# Intensive-Level Architectural Survey of Ashton Hydroelectric Project, Fremont County, Idaho

**JUNE 2019**

PREPARED FOR

**PacifiCorp**

PREPARED BY

**SWCA Environmental Consultants**

# INTENSIVE-LEVEL ARCHITECTURAL SURVEY OF ASHTON HYDROELECTRIC PROJECT, FREMONT COUNTY, IDAHO

Prepared for

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SWCA Project No. 45947.07

SWCA Cultural Resources Report No. 19-328

June 2019

# ABSTRACT

The Ashton Hydroelectric Project is a power generation complex on the Henry's Fork of the Snake River, Fremont County, Idaho, approximately 2.5 miles west of Ashton, Idaho. The Ashton Hydroelectric Project has not been formally documented, and its eligibility for the National Register of Historic Places (NRHP) has not been previously evaluated.

In 2020, PacifiCorp proposes to remove three company houses and a shed within the Ashton Hydroelectric Project. The removal of the four buildings will be accompanied by asbestos abatement. These activities are collectively referred to hereinafter as the "proposed work." In compliance with License Article 408 and in fulfillment of its Section 106 consultation responsibilities, PacifiCorp has initiated consultation with the Idaho State Historic Preservation Office (SHPO) regarding the proposed work (SHPO Review No. 2019-326). SHPO has requested that the Ashton Hydroelectric Project be documented on an Idaho Historical Sites Inventory (IHSI) form to assist with determining whether the property is eligible for the NRHP and how the proposed work may affect it.

At the request of PacifiCorp, SWCA conducted a study of the Ashton Hydroelectric Project in April 2019. The study consisted of an intensive-level survey of historic architectural resources within the area of the Ashton Hydroelectric Project. The survey identified 24 architectural resources within the vicinity of the Hydroelectric Project, of which 4 (17 percent) were considered to retain integrity and contribute to a potential historic district. The four resources do not possess the significance to be recommended individually eligible for the National Register of Historic Places (NRHP) and, due to lack of integrity, the potential Ashton Hydroelectric Project Historic District is also recommended not eligible under any criteria for the NRHP.

## CERTIFICATION OF RESULTS

I certify that this investigation was conducted and documented according to Secretary of Interior's Standards and guidelines and that the report is complete and accurate to the best of my knowledge.

Signature of Principal Investigator

June 19, 2019

Date

# KEY INFORMATION

PROJECT NAME

Intensive-Level Architectural Survey of Ashton Hydroelectric Project, Fremont County, Idaho

PROJECT NUMBER(S)

SWCA Project No. 45947.07

LOCATION

Fremont County, Idaho

USGS QUADS

Lemon Lake, Idaho; Ashton, Idaho

LEGAL LOCATION OF SURVEY

Township 9N, Range 42E, Sections 27 and 28

PROJECT AREA

Acres: 10.41

AREA SURVEYED

Acres Intensive Survey: 10.41

Acres Reconnaissance Survey: 0

PROJECT DATA

Previously recorded cultural resources: 0

New cultural resources located and/or recorded: 24

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FEDERAL AGENCY

Federal Energy Regulatory Commission (FERC)

REPORT PREPARED FOR

PacifiCorp

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June 19, 2019

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# PROJECT DESCRIPTION

In 2020, PacifiCorp proposes to remove three company houses and a shed within the Ashton Hydroelectric Project, a power generation complex on the Henry's Fork of the Snake River, Fremont County, Idaho. The removal of the four buildings will be accompanied by asbestos abatement. These activities are collectively referred to hereinafter as the "proposed work." The Ashton Hydroelectric Project has not been formally documented, and its eligibility for the National Register of Historic Places (NRHP) has not been previously evaluated.

In compliance with License Article 408 and in fulfillment of its Section 106 consultation responsibilities, PacifiCorp has initiated consultation with the Idaho State Historic Preservation Office (SHPO) regarding the proposed work (SHPO Review No. 2019-326). SHPO has requested that the Ashton Hydroelectric Project be documented on an Idaho Historical Sites Inventory (IHSI) form to assist with determining whether the property is eligible for the NRHP and how the proposed work may affect it. PacifiCorp has in turn requested that SWCA Environmental Consultants (SWCA) prepare this report presenting intensive-level documentation of the Ashton Hydroelectric Project (the study area) (Figure 1) and evaluation of its eligibility for the NRHP, including an IHSI form. As part of this documentation work, a search for historic drawings and photographs has been conducted and representative drawings and photographs have been included in the report. The report concludes with SWCA's recommendations regarding the eligibility of the Ashton Hydroelectric Project for the NRHP.

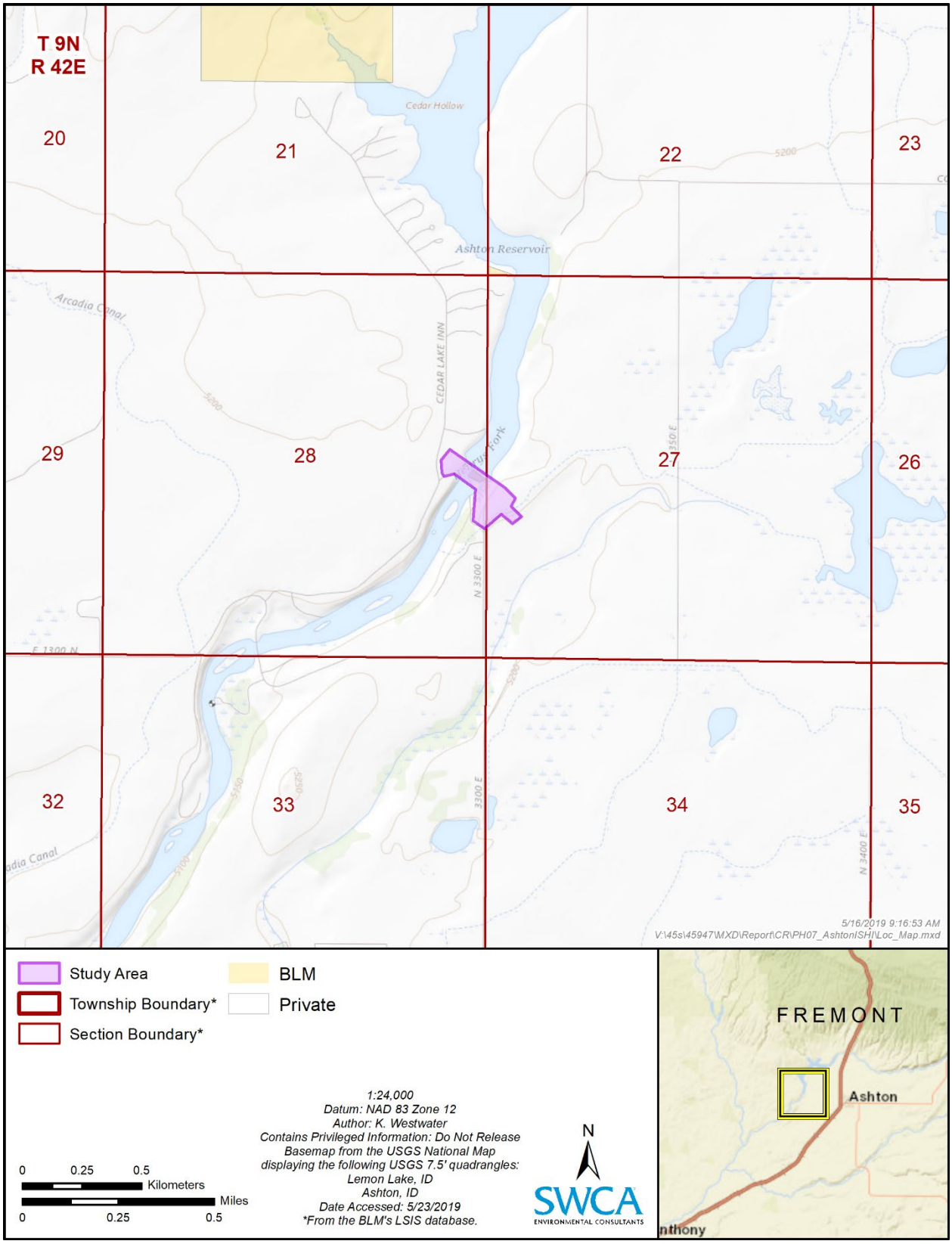


**Figure 1. Study area location map.**

# Project Study Area and Area of Potential Effect

Because the four buildings to be demolished fall within the boundary of the larger Ashton Hydroelectric Project (which includes other employee housing, offices, and the dam and powerhouse itself), they likely represent contributing elements in a historic district. Their removal has the potential to affect the eligibility of that district. The study area (Figure 2) is therefore defined as the boundaries of the Ashton Hydroelectric Project Historic District (District), as well as an associated resource on a separate but adjacent property that was recently moved out of the district.

An Area of Potential Effect has not yet been defined for the project.

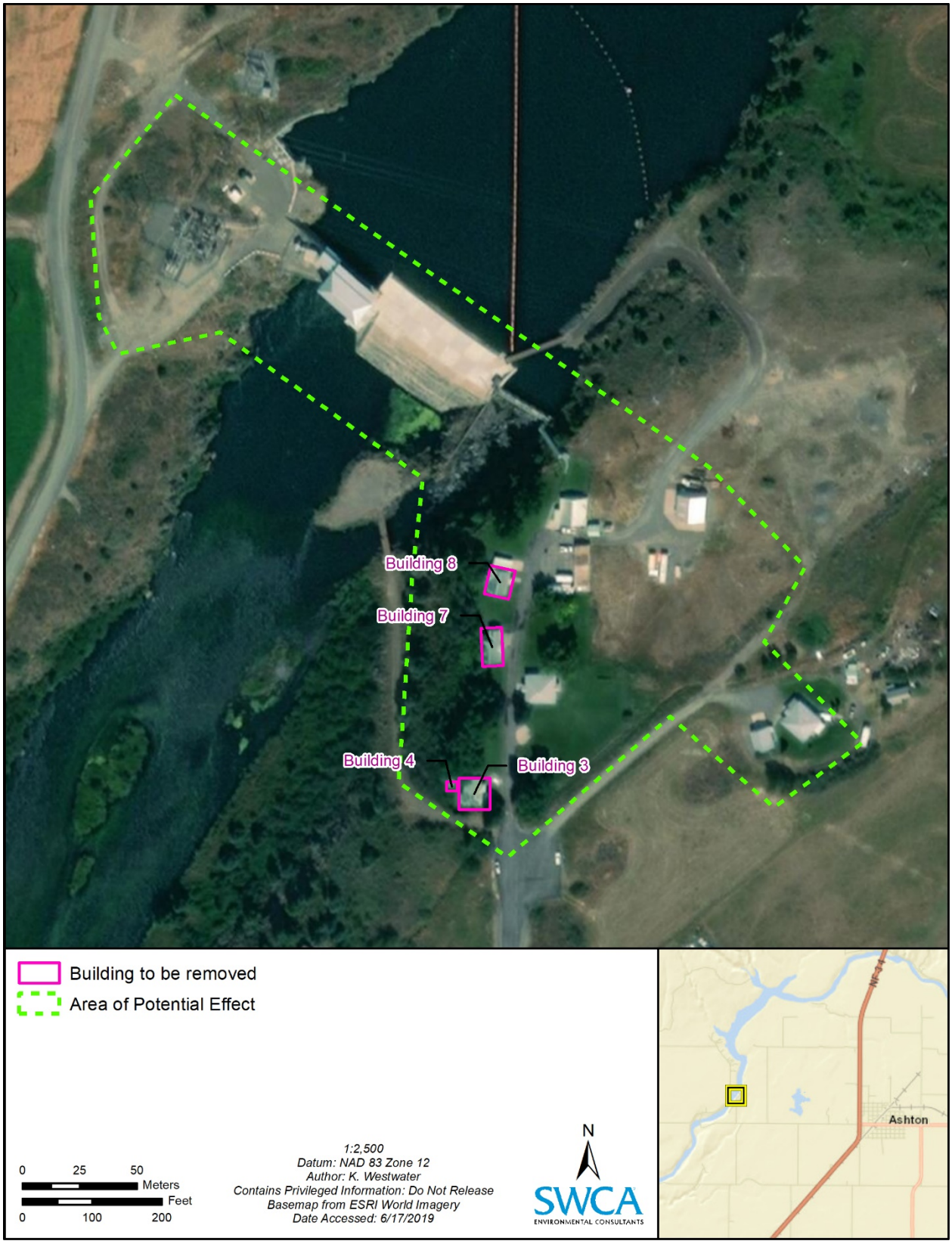


**Figure 2. Map of study area and buildings to be removed in 2020. The study area largely coincides with the potential historic district boundary (see Figure 33).**

# ENVIRONMENTAL SETTING

The Ashton Hydroelectric Project (the Project) is composed of a dam, reservoir, power plant, switchyard, company housing and shop area, and open fields. The Project is in Fremont County in the northeastern-most corner of central Idaho in a unique area characterized by both the northern extent of the Great Basin and the central Rocky Mountains (Plains). It is approximately 5 kilometers (km) (2.5 miles) west of the town of Ashton, Idaho. The reservoir was created by the placement of Ashton Dam on the Henry's Fork of the Snake River, which flows into the reservoir from the north and continues south of the dam. The reservoir is located on an extensive series of alluvial fans (Snake River Group), which overlay the volcanic activity distinctive of the area, at the base of the Island Park Caldera. The topography of the region varies greatly, from the foothills of the Centennial Range at 1,981 meters (m) (6,500 feet) above mean sea level down through a gradual alluvial slope that extends to the Henry's Fork River at 1,463 m (4,800 feet) at its lowest point (Roberts 1976). The Ashton Hydroelectric Project rests within the lower reaches of this volcanic gradient along the Henry's Fork. Plant species identified in the study area consist of Utah Juniper (*Juniperus osteosperma*), willow (*Salix* sp.), sagebrush (*Artemisia tridentata* and *Artemisia arbuscula*), rabbitbrush (*Chrysothamnus* sp.), bitterbrush (*Purshia tridentata*), crested wheatgrass (*Agropyron cristatum*), buckwheat (*Fagopyrum esculentum*), pepper weed (*Lepidium latifolium*), thistle (Cynareae), curly dock (*Rumex crispus*), heron's bill (*Erodium* sp.), mint (*Mentha* sp.), and prickly pear (*Opuntia* sp.).

The built environment of the Ashton Hydroelectric Project can be divided into two areas. The first is the residential and shop/office area, which is mostly flat. It is accessed via a mix of paved and gravel one-lane roads. The area has landscaping elements such as planted lawns and flower beds (around the cottages and office building) and open fields (east of Building 1). It has numerous buildings and structures and several other built features including a stone retaining wall, clotheslines, a mix of chain-link and barbed-wire fencing around the boundary, and a stone outdoor fireplace (Figure 3).

The second area encompasses the dam and hydroelectric plant. It is accessed on the west side by an unpaved road and on the east side by a gravel road and a metal bridge that allows vehicular access to the dam itself, as does a covered staircase on the east side. The area does not have landscaping or built features beyond a chain-link fence designed to prevent access to the dam on the west side and railings and concrete barriers to block off slopes and intake tunnels (Figure 4).

**Figure 3. Study area overview showing residential/shop area. Buildings 3, 5, 6, 7, and 8. Facing south. Photograph taken April 30, 2019.**

**Figure 4. Study area overview showing the dam/hydroelectric plant. Building 10 and Structures 1 and 2 (with residential area in background). Facing southeast. Photograph taken April 30, 2019.**

# CULTURAL SETTING

The use of electricity to provide light and power to homes and businesses is a relatively recent development. Electric power got its start in New York in the 1880s. Thomas Edison invented the incandescent bulb in the 1870s and began to work with wealthy customers to install electric power in their homes, which was produced by small generators. In 1882, with funding from J. P. Morgan, Edison opened the Pearl Street Station in lower Manhattan, the first centralized power plant made up of multiple generators that served numerous homes and customers by sending electricity over a grid of wires. The Pearl Street Station quickly became a model for industrial-scale power generation (Institute for Energy Research 2017).

The first hydroelectric power plant came into service in Appleton, Wisconsin, on September 30, 1882, and was powered by the Fox River. The plant was known as the Appleton Edison Light Company and was based on Edison's work in creating an electrical grid in New York City. It produced just enough electricity to light the owner's home, a nearby building, and the plant itself (Library of Congress 2018). Despite the low initial energy yield, it proved that hydroelectric power was a viable source of electricity.

When electric power first came into use in the 1880s, it offered a level of safety and convenience that the previously popular gas light could not match, and as a result, it quickly gained popularity in urban areas. The dense populations of cities made the installation of electric infrastructure economical; power lines could serve many customers per mile, decreasing the average installation cost per customer. As well, new electric companies quickly began to merge, eliminating the need for many smaller generating plants and enabling the consolidated companies to instead use larger, more efficient facilities (Institute for Energy Research 2014).

Electric power generation in the Intermountain West followed a slightly different pattern, particularly in respect to hydroelectric power. Unlike the densely packed cities of the Eastern Seaboard, residents of the West were often much more widely dispersed. In more arid areas like Utah, southern Idaho, and Colorado, the locations of water sources where hydroelectricity could be generated were sometimes a significant distance from towns and cities. Despite these differences, electric power was still in high demand by western consumers. This demand for electric power was stimulated by two major forces: community demand for domestic and urban infrastructure and demand for power to drive industrial operations (Southworth et al. 1999:31). Of these two, the latter may well have been the primary driving force. The earliest power plants in the region were originally established by Lucien L. Nunn, who built plants initially in Telluride, Colorado, and later in Utah to drive his mining operations (Southworth et al. 1999:31).

The Ames Hydroelectric Generating Plant near Telluride was the first plant of its kind. It was the first hydroelectric facility in the world to "generate, transmit and use alternating current (AC) for industrial purposes in the U.S." (Hydro Review 2013). AC, developed by George Westinghouse, allowed electricity to be transmitted at a much higher voltage and for longer distances than direct current (DC). Edison's power plants, starting with the Pearl Street Station, all used DC; during the late 1890s, he actively campaigned against the use of AC, most notably by designing an AC-powered electric chair to electrocute animals. However, Nunn recognized that AC was well-suited to his needs, particularly the long-distance transmission of electricity from the power-generating station to a mine miles way. Construction of the Ames plant began in 1890, and by June 1891, it was generating energy. It quickly became a success and simultaneously demonstrated the superiority of AC for the transmission of electricity over long distances (Hydro Review 2013).

Nunn followed his success at the Ames plant by expanding his operations in Colorado and then to Utah and Idaho. By 1900, he had established hydroelectric plants in Logan and Provo Canyons in Utah. As

with the Ames plant, these generating stations primarily delivered power to mines. At the time they were built, both of these stations had some of the longest electrical transmission systems in the nation.

With the success of these plants, Nunn began to look northward for additional power opportunities along the Bear River in northern Utah and Idaho. Nunn's interest in hydroelectric power from the Bear River would ultimately lead to the construction of four facilities on the river. Nunn initiated construction of the Grace Hydroelectric Complex on the Bear River in Idaho in the early twentieth century (Southworth et al. 1999:32). The plant was completed in 1908. It was a historic structure from the beginning, as it was one of the first multipurpose plants in the area—if not the world—generating 11,000 kilowatts (kW) (Southworth et al. 1999:32).

However, Nunn was far from the only hydroelectric power entrepreneur in the region in the late nineteenth and early twentieth centuries. A number of other hydroelectric companies served urban centers and mining operations, although other municipally owned hydroelectric facilities also served smaller towns. These early operations were often relatively small in scale and were subject to frequent technical problems as a result of equipment failure, or even lightning strikes; they were also often frequently highly competitive for potential customers (Fiege and Ore 1988). As a result, many smaller companies began to consolidate ca. 1900.

The early history of the Ashton-St. Anthony's Hydroelectric Project ties into these patterns. Construction began on the hydroelectric project in 1914 under the oversight of the Ashton & St. Anthony Power Company (ASAPC), which was founded in 1913. The company was named after the two closest towns to the dam, St. Anthony and Ashton, Idaho. Both towns are in Fremont County and are in proximity to Henry's Fork of the Snake River.

St. Anthony, Idaho, was founded in 1890 by C. H. Moon. It became the county seat when Fremont County was established and remains so today. In 1899, a railroad connection was made to the town. The town continued to grow, including the opening of a public school, various businesses, a post office, and churches for several different denominations including Presbyterians, Methodists, Mormons, Catholics, Episcopalians, and Baptists (Greater St. Anthony Chamber of Commerce 1993).

Ashton was established later than St. Anthony. The first railroad survey went through the future location of Ashton in 1881. It was not until 1904, however, that 640 acres of land for a townsite were purchased from George Harigfeld, J. E. McGavin, and Asa Hendricks. The purchasers were the Ashton Townsite Company, which was primarily made up of residents of St. Anthony. The townsite was incorporated on July 11, 1906 (Lyon 2006).

