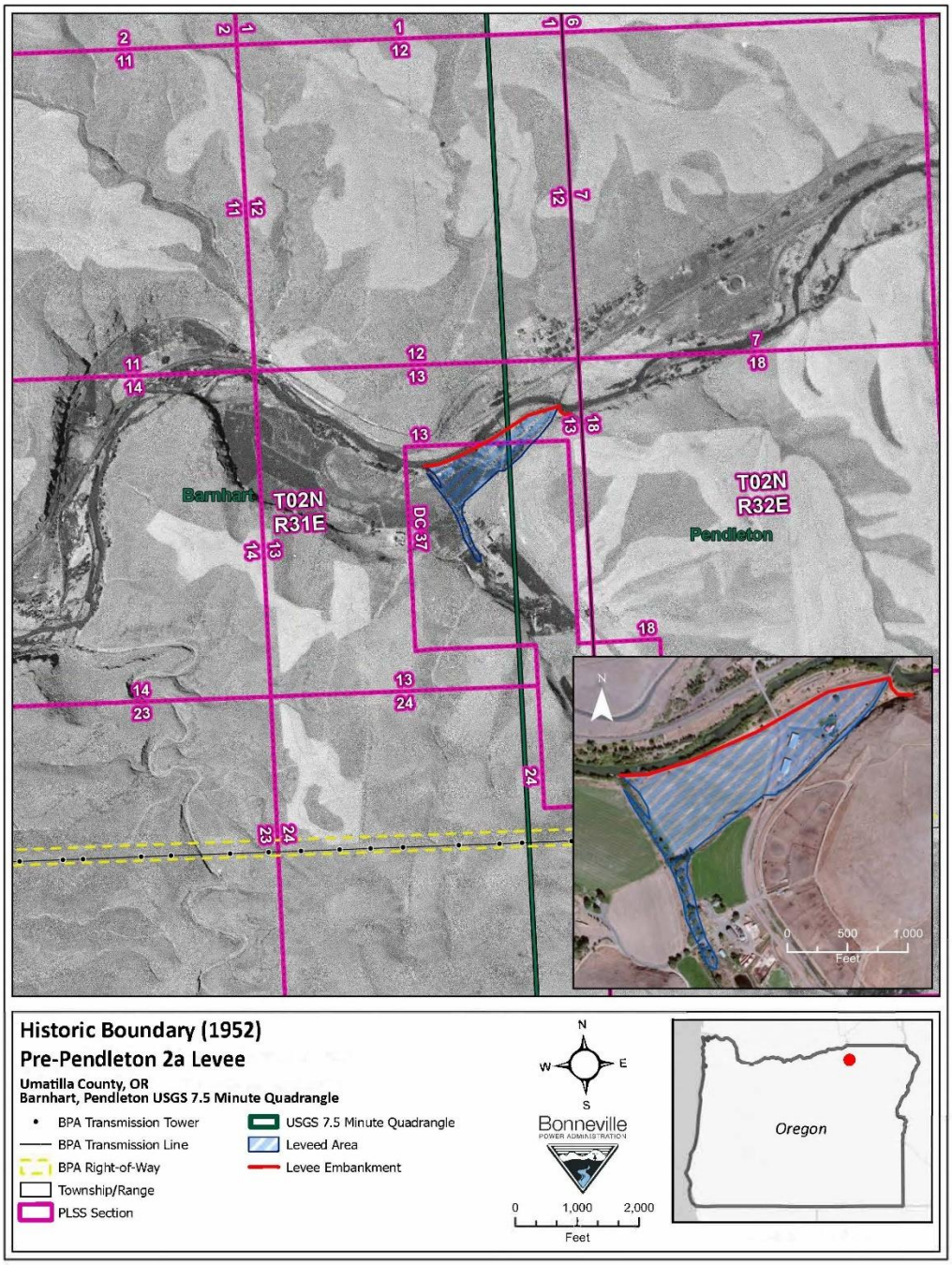

Figure 3: 1952 Aerial Overlay (USGS).

