MONTANA HISTORICAL AND ARCHITECTURAL INVENTORY

Site # 3

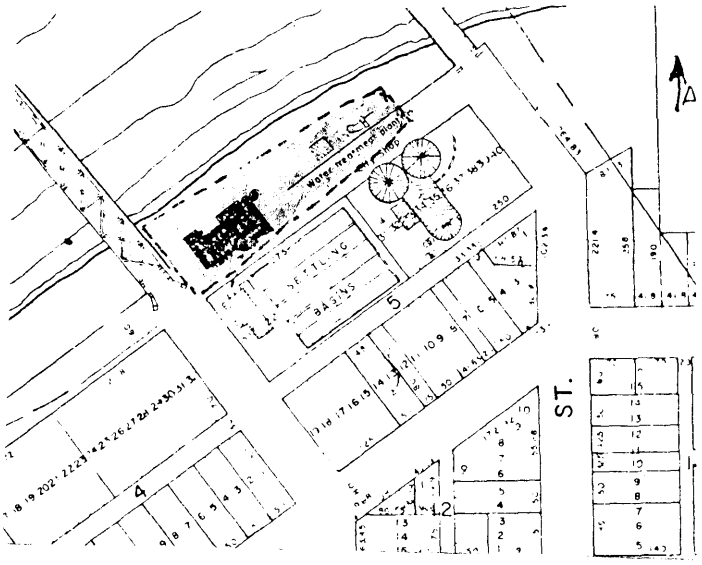
Legal Description: Original Townsite, see attached page

Address: 420 West Bell St.

Ownership: Name: City of Glendive, City Hall, Glendive, MT

x private / public address:

Roll # 15,19 Frame # 15-22



Location map or building plan with arrow north.

Historic Name: Glendive City Water Filtration Plant

Common Name: same

Date of Construction: 1917, 1923, 1934 ☐ estimated x documented

Architect: Burns and McConnell Engineering

Builder: Norwood Engineering

Original Owner: City of Glendive

Original Use: Water filtration plant

Present Use: same

RESEARCH SOURCES: Note all records consulted to determine dates of construction, original owners, builders, uses, etc.

Title Search:	x	Tax Records:	n/a
Bldg. Permit:	n/a	Census Records:	n/a
Sewer/Water:	n/a	Sanborn Maps:	x
Directories:	x	Newspapers:	x

BIBLIOGRAPHY:

See historical information

PHYSICAL DESCRIPTION: Describe present appearance of structure/site, then contrast and compare, noting additions, alterations, and changes in materials. Discuss significant architectural features.

The Glendive City Water Filtration Plant, which was built in three sections. The front portion of the building, which is oriented toward Bell St., was built in 1917, and is a one-story, rectangular, brick structure divided into three front and three side bays, and set on a concrete foundation. The gable roof is covered with cedar shingles and features overhanging eaves with exposed rafter tails, wide gable end fascia with exposed purlins and diagonal support braces (king post, collar beams, and tie beam). Subtle brick corbelling is used sparingly to enliven the primary facade, and pilasters flank each window opening along the side elevations. Windows are multi-paned, fixed metal units with inset, operable casements and have concrete lintels and sills. An elevated, concrete porch with thick concrete railings is centered on the south (primary) facade. The main door to the building is a double metal unit with a fixed glass transom and concrete architrave above. A large elevated concrete deck also remains on the east side of the building.

A two-story, brick addition was built onto the rear of the building in 1923. The design and detailing of this addition follows the pattern established by the 1917 portion, and adds to the historic and architectural significance of the overall

(continued)

HISTORICAL INFORMATION: Describe the persons, important events, and/or historical patterns associated with the structure/ site and surrounding area.

The Glendive City Water Treatment Plant was constructed in 1917 after years of debate and delays. The City of Glendive was incorporated in 1902 chiefly for the purpose of constructing a city water system. Prior to the construction of the city water system, water was delivered to homes in barrels.[1] In 1904, Mayor Henry Dion appointed a committee to investigate the advisability of a water works system. In 1905, a $50,000 bond issue was passed, land for a reservoir site purchased, and an ordinance (#144) passed for the construction of a water plant. Between 1905 and 1907, a pump station, wooden water mains, and a reservoir were constructed.[2] The 250,000 gallon settling tank was located near the present site of the filtration plant, and a 750-gallon-per-minute pump, and wooden water mains comprised this distribution system.[3]

After further delays, the Engineering firm of Burns and McDonnell of Kansas City, was hired in 1915 to prepare a preliminary survey for a water filtration plant.[4] In 1916, and, in 1916, a $130,000 water bond issue was passed for this purpose. a contract for the construction of the plant designed by Burns and McDonnell, was awarded to Norwood Engineering Company of Florence, Mass., in the amount of $32,610.[5] A description of the plant in the August 24, 1916 Dawson County Review, noted that the portion of the plant above ground:

> "will be of brick and will be 30 x 56, being one story above ground and the remaining portion 2 stories. It will be 14 feet below the ground surface and all underground work will be concrete." 6

(continued)

INTEGRITY: Assess the degree to which the structure/site, and surrounding area accurately convey the historical associations of the property.