Despite the company's name, the ASAPC was not actually created to serve either community, nor was it owned and operated by residents of the two towns. Its primary organizer was Nels (or Neils) N. Holm, a resident of Shelley, Idaho, a community approximately 60 miles southwest of Ashton. Little additional information exists about Holm (1852–1929) (Ancestry 2017). Census data shows that he was born in Denmark, immigrated to the United States in 1880, and became a naturalized citizen. The 1910 census lists his occupation as "Civil Engineer." He was married to Anna Holm (who was also born in Denmark); they had no children listed (Ancestry 2006). The 1920 census notes that he was a civil engineer working for an unspecified power company (which was presumably the ASAPC) (Ancestry 2010).

Holm was supported in the venture by other residents of Shelley and Blackfoot, Idaho, another community near Shelley. The Ashton hydroelectric plant was not Holm's first such business venture. In 1913, the *Blackfoot Optimist* described him as "the promoter of the Shelley power plant which was sold for $190,000 about a year ago" (*Blackfoot Optimist* 1913). By August 1913, the ASAPC was established as "a corporation capitalized for $250,000, of which $80,000 has been subscribed" (*Twin Falls Times* 1913).

In 1913, the future site of the Ashton-St. Anthony Dam was located by Holm. Based on his observations, the site, which was in a deep gorge with basalt walls approximately 2.5 miles west of Ashton, represented a good location for a power plant. "Construction on the dam began in 1914 under the authority of a group of men from Shelley, Blackfoot and Idaho Falls who wanted to gain a foothold in the Ashton area before the 2-year-old Utah Power and Light Co. did" (Baum 2004). Construction began in 1914 and was completed in 1918 (NPG of Idaho 2016). When it was first established, the Ashton Hydroelectric Project included a powerhouse on the west end and an earthfill dam 60 feet high. Cumulatively, the project (including the spillway, dam, and generating station and powerhouse) was 500 feet long (Hoyt 1935:203). The completed hydroelectric plant powered a 44-kV transmission line (Baum 2004).

The ASAPC also opened a second hydroelectric plant, a smaller facility located near St. Anthony, Idaho. The St. Anthony hydroelectric plant was finished in 1925 and as of 1935 could generate 0.50 megawatts of energy, with an average annual generation of 3.9 gigawatt hours. The dam had a gross static head of 14 feet (PacifiCorp 2011; Clyde et al. 1979:21).

But from the beginning, the ASAPC faced both financial and legal challenges. These mostly stemmed from the relatively late establishment of the company during the period when most hydroelectric companies were undergoing consolidation into larger corporations. As a relative late-comer to the field of hydroelectric power generation, the ASAPC was forced to compete with other companies that already held functional (if unofficial) monopolies over power generation and distribution to nearby municipalities.

Foremost among these was the Utah Power & Light Company (UP&L). Recognizing the problems of operating solitary hydroelectric plants, and because competition sometimes resulted in redundant power services for a given municipality, Utah hydroelectric power companies began to consolidate their holdings and interconnect their plants with transmission lines. Creating an integrated network of plants and distribution systems allowed power companies to meet varied demands and to make more efficient use of water resources (Fiege and Ore 1988:E15). UP&L was one such company that resulted from these mergers. Formed in 1912, the company operated three plants that served Salt Lake City, Ogden, and smelters south of Salt Lake City. UP&L was a subsidiary of a larger national holding company, the Electric Bond and Share Company (EBASCO), that was organized in 1905.

Within a few years of its establishment, UP&L gained control of four large utilities: the Knight Consolidated Power Company, L.L. Nunn's Telluride Power Company, the Utah Light and Traction Company, and the Idaho Power and Transmission Company. UP&L's objective in acquiring the companies was to achieve even greater economies of scale by combining the companies' plants and distribution systems in to a huge, fully integrated, superpower system (Fiege and Ore 1988:E16).

The success of Nunn's plants on the Bear River attracted UP&L to eastern Idaho (Southworth et al. 1999:32). The Bear River offered relatively untapped potential for hydroelectric development as well as several preexisting plants operated by Nunn's power company. Between 1912 and 1923, UP&L purchased or constructed four hydroelectric plants on the river (Southworth et al. 1999:32–33, 37).

Along with competition between newly consolidated power companies in the region, the period also saw the establishment of government regulatory measures on the state level for hydroelectric power. In particular, the Idaho Public Utilities Commission (PUC), which was established in 1913, proved a consistent roadblock for ASAPC (Idaho Office of the Governor 2019). This was because, unlike companies in previous years, ASAPC had to apply for permits to distribute its power, and in many cases (due to new state laws) these permits were not granted. Based on news stories from the time, this was often due to pressure from UP&L, which served the same geographic area and stood to benefit from a lack of competition with ASAPC. Numerous news articles from 1913 to 1920 showcase various points when ASAPC came into conflict with the PUC and with UP&L.

The first dates to 1913, when the PUC refused to issue a certificate of public convenience and necessity to ASAPC. Although the company was able to operate in specific municipalities nearby (which were exempt from state oversight) like Ashton and Marysville, Idaho, the PUC's ruling precluded significant expansion of the company's service area. As the *Blackfoot Optimist* noted, "The Utah Power & Light company of Salt Lake, which operates in the same territory, was the principal opponent of the application and the decision is a distinct victory for that company" (*Blackfoot Optimist* 1913).

In 1914, ASAPC again faced off against the PUC and UP&L, again with unsatisfactory results. The company sought to establish service in an area already served by UPL, arguing that the "company rendered inefficient and unreliable service at extortionate rates, and the Utah company in defense answered that it gave the best service at the lowest rate the field enabled" (*Lincoln County Times* 1914). The PUC declined to issue a permit to ASAPC on the basis of "…a theory previously laid down that the competition would not be lasting and only result in economic waste" (*Lincoln County Times* 1914). At least one newspaper took a strong stance on the issue in favor of ASAPC:

> While such decisions under ordinary circumstances may be based in a sound principle, it still opens the door to some exceedingly grave abuses: if even a small fraction of the grievances laid at the doors of private monopolies in public utilities have any foundation in fact. The most oppressive monopolies are at least exposed to potential competition, but under the Idaho reform law they are not legally installed in the possession of an absolute monopoly. If the fear of competition acts as a small measure of restraint on the cupidity and arrogance of quasi-monopolies, even the remote fear is now removed in the state. Even the sort of power that seems vested in the commission appears to be conducive to monopoly, since there will be few applicants for permits under its terms. (*Lincoln County Times* 1914)

Again in 1916, UP&L (along with several other organizations) attempted to block ASAPC when it sought to expand. ASAPC had applied to the PUC to expand service to the village of Roberts, Idaho (approximately 40 miles southwest of Ashton). The municipality supported the application, but UP&L objected to the proposed arrangement. ASAPC alleged that UP&L had not attempted to provide power to Roberts until ASAPC did, at which point UP&L attempted to prevent them from establishing service. It is unclear from the newspapers which side the PUC decided in favor of (*Evening Capital News* 1916).

Despite these permitting setbacks, ASAPC continued to forge ahead with the Ashton Hydroelectric Project and the expansion of its service area. In 1916, a company representative reported "that the company has $70,000 in the treasury" (*Blackfoot Optimist* 1916a). What was more, the dam and power plant were to be completed by August, and a transmission line was planned to Mud Lake by May 1917. By 1916, ASAPC was also unique within the state: "This company is the only independent concern in the State at this time, and is one of the largest, with a capacity of 5,000 horse-power" (*Blackfoot Optimist* 1916b). Although the dam was not completed until 1918, it formally opened in June that year. Ultimately by the time the Project opened, the dam, powerhouse, and associated machinery cost a total of $500,000 (not adjusted for inflation) (*Oakley Herald* 1918).

Legal battles continued, but in 1920, ASAPC won a rare victory when the PUC ruled in favor of its right to supply electricity to Arco, a town approximately 95 miles southwest of Ashton. This was due to the fact that as a municipality Arco was outside of the jurisdiction of the PUC and that ASAPC had negotiated with Arco directly and the town owned the transmission line used to provide power; as a result, the PUC did not have a say in ASAPC's contract with Arco (*Evening Capital News 1920*).

Despite these minor victories, by 1920 it was clear that the financial pressures brought to bear on ASAPC through years of constant litigation and failure to find customers were having a negative effect on the company. A candid editorial in the *Idaho Republican* laid out the company's grievances:

> For a good many years it has been quite plain that a competing firm, the Utah Light and Power company, has been doing what they can to hinder the development of [this] plant, and the utilities commission seems to be the instrument thru which they work to try to wipe Mr. Younie's power plant [the Ashton Hydroelectric Project] off of the map or to acquire it themselves. It is a part of the irony of our free institutions, that a weapon that was created to protect the individual against the encroachment of the strong, may also be taken up and used cuningly [*sic*] by the strong against the weak. (Trego 1920)

For the article, the writer interviewed Alexander Younie, who in 1920 was one of the chief financial backers of ASAPC. His statement to the paper does little to hide bitterness at the setbacks the company had faced:

> We commenced this enterprise a number of years ago when materials and labor were cheap, and the river was running thru [sic] the canyon doing nobody any good… Towns and villages all up and down the valley were in need of light and power and nobody was supplying it. The Utah Light & Power Co. was getting a foothold at different places and had pretty well absorbed things at Idaho Falls and Shelley, but with all their power and idle works, they were not offering the people any very desirable bargains in power and light… all thru [sic] the years we have been hampered by every means that shrewd corporation lawyers and operators could devise to keep us from building. They have done everything from using the power of the public utilities commission to prevent our securing rights of way and franchise, down to the least of petty transactions to retard the shipment of goods and the placing of cement in foundations or timbers in construction… For a year and a half we have been just about ready to deliver electrical energy to the town of Ashton, situated right by our plant, and yet before delivery was accomplished and while we had made most of our investment for delivery, a suit was filed protesting our right to that territory… (Trego 1920)

Historical records suggest that by 1922 the company was in a dire financial situation. The *Idaho Republican* notes a meeting of ASAPC shareholders to authorize the reorganization of the company, approve the creation of a new corporation and conveyance of the existing power plant, equipment, and franchise to that new corporation, and consent to the issuance of stock by the new corporation (*Idaho Republican* 1922). The results of this meeting are unclear, but based on historical evidence it is likely that the meeting was not successful in gaining shareholder approval.

The ASAPC continued to operate the hydroelectric plant until 1923, when the company declared bankruptcy and became the Warm Springs Power Company, which continued to operate the station. Shortly after that (likely as result of ongoing financial troubles), the Warm Springs Power Company sold the Ashton-St. Anthony Hydroelectric Plant to UP&L, its long-time corporate adversary. The exact date when ownership of the dam was transferred to UP&L is unclear, but based on historical records, the transfer occurred ca. 1925. One source lists the sale as dating to 1924 and another dates the sale to November 1926, although historical records prove that the later date is too late to be correct (Hoyt 1935:203; Baum 2004).

In 1925, after taking over the Ashton facility, UP&L conducted improvements to the plant. These included the addition of two new generating units capable of handling 2,000 kW (Baum 2004). As *The Synchronizer*, an in-house publication put out by UP&L employees, observed, these improvements represented a unique engineering challenge.

> This job, in comparison with such jobs as Soda and Cutler [other UP&L stations in Idaho], may seem rather unimportant, but involving, as it does, improvements to an existing structure it presents some features of engineering and construction work not found on a new development which is built from the ground up. It was a problem of adapting modern water wheels to a

> structure designed for a more or less obsolete type of wheel, with as few changes in the existing structure as possible. Also whatever changes were made had to be made so as not to weaken the existing structure. (Kittleman 1925:1)

The existing turbines were ill-suited to the design and the high head of the dam. As a result, the spaces for the turbine units were slightly modified through the removal of old concrete and modified turbine units were designed to meet the needs of the plant. "It will be noted that the water wheels are not submerged as is the case with the old unit, but that the water is led into the wheel by means of a concrete penstock and scroll case" (Kittleman 1925:2). The intake gate openings were also enlarged and the original wood gates were replaced with metal gates, the transformers were replaced and relocated outside of the powerhouse, and improvements were made to the damaged earthfill dam (Kittleman 1925:5).

It is unclear when the residential portion of the Ashton Hydroelectric Project was constructed, but it is shown on site diagrams dating to 1925. One 1925 map shows four cottages (Buildings 2, 3, 5, and 7), a garage (Building 4), and a well and pump house (Building 6) (Figure 5) (Utah Power & Light 1925a). A second map also dating to 1925 lists two of the cottages as "old cottages," suggesting that, prior to the UP&L takeover of the facility, only two cottages (Buildings 3 and 7) had been constructed by ASAPC (Figure 6) (Utah Power & Light 1925b). The cottages are in close proximity and face a central road leading north-south through the residential area. The overall physical organization of the cottages is similar to the property layout at the time of this study.

No other maps are available for the historic period, but historic photographs show the addition of several more buildings to the residential and shop area of the Ashton Hydroelectric Project prior to 1949. These additions included the garage (Building 1), which was added ca. 1940, an additional operator's cottage (Building 8), added ca. 1940, and several barns or other agricultural buildings that stood east of Building 1, added between 1925 and 1949 (Figures 7–10).

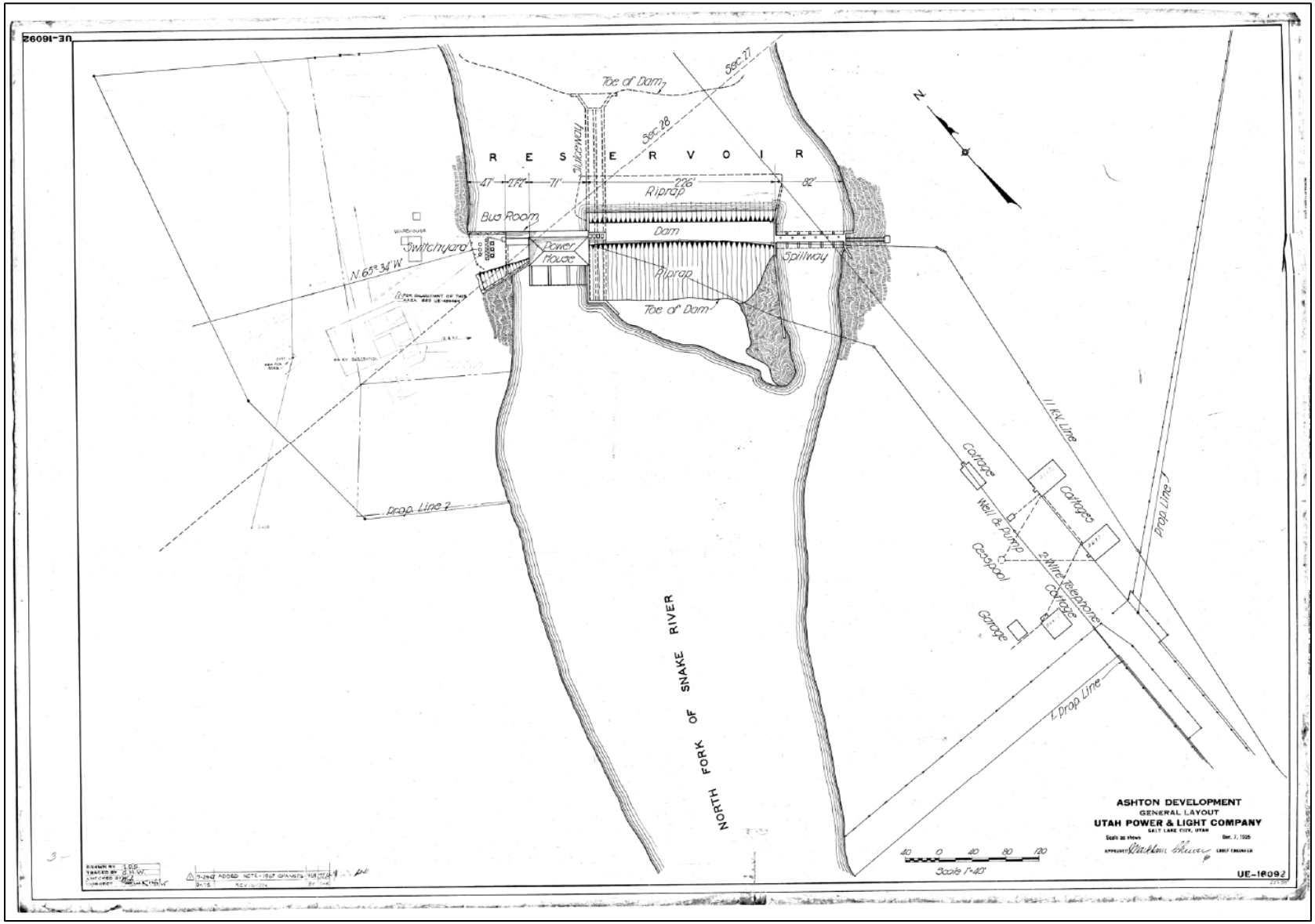


**Figure 5. Map of Ashton Development General Layout, 1925. Utah Power & Light 1925a. Image courtesy of PacifiCorp.**

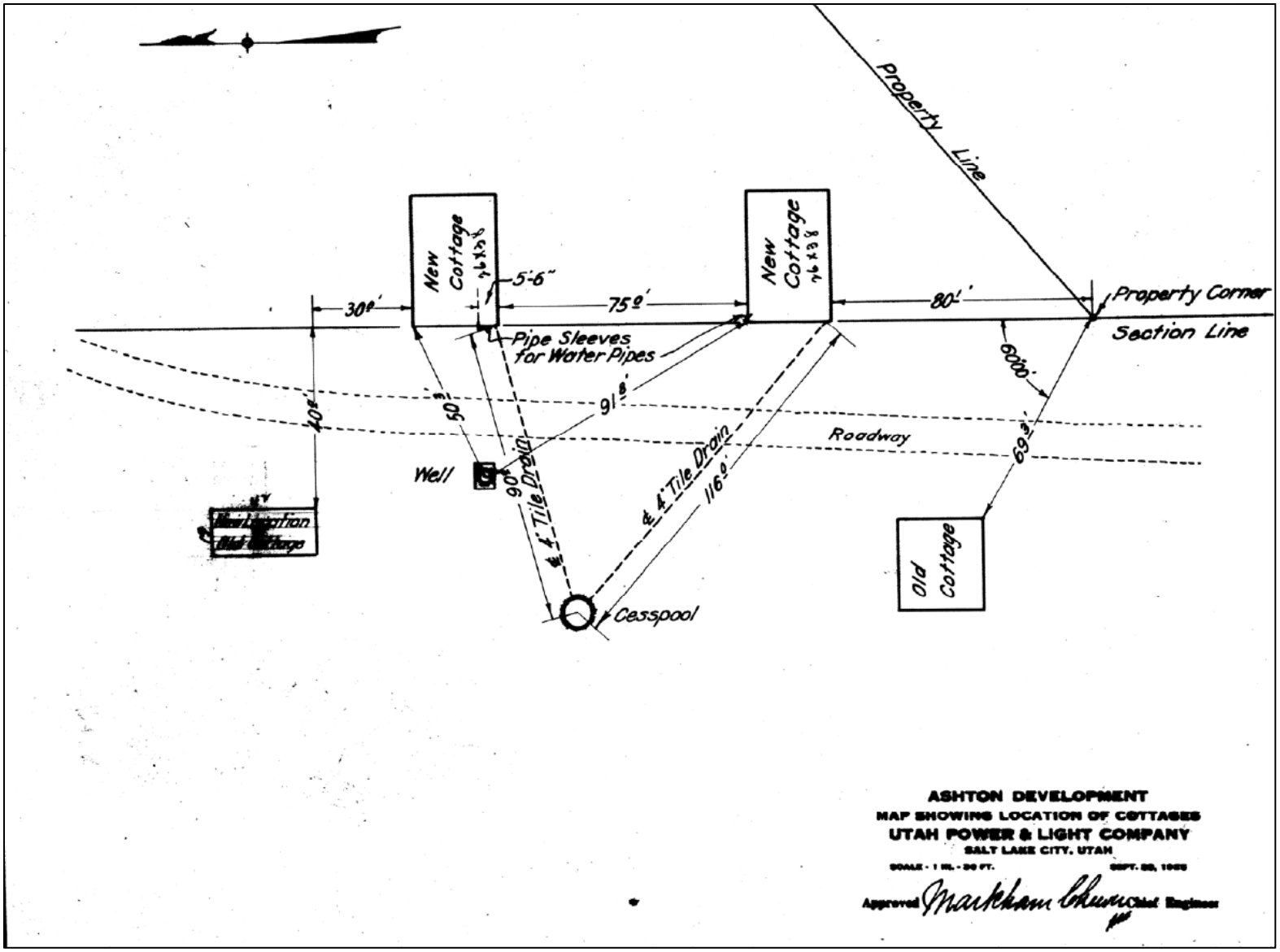


**Figure 6. Ashton Development, Map Showing Location of Cottages, 1925. Utah Power & Light 1925b. Image courtesy of PacifiCorp.**