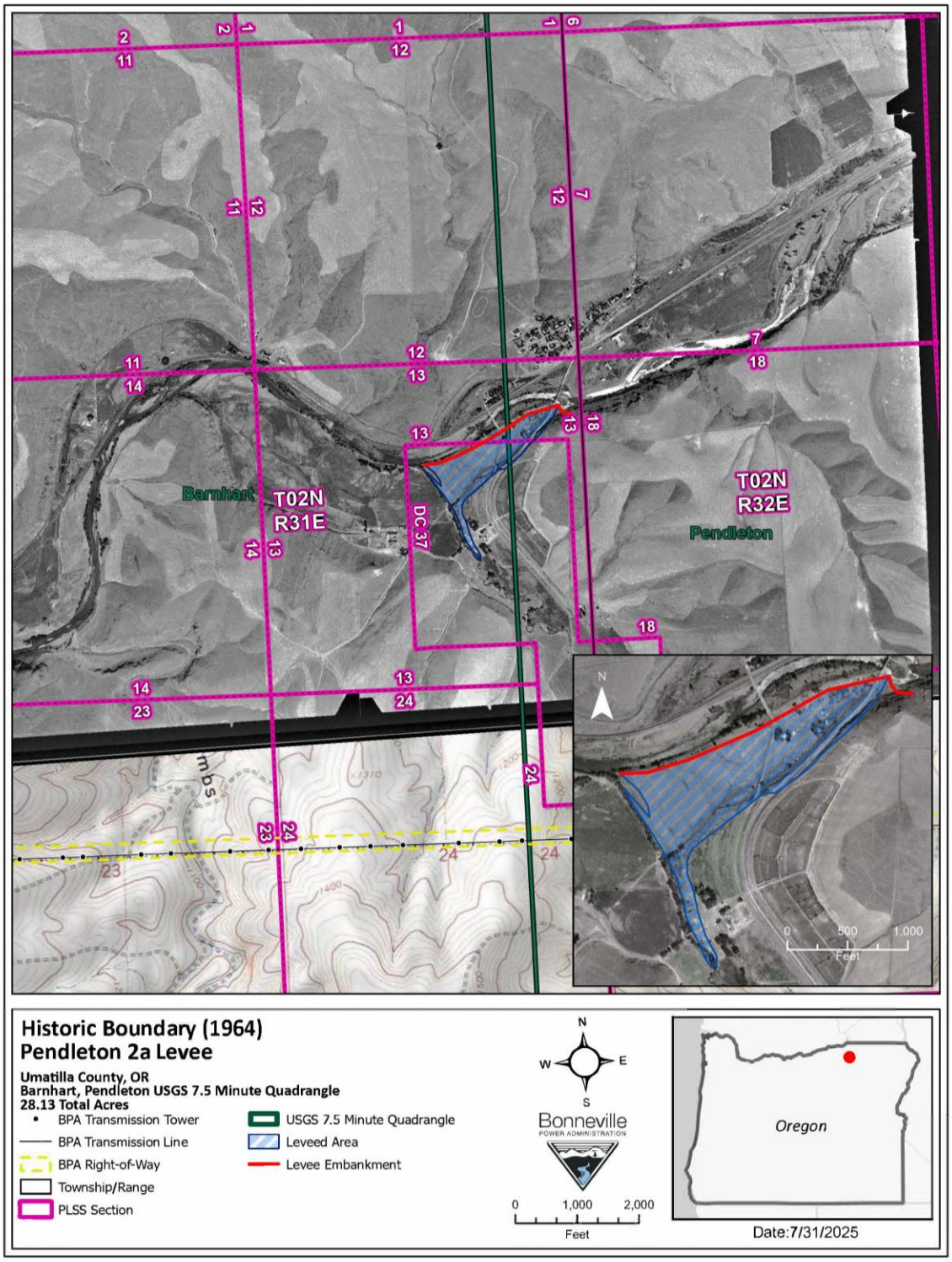

Figure 4: 1964 aerial following the construction of the levee (USGS).