INTEGRITY

The historic water filtration plant is the most prominent buildings within the complex, and, because it is situated on the bluff overlooking the Yellowstone River and separated by an unpaved road from the new buildings within the current filtration plant complex, it clearly reads as a separate structure. The original function of the historic filtration plant is still readily identifiable. The

(continued)

HISTORICAL and/or ARCHITECTURAL SIGNIFICANCE: Justify how the persons, important events, o

Areas of Significance: community development, politics/government
Applicable Criteria: A
Period of Significance: 1917-1934

Although the Glendive City Water Filtration Plant was not constructed until 1917, the desire for improved water quality and delivery was the primary impetus for the incorporation of the city fifteen years earlier in 1902. The historic water plant qualifies for listing in the National Register of Historic Places because it represents the most important, controversial, expensive, and far-reaching project the city undertook during the first three decades of its existence. The citizens of the young town of Glendive relied upon the water of the muddy Yellowstone River for their needs, and the desire for filtered water figured prominently in their debates at the turn of the century about incorporation. Raising funds for the construction of the plant was a long term affair, requiring the efforts of several city administrations to realize, and the final construction of the plant and the distribution system consumed a sizable

(continued)

FORM PREPARED BY:
Name: Bill Babcock
Address: Missoula, MT
August, 1987

GEOGRAPHICAL INFORMATION:
Acreage: less than one
USGS Quad: Glendive, MT 1967 7.5 minute
UTM's: 13/521455/5216760

HISTORICAL INFORMATION (continued)

The new plant had a capacity of 2 million gallons per day and, by 1929, another settling tank was added to the operation, this one having a capacity of an additional 300,000 gallons.[7]

In 1921-1923, the city's wooden water mains were replaced with cast iron pipe. In 1934, a water softening system, designed by C.W. Eyer, Glendive City Engineer, was installed in the filtration plant. This was the first water softening plant to be constructed in Montana. These improvements to the water system were financed by a $15,000 bond issue used to match a federal grant of $19,000 under the Public Works Administration. Other improvements included replacement of the early 1920's cast iron pipe with asbestos-cement pipe for the water distribution mains in 1939; construction of a 1-million-gallon reservoir and 10 inch transmission lines with a $65,000 bond issue in 1941; and construction of the existing 1-million-gallon presedimentation basin in 1941 after a $100,000 bond issue.[8]

The plant experienced a major expansion in 1960 with the construction of a new filtration building and the expansion of the old filtration building. The new filtration plant is not included within this nomination. The existing water filtration system relies upon the pumps in the old filtration plant to disperse water to settling ponds and then into the old plant for chemical treatment and rapid filtering through sand. From there, the water is pumped to the new plant where it goes through another rapid sand filtering process as well as and chlorine treatment before being pumped out to the citizens of Glendive.[9]

Footnotes

1. Marie MacDonald, Glendive, The History of a Montana Town, Glendive Gateway Press, 1968, pp. 47-50; Peggy Winchell "History of Glendive, Montana," n.d. paper prepared for Breakfast Lions Club.

2. "Chronological History of Water," typescript apparently prepared by City of Glendive in about 1956.

3. Sanborn Map, 1910.

4. "Chronological history" Glendive Independent, 10/19/1915.

5. Dawson County Review 8/24/1916; "Waterworks Improvements" plans by Burns and McConnell Engineers on file in Glendive City archives, City Hall, Glendive Montana.

6. Ibid

7. "Chronological History"

8. Ibid: "Water Softening Project" plans on file in Glendive City Archives, City Hall, Glendive, Mt.; Interview with Charles Mohr, Plant supervisor, Glendive, City Water Filtration Plant, by Bill Babcock, Glendive, Mt. 4/21/1987.

PHYSICAL DESCRIPTION (continued)

building. This part of the building has a hip roof covered with cedar shingles. Window and door detailing corresponds with the style of front section. The rear, flat roofed portion of the addition was built to house the flocculator.

A flat-roofed, one-story, concrete masonry unit addition was built to the rear of the flocculator plant in 1960 and is considered to be an incompatible addition to the historic filtration plant. This section of the building houses the solid contact unit and is irregular in shape (with a curved east wall), and thick concrete foundation. The back elevation has a metal frame, multi-pane window, with an operable casement inset. A concrete platform with concrete steps extends from the east side of this addition. A large, metal, cylindrical lime silo with a funnel-shaped bottom stands atop the flat roof.

On the lots adjacent to the historic water filtration plant is the replacement plant that was constructed in 1960, five concrete settling ponds that were constructed in 1941, and a small, one-story, wood frame shed. These new buildings are not included within the boundaries of the nominated historic filtration plant.

STATEMENT OF SIGNIFICANCE (continued)

percentage of the city's operating budget. Improvements to the water system in the 1920's and 1930's continued to make the provision of a quality water supply the top priority for the city government throughout the historic period. Even though the historic plant was expanded in 1960, the original building still maintains a great deal of its design and material integrity. The major part of the expansion of the filtration system is housed in the 1960 building, which is not out of scale with the historic plant.

INTEGRITY (continued)

1923 addition to the plant is considered to be a contributing component of the historic building, but the 1960, concrete masonry unit addition to the rear is noncontributing. Because this later addition is located on a secondary facade and is only one story in height, it does not seriously detract from the overall high degree of historic architectural integrity exhibited by the filtration plant.

BOUNDARY DESCRIPTION

The historic water filtration plant is situated on a small parcel of land located immediately to the north of block 5 of the Original Townsite of Glendive, measuring (starting from the west corner of said block) 75' to the west, then 250' to the north, then 25' to the east, and 225' to the south back to the point of beginning.