**Figure 7. Ashton Development: New Operator's Cottages, 1925. Likely Buildings 2 and 5, with Building 2 in original location. Image courtesy of PacifiCorp.**


**Figure 8. Ashton Development, General View, Looking S.E., 1925. Note buildings in background on left. Buildings include operator's cottages and (on the far left) what are likely barns (now demolished) and possibly a temporary shop building used for upgrades to the dam (which does not appear on 1925 maps). The dam and powerhouse are in the foreground. Image courtesy of PacifiCorp.**

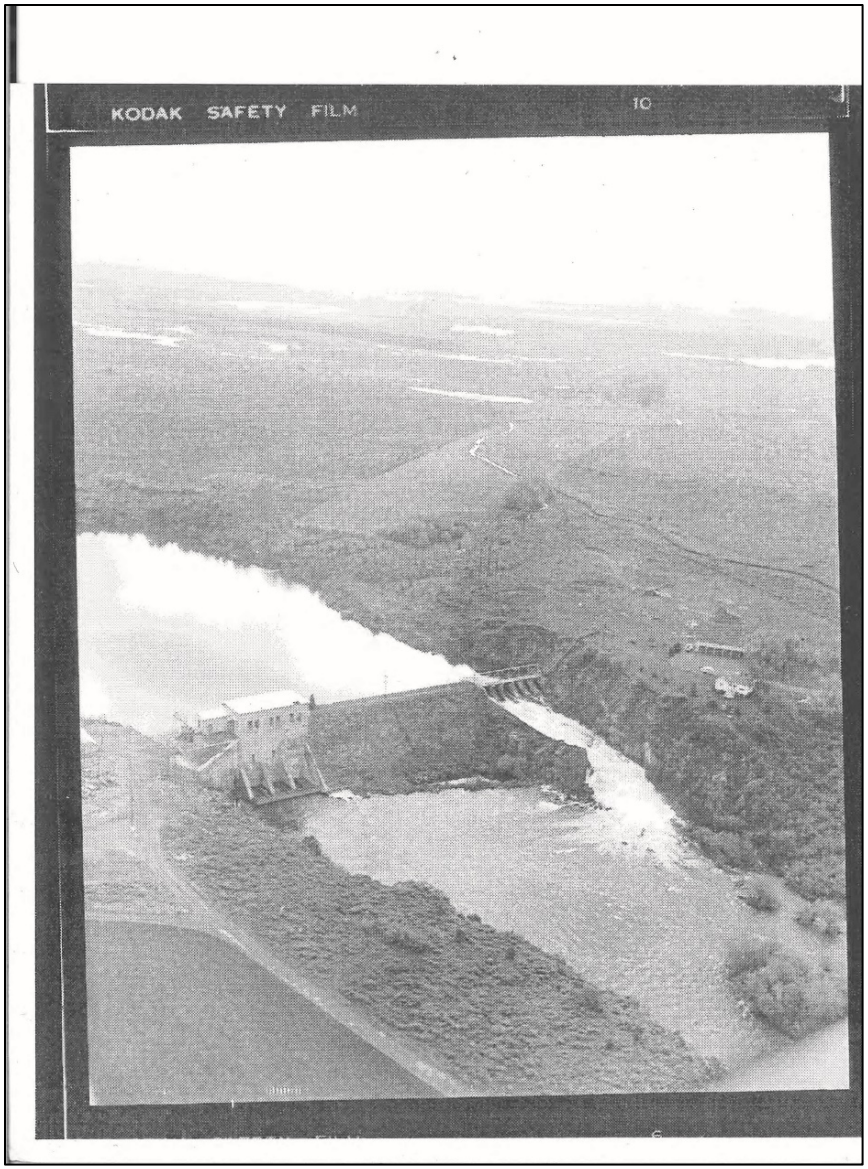


**Figure 9. Ashton dam, powerhouse, and spillway, with Building 1 (garage) visible on right, ca. 1940. Image courtesy of PacifiCorp.**

**Figure 10. Ashton dam and spillway, with Structure 2 (staircase) and Building 8 on right, ca. 1940. Note that the staircase is open. Image courtesy of PacifiCorp.**

By 1974, the residential and shop area included five cottages (Buildings 2, 3, 5, 7, and 8), a small "garage" (Building 4), a larger garage (Building 1), and two barns (Figure 11) (Utah Power & Light 1974). The shop building that now stands at the north end of the residential and shop area was not present, nor was the nearby garage/shed.

In 1984, the residential and shop area included the same five cottages, two garage buildings (Building 1) and what is likely the shop building) and a shed (the shed/garage near the shop building). Several small buildings, including Buildings 4 and 6, are not shown on the map, but this was likely because they were considered too small or inconsequential to be noted rather than because they were moved or not extant at the time (Figure 12) (Utah Power & Light 1984).

By 2015, the map shows only four cottages (with Building 2 no longer present), along with the garage (Building 1) and shop building, as well as a garage and spill response equipment building east Building 1 (Figure 13) (PacifiCorp 1995). Although the District has certainly changed over time, its layout in 2015 is similar to how it existed historically, particularly the emphasis on a cluster of residential and shop buildings centered around a north-south running road.

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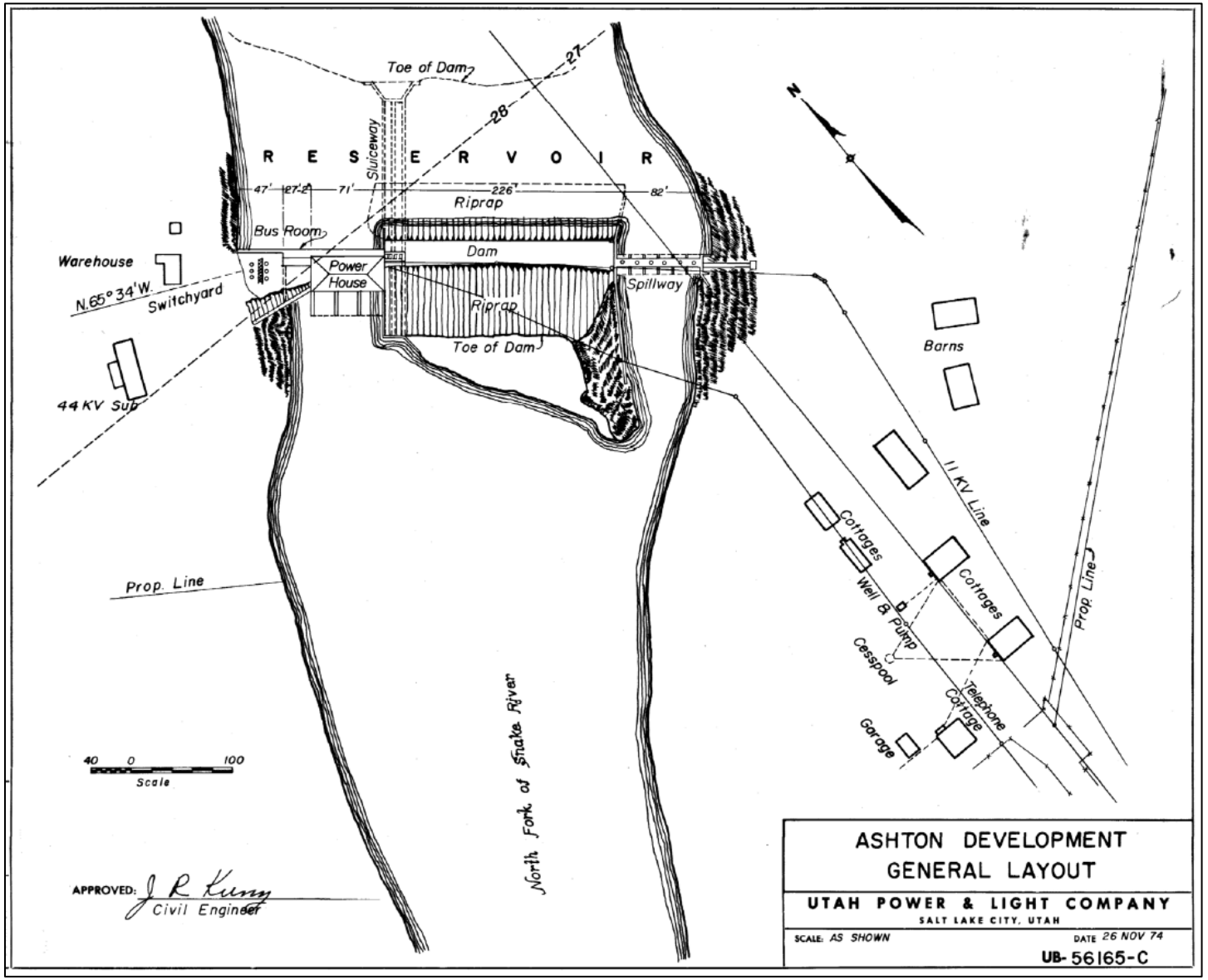


**Figure 11. Ashton Development General Layout, 1974. Utah Power & Light 1974. Image courtesy of PacifiCorp.**

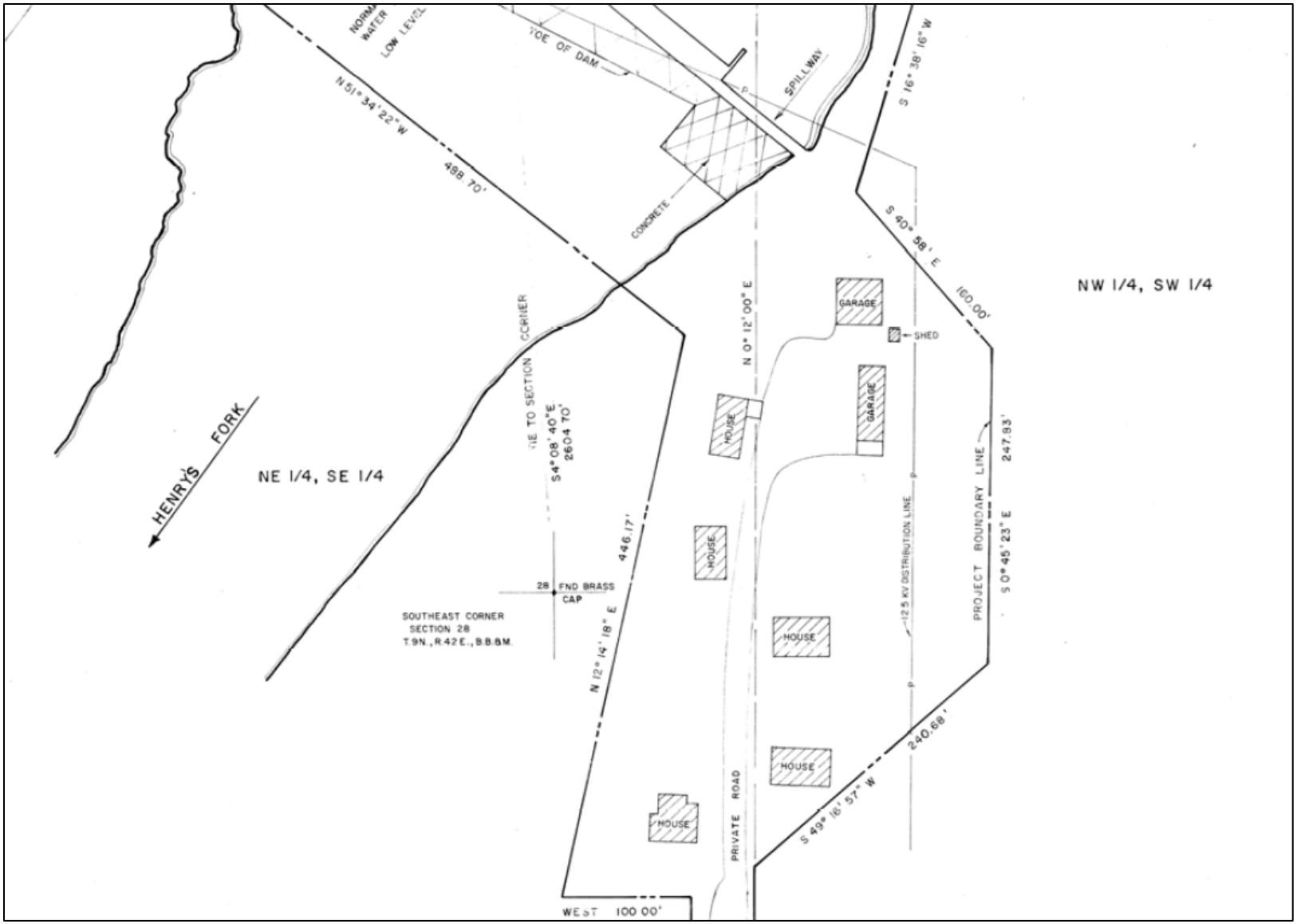


**Figure 12. Ashton Hydroelectric Project, Plant Facilities Map, 1984 (detail). Utah Power & Light 1984. Image courtesy of PacifiCorp.**

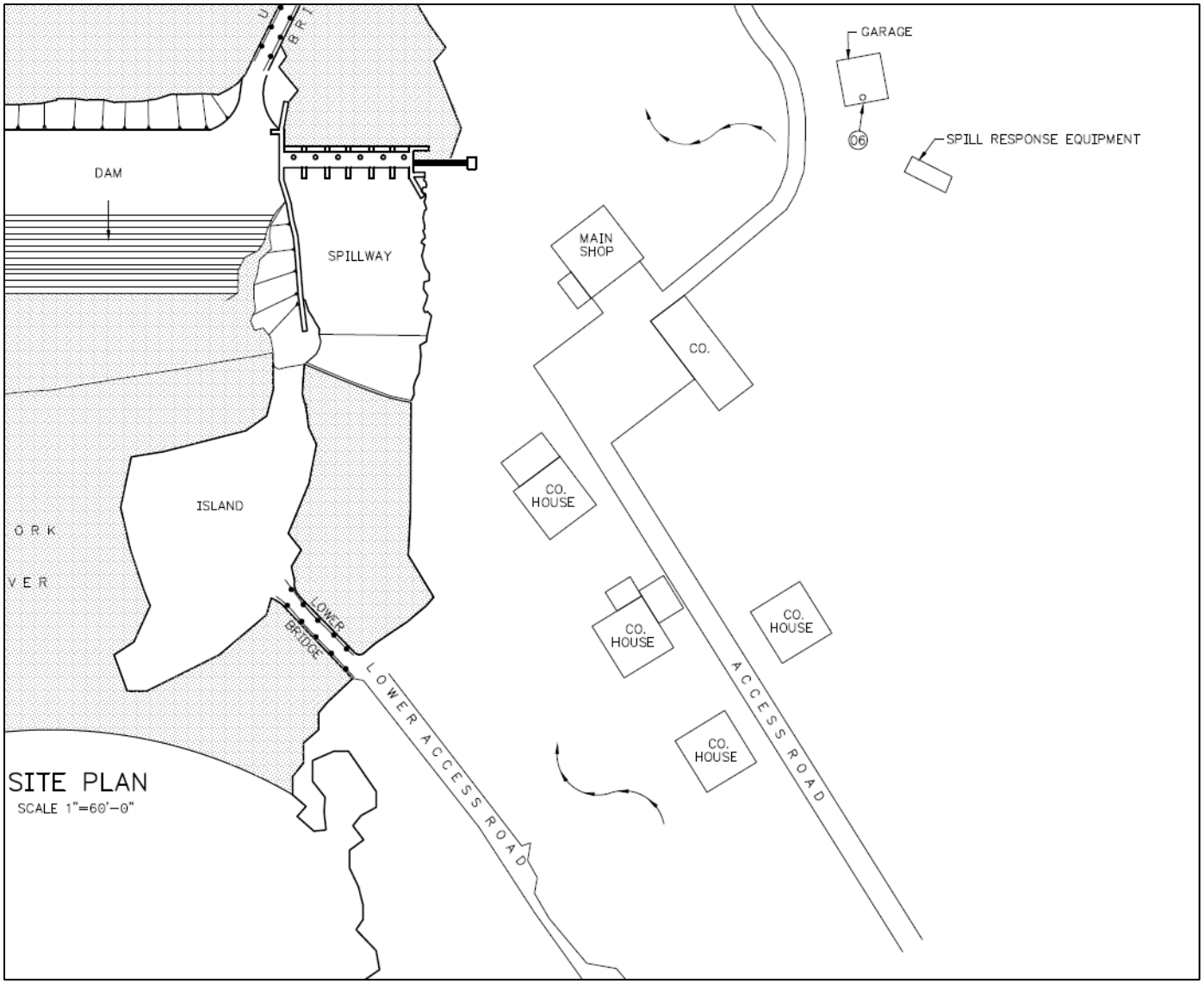


**Figure 13. Ashton Hydro Plant SPCC Plan: Powerhouse Site Plan, 1995 (detail). PacifiCorp 1995. Image courtesy of PacifiCorp.**

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As of 1935, the powerhouse had "One open-flume type 46-in. hydraulic turbine, rated capacity 3,150 hp., and two 51-in. S. Morgan Smith turbines, rated capacity 3,000 hp. each, direct connected to three generators, a total rated capacity 5,800 kw" (Hoyt 1935:203). The power plant operated at an average head of approximately 46 feet, with energy generated at 2,300 volts, and it had been incorporated into the company's eastern Idaho system (Hoyt 1935:203). As of 1979, the hydroelectric plant was capable of generating 5.80 megawatts, and generated an average of 33.0 gigawatt-hours annually. In 1979, it had a static head of 45 feet (Clyde, et al. 1979:21).

Some repairs and alterations were made to the hydroelectric plant beginning in 1991. The top five feet of the dam were removed and the downstream rock face of the dam was covered with roller-compacted concrete, creating the steps present today. The dam crest was covered with formed concrete. The goal was to make the dam crest serviceable as a spillway in the event of a flood exceeding the capacity of the existing spillway. The oldest generator was also replaced, increasing the generating power from 1,500 kW to 2,700 kW. In addition, "The wood spill gates were replaced by steel, the switchboard and metering were upgraded, material was removed from below the dam and a man-made island was built that now serves as access for fishermen" (Baum 2004).

Additional major repairs and upgrades were made to the dam from 2009 to 2012. This included removing the dam crest and all upstream materials to the natural foundation materials; the rock core and roller compacted concrete placed in 1991 were retained. The lower powerhouse face was also covered with a new concrete supporting wall and existing buttresses were repaired. In preparation for the project a bypass tunnel and control gates were built into the bank of the reservoir north of the dam. Although the project faced some challenges including building the tunnel and connecting it "live" to the reservoir and controlling seepage through cofferdams, it was successfully completed without negative environmental effects (PacifiCorp 2011; Berg 2012; Kyle 2012). As described in 2012, the Ashton hydroelectric plant "consists of a dam and powerhouse with three generating units. The dam is a rock and earth filled structure, 60 feet tall and 226 feet long with a 70-foot-wide concrete intake and 82-foot-long spillway" (PacifiCorp 2012). At the time of survey, one generator was rated at 2.85 megawatts and the other two were both rated at 2.5 megawatts (PacifiCorp 2012).

# PRE-FIELD RESEARCH

SWCA requested a file search for the study area from the Idaho State Historical Society and received the results for file search number 19228 on April 30, 2019. The file search area had a 1-mile buffer around the study area to ensure all historic sites were accounted for.

## Previous Cultural Resources Studies

The file search documents show that six previous cultural resources studies have been conducted within the file search area (Table 1). Several of the previous studies were done on behalf of the Bureau of Land Management (BLM), while the other studies consist of a transportation-related project, two projects conducted on behalf of FERC, and one miscellaneous project.

**Table 1. Previous Cultural Resources Studies Conducted in the File Search Area**

| Survey No. | Project No. | Title | Author | Year | Agency |
|---|---|---|---|---|---|
| 1995/107 | ID-030-91-132 | Cedar Hollow Fence, BLM, Idaho Falls District | Hill, Richard | 1994 | BLM, Idaho Falls |
| 1997/842 | ID-030-97-063 | Atchley Road Right-of-Way | Hill, Richard | 1997 | BLM, Idaho Falls |
| 2012/733 | A012(122) | Fremont County/Local Highway Technical Assistance Council (LHTAC – E. 1300 N. Ora Bridge, Fremont Co.) Idaho Transportation Department | Hartmans, Donna et al. | 2011 | Idaho Transportation Department |
| 1991/894 | Accession No. 20150157 | A Cultural Resource Inventory of Ashton Dam, Henry's Fork River, Fremont County, Idaho. Research Report No. 191-2, Nielson Consulting Co. | Nielsen, Glenna | 1991 | Nielson Consulting Co. |
| 2012/425 | SWCA 21462 | Ashton Reservoir Drawdown Zone in Fremont County, Idaho | Herzog, Nicole, et al. | 2012 | FERC |
| 2013/717 | 24104 | Testing and Site Reevaluation of Four Prehistoric Archaeological Sites Within the Ashton Reservoir Drawdown Zone, Fremont County | Fenner, L. and J. Bard | 2013 | FERC |

The majority of projects involved intensive-level survey. Only one project, Survey No. 2012/425 involved survey at both the reconnaissance and intensive level.