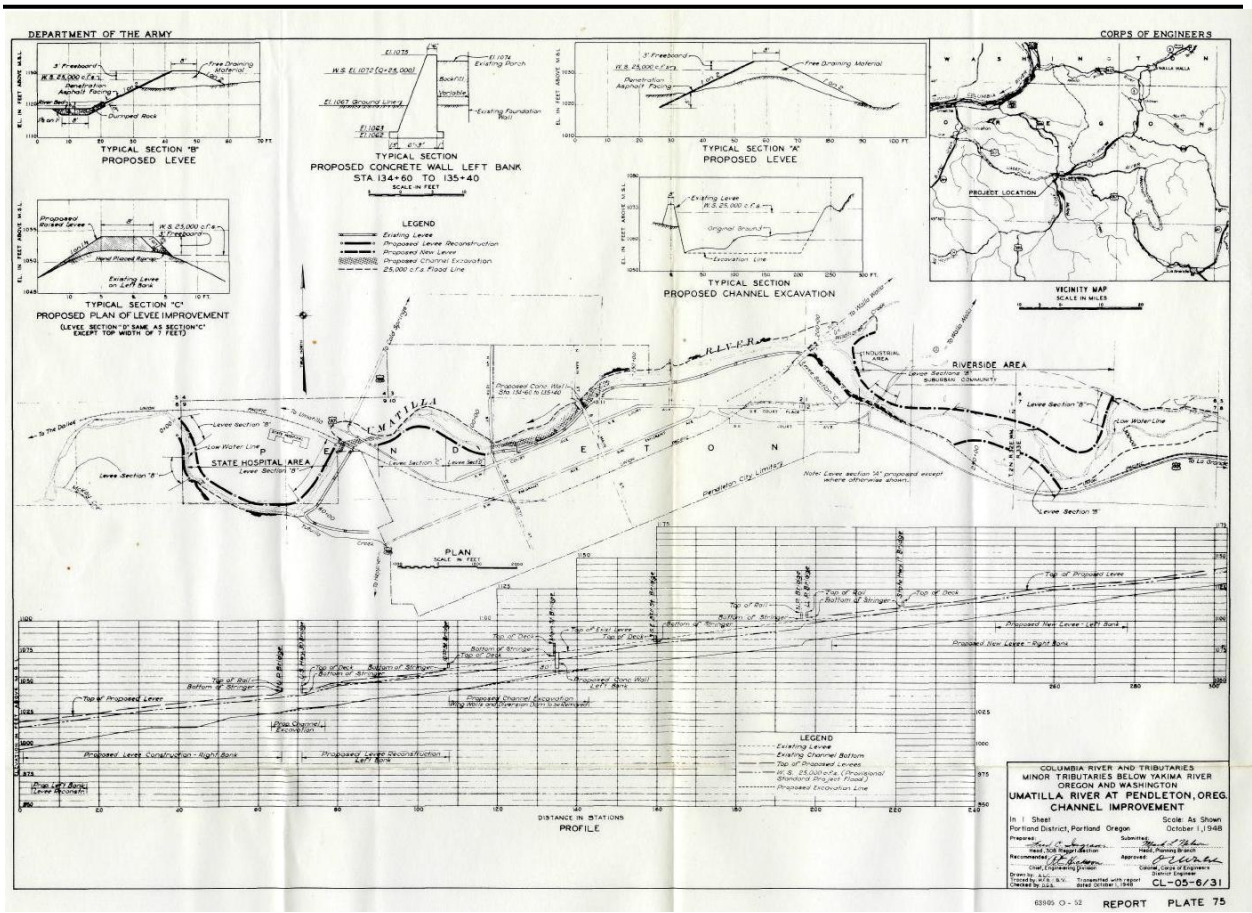

Figure 5: Proposed Zone 1 Levee System from H.Doc 81-531. While this figure does not show the Pendleton 2a Levee system, it is likely the Pendleton 2a Levee utilized a similar levee design.

Figure 6: Panorama view of Pendleton 2a Levee, looking south (Duran, 2022).

Figure 7: Birch Creek Road crossing south over the Umatilla River towards the overgrown levee, looking southeast (Duran, 2022).

Figure 8: Overview of Pendleton 2a Levee, looking north (Gonzalez-Pereda, 2025). Arrow points to the top levee crest.

Figure 9: Confluence of Birch Creek and the Umatilla River, looking east towards the Pendleton 2a Levee (right) (Gonzalez-Pereda, 2025).

Figure 10: Western most portion of the Pendleton 2a Levee (left), looking west (Gonzalez-Pereda, 2025).

Figure 11: Western most portion of the Pendleton 2a Levee (right), looking east toward levee (Gonzalez-Pereda, 2025).

Figure 12: Example of riprap found along the length of the Pendleton 2a Levee, looking west (Gonzalez-Pereda, 2025).

Figure 13: Middle portion of the Pendleton 2a Levee (left) along the Umatilla River (right), looking west (Gonzalez-Pereda, 2025).

Figure 14: Top of Pendleton 2a Levee (right), looking west (Gonzalez-Pereda, 2025).

Figure 15: Top of Pendleton 2a Levee, looking east (Gonzalez-Pereda, 2025).

Figure 16: Pendleton 2a Levee (right), looking west (Gonzalez-Pereda, 2025).

Figure 17: Pendleton 2a Levee (left), looking east toward Birch Creek Road (Gonzalez-Pereda, 2025).

Figure 18: Birch Creek Road crossing over the Pendleton 2a levee, looking north (Gonzalez-Pereda, 2025)

Figure 19: Top of the easternmost segment of Pendleton 2a Levee (left), looking east from Birch Creek Road (Gonzalez-Pereda, 2025).