In addition, two historic architectural resources (buildings) and two archaeological resources (sites) have been previously recorded in the file search area. None are within the study area (Tables 2 and 3). Of the two buildings, neither is listed on the NRHP; one was determined eligible for the NRHP and the other was determined ineligible. Of the two archaeological sites, both were determined to be ineligible for the NRHP.

**Table 2. Previously Documented Historic Architectural Resources in the File Search Area**

| IHSI No. | Property Name | Street* | NRHP Reference No. | Finding Date | Eligibility |
|---|---|---|---|---|---|
| 43-16333 | Ora Bridge | E 1300 N Road | N/A | 6/27/2012 | Eligible |
| 43-16334 | Rex C. Baum Farm pump house | E 1300 N Road | N/A | 6/27/2012 | Ineligible |

**Table 3. Previously Documented Archaeological Resources in the File Search Area**

| Smithsonian Trinomial | Site Name | Attributes | Finding Date | Eligibility |
|---|---|---|---|---|
| 10FM524 | N/A | historic dump; glass, cans, ceramics, metal, rubber, leather car parts, stove parts, tins | 6/27/2012 | Ineligible |
| 10FM525 | N/A | historic scatter; metal, glass, ceramics, cans, car parts | 6/27/2012 | Ineligible |

Also of note, PacifiCorp undertook consultation with the SHPO in 2010 regarding planned repairs and alterations to the dam. As the SHPO noted, the dam was heavily modified in 1991 through the removal of the top five feet of the dam, the installation of a concrete cap, and the application of roller-compacted concrete on the downstream face. It was the SHPO's opinion that these modifications reduced the historic integrity of the dam and, if the structure was evaluated, would likely render it not eligible for the NRHP (Stenberg 2010). It was also considered non-contributing in a potential historic district (Pengilly 2010).

## Expected Cultural Resources

No architectural resources have been previously recorded in the study area and no resources within the study area have been listed on the NRHP. Given the study's location in a small area confined to the immediate vicinity of the Ashton Hydroelectric Project, it was expected that many of the architectural resources surveyed would be potentially eligible for the NRHP as contributing resources to a historic district eligible under Criterion A and possibly Criterion C for its relationship to the development and operation of the Ashton Hydroelectric Project, under the themes of Engineering and Architecture. It was expected that few if any resources would be individually eligible for the NRHP.

# FIELD METHODOLOGY

Fieldwork was conducted on April 29-30, 2019, and included a visual inspection of the study area and digital photography of its architectural resources. Fieldwork was conducted by field lead Kate Hovanes, SWCA Historic Preservation Specialist, and Stephanie Lechert, SWCA Historic Preservation Specialist, under the direction of Anne Oliver, SWCA Historic Architecture Team Lead. Ms. Hovanes, Ms. Lechert, and Ms. Oliver meet or exceed the Secretary of the Interior's Historic Preservation Professional Qualifications Standards for Architectural History as outlined in 62 Federal Register 33708 (June 20, 1997) (Appendix A).

Fieldwork consisted of documenting each architectural resource in the study area and evaluating it for NRHP eligibility both individually and as a contributing resource in a potential historic district encompassing the Ashton Hydroelectric Project; the potential district as a whole was then evaluated for eligibility to the NRHP. Each historic-age resource was photographed and the data required to complete

the associated IHSI form was recorded (Appendix B). Non-historic resources were noted but not recorded.

# RESULTS

The National Park Service defines a historic district as possessing "a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development" (National Park Service 1997:5). The buildings and structures recorded during this study are all linked historically and through the planned physical development of the Ashton Hydroelectric Project. Because of this, the resources have been evaluated within the context of a potential historic district. No resources were identified that might be individually eligible for the NRHP.

In total, 10 architectural resources dating to the period of significance were recorded in the study area, along with three architectural resources of historic age but dating to outside the period of significance, discussed below (Figure 14). Eleven resources not of historic age were noted but not recorded, for a total of 24 resources (Table 4) (Appendix C).

**Table 4. Architectural Resources Recorded in Study Area**

| Resource Number and Use | Construction Date |
|---|---|
| Building 1: Garage | Ca. 1940 |
| Building 2: Henderson House | Ca. 1925 |
| Building 3: Operator's Cottage | Ca. 1925 |
| Building 4: Shed | Ca. 1925 |
| Building 5: Operator's Cottage | Ca. 1925 |
| Building 6: Well/Pump House | Ca. 1925 |
| Building 7: Operator's Cottage | Ca. 1925 |
| Building 8: Operator's Cottage | Ca. 1940 |
| Building 9: Propane Storage Shed | Ca. 1925 |
| Building 10: Powerhouse | 1918 |
| Structure 1: Dam and Spillway | 1918 |
| Structure 2: Access Staircase | Ca. 1925 |
| Structure 3: Switchyard | Ca. 1940 |
| Garage/Shed | Ca. 1975 |
| Main Shop | Ca. 1975 |
| Outdoor Fireplace | 1979 |
| Metal girder bridge | Ca. 2012 |
| Metal girder bridge | Ca. 2012 |
| Man-made island below dam | Ca. 2012 |
| Garage | Ca. 1995 |
| Shed | Ca. 2010 |
| Shipping container | Ca. 2007 |
| Shipping container | Ca. 2007 |
| Tunnel | Ca. 2010 |

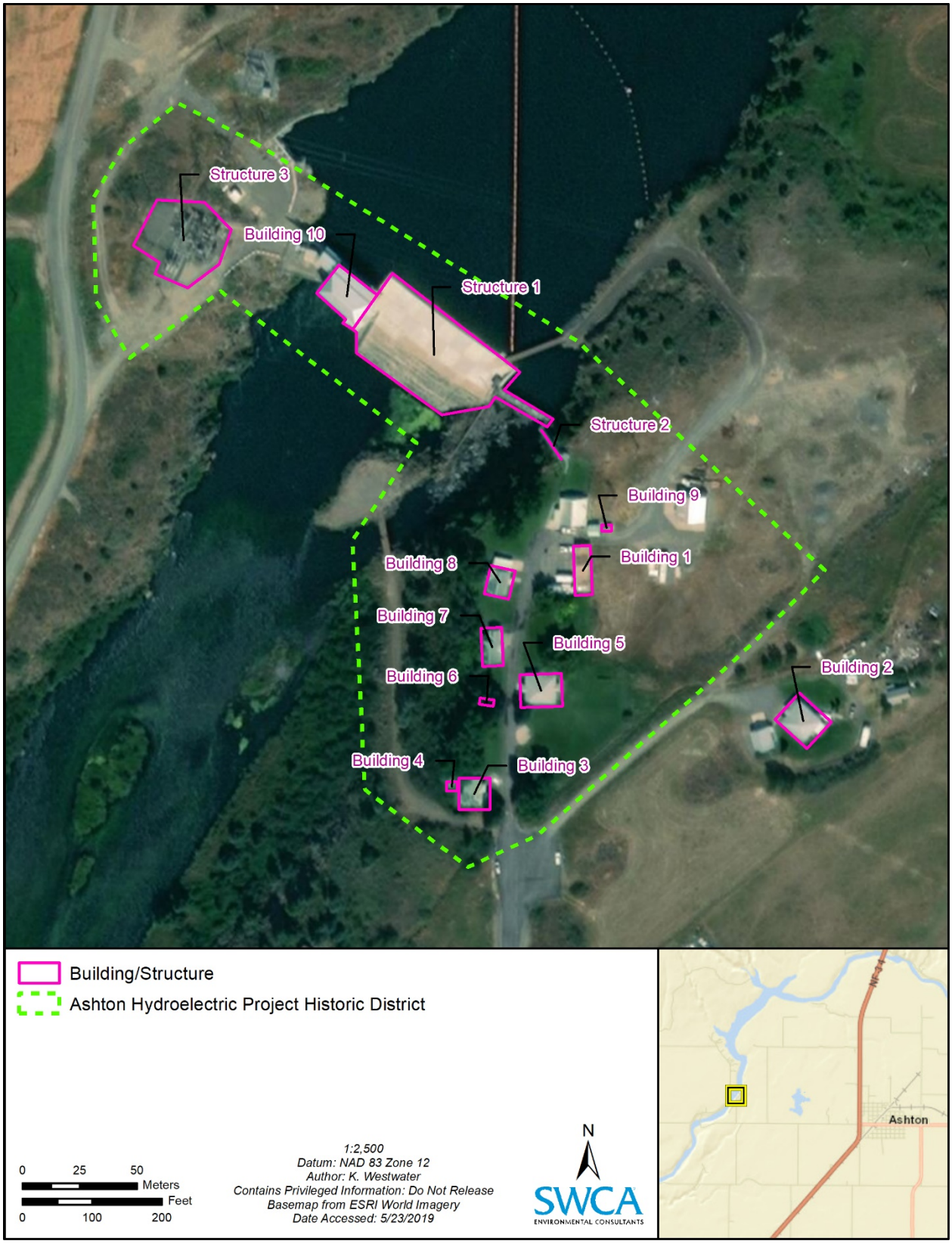


**Figure 14. Sketch map of Ashton Hydroelectric Project Historic District and recorded resources.**

# Boundary and Period of Significance

The boundary for the historic district coincides with the current property boundary of the Project, which is similar to its historic property boundary. Its period of significance is the initial period of development for the site, from the first construction in 1914 to ca. 1925, when the dam site came under the ownership of UP&L.

# Significance

The Ashton Hydroelectric Project Historic District is significant at the state level under Criterion A (under the area of Engineering) for its association with events that have made a significant contribution to the broad patterns of Idaho's history, and under Criterion C (under the area of Architecture) as a significant and distinguishable historic district whose components lack individual distinction.

## *Criterion A: Engineering*

The development of hydroelectric power in the Intermountain West generally, and in Idaho specifically, is a vital thread in the history of engineering. Hydroelectric infrastructure provided a source of electricity to communities that had never before had access to it. In many ways, this newfound access revolutionized the way individuals and communities as a whole lived, ate, worked, and even sometimes traveled. The Ashton Hydroelectric Project represents an important aspect of this broader pattern in the state's history. It was a comparatively late example of a hydroelectric project, and (by 1916) the only independent power company in the state (*Blackfoot Optimist* 1916b). By ca. 1925, the original operating company had been forced into bankruptcy and the plant was sold to UP&L (Hoyt 1935:203; Baum 2004). As a result, the Ashton Hydroelectric Project is therefore both an aberration within the broader history of hydroelectric power generation (due to its late establishment and independent operation) and an excellent example of the later patterns of consolidation (with its eventual absorption into UP&L's hydroelectric power generation system).

## *Criterion C: Architecture*

Although the resources within the District boundary lack individual distinction, cumulatively they represent a distinctive collection of historic buildings and structures spanning the history of the development and operation of the Ashton Hydroelectric Project. Many of the extant operator's cottages and the dam, powerhouse, switchyard, and outbuildings remain in largely the same configuration as during the period of significance. As a result, the historic district offers an example of the historic layout and design of a relatively remote hydroelectric generating station, as well as examples of the standard housing and workspaces provided for the station's operators. While all resources lack the architectural significance to be individually eligible for the NRHP, cumulatively they represent a significant and distinguishable historic district.

# Resources Recorded

## *Historic District*

The Ashton Hydroelectric Project Historic District consists of 24 historic and non-historic buildings and structures clustered around Henry's Fork of the Snake River. The District's character is a mix of residential and industrial uses. The types of buildings, which encompass residences, shop buildings, and buildings and structures for the generation and transmission of hydroelectric power, reflect these uses. As

a whole, the District represents an area of relatively dense development within the largely undeveloped rural landscape that surrounds it.

The buildings are utilitarian and generally feature few stylistic details. The operator's cottages and other historic-age buildings within the residential and shop area of the District commonly fall within the National Folk style. The powerhouse is also primarily utilitarian but possesses a few stylistically Moderne elements. The dam is typologically an earthfill dam. All of the buildings within the District are of comparatively modest size. The cottages are generally compact and one story tall, and the dam and powerhouse are relatively small in size compared to many other hydroelectric facilities in southeastern Idaho and northern Utah.

The Ashton Hydroelectric Project Historic District can be divided into two areas: the residential and shop/office area (east of the river and on the edge of the cliff overlooking Henry's Fork) and the dam and hydroelectric plant (which encompasses the river gorge itself and the west side of the river).

The residential and shop area is mostly flat and is clustered around a single road that runs north-south through the center of the area before turning east and widening to become a gravel road and parking area. All historic buildings and several non-historic buildings are oriented towards the road. The area has planned landscaping elements such as planted lawns and flower beds (around the cottages and office building) and open fields (east of Building 1). The cliffs on the west side of this area sharply define the edge of the residential and shop area. For a discussion of changes to the residential and shop area, please see the Cultural Setting section of this report.

The dam and hydroelectric plant area was historically connected to the residential area via a staircase on the east embankment of the river that leads down from the residential and shop area to the spillway below. This staircase remains a primary means of access to the dam but has been augmented outside of the historic period by an unpaved road on the west side and a gravel road and a metal bridge on the east side that allow vehicular access to the dam itself. Unlike the residential and shop area, the dam and hydroelectric plant area does not have landscaping or built features beyond a chain-link fence designed to prevent access to the dam on the west side and railings and concrete barriers to block off slopes and intake tunnels.

The general condition of the buildings and structures in the District is good. Many of the historic-age buildings and structures within the District have undergone alterations and additions during and outside of the period of significance. Several buildings have also been added outside of the historic period and at least one, Building 9, may have been moved (although when it was moved is unclear). However, the District largely reflects the original configuration and appearance (Figures 15–19). The District remains distinct from the surrounding rural farming area because of its strong visual and functional connection to hydroelectric power.


**Figure 15. Overview of Ashton Hydroelectric Project, ca. 1940. Facing southwest.**

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**Figure 16. Overview of the Ashton dam and powerhouse, with the residential and shop area visible in the background on the left, ca. 1940. Image courtesy of PacifiCorp.**

**Figure 17. Modern overview photograph showing similar view. Facing southeast. Note the relationship between the dam and powerhouse to the residential and shop area, which remains similar to that shown in the historic view.**

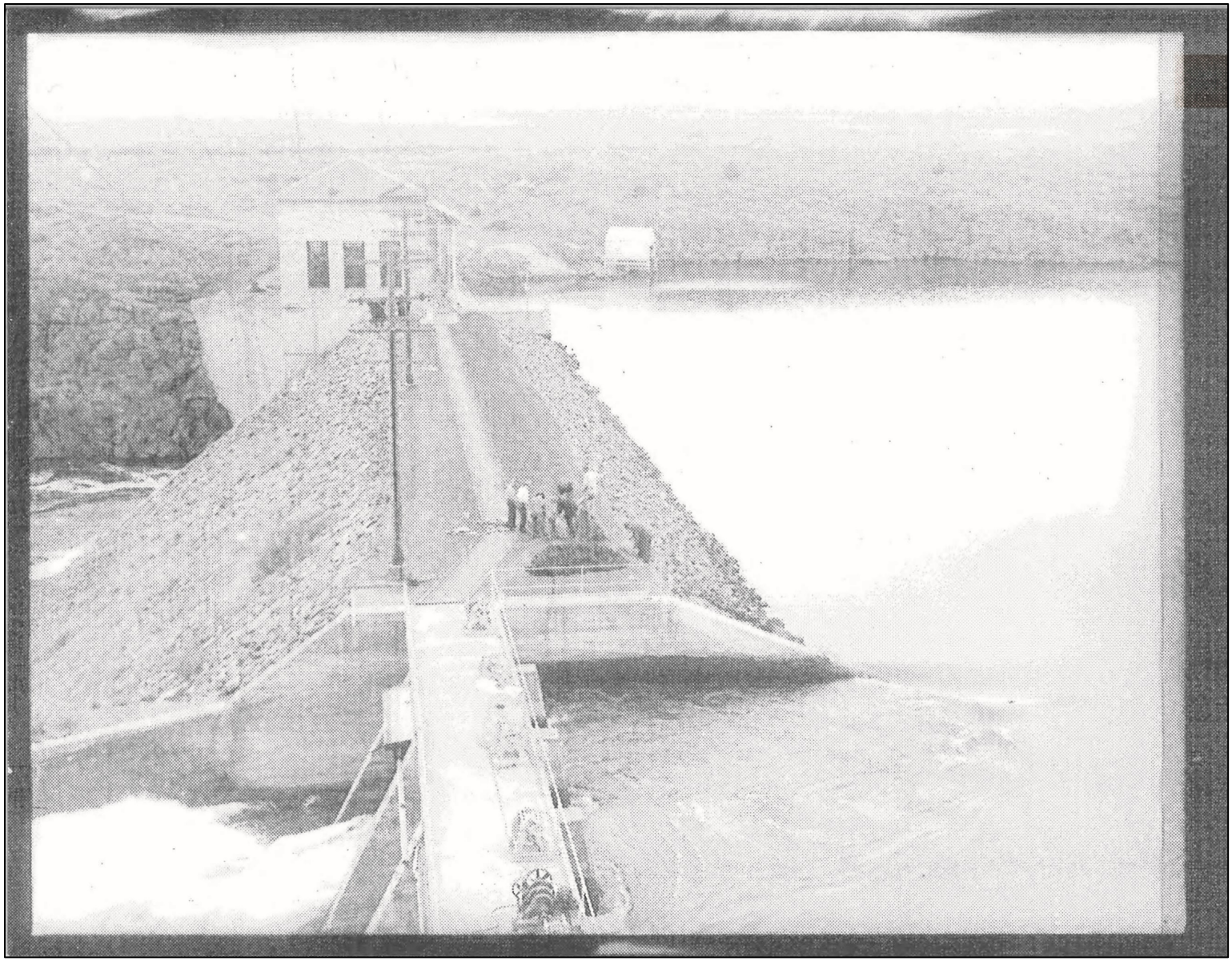

**Figure 18. Ashton dam and powerhouse, ca. 1925. Facing northwest. Image courtesy of PacifiCorp.**

**Figure 19. Modern photograph of dam showing similar view. Facing northwest. Although the dam is now capped with concrete, its basic form and scale remain the same.**

# Historic Age Resources

## BUILDING 1: GARAGE

**Figure 20. Building 1. Facing east. Photograph taken April 29, 2019.**

### Description

Building 1 is a one-story, west-facing, shed-roofed garage (Figure 20). Based on historic photographs, the garage building was built sometime after 1925 and before 1949; based on the condition and materials of the building, it likely dates to ca. 1940 (see Figure 9) (PacifiCorp 1925–1949). The garage stands on a formed concrete foundation. The walls are clad with corrugated metal siding. The roof is covered with corrugated metal; the eaves are enclosed with a wood fascia and soffit. The building is accessed via six overhead garage doors on west side. All the doors are modern metal replacements (likely installed ca. 1990 based on design and condition). The building has window openings on the north, south, and east sides, although all of the windows on the east side and one on the south have been removed and infilled with plywood painted to resemble the original glazing pattern. The remaining windows are all original and are wood four-light fixed windows. A basketball hoop is attached to the west side of the building. The east (rear) side of the building has two 2 × 4 boards, approximately 24 feet long in total, nailed above the windows. The boards likely served as a nailer for an addition or roof over a covered area for livestock historically located east of Building 1. The purpose of the boards is unclear, but they may have served as nailers for an addition or roof for a covered area. A poured concrete pad (added after the original construction of the building based on the way the concrete overlaps the building's metal siding) also extends from the south side of the building. Based on the presence of modern picnic tables, it may have served as an outdoor seating area for employees or as an uncovered parking area for vehicles.

## Integrity

Based on historic photographs, Building 1 remains in its original location in the District (see Figure 9) (PacifiCorp 1925–1949). Building 1 continues to be associated with the operation of the Ashton Hydroelectric Project. Its setting remains within a clustered development surrounded by an open, rural landscape. Although covered areas for livestock that were historically attached to the rear of the building have been removed, the building's overall design (such as the location of access doors, footprint, and roof shape) largely remains the same as it was historically. The building retains the majority of its original materials, including metal siding and roofing and approximately half of its original windows, although the garage doors have been replaced. The workmanship used in its construction also remains in evidence, including the application of the metal siding and the installation of the windows, and the building retains the feeling of an outbuilding dating to the original construction of the hydroelectric complex. Overall, Building 1 retains integrity. However, Building 1 was built in ca. 1940 and is therefore outside the period of significance for both Criterion A and C. It is therefore considered a non-contributing resource in the district.

# BUILDING 2: HENDERSON HOUSE

**Figure 21. Building 2. Facing southeast. Photograph taken April 30, 2019.**

## Description

Building 2 is a one-story, northwest-facing National Folk–style building with a pyramidal roof (Figure 21) (McAlester 2014:146). It dates to ca. 1925, when it was originally located south of Building 5 (Utah Power & Light Company 1925a). In 2002, it was moved to its current location southeast of the dam (personal communication with Mark Stenberg, 2019). The property was not accessible during the survey due to private land ownership. The building stands on a formed concrete foundation. The walls are clad

with vinyl or aluminum siding. The roof is covered with standing seam metal; the eaves are enclosed with a fascia and soffit. It is accessed via a two-panel glazed metal front door with six fixed lights; there is likely also a door on the southeast side, but it could not be observed to due lack of access to the property. The building has vinyl-framed, one-by-one sliding windows on all sides. There are several modern additions. A small front porch extends forward from the northwest side. The porch has a gable-front roof supported by vertical posts. It covers a poured concrete deck with vinyl railings; the porch roof and the posts are not connected to this poured concrete deck. A shed-roofed addition is attached to the northwest side. It is unclear if the addition has walls or if it is supported by vertical posts; at the time of survey the walls were covered with fabric. A wood, shed-roofed porch extends from the southeast side but could not be fully observed due to lack of property access.

Building 2 has several modern outbuildings around it; these were not recorded because they date to outside of the historic period and are not associated with the history of the historic district.

## Integrity

Building 2 does not remain in its original location within the District, but instead was moved off land owned by PacifiCorp in 2002 (personal communication with Mark Stenberg, 10 March 2019). The building is now privately owned and used as a residence and is no longer associated with the operation of the Ashton Hydroelectric Project. Although it remains in a rural landscape, its setting is now physically separate from the clustered development of other company-owned residences and buildings. The building's overall design has changed significantly as a result of several additions and alterations to the building's layout. Numerous alterations, such as the replacement of windows and doors and the application of modern siding, have also resulted in the loss of original materials and have obscured or removed evidence of the original workmanship. Because of these changes, the building no longer retains the feeling of a residence dating to the original construction of the hydroelectric complex. Therefore, Building 2 does not retain integrity and is not considered a contributing resource within the historic district.

## BUILDING 3: OPERATOR'S COTTAGE


**Figure 22. Building 3. Facing west. Photograph taken April 30, 2019.**

### Description

Building 3 is a one-story, east-facing National Folk–style building with a pyramidal roof (Figure 22) (McAlester 2014:146). It dates to ca. 1925 (Utah Power & Light Company 1925a). The building has two additions: a north addition and a west addition, which are discussed further below. The original building stands on a formed concrete foundation. The walls are clad with asbestos shingle siding (likely added ca. 1950 based on the material); the shingles cover the earlier wood drop siding. The roof is covered with ribbed metal. The eaves are enclosed with a wood fascia but no soffit. A brick chimney extends from the peak of the pyramidal roof. The building is accessed via doors on the east side and the north side of the west addition. Both doors are wood four-paneled doors with a fixed, single-light window, protected by aluminum screen doors (likely dating to ca. 1950 based on design). Many of the building's windows are covered with plywood and could not be observed. Observed windows were one wood one-over-one sash window (on the east side) and two wood single-light casement windows (on the north side). The building has a front porch on the east side that consists of a formed concrete stoop into which two square metal posts were set, which support a shed roof covered with ribbed metal; it is unclear if the porch is original.

Building 3 has two additions. The first is the north addition, which stands on a formed concrete foundation. The walls are clad with asbestos shingles over the original drop siding. The roof is a shed roof extending in line with the main pyramidal roof. Based on differences in the roofing materials (particularly the configuration of the rafters), it is not original to the building, but based on a historic map it had been added by 1925 (Utah Power & Light Company 1925a). The second addition is a rear addition that stands on a formed concrete foundation. It is clad with asbestos shingles that cover the original wood tongue-and-groove siding. It has a shed roof that follows the slope of the main roof. It is accessed via a set of

formed concrete steps. The steps were originally covered with a shed roof that has since lost its roofing; this roof was supported by a tubular metal post. Based on its condition and materials, this addition likely dates to ca. 1940.

### Integrity

Based on a 1925 map, Building 3 remains in its original location in the District (Utah Power & Light Company 1925a). Building 3 continues to be associated with the operation of the Ashton Hydroelectric Project. Its setting remains within a clustered development surrounded by an open, rural landscape. However, although it was originally constructed during the period of significance, the building's design was altered outside of the period of significance. Building elements have also been added or replaced outside of the period of significance (such as the asbestos shingle siding). The building retains little evidence of the workmanship employed when constructing it during the period of significance. Because of these changes, the building no longer retains the feeling of a residence dating to the original construction period of the hydroelectric complex. Overall, Building 3 does not retain integrity and is considered a non-contributing resource to the historic district.

## BUILDING 4: SHED

**Figure 23. Building 4. Facing northwest. Photograph taken April 30, 2019.**

### Description

Building 4 is a one-story, east-facing vernacular outbuilding with a shed roof. It dates to ca. 1925 (Figure 23) (Utah Power & Light Company 1925a). Its intended use is unclear: present-day dam operators have described it as a storage area for the residents of Building 3, but a 1925 map labels it as a "garage"; based on its size and design, it was most likely used for personal storage (Utah Power & Light Company 1925a). The building stands on a formed concrete foundation. Its walls are clad with horizontal wood

tongue-and-groove siding. The roof is covered with corrugated metal; the eaves are enclosed with wood fascia and soffit. The building is accessed via a door opening on the east side. The door opening has wood trim but was boarded up at the time of survey, which prevented observation of the door. The building has one window marked by a wood-trimmed opening on the east side; at the time of survey this opening had been infilled with vertical tongue-and-groove siding.

### Integrity

Based on a 1925 map, Building 4 remains in its original location in the District (Utah Power & Light Company 1925a). It continues to be associated with the operation of the Ashton Hydroelectric Project. Its setting remains that of a clustered development surrounded by an open, rural landscape. The building's overall design (such as the location of the access door, footprint, and roof shape) remains the same as it was during the period of significance. The original building materials remain. The workmanship required to construct the building, such as the application of the siding, remains evident, and it retains the feeling of an outbuilding dating to the original construction of the hydroelectric complex. Overall, Building 4 retains integrity and can be considered a contributing resource to the historic district.

## BUILDING 5: OPERATOR'S COTTAGE

**Figure 24. Building 5. Facing southeast. Photograph taken April 30, 2019.**

### Description

Building 5 is a one-story, northwest-facing National Folk–style building with a pyramidal roof (Figure 24) (McAlester 2014:146). It dates to ca. 1925 (Utah Power & Light Company 1925a). The building stands on a formed concrete foundation. The walls are clad with aluminum siding. The roof is covered with ribbed metal and the eaves are enclosed with an aluminum fascia and soffit. The building is accessed on the west side via a metal four-panel door with a fan light and a side light. It is also accessed on the east

side via a flat metal door with a single fixed light. The windows are all vinyl-framed replacements and are a mix of one-over-one sash windows, one-by-one sliding windows, and single fixed pane windows; a bay window is on the north end of the east side. The building has a front porch with poured concrete steps and a front-gable roof. The roof is covered with flat sheet metal and has eaves enclosed by a vinyl fascia and soffit and supported by posts enclosed with vinyl.

Based on physical evidence (particularly a large seam in the concrete foundation), it is likely that the north side of the building is a later addition. This is supported by historic site maps, which show Building 5 with a rectangular footprint rather than square (as it was at the time of survey) until after 1974 (Utah Power & Light Company 1974). Based on this evidence, it is likely that not only is the north side of the building an addition dating to after 1974, the roof of the building was significantly reconfigured at the time of the addition to its current pyramidal shape.

## Integrity

Based on a 1925 map, Building 5 remains in its original location in the District (Utah Power & Light Company 1925a). Building 5 continues to be associated with the operation of the Ashton Hydroelectric Project and continues to serve as employee housing. Its setting remains that of a clustered development surrounded by an open, rural landscape. However, the building's overall design and layout have been significantly altered outside of the period of significance through the construction of the north addition and the reconfiguration of the roof to accommodate that addition. Several alterations, including the application of metal siding and the replacement of all doors and windows, have resulted in the loss or obscuring of original materials and the workmanship required to construct the building. Because of these changes, the building no longer retains the feeling of a residence dating to the original construction of the hydroelectric complex and it does not retain integrity. Building 5 is therefore considered non-contributing within the District.

## BUILDING 6: WELL/PUMP HOUSE

**Figure 25. Building 6. Facing south. Photograph taken April 29, 2019.**

### Description

Building 6 is a vernacular, one-story, north-facing, side-gable well/pump house dating to ca. 1925 (Figure 25) (Utah Power & Light Company 1925a). It stands on a formed concrete foundation. The walls are covered with asbestos shingle siding with wood corner boards. The roof is covered with ribbed metal, although several layers of wood shingles are visible below the current roofing, and the eaves are exposed. The building has one door on the north side that is made of vertical wood tongue-and-groove siding. The building has a pair of wood two-over-two fixed pane windows on the south side. A wood fire extinguisher box with a shed roof is attached to the east side of the building and is supported by two wood brackets.

### Integrity

Based on a 1925 map, Building 6 remains in its original location in the District (Utah Power & Light Company 1925a). Building 6 continues to be associated with the operation of the Ashton Hydroelectric Project. Its setting remains that of a clustered development surrounded by an open, rural landscape around the District as a whole. The building's design is the same as it was during the period of significance. Some building elements have been replaced or altered outside of the period of significance but many original materials remain, including windows, the front door, building details (such as the exposed rafter tails), and wood siding under the asbestos shingle siding. The building still retains evidence of the workmanship employed when constructing it, and it retains the feeling of a utility building dating to the original construction of the hydroelectric complex. Overall, Building 6 retains integrity and can be considered a contributing resource to the historic district.

## BUILDING 7: OPERATOR'S COTTAGE

**Figure 26. Building 7. Facing west. Photograph taken April 30, 2019.**

### Description

Building 7 is a one-and-a-half story, east-facing, National Folk–style massed-plan, side-gabled family operator's cottage dating to ca. 1925 (Figure 26) (McAlester 2014:144; Utah Power & Light Company 1925a). The building stands on a formed concrete foundation. The walls are clad with a mix of asbestos shingle and aluminum siding over earlier wood shiplap and clapboard siding. The building is accessed on the east side by a wood-paneled door with three fixed lights that is protected by a modern metal screen door, and on the north side by a flat, unglazed wood door with a modern metal screen door. The windows are a mix of wood one-over-one sash windows (in varying sizes and designs), wood two-by-three fixed windows, a wood-framed picture window (now boarded up), a wood four-light awning window, and several windows that were covered with plywood and that could not be observed. The building has a front porch that has a formed concrete deck into which metal posts have been set; these support a shed roof. It is unclear if the porch is original. The building has had one significant addition, the extension of the north section (which is lower than the main building roof). Based on a 1925 map, the building likely originally had a small extension on the north side, but physical evidence (including a visible seam in building materials) suggests that the north extension was expanded at a later date, possibly ca. 1950 based on materials and condition.

### Integrity

Based on a 1925 map, Building 7 remains in its original location in the District (Utah Power & Light Company 1925a). Building 7 continues to be associated with the operation of the Ashton Hydroelectric Project. Its setting remains that of a clustered development surrounded by an open, rural landscape around

the District as a whole. Some aspects of the building's design (such as the location of access doors and roof shape) remain the same as during the period of significance but the addition on the north end, built outside of the period of significance, has greatly altered the design of the primary façade. Building materials have been altered outside of the period of significance through application of asbestos shingles and aluminum siding and the removal of some of the windows. As a result of these changes, evidence of the workmanship employed when constructing it has been obscured. Because of these changes, the building no longer retains the feeling of a residence dating to the original construction of the hydroelectric complex. Overall, Building 7 does not retain integrity and is considered a non-contributing resource to the historic district.

## BUILDING 8: OPERATOR'S COTTAGE

**Figure 27. Building 8. Facing west. Photograph taken April 30, 2019.**

### Description

Building 8 is a one-story, east-facing, National Folk–style massed-plan, side-gabled family operator's cottage, dating to ca. 1940 (Figure 27; see Figure 10) (McAlester 2014:144; Utah Power & Light Company 1925a; PacifiCorp 1925–1949). The building stands on a formed concrete foundation. The walls are clad with asbestos shingle siding over what was likely the original wood siding (siding type was not visible during survey). The roof is ribbed metal, but several layers of wood shingles are visible beneath the metal. The eaves are enclosed with a wood fascia and soffit. A brick chimney extends from the west side of the roof near the center of the building. The building is accessed on the east side by a wood six-panel door with three decorative fixed lights at the top; a modern metal screen door is also present. The west side of the building is accessed via a flat wood laminate door with one fixed light. The windows are all metal framed and are a mix of one-over-one sash windows and fixed windows. The basement also has windows; these are all metal one-by-one sliding windows. The building has two

porches. The first is on the east side and is a shed-roofed porch that extends over concrete steps accessing the front door. The concrete steps have metal railings set into them. The porch roof is supported by metal posts set into the front concrete walkway. The porch roof is made of wood rafters with ribbed metal roofing; the rafters are nailed to the house's fascia, suggesting it is a later addition, likely added ca. 1950 based on condition and materials. It is unclear if the porch is original. Concrete steps access the west door; based on their condition they are likely original to the building. A series of railings made of pipes and fittings were added to the steps based on their application over the asbestos siding. Wood boards have been added to the north side of the steps to extend the porch. A roof with wood rafters extends over the steps and the wood extension; it is supported with metal posts set into a concrete deck that extends beyond the building to the west. A shed-roofed car port, supported with wood posts, was also added to the building ca. 1950 based on condition and materials.

## Integrity

Based on historic photographs, Building 8 remains in its original location in the District (Utah Power & Light Company 1925a). Building 8 continues to be associated with the operation of the Ashton Hydroelectric Project. Its setting remains that of a clustered development surrounded by an open, rural landscape around the District as a whole. The building's overall design (such as the location of access doors and roof shape) remains the same as it was historically, with the exception of the addition of a carport and the porches. These additions are now of historic age. Some building elements have been replaced or altered, but many original materials remain, including the front door and wood siding under the asbestos shingle siding. The building still retains evidence of the workmanship employed when constructing it. As a result, it retains the feel of a residence within an isolated company housing and work complex oriented around the generation of hydroelectric power. Overall, Building 8 retains integrity. However, Building 8 was built in ca. 1940 and is therefore outside the period of significance for both Criterion A and C. It is therefore considered a non-contributing resource in the district.

## BUILDING 9: PROPANE STORAGE SHED


**Figure 28. Building 9. Facing northwest. Photograph taken April 30, 2019.**

### Description

Building 9 is a one-story, south-facing, side-gable vernacular storage shed currently used to store propane (Figure 28). It likely dates to ca. 1925, based on its materials and condition. It sits on a wood sill. The walls are clad with horizontal drop siding, except for the wall base on the south side, which is clad with plywood. It has a ribbed metal roof; the eaves are enclosed with a wood fascia and soffit. It is accessed on the south side via a flat door made from a sheet of plywood.

Although the building's construction, materials and condition suggest it may date to ca. 1925, it does not appear on any historic maps of the Ashton Hydroelectric Project. Based on this, it may have been repurposed and moved to its current location after 1995 (the date of the last available map of the Project) or may have existed in its current location but was considered too unimportant or temporary to include on a map (PacifiCorp 1995).

### Integrity

Based on historic maps, it is unclear if Building 9 remains in its original location in the District or if it was moved outside of the historic period. If it was moved, the repurposing and moving of small sheds or outbuildings was historically a common practice and may itself represent an important aspect of the building's historic use and location. Building 9 continues to be associated with the operation of the Ashton Hydroelectric Project. Its setting remains that of a clustered development surrounded by an open, rural landscape around the District as a whole. The building's design is the same as it was during the period of significance. Most original materials remain, including the majority of the siding and the roof framing. The building still retains evidence of the workmanship employed when constructing it. As a

result, it retains the feeling of a utility building within an isolated company housing and work complex oriented around the generation of hydroelectric power. Overall, Building 9 retains integrity and can be considered a contributing resource to the historic district.

## BUILDING 10: POWERHOUSE

**Figure 29. Building 10. Facing west. Photograph taken April 30, 2019.**

### Description

Building 10 is the Ashton Hydroelectric Project's powerhouse (Figure 29). It is located on the northwest end of the Ashton dam and dates to 1918 (when it was completed). The building has two parts: the main powerhouse building and what a 1925 map labeled a "bus room" on the northwest side (Utah Power & Light Company 1925a). The two will be described separately here.

The powerhouse is made of formed concrete and stands approximately 90 feet above the water level on the down-river side. The powerhouse is a utilitarian building with few stylistic elements. It has several details suggestive of very early Moderne influence, including the narrow window shape and the exposed flat concrete walls (McAlester 2014:581–583). It has a low, hipped roof made of a mix of corrugated and ribbed metal; the roof has been replaced multiple times, most recently in 2014 (personal communication with Mark Stenberg, 2019). The eaves are not enclosed. The building has metal windows that consist of five stacked lights, of which the top four are operable hopper windows. All windows are replacements; the original windows were multi-pane, steel-framed sash windows (Kittleman 1925:3). Three vent openings also open on the northeast side of the building. The powerhouse is accessed on the northeast side via a flat metal door protected with a metal screen, and via a flat plywood overhead garage door on the northwest side (dating to ca. 1990 based on materials and condition). A covered deck on the northeast side of the powerhouse protects the gates that control waterflow to the turbines. The deck is metal-framed

and supported by metal braces attached to the concrete of the powerhouse. The deck is made of a mix of concrete and open metal grating. The deck has a roof that is supported by posts made of lattice girders that support metal roof framing that in turn supports the corrugated metal roof. Nine gates, with associated control mechanisms, extend across the deck. The lower (downstream) side of the powerhouse has had approximately 1 foot of modern concrete applied as a support to the walls to strengthen it structurally in ca. 2010 (personal communication with Mark Stenberg, 2019). The two historic concrete buttresses extending from the building's side were refurbished during the dam remediation project. Two metal-framed vents (that are of historic age based on materials and condition) provide ventilation to the lower portion of the powerhouse. Gate actuation motors were added to the nine turbine intake gates in 2018. These motors replaced the functions of the electric mule motor that travelled on two tracks between the gate screws where operators would attach it one at a time to open or close the gates.

The "bus room" is original to the powerhouse building (Utah Power & Light Company 1925a). Prior to the purchase of the property by UP&L, it housed transformers, but after the transfer of ownership in 1925, it was used to hold oil switches and as a bus room (Kittleman 1925:7). A bus room held rigid single-phase connectors interconnecting generators with step-up transformers (Bureau of Reclamation 2005). The bus room is connected to the powerhouse on its southeast side (the northwest side of the powerhouse). It is made of formed concrete covered with stucco siding on the northwest and southwest sides. The bus room is lower than the main powerhouse and has a side-gable roof covered with corrugated metal. The bus room is accessed on the southeast side via a set of flat, unglazed, metal double doors and on the northwest side via a flat metal door. It now serves as an office and data management area (Control Room Building). Metal strapping was added to the upstream wall of the "bus room" (Control Room) in 2018 to assure the connection of this smaller building to the foundation below in the event of a probable maximum flood occurrence.

A small switchyard associated with Building 10 is located just northwest of the powerhouse building. Although the transformers and other equipment are modern, based on historic photographs and historic documents, the steel lattice girders supporting the electrical transmission lines were installed in 1925 after UP&L purchased the plant (Utah Power & Light Company 1925a; Kittleman 1925:7).

## Integrity

Based on historic photographs and a 1925 map, Building 10 remains in its original location in the District (Utah Power & Light Company 1925a; PacifiCorp 1925–1949). It continues to be associated with the operation of the Ashton Hydroelectric Project and the generation of power from the dam. Its setting remains rural, on the banks of Henry's Fork of the Snake River, directly next to the dam and across the river from the residential and office area. The building's design has changed minimally since the historic period. Many of the materials, particularly the concrete walls, remain intact. The structure still retains evidence of the workmanship employed when it was constructed (such as imprints of wood forms on the concrete walls when they were poured). As a result, the powerhouse retains the feeling of an original component of the hydroelectric project. Overall, Building 10 retains integrity and can be considered a contributing resource to the historic district.

## STRUCTURE 1: DAM AND SPILLWAY

**Figure 30. Structure 1. Facing northwest. Photograph taken April 30, 2019.**

### Description

The Ashton Dam is an earthfill dam measuring approximately 60 feet high and 500 feet long; construction on the dam began in 1914 (Figure 30) (Baum 2004). The dam structure includes an earthfill section on the northwest and a spillway on the southeast. The earthfill dam was originally exposed earth but a roller-compacted concrete cap, the most visible alteration to the dam, was added in 1991 to repair and strengthen the structure. The concrete cap has a flat top that can act as a spillway in the event of a flood, with the down-stream side stepped. The spillway has six openings separated by concrete buttresses. The openings are controlled with curved metal gates that are adjusted using an electric overhead crane. The openings then lead to a tail race defined by a cliff on the east side and a concrete wall on the west. The spillway is accessed via a concrete deck that rests on top of the buttresses and from which the gate crane is operated. The crane itself is suspended from a metal track. Although the spillway has undergone some additions (including the crane and a bubbler designed to circulate air by the gates to prevent the formation of ice), all additions are of limited visual impact.

### Integrity

The dam and spillway remain in their original locations and the dam still extends across the river that it was originally intended to control (Utah Power & Light Company 1925a). The dam and spillway are vital to the Ashton Hydroelectric Project and their setting remains that of a clustered development surrounded by an open, rural landscape around the District as a whole. However, the dam's design has been extensively modified outside of the period of significance. Although it is still an earthfill dam, a concrete cap has been added to the top of the dam itself, resulting in changes to its design, and most of the original

materials were removed in 1991. As a result of the modifications made to the structure, it also does not reflect original workmanship. Because of these changes, the dam and spillway no longer retain the feeling of original components of the hydroelectric project. In 2010 the Idaho SHPO observed that it had lost integrity and was unlikely to be eligible for the NRHP or contributing in a potential historic district (Stenberg 2010; Pengilly 2010).

## STRUCTURE 2: ACCESS STAIRCASE

**Figure 31. Structure 2. Facing east. Photograph taken April 30, 2019.**

### Description

Structure 2 is an enclosed access staircase that leads from the residential and shop area to the spillway and dam (Figure 31). The staircase is first shown on a 1925 map, and historic photographs from 1925 show that it was originally unenclosed (see Figure 8) (Utah Power & Light Company 1925a; PacifiCorp 1925–

1949). Based on later historic photographs, it was enclosed after ca. 1950. The staircase is supported by a series of wood trusses set into concrete footings. The stairs themselves are made of wood, as are the railings. The walls enclosing the staircase have a wood framing system to which corrugated fiberglass panels have been nailed. The roof is made of ribbed metal. The stairs are accessed on the east side by a decoratively paneled metal door and on the west side by a flat metal door; both doors date to ca. 1980.

### Integrity

Based on a 1925 map, the access staircase remains in its original location in the District (Utah Power & Light Company 1925a). It continues to be associated with the operation of the Ashton Hydroelectric Project and serves as a physical connection between the residential and office area and the dam itself. Its setting remains within a clustered development surrounded by an open, rural landscape around the District as a whole. The design of the staircase has changed significantly outside of the period of significance, however, as a result of the construction of an enclosure around the stairs. Most building elements have been replaced or altered; it is unlikely any materials dating to the period of significance remain. The staircase does not retain evidence of the workmanship employed when constructing it and, as a result of these cumulative changes, does not retain its feeling as an original element of an isolated company housing and work complex oriented around the generation of hydroelectric power. Overall, Structure 2 does not retain integrity and is considered non-contributing to the historic district.

## STRUCTURE 3: SWITCHYARD

**Figure 32. Structure 3. Facing northwest. Photograph taken April 30, 2019.**

### Description

Structure 3 is a switchyard located west of the dam and powerhouse on the west side of Henry's Fork (Figure 32). The switchyard stands on an artificially created terrace held in place with a modern concrete

retaining wall; it is in the same location as the original switchyard present in ca. 1925 (Utah Power & Light Company 1925a). The switchyard is made of a mix of old and new elements. It is supported by exposed wood posts and beams to which electrical equipment is attached. Exterior lights have been attached to the posts. These lights are a mix of two historic solarized glass lights (which date to before ca. 1940 based on the use of manganese in the glass manufacture) and five lights that date to between ca. 1940 and ca. 1990 based on condition and design (Corning Museum of Glass 2018). Based on this evidence, it is likely that some components of the switchyard (such as lights and wood posts) date to potentially as early as ca. 1930. The electrical equipment in the switchyard consists of fifteen separate components, such as circuit breakers, capacitor banks, transformers, and regulators. Of these, 10 components date to 1973 or later. The other five components date to between 1952 and 1955. In general, the electrical equipment in the switchyard has been extensively altered outside of the historic period, and little if any of the equipment dates to the period of significance (personal communication with Mark Stenberg, June 2019).

### Integrity

Structure 3 dates to the period of significance or occupies the same location and serves the same function as a previous switchyard that existed during the period of significance. Based on a 1925 map, Structure 3 remains in its original location in the District (Utah Power & Light Company 1925a). It continues to be associated with the operation of the Ashton Hydroelectric Project and the transmission of power from the dam. Its setting remains rural, on the banks of Henry's Fork of the Snake River, near the dam and powerhouse and across the river from the residential and office area. The substation's design has changed significantly outside of the period of significance through the installation of new equipment and additional structural elements to hold it. Most materials, particularly the substation electrical equipment, have been replaced outside of the historic period, although physical evidence does show that some historic-age materials remain. None of the electrical equipment, a defining feature of the structure, dates to the period of significance. The structure retains little evidence of the workmanship employed when it was originally constructed. As a result, the structure no longer retains the feeling of an original component of the hydroelectric complex. Overall, Structure 3 does not retain integrity and is considered a non-contributing resource to the historic district.

## *Non-Historic Age Resources*

The following 11 resources were noted within the historic district boundary but were not of historic age and were not fully documented:

- Two metal bridges constructed from flatbed railroad cars, installed ca. 2012, that provide access to the dam (on the north side) and provide access to the island constructed below the dam (on the south side) (personal communication with Mark Stenberg, 2019).
- A man-made island below the dam, which was also created ca. 2012 as part of construction work on the dam (personal communication with Mark Stenberg, 2019).
- A one-story, west-facing, gable-front shed dating to ca. 1975 (Utah Power & Light Company 1974).
- A one-story, south-facing, gable-front shop building dating to ca. 1975 (Utah Power & Light Company 1974).
- An outdoor fireplace made out of mortared local stone that (based on an inscription in the concrete base) dates to 1979.
- A garage building east of Building 1 built ca. 1995 to replace an earlier building that burned down (PacifiCorp 1995).

- A shed northeast of the switchyard (Structure 3) built ca. 2010 to replace an earlier garage and machine shop (personal communication with Mark Stenberg, 2019).
- Two shipping containers east of Building 1 added ca. 2007 to replace a barn that was removed that year (personal communication with Mark Stenberg, 2019).
- A tunnel to allow for additional waterflow built ca. 2010 on the west side of the river (personal communication with Mark Stenberg, 2019).

These resources were added outside the period of significance for the District and are considered non-contributing resources.

# National Register of Historic Places Eligibility

The Ashton Hydroelectric Project Historic District is significant under NRHP Criterion A (in the area of Engineering) and Criterion C (in the area of Architecture). The District's period of significance is from 1914–ca. 1925. The District includes 24 resources, 11 of which date to the period of significance. Of these, 4 retain integrity and are contributing to the District (17 percent) (Figure 33) (Table 5).

Although significant, the District retains integrity in only limited aspects. It is in its original location and the resources within it mostly remain in their original locations. All resources within the District continue to be associated with the operation of the Ashton Hydroelectric Project and the production of hydroelectric power. The District's setting remains that of a clustered development surrounded by an open, rural landscape. However, through the demolition, replacement, construction, and relocation of buildings, the District's design has been extensively modified outside of the period of significance. As a result of the modifications to the buildings and structures, the District as a whole has largely lost its original materials and evidence of the workmanship involved in creating the Project. The few resources that do retain integrity and are contributing, with the exception of the powerhouse, are auxiliary buildings that were historically less significant than many of the other resources in the District. As a result, the District no longer retains the feeling of an early 20th century, isolated electric generating station with a small company housing and work complex nearby. Overall, the District does not retain the key aspects of historic integrity required to convey its significance under either Criterion A or Criterion C. In summary, the Ashton Hydroelectric Project Historic District is recommended not eligible for the NRHP under any criterion.

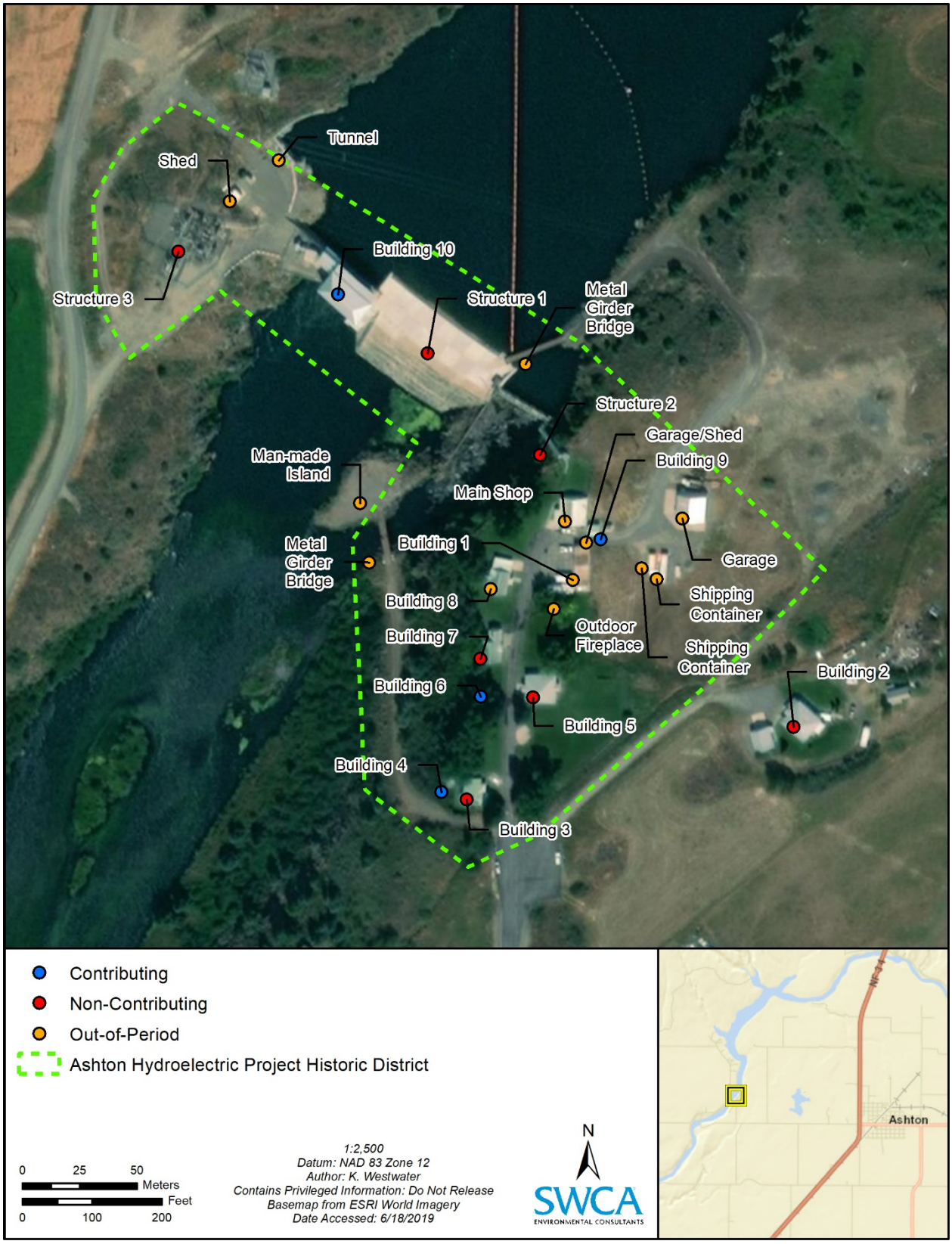


**Figure 33. Map of potential historic district boundary, all identified resources, and their contributing status in the potential Ashton Hydroelectric Project Historic District.**

**Table 5. Contributing and Non-contributing Resources Recorded in the Study Area**

| Resource Number and Use | Contributing Status | Eligibility Justification |
|---|---|---|
| Building 1: Garage | Non-contributing | Of historic age but built outside period of significance |
| Building 2: Henderson House | Non-contributing | Dates to period of significance but lacks integrity |
| Building 3: Operator's Cottage | Non-contributing | Dates to period of significance but lacks integrity |
| Building 4: Shed | Contributing | Dates to period of significance and retains integrity |
| Building 5: Operator's Cottage | Non-contributing | Dates to period of significance but lacks integrity |
| Building 6: Well/Pump House | Contributing | Dates to period of significance and retains integrity |
| Building 7: Operator's Cottage | Non-contributing | Dates to period of significance but lacks integrity |
| Building 8: Operator's Cottage | Non-contributing | Of historic age but built outside period of significance |
| Building 9: Propane Storage Shed | Contributing | Dates to period of significance and retains integrity |
| Building 10: Powerhouse | Contributing | Dates to period of significance and retains integrity |
| Structure 1: Dam and Spillway | Non-contributing | Dates to period of significance but lacks integrity |
| Structure 2: Access Staircase | Non-contributing | Dates to period of significance but lacks integrity |
| Structure 3: Substation | Non-contributing | Dates to period of significance but lacks integrity |
| Garage/Shed | Non-contributing | Not of historic age |
| Main Shop | Non-contributing | Not of historic age |
| Outdoor Fireplace | Non-contributing | Not of historic age |
| Metal bridge | Non-contributing | Not of historic age |
| Metal bridge | Non-contributing | Not of historic age |
| Man-made island below dam | Non-contributing | Not of historic age |
| Garage | Non-contributing | Not of historic age |
| Shed | Non-contributing | Not of historic age |
| Shipping container | Non-contributing | Not of historic age |
| Shipping container | Non-contributing | Not of historic age |
| Tunnel | Non-contributing | Not of historic age |

# MANAGEMENT RECOMMENDATIONS

PacifiCorp requested that SWCA prepare this report and attached IHSI form to document the Ashton Hydroelectric Project and evaluate its eligibility for the NRHP. SWCA recommends the Ashton Hydroelectric Project Historic District as not eligible for the NRHP under any criteria. The District is subject to ongoing effects from the operation of the Ashton Hydroelectric Project, such as deterioration as a result of use or aging, alterations to buildings to accommodate ongoing uses, and future planned demolitions as buildings and structures become obsolete.

## Determination of Effects

PacifiCorp proposes to remove three company houses (Buildings 3, 7, and 8) and a shed (Building 4) within the Ashton Hydroelectric Project Historic District, accompanied by asbestos abatement. SWCA recommends that these buildings are resources that do not contribute to the NRHP eligibility of the District due to loss of integrity (Buildings 2, 4, and 7) or because they were built outside of the period of significance (Building 8). Furthermore, the District itself lacks the integrity to be eligible for the NRHP. It is SWCA's opinion that no NRHP-eligible historic properties will be affected by the proposed work.

## Avoidance, Minimization, or Mitigation Options

PacifiCorp has determined that the four buildings that are the subject of the proposed work are a hazard and that their removal is necessary for continued safe operation of the Ashton Hydroelectric Project; they are not in use and are subject to nuisance animal infestations; they also constitute a fire hazard. Therefore, avoidance or minimization of the effects of building removal are not viable options. However, neither the four buildings nor the District itself are recommended eligible for the NRHP and no avoidance, minimization, or mitigation options are recommended.

# CONCLUSIONS

On behalf of PacifiCorp, SWCA documented the Ashton Hydroelectric Project Historic District and evaluated its eligibility for the NRHP. The Ashton Hydroelectric Project is a unique example within the broader history of hydroelectric power in Idaho. At the time it was founded, it represented a lone challenger to Utah Power & Light's functional monopoly in southeastern Idaho, and its eventual incorporation in the Utah Power & Light generation system is an important aspect of the consolidation of power companies. Although previously unrecorded and unresearched, SWCA's study highlights this resource's unique place in the state's engineering history. Although many historic age resources remain in the District, the majority date to outside the period of significance or lack the necessary integrity to be considered contributing resources to the District. In summary, SWCA recommends that the Ashton Hydroelectric Project Historic District is not eligible for the NRHP under any criteria. No resources in the study area are recommended as individually eligible for the NRHP.

For reasons of operational safety, PacifiCorp proposes to remove four buildings that SWCA recommends as non-contributing elements of the potential District, which itself is recommended not eligible for the NRHP. It is SWCA's evaluation that no historic properties will be affected by removal of these buildings as defined by Section 106 and its implementing regulations.

No artifacts were collected during the investigations reported here. All original photographs, field notes, and GIS data, as well as copies of the report and the IHSI form, are archived at the SWCA office in Salt Lake City, Utah, under SWCA project number 45947.07.

# REFERENCES CITED

Ancestry
2006 *1910 United States Federal Census* [database online]. Ancestry.com Operations Inc, Lehi, Utah.

2010 *1920 United States Federal Census* [database online]. Ancestry.com Operations, Inc., Provo, Utah.

2017 *Idaho, County Birth and Death Records, 1863-1970* [database online]. Ancestry.com Operations, Inc., Lehi, Utah.

Baum, Tyler
2004 Ashton Dam is 90-years-old. *Rexburg Standard Journal* 10 September. Rexburg, Idaho. Available at: https://www.rexburgstandardjournal.com/news/ashton-dam-is--years-old/article_2839684c-2fe6-5300-a186-6d093419fd6e.html. Accessed April 22, 2019.

Berg, Sven
2012 Ashton dam Dewatering Project Nears. *Idaho Falls Post-Register 18* January 18. Idaho Falls, Idaho.

*Blackfoot Optimist*
1913 Ruling is Against St. Anthony Power. November 20. Blackfoot, Idaho.

1916a Power Company Progressing. April 6. Blackfoot, Idaho.

1916b Electricity for Heat. May 18. Blackfoot, Idaho.

Bureau of Reclamation
2005 Reclamation: Managing Water in the West. Hydroelectric Power. Available at: https://www.usbr.gov/power/edu/pamphlet.pdf. Accessed May 24, 2019.

Clyde, Calvin G., Eugene K. Israelsen, and Win-Kai Liu
1979 *A Resource Survey of Hydroelectric power Potential in Utah and Southeast Idaho*. Paper 533. Utah Water Research Laboratory, Utah State University, Logan.

Corning Museum of Glass
2018 Rakow Research Library: Ask a Glass Question. Available at: https://libanswers.cmog.org/faq/144879. Accessed May 14, 2019.

*Evening Capital News*
1916 Commission to Render Decision. March 23. Boise, Idaho.

1920 Arco Light Service Battle Divides the Utility Commission. January 11. Boise, Idaho.

Fiege, Mark T., and Janet Ore
1988 *Electric Power Plants in Utah, Multiple Property Listing*. Prepared for Utah Power and Light Company. On file with Utah Department of State History.

Greater St. Anthony Chamber of Commerce
1993 The History of St. Anthony, Idaho. Derived from *Fremont County Centennial Edition*. Available at: https://stanthonychamber.com/history. Accessed May 9, 2019.

Hoyt, W. G.
1935 *Water Utilization in the Snake River Basin*. Water-Supply Paper 657. U.S. Department of the Interior. Government Printing Office, Washington, D.C.

Hydro Review
2013 Ames Hydro: Making History Since 1891. Available at: https://www.hydroworld.com/articles/hr/print/volume-32/issue-7/articles/ames-hydro-making-history-since-1891.html. Accessed September 28, 2018.

Idaho Office of the Governor
2019 *Public Utilities Commission*. Available at: https://govelect.idaho.gov/transition/900-PUC-2018-Transition-Docs.pdf. Accessed May 9, 2019.

*Idaho Republican*
1922 Notice of Special Meeting of Stockholders of Ashton and St. Anhony [sic] Power Company. August 31. Blackfoot, Idaho.

Institute for Energy Research
2017 History of Electricity. Available at: http://instituteforenergyresearch.org/history-electricity/. Accessed February 23, 2017.

Kittleman, S. W.
1925 Improvements at Ashton Plant. *The Synchronizer* 10(2):1–7. Utah Power & Light Company, Salt Lake City, Utah.

Kyle, Zach
2012 Ashton Dam Project Wraps Up. *Idaho Falls Post-Register* 6 November. Idaho Falls, Idaho.

Library of Congress
2018 The World's First Hydroelectric Power Plant Began Operation September 30, 1882. Available at: http://www.americaslibrary.gov/jb/gilded/jb_gilded_hydro_2.html. Accessed September 28, 2018.

*Lincoln County Times*
1914 Private Monopoly in State Public Utilities. January 1. Jerome, Idaho.

Lyon, Glade
2006 *Ashton, Idaho: The Centennial History, 1906-2000,* edited by Katherine Mearl Lyon. Waking Lion Press, West Valley City, Utah.

McAlester, Virginia Savage
2014 *A Field Guide to American Houses*. Alfred A. Knopf, New York, NewYork.

National Park Service
1997 *National Register Bulletin: How to Apply the National Register Criteria for Evaluation.* Department of the Interior, National Park Service, Washington, D.C.

2019 Secretary of the Interior's Standards for Architectural and Engineering Documentation. Available at: https://www.nps.gov/history/local-law/arch_stnds_6.htm. Accessed May 22, 2019.

NPG of Idaho
2016 Ashton Dam Reconstruction Complete. Available at: https://www.localnews8.com. Accessed April 22, 2019.

*Oakley Herald*
1918 In the Gem State. June 14. Oakley, Idaho.

PacifiCorp
1925–1949 Ashton Historical Photos. On file, PacifiCorp, Pocatello, Idaho.

1995 Ashton Hydro Plant SPCC Plan, Exhibit B, Powerhouse Site Plan. PacifiCorp Power, Portland, Oregon.

2011 *Ashton/St. Anthony Hydroelectric Development*. Available at: http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/EnergyGeneration_FactSheets/RMP_GFS_Ashton.pdf. Accessed April 25, 2019.

2012 Ashton Dam Reconstruction Enters Final Year. Available at: www.pacificorp.com/about/newsroom/2012nrl/adrefy.html. Accessed April 22, 2019.

Pengilly, Susan
2010 Letter to Mark Stenberg, PacifiCorp. Re: PacifiCorp; Ashton Dam Remediation Project FERC Proj. No. P-2381. March 12. On file with PacifiCorp.

Roberts, Daniel G.
1976 *Final Report on the 1974-1975 Camas Creek-Little Grassy Archaeological Survey*. Archaeological Report #5. Idaho State University Museum of Natural History, Pocatello.

Southworth, Don, Kevin C. O'Dell, Erica Hanson, and Michael R. Polk
1999 A Cultural Resources Survey and Inventory of the Soda, Grace/Cove, and Oneida Hydroelectric Power Plants in Caribou and Franklin Counties, Idaho. Archaeological Report No. 907-01. Prepared by Sagebrush Consultants, L.L.C., Ogden, Utah, for Duke Engineering & Services, Inc. Copies available from Sagebrush Consultants, L.L.C.

Stenberg, Mark
2010 Letter to Don Watts, Idaho Historic Preservation Office. Re: PacifiCorp consultation request for the Ashton Dam Remediation Project. FERC Project No. P-2381. January 25. On file with PacifiCorp.

Trego, Byrd
1920 Beets, Politics and Progress: Chapter XVIII. *Idaho Republican* 30 August. Blackfoot, Idaho.

*Twin Falls Times*
1913 New Power Plant. August 19. Twin Falls, Idaho.

Utah Power & Light Company
1925a Ashton Development General Layout. Utah Power & Light Company, Salt Lake City.

1925b Ashton Development: Map Showing Location of Cottages. Utah Power & Light Company, Salt Lake City.

1974 Ashton Development General Layout. Utah Power & Light Company, Salt Lake City.

1984 Ashton Hydroelectric Project: Plant Facilities Map. Utah Power & Light Company, Salt Lake City.

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# APPENDIX A

## Resumes

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# KATE HOVANES, M.S., ARCHITECTURAL HISTORIAN

Ms. Hovanes is an architectural historian for SWCA Environmental Consultants (SWCA) in Salt Lake City, Utah. Her professional experience includes researching and writing historic contexts, preparing National Register nominations, historic and archaeological resource surveying, archival research, and conducting oral histories.

Ms. Hovanes' previous work experience includes interning for the Pennsylvania Department of Transportation (PennDOT) and the National Park Service at Glen Canyon National Recreation Area. During her time at PennDOT, she assisted with the Section 106 project review process, developed context-sensitive design recommendations for historic bridge replacements, and liaised with the public about the historic bridge marketing program. While with the National Park Service, she conducted an ILS and provided treatment recommendations for two NRHP-listed buildings at Lees Ferry, as well as surveyed, monitored, and assessed the condition of a variety of historic and archaeological resources in southern Utah and northern Arizona.

## YEARS OF EXPERIENCE

4.6

## EXPERTISE

Building survey and documentation

National Register nominations

Completing HABS/HAER–style resource recordation

Section 106 review and compliance

NRHP eligibility determinations

## EDUCATION

M.S., Historic Preservation; University of Vermont, Burlington, VT; 2015

B.A. highest honors, History; Smith College, Northampton, MA; 2012

## PERMITS

U.S. Bureau of Land Management Cultural Resource Use Permit (14UT55126), Field Supervisor/Crew Chief; UT

U.S. Bureau of Land Management Cultural Resource Use Permit (N-50837), Crew Chief; NV

## SELECTED PROJECT EXPERIENCE

**Soda Crane HAER Level II Documentation; Soda Springs, Idaho; PacifiCorp (2018–2019).** SWCA prepared documentation meeting HAER Level II standard for the historic crane at the Soda Hydroelectric Development. Documentation included the preparation of HAER Level II outline format documentation and archival research. *Role: Historic Preservation Specialist. Completed the HAER Level II documentation, including archival research.*

**Oneida Cottages HABS Level II Documentation; Preston, Idaho; PacifiCorp (2018–2019).** SWCA prepared documentation meeting HABS Level II standards for Oneida Village, a historic company town associated with the Oneida Dam near Preston, Idaho. Documentation included the preparation of the HABS Level II outline format documentation and measured drawings of buildings. *Role: Historic Preservation Specialist. Completed the HABS Level II documentation, including archival research and measured drawings.*

**Weber County Library National Register Nomination; Ogden, Utah; EDA Architects, Inc. (2018–2019).** SWCA prepared an NRHP nomination for the Weber County Library in Ogden. The Weber County Library is a New Formalist building and was an early example of Modernist architecture in Utah. *Role: Historic Preservation Specialist. Completed the nomination form, including researching its architectural significance and writing the statement of significance.*

**Midway National Register Nominations; Midway, Utah; City of Midway (2018).** SWCA prepared two NRHP nominations for historic properties located in Midway, Utah, including site photography, background research, writing the nominations, and submitting them to the State Historic Preservation Office. *Role: Project Manager/Historic Preservation Specialist. Managed the project from start to finish, including writing the proposal, client management and fieldwork coordination, budget management, fieldwork and research, and report preparation and submission to the Utah State Historic Preservation Office.*

**Park City Main Street Historic District National Register Update; Park City, Utah; Park City Municipal Corporation (2018).** SWCA prepared an update to the original NRHP nomination form for Park City's Main Street Historic District. *Role: Historic Preservation Specialist. Assisted with fieldwork, prepared the updated NRHP nomination form, and coordinated submission with the Utah State Historic Preservation Office.*

**West Davis Corridor Architectural Survey; Davis County, Utah; HDR, Inc. and Utah Department of Transportation (2018).** SWCA conducted ILSs of six historic properties within the survey area. These ILSs included property documentation, photography, mapping, and the creation of measured drawings of selected buildings, as well as historic research consisting of archival research, oral histories, and title searches. *Role: Historic Preservation Specialist. Documented properties through photography and the creation of measured drawings,*

*conducted historic research including oral histories with previous owners, title searches, and archival research, and produced reports detailing SWCA's findings.*

**Camp W. G. Williams Intensive Level Surveys; Salt Lake and Utah Counties, Utah; Utah National Guard (2018).** SWCA conducted an intensive-level survey of three historic buildings at Camp W. G. Williams, all of which dated to the World War II or post–war eras. *Role: Historic Preservation Specialist. Recorded historic buildings, drafted measured drawings of the buildings, researched and wrote a historic context for each, and compiled information in a final report.*

**Architectural Assessment of Reno's Faith Deliverance Church; Washoe County, Nevada; City of Reno (2018).** SWCA completed an intensive-level survey of the Faith Deliverance Church in Reno, Nevada, including photographic documentation, archival research, measured drawings, and the completion of an Architectural Resource Assessment form. Faith Deliverance Church was historically associated with Reno's African American community beginning in the 1960s. *Role: Historic Preservation Specialist. Documented the property photographically and created measured drawings. Wrote an architectural description of the building.*

**Lincoln County Historic Ranching and Farming Context; Lincoln County, Nevada; Bureau of Land Management (2017).** Researched and wrote a detailed historic context of ranching and farming in Lincoln County, Nevada, including resource typology and eligibility and oral histories with county residents. This project provided a document that not only met Department of the Interior standards for MPDFs but included additional research and documentation such as oral histories with local ranching and farming families and a reconnaissance-level survey of historic agricultural resources in portions of the county. *Role: Historic Preservation Specialist. Researched and wrote the historic context, and assisted with the development of resource typology and eligibility standards.*

**Historic Context Development for the Vernal Field Office of the Bureau of Land Management and the Utah State Historic Preservation Office; Daggett, Duchesne, and Uinta Counties, Utah; Utah Division of State History (2017).** SWCA produced three contexts relating to the history and prehistory of the Uinta Basin. These contexts addressed the regional histories of sheep ranching, irrigation, and prehistoric temporary campsites. SWCA also developed resource typology and registration requirements for the NRHP. *Role: Historic Preservation Specialist. Researching and writing the historic context, developing resource typology, and assisting with the development of eligibility standards.*

**Historic Overview of the Nellis and Creech Air Force Base Runway Systems, Clark County, Nevada; U.S. Air Force (2017).** SWCA surveyed runway structural systems at Nellis and Creech Air Force Bases, a survey that encompassed 96 resources in total. This project provided a comprehensive inventory of the runway structural systems at the bases, as well as an evaluation of the significance and integrity of the runway systems as a whole and a discussion of the potential NRHP eligibility of specific resources. *Role: Historic Preservation Specialist. Inventoried and recorded all runway system resources; compiled data from the recordation into two comprehensive reports; researched the histories of both bases' runway systems; and created historic contexts to allow for NRHP eligibility assessments.*

**Utah Army National Guard Historic Structures Maintenance and Treatment Plan, Utah; Utah Army National Guard (2017).** SWCA inventoried 28 historic buildings and structures belonging to the Utah Army National Guard (UTARNG) throughout Utah. These buildings were built between the 1920s and the 1960s. This inventory included updated photographic recordation, written architectural descriptions, and comprehensive building condition assessments, which were compiled in an updated historic structures maintenance and treatment plan (HSMTP). Additionally, the previously created HSMTP was reformatted and updated to allow it to be integrated with UTARNG's facilities maintenance management website. *Role: Historic Preservation Specialist. Building condition assessment and recordation; data compilation and updates to the existing HSMTP; reformatting the HSMTP to make it compatible with other facilities management databases; and creation of educational material for UTARNG to improve understanding of maintenance issues and strategies for historic buildings.*

**Wood River Recreation Residence History and Evaluation; Sawtooth National Recreation Area, ID; National Park Service (2015).** Assisted in conducting an intensive-level survey of seven recreation residences in Sawtooth National Recreation Area, researched their histories, and offered National Register evaluations. *Role: Cultural Resource Technician. Surveyed and recorded historic properties, and produced a report detailing findings.*

**Mountain View Corridor Intensive Level Survey; Salt Lake County, UT; Utah Department of Transportation (2015).** Assisted with an intensive-level survey of historic properties subject to demolition as a part of the Utah Department of Transportation's Mountain View Corridor project; researched and wrote property histories and produced building documentation forms. *Role: Cultural Resource Technician. Conducted an intensive-level survey of historic properties and produced survey forms detailing findings, including National Register eligibility recommendations.*

# APPENDIX B

## ISHI Form

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# IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME: Ashton Hydroelectric Project Historic District | FIELD#: 001

STREET: 1338 North 3300 East | RESTRICT: ☐

CITY: Ashton | VICINITY: ☑ | COUNTY CD: 43 | COUNTY NAME: Fremont

SUBNAME: | BLOCK: | SUBLOT: | ACRES: | LESS THAN: ☐

TAX PARCEL: RP09N42E281800 | UTMZ: 12 | EASTING: 460217 | NORTHING: 4880685

TOWNSHIP: 9 | N_S: N | RANGE: 42 | E_W: E | SECTION: 27 | ¼, ¼ | ¼

QUADRANGLE: ASHTON | OTHERMAP: Lemon Lake

SANBORN MAP: N/A | SANBORN MAP#: N/A | PHOTO#: Digital

PROPERTY TYPE: District | CONST/ACT1: Original Construction | ACTDATE1: 1914 | CIRCA1: ☐

CONST/ACT2: Significant Construction | ACTDATE2: 1925 | CIRCA2: ☑

ASSOCIATED FEATURES:
Building 1: Garage (non-contributing)
Building 2: Henderson House (non-contributing)
Building 3: Operator's cottage (non-contributing)
Building 4: Shed (contributing)

TOTAL # FEATURES: 13

ORIGINAL USE: Industry/Processing | WALL MATERIAL:

ORIGSUBUSE: energy facility | FOUND. MATERIAL:

CURRENT USE: Industry/Processing | ROOF MATERIAL:

CURSUBUSE: energy facility | OTHER MATERIAL:

ARCHSTYLE: No Style | PLAN: | CONDITION: Good

NR REF #: N/A | NPS CERT: | ACTIONDATE: | FUTURE ELIG DATE:

DIST/MPLNAME1: N/A | DIST/MPLNAME2: N/A

| | | | |
|---|---|---|---|
| Individually Eligible ☐ | Contributing in a potential district ☐ | Noncontributing ☐ | Future eligibility ☐ |
| Not Eligible ☑ | Multiple Property Study ☐ | Not evaluated ☐ | |

CRITERIA: A ☑ B ☐ C ☑ D ☐ | CRITERIA CONSIDERATION: A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐

AREA OF SIGNIF: Engineering | AREA OF SIGNIF: Architecture

COMMENTS: Description:

The Ashton Hydroelectric Project Historic District consists of 24 historic and non-historic buildings and structures clustered around Henry's Fork of the Snake River. The District's character is a mix of residential and industrial uses. The types of buildings

PROJ/RPT TITLE: Intensive-Level Architectural Survey of Ashton Hydroelectric Project, Fremont County, Idaho | SVY DATE: 04/30/19 | SVY LEVEL: Intensive

RECORDED BY: Kate Hovanes | PH: 801-322-4307 | ADDRESS: 257 E 200 S, Suite #200, Salt Lake City, UT, 84111

SUBMITTED PHOTOS ☑ NEGS ☐ SLIDES ☐ SKETCH MAP ☑

SVY RPT #: | MS RPT #: | IHPR #: | HABS NO. ID-: | HAER NO. ID-:

********** FOR ISHPO USE ONLY **********

IHSI#: 001 | SITS#: | REV#:

CS #: | IHSI# REF: | NR REF# 2: | REV# REF:

SVY RPT# 1: | SVY RPT# 2: | SVY RPT# 3: | MS RPT# 1: | MS RPT# 2:

ADD'L NOTES: Property is at Township 9N, Range 42E, Sections 27 and 28.

MORE DATA ☐

ATTACH ☑

REV# | SITS# | IHSI#

# OF PHOTOS: | NEGBOX#: | # OF SLIDES: | SHPO DETER: | DETER DATE:

INITIALED: | ENTRY DATE: | REVISE1: | REVISE2: | REVISE3:

# IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME: Ashton Hydroelectric Project Historic District | IHSI#: 001

FIELD#: 001 | COUNTY NAME: Fremont

OTHER NAME: N/A

COUNTY CD: 43 | CITY: Ashton | VICINITY: ☑

UTM REF2: 12/460113/4880801 | UTM REF3: 12/460244/4880472 | UTM REF4: 12/460432/4880647

OTHER MATERIAL2: | CULTAFFIL: | AGENCYCERT: Statewide

SIGNIFDATE: | SIGNIFPERIOD: 1914-1925 | SIGNIFPERSON:

ARCH/BUILD: | ARCHPLANS: ☐ | TAXEASE: ☐ | TAXCERT: ☐

OWNERSHIP: Private | PROPOWN: PacifiCorp

MORE DATA: ☐ | ATTACH: ☑

DOCSOURCE: See "Comments" tab for references cited.

ADD'L NOTES: Property is at Township 9N, Range 42E, Sections 27 and 28.

COMMENTS:

Description:

The Ashton Hydroelectric Project Historic District consists of 24 historic and non-historic buildings and structures clustered around Henry's Fork of the Snake River. The District's character is a mix of residential and industrial uses. The types of buildings, which encompass residences, shop buildings, and buildings and structures for the generation and transmission of hydroelectric power, reflect these uses. As a whole, the District represents an area of relatively dense development within the largely undeveloped rural landscape that surrounds it.

The buildings are utilitarian and generally feature few stylistic details. The operator's cottages and other historic-age buildings

PHOTO LOG: ☐ | IHSI# REF: | INITIALED: | DATEENTERED:

SKETCH: ☑

REV# | SITS# | IHSI#

# IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME Ashton Hydroelectric Project Historic District IHSI# 001

FIELD# 001 COUNTY NAME Fremont

COMMENTS:

Description:

The Ashton Hydroelectric Project Historic District consists of 24 historic and non-historic buildings and structures clustered around Henry's Fork of the Snake River. The District's character is a mix of residential and industrial uses. The types of buildings, which encompass residences, shop buildings, and buildings and structures for the generation and transmission of hydroelectric power, reflect these uses. As a whole, the District represents an area of relatively dense development within the largely undeveloped rural landscape that surrounds it.

ATTACH ☑

The buildings are utilitarian and generally feature few stylistic details. The operator's cottages and other historic-age buildings within the residential and shop area of the District commonly fall within the National Folk style. The powerhouse is also primarily utilitarian but possesses a few stylistically Moderne elements. The dam is typologically an earthfill dam. All of the buildings within the District are of comparatively modest size. The cottages are generally compact and one story tall, and the dam and powerhouse are relatively small in size compared to many other hydroelectric facilities in southeastern Idaho and northern Utah.

The Ashton Hydroelectric Project Historic District can be divided into two areas: the residential and shop/office area (east of the river and on the edge of the cliff overlooking Henry's Fork) and the dam and hydroelectric plant (which encompasses the river gorge itself and the west side of the river).

The residential and shop area is mostly flat and is clustered around a single road that runs north-south through the center of the area before turning east and widening to become a gravel road and parking area. All historic buildings and several non-historic buildings are oriented towards the road. The area has planned landscaping elements such as planted lawns and flower beds (around the cottages and office building) and open fields (east of Building 1). The cliffs on the west side of this area sharply define the edge of the residential and shop area. For a discussion of changes to the residential and shop area, please see the Cultural Setting section of this report.

The dam and hydroelectric plant area was historically connected to the residential area via a staircase on the east embankment of the river that leads down from the residential and shop area to the spillway below. This staircase remains a primary means of access to the dam but has been augmented outside of the historic period by an unpaved road on the west side and a gravel road and a metal bridge on the east side that allow vehicular access to the dam itself. Unlike the residential and shop area, the dam and hydroelectric plant area does not have landscaping or built features beyond a chain-link fence designed to prevent access to the dam on the west side and railings and concrete barriers to block off slopes and intake tunnels.

The general condition of the buildings and structures in the District is good. Many of the historic-age buildings and structures within the District have undergone alterations and additions during and outside of the period of significance. Several buildings have also been added outside of the historic period and at least one, Building 9, may have been moved (although when it was moved is unclear). However, the District largely reflects the original configuration and appearance. The District remains distinct from the surrounding rural farming area because of its strong visual and functional connection to hydroelectric power.

Significance:

The use of electricity to provide light and power to homes and businesses is a relatively recent development. Electric power got its start in New York in the 1880s. Thomas Edison invented the incandescent bulb in the 1870s and began to work with wealthy customers to install electric power in their homes, which was produced by small generators. In 1882, with funding from J. P. Morgan, Edison opened the Pearl Street Station in lower Manhattan, the first centralized power plant made up of multiple generators that served numerous homes and customers by sending electricity over a grid of wires. The Pearl Street Station quickly became a model for industrial-scale power generation (Institute for Energy Research 2017).

The first hydroelectric power plant came into service in Appleton, Wisconsin, on September 30, 1882, and was powered by the Fox River. The plant was known as the Appleton Edison Light Company and was based on Edison's work in creating an electrical grid in New York City. It produced just enough electricity to light the owner's home, a nearby building, and the plant itself (Library of Congress 2018). Despite the low initial energy yield, it proved that hydroelectric power was a viable source of electricity.

When electric power first came into use in the 1880s, it offered a level of safety and convenience that the previously popular gas light could not match, and as a result, it quickly gained popularity in urban areas. The dense populations of cities made the installation of electric infrastructure economical; power lines could serve many customers per mile, decreasing the average installation cost per customer. As well, new electric companies quickly began to merge, eliminating the need for many smaller generating plants and enabling the consolidated companies to instead use larger, more efficient facilities (Institute for Energy Research 2014).

Electric power generation in the Intermountain West followed a slightly different pattern, particularly in respect to hydroelectric power. Unlike the densely packed cities of the Eastern Seaboard, residents of the West were often much more widely dispersed. In more arid areas like Utah, southern Idaho, and Colorado, the locations of water sources where hydroelectricity could be generated were sometimes a significant distance from towns and cities. Despite these differences, electric power was still in high demand by western consumers. This demand for electric power was stimulated by two major forces: community demand for domestic and urban infrastructure and demand for power to drive industrial operations (Southworth et al. 1999:31). Of these two, the latter may well have been the primary driving force. The earliest power plants in the region were originally established by Lucien L. Nunn, who built plants initially in Telluride, Colorado, and later in Utah to drive his mining operations (Southworth et al. 1999:31).

REV# SITS# IHSI#

The Ames Hydroelectric Generating Plant near Telluride was the first plant of its kind. It was the first hydroelectric facility in the world to "generate, transmit and use alternating current (AC) for industrial purposes in the U.S." (Hydro Review 2013). AC, developed by George Westinghouse, allowed electricity to be transmitted at a much higher voltage and for longer distances than direct current (DC). Edison's power plants, starting with the Pearl Street Station, all used DC; during the late 1890s, he actively campaigned against the use of AC, most notably by designing an AC-powered electric chair to electrocute animals. However, Nunn recognized that AC was well-suited to his needs, particularly the long-distance transmission of electricity from the power-generating station to a mine miles way. Construction of the Ames plant began in 1890, and by June 1891, it was generating energy. It quickly became a success and simultaneously demonstrated the superiority of AC for the transmission of electricity over long distances (Hydro Review 2013).

Nunn followed his success at the Ames plant by expanding his operations in Colorado and then to Utah and Idaho. By 1900, he had established hydroelectric plants in Logan and Provo Canyons in Utah. As with the Ames plant, these generating stations primarily delivered power to mines. At the time they were built, both of these stations had some of the longest electrical transmission systems in the nation.
With the success of these plants, Nunn began to look northward for additional power opportunities along the Bear River in northern Utah and Idaho. Nunn's interest in hydroelectric power from the Bear River would ultimately lead to the construction of four facilities on the river. Nunn initiated construction of the Grace Hydroelectric Complex on the Bear River in Idaho in the early twentieth century (Southworth et al. 1999:32). The plant was completed in 1908. It was a historic structure from the beginning, as it was one of the first multipurpose plants in the area--if not the world--generating 11,000 kilowatts (kW) (Southworth et al. 1999:32).

However, Nunn was far from the only hydroelectric power entrepreneur in the region in the late nineteenth and early twentieth centuries. A number of other hydroelectric companies served urban centers and mining operations, although other municipally owned hydroelectric facilities also served smaller towns. These early operations were often relatively small in scale and were subject to frequent technical problems as a result of equipment failure, or even lightning strikes; they were also often frequently highly competitive for potential customers (Fiege and Ore 1988). As a result, many smaller companies began to consolidate ca. 1900.

The early history of the Ashton-St. Anthony's Hydroelectric Project ties into these patterns. Construction began on the hydroelectric project in 1914 under the oversight of the Ashton & St. Anthony Power Company (ASAPC), which was founded in 1913. The company was named after the two closest towns to the dam, St. Anthony and Ashton, Idaho. Both towns are in Fremont County and are in proximity to Henry's Fork of the Snake River.

St. Anthony, Idaho, was founded in 1890 by C. H. Moon. It became the county seat when Fremont County was established and remains so today. In 1899, a railroad connection was made to the town. The town continued to grow, including the opening of a public school, various businesses, a post office, and churches for several different denominations including Presbyterians, Methodists, Mormons, Catholics, Episcopalians, and Baptists (Greater St. Anthony Chamber of Commerce 1993).

Ashton was established later than St. Anthony. The first railroad survey went through the future location of Ashton in 1881. It was not until 1904, however, that 640 acres of land for a townsite were purchased from George Harigfeld, J. E. McGavin, and Asa Hendricks. The purchasers were the Ashton Townsite Company, which was primarily made up of residents of St. Anthony. The townsite was incorporated on July 11, 1906 (Lyon 2006).

Despite the company's name, the ASAPC was not actually created to serve either community, nor was it owned and operated by residents of the two towns. Its primary organizer was Nels (or Neils) N. Holm, a resident of Shelley, Idaho, a community approximately 60 miles southwest of Ashton. Little additional information exists about Holm (1852 - 1929) (Ancestry 2017). Census data shows that he was born in Denmark, immigrated to the United States in 1880, and became a naturalized citizen. The 1910 census lists his occupation as "Civil Engineer." He was married to Anna Holm (who was also born in Denmark); they had no children listed (Ancestry 2006). The 1920 census notes that he was a civil engineer working for an unspecified power company (which was presumably the ASAPC) (Ancestry 2010).

Holm was supported in the venture by other residents of Shelley and Blackfoot, Idaho, another community near Shelley. The Ashton hydroelectric plant was not Holm's first such business venture. In 1913, the Blackfoot Optimist described him as "the promoter of the Shelley power plant which was sold for $190,000 about a year ago" (Blackfoot Optimist 1913). By August 1913, the ASAPC was established as "a corporation capitalized for $250,000, of which $80,000 has been subscribed" (Twin Falls Times 1913).

In 1913, the future site of the Ashton-St. Anthony Dam was located by Holm. Based on his observations, the site, which was in a deep gorge with basalt walls approximately 2.5 miles west of Ashton, represented a good location for a power plant. "Construction on the dam began in 1914 under the authority of a group of men from Shelley, Blackfoot and Idaho Falls who wanted to gain a foothold in the Ashton area before the 2-year-old Utah Power and Light Co. did" (Baum 2004). Construction began in 1914 and was completed in 1918 (NPG of Idaho 2016). When it was first established, the Ashton Hydroelectric Project included a powerhouse on the west end and an earthfill dam 60 feet high. Cumulatively, the project (including the spillway, dam, and generating station and powerhouse) was 500 feet long (Hoyt 1935:203). The completed hydroelectric plant powered a 44-kV transmission line (Baum 2004).

The ASAPC also opened a second hydroelectric plant, a smaller facility located near St. Anthony, Idaho. The St. Anthony hydroelectric plant was finished in 1925 and as of 1935 could generate 0.50 megawatts of energy, with an average annual generation of 3.9 gigawatt hours. The dam had a gross static head of 14 feet (PacifiCorp 2011; Clyde et al. 1979:21).

But from the beginning, the ASAPC faced both financial and legal challenges. These mostly stemmed from the relatively late establishment of the company during the period when most hydroelectric companies were undergoing consolidation into larger corporations. As a relative late-comer to the field of hydroelectric power generation, the ASAPC was forced to compete with

other companies that already held functional (if unofficial) monopolies over power generation and distribution to nearby municipalities.

Foremost among these was the Utah Power & Light Company (UP&L). Recognizing the problems of operating solitary hydroelectric plants, and because competition sometimes resulted in redundant power services for a given municipality, Utah hydroelectric power companies began to consolidate their holdings and interconnect their plants with transmission lines. Creating an integrated network of plants and distribution systems allowed power companies to meet varied demands and to make more efficient use of water resources (Fiege and Ore 1988:E15). UP&L was one such company that resulted from these mergers. Formed in 1912, the company operated three plants that served Salt Lake City, Ogden, and smelters south of Salt Lake City. UP&L was a subsidiary of a larger national holding company, the Electric Bond and Share Company (EBASCO), that was organized in 1905.

Within a few years of its establishment, UP&L gained control of four large utilities: the Knight Consolidated Power Company, L.L. Nunn's Telluride Power Company, the Utah Light and Traction Company, and the Idaho Power and Transmission Company. UP&L's objective in acquiring the companies was to achieve even greater economies of scale by combining the companies' plants and distribution systems in to a huge, fully integrated, superpower system (Fiege and Ore 1988:E16).

The success of Nunn's plants on the Bear River attracted UP&L to eastern Idaho (Southworth et al. 1999:32). The Bear River offered relatively untapped potential for hydroelectric development as well as several preexisting plants operated by Nunn's power company. Between 1912 and 1923, UP&L purchased or constructed four hydroelectric plants on the river (Southworth et al. 1999:32-33, 37).

Along with competition between newly consolidated power companies in the region, the period also saw the establishment of government regulatory measures on the state level for hydroelectric power. In particular, the Idaho Public Utilities Commission (PUC), which was established in 1913, proved a consistent roadblock for ASAPC (Idaho Office of the Governor 2019). This was because, unlike companies in previous years, ASAPC had to apply for permits to distribute its power, and in many cases (due to new state laws) these permits were not granted. Based on news stories from the time, this was often due to pressure from UP&L, which served the same geographic area and stood to benefit from a lack of competition with ASAPC. Numerous news articles from 1913 to 1920 showcase various points when ASAPC came into conflict with the PUC and with UP&L.

The first dates to 1913, when the PUC refused to issue a certificate of public convenience and necessity to ASAPC. Although the company was able to operate in specific municipalities nearby (which were exempt from state oversight) like Ashton and Marysville, Idaho, the PUC's ruling precluded significant expansion of the company's service area. As the Blackfoot Optimist noted, "The Utah Power & Light company of Salt Lake, which operates in the same territory, was the principal opponent of the application and the decision is a distinct victory for that company" (Blackfoot Optimist 1913).

In 1914, ASAPC again faced off against the PUC and UP&L, again with unsatisfactory results. The company sought to establish service in an area already served by UPL, arguing that the "company rendered inefficient and unreliable service at extortionate rates, and the Utah company in defense answered that it gave the best service at the lowest rate the field enabled" (Lincoln County Times 1914). The PUC declined to issue a permit to ASAPC on the basis of "...a theory previously laid down that the competition would not be lasting and only result in economic waste" (Lincoln County Times 1914). At least one newspaper took a strong stance on the issue in favor of ASAPC:

"While such decisions under ordinary circumstances may be based in a sound principle, it still opens the door to some exceedingly grave abuses: if even a small fraction of the grievances laid at the doors of private monopolies in public utilities have any foundation in fact. The most oppressive monopolies are at least exposed to potential competition, but under the Idaho reform law they are not legally installed in the possession of an absolute monopoly. If the fear of competition acts as a small measure of restraint on the cupidity and arrogance of quasi-monopolies, even the remote fear is now removed in the state. Even the sort of power that seems vested in the commission appears to be conducive to monopoly, since there will be few applicants for permits under its terms" (Lincoln County Times 1914).

Again in 1916, UP&L (along with several other organizations) attempted to block ASAPC when it sought to expand. ASAPC had applied to the PUC to expand service to the village of Roberts, Idaho (approximately 40 miles southwest of Ashton). The municipality supported the application, but UP&L objected to the proposed arrangement. ASAPC alleged that UP&L had not attempted to provide power to Roberts until ASAPC did, at which point UP&L attempted to prevent them from establishing service. It is unclear from the newspapers which side the PUC decided in favor of (Evening Capital News 1916).

Despite these permitting setbacks, ASAPC continued to forge ahead with the Ashton Hydroelectric Project and the expansion of its service area. In 1916, a company representative reported "that the company has $70,000 in the treasury" (Blackfoot Optimist 1916a). What was more, the dam and power plant were to be completed by August, and a transmission line was planned to Mud Lake by May 1917. By 1916, ASAPC was also unique within the state: "This company is the only independent concern in the State at this time, and is one of the largest, with a capacity of 5,000 horse-power" (Blackfoot Optimist 1916b). Although the dam was not completed until 1918, it formally opened in June that year. Ultimately by the time the Project opened, the dam, powerhouse, and associated machinery cost a total of $500,000 (not adjusted for inflation) (Oakley Herald 1918).

Legal battles continued, but in 1920, ASAPC won a rare victory when the PUC ruled in favor of its right to supply electricity to Arco, a town approximately 95 miles southwest of Ashton. This was due to the fact that as a municipality Arco was outside of the jurisdiction of the PUC and that ASAPC had negotiated with Arco directly and the town owned the transmission line used to provide power; as a result, the PUC did not have a say in ASAPC's contract with Arco (Evening Capital News 1920).

Despite these minor victories, by 1920 it was clear that the financial pressures brought to bear on ASAPC through years of constant litigation and failure to find customers were having a negative effect on the company. A candid editorial in the Idaho Republican laid out the company's grievances:

"For a good many years it has been quite plain that a competing firm, the Utah Light and Power company, has been doing what they can to hinder the development of [this] plant, and the utilities commission seems to be the instrument thru which they work to try to wipe Mr. Younie's power plant [the Ashton Hydroelectric Project] off of the map or to acquire it themselves. It is a part of the irony of our free institutions, that a weapon that was created to protect the individual against the encroachment of the strong, may also be taken up and used cuningly [sic] by the strong against the weak" (Trego 1920).

For the article, the writer interviewed Alexander Younie, who in 1920 was one of the chief financial backers of ASAPC. His statement to the paper does little to hide bitterness at the setbacks the company had faced:

"We commenced this enterprise a number of years ago when materials and labor were cheap, and the river was running thru [sic] the canyon doing nobody any good... Towns and villages all up and down the valley were in need of light and power and nobody was supplying it. The Utah Light & Power Co. was getting a foothold at different places and had pretty well absorbed things at Idaho Falls and Shelley, but with all their power and idle works, they were not offering the people any very desirable bargains in power and light... all thru [sic] the years we have been hampered by every means that shrewd corporation lawyers and operators could devise to keep us from building. They have done everything from using the power of the public utilities commission to prevent our securing rights of way and franchise, down to the least of petty transactions to retard the shipment of goods and the placing of cement in foundations or timbers in construction... For a year and a half we have been just about ready to deliver electrical energy to the town of Ashton, situated right by our plant, and yet before delivery was accomplished and while we had made most of our investment for delivery, a suit was filed protesting our right to that territory" (Trego 1920).

Historical records suggest that by 1922 the company was in a dire financial situation. The Idaho Republican notes a meeting of ASAPC shareholders to authorize the reorganization of the company, approve the creation of a new corporation and conveyance of the existing power plant, equipment, and franchise to that new corporation, and consent to the issuance of stock by the new corporation (Idaho Republican 1922). The results of this meeting are unclear, but based on historical evidence it is likely that the meeting was not successful in gaining shareholder approval.

The ASAPC continued to operate the hydroelectric plant until 1923, when the company declared bankruptcy and became the Warm Springs Power Company, which continued to operate the station. Shortly after that (likely as result of ongoing financial troubles), the Warm Springs Power Company sold the Ashton-St. Anthony Hydroelectric Plant to UP&L, its long-time corporate adversary. The exact date when ownership of the dam was transferred to UP&L is unclear, but based on historical records, the transfer occurred ca. 1925. One source lists the sale as dating to 1924 and another dates the sale to November 1926, although historical records prove that the later date is too late to be correct (Hoyt 1935:203; Baum 2004).

In 1925, after taking over the Ashton facility, UP&L conducted improvements to the plant. These included the addition of two new generating units capable of handling 2,000 kW (Baum 2004). As The Synchronizer, an in-house publication put out by UP&L employees, observed, these improvements represented a unique engineering challenge.

"This job, in comparison with such jobs as Soda and Cutler [other UP&L stations in Idaho], may seem rather unimportant, but involving, as it does, improvements to an existing structure it presents some features of engineering and construction work not found on a new development which is built from the ground up. It was a problem of adapting modern water wheels to a structure designed for a more or less obsolete type of wheel, with as few changes in the existing structure as possible. Also whatever changes were made had to be made so as not to weaken the existing structure" (Kittleman 1925:1).

The existing turbines were ill-suited to the design and the high head of the dam. As a result, the spaces for the turbine units were slightly modified through the removal of old concrete and modified turbine units were designed to meet the needs of the plant. "It will be noted that the water wheels are not submerged as is the case with the old unit, but that the water is led into the wheel by means of a concrete penstock and scroll case" (Kittleman 1925:2). The intake gate openings were also enlarged and the original wood gates were replaced with metal gates, the transformers were replaced and relocated outside of the powerhouse, and improvements were made to the damaged earthfill dam (Kittleman 1925:5).

It is unclear when the residential portion of the Ashton Hydroelectric Project was constructed, but it is shown on site diagrams dating to 1925. One 1925 map shows four cottages (Buildings 2, 3, 5, and 7), a garage (Building 4), and a well and pump house (Building 6) (Utah Power & Light 1925a). A second map also dating to 1925 lists two of the cottages as "old cottages," suggesting that, prior to the UP&L takeover of the facility, only two cottages (Buildings 3 and 7) had been constructed by ASAPC (Utah Power & Light 1925b). The cottages are in close proximity and face a central road leading north-south through the residential area. The overall physical organization of the cottages is similar to the property layout at the time of this study.

No other maps are available for the historic period, but historic photographs show the addition of several more buildings to the residential and shop area of the Ashton Hydroelectric Project prior to 1949. These additions included the garage (Building 1), which was added ca. 1940, an additional operator's cottage (Building 8), added ca. 1940, and several barns or other agricultural buildings that stood east of Building 1, added between 1925 and 1949.

By 1974, the residential and shop area included five cottages (Buildings 2, 3, 5, 7, and 8), a small "garage" (Building 4), a larger garage (Building 1), and two barns (Utah Power & Light 1974). The shop building that now stands at the north end of the residential and shop area was not present, nor was the nearby garage/shed.

In 1984, the residential and shop area included the same five cottages, two garage buildings (Building 1) and what is likely the shop building) and a shed (the shed/garage near the shop building). Several small buildings, including Buildings 4 and 6, are not shown on the map, but this was likely because they were considered too small or inconsequential to be noted rather than because they were moved or not extant at the time (Utah Power & Light 1984).

By 2015, the map shows only four cottages (with Building 2 no longer present), along with the garage (Building 1) and shop building, as well as a garage and spill response equipment building east Building 1 (PacifiCorp 1995). Although the District has

certainly changed over time, its layout in 2015 is similar to how it existed historically, particularly the emphasis on a cluster of residential and shop buildings centered around a north-south running road.

As of 1935, the powerhouse had "One open-flume type 46-in. hydraulic turbine, rated capacity 3,150 hp., and two 51-in. S. Morgan Smith turbines, rated capacity 3,000 hp. each, direct connected to three generators, a total rated capacity 5,800 kw" (Hoyt 1935:203). The power plant operated at an average head of approximately 46 feet, with energy generated at 2,300 volts, and it had been incorporated into the company's eastern Idaho system (Hoyt 1935:203). As of 1979, the hydroelectric plant was capable of generating 5.80 megawatts, and generated an average of 33.0 gigawatt-hours annually. In 1979, it had a static head of 45 feet (Clyde, et al. 1979:21).

Some repairs and alterations were made to the hydroelectric plant beginning in 1991. The top five feet of the dam were removed and the downstream rock face of the dam was covered with roller-compacted concrete, creating the steps present today. The dam crest was covered with formed concrete. The goal was to make the dam crest serviceable as a spillway in the event of a flood exceeding the capacity of the existing spillway. The oldest generator was also replaced, increasing the generating power from 1,500 kW to 2,700 kW. In addition, "The wood spill gates were replaced by steel, the switchboard and metering were upgraded, material was removed from below the dam and a man-made island was built that now serves as access for fishermen" (Baum 2004).

Additional major repairs and upgrades were made to the dam from 2009 to 2012. This included removing the dam crest and all upstream materials to the natural foundation materials; the rock core and roller compacted concrete placed in 1991 were retained. The lower powerhouse face was also covered with a new concrete supporting wall and existing buttresses were repaired. In preparation for the project a bypass tunnel and control gates were built into the bank of the reservoir north of the dam. Although the project faced some challenges including building the tunnel and connecting it "live" to the reservoir and controlling seepage through cofferdams, it was successfully completed without negative environmental effects (PacifiCorp 2011; Berg 2012; Kyle 2012). As described in 2012, the Ashton hydroelectric plant "consists of a dam and powerhouse with three generating units. The dam is a rock and earth filled structure, 60 feet tall and 226 feet long with a 70-foot-wide concrete intake and 82-foot-long spillway" (PacifiCorp 2012). At the time of survey, one generator was rated at 2.85 megawatts and the other two were both rated at 2.5 megawatts (PacifiCorp 2012).

Eligibility:

The Ashton Hydroelectric Project Historic District is significant under NRHP Criterion A (in the area of Engineering) and Criterion C (in the area of Architecture). The District's period of significance is from 1914 - ca. 1925. The District includes 24 resources, 11 of which date to the period of significance. Of these, 4 retain integrity and are contributing to the District (17 percent) (Table 5).

Although significant, the District retains integrity in only limited aspects. It is in its original location and the resources within it mostly remain in their original locations. All resources within the District continue to be associated with the operation of the Ashton Hydroelectric Project and the production of hydroelectric power. The District's setting remains that of a clustered development surrounded by an open, rural landscape. However, through the demolition, replacement, construction, and relocation of buildings, the District's design has been extensively modified outside of the period of significance. As a result of the modifications to the buildings and structures, the District as a whole has largely lost its original materials and evidence of the workmanship involved in creating the Project. The few resources that do retain integrity and are contributing, with the exception of the powerhouse, are auxiliary buildings that were historically less significant than many of the other resources in the District. As a result, the District no longer retains the feeling of an early 20th century, isolated electric generating station with a small company housing and work complex nearby. Overall, the District does not retain the key aspects of historic integrity required to convey its significance under either Criterion A or Criterion C.

In summary, the Ashton Hydroelectric Project Historic District is recommended not eligible for the NRHP under any criterion.

References Cited:

Ancestry
2006 1910 United States Federal Census [database online]. Ancestry.com Operations Inc, Lehi, Utah.
2010 1920 United States Federal Census [database online]. Ancestry.com Operations, Inc., Provo, Utah.
2017Idaho, County Birth and Death Records, 1863-1970 [database online]. Ancestry.com Operations, Inc., Lehi, Utah.

Baum, Tyler
2004 Ashton Dam is 90-years-old. Rexburg Standard Journal 10 September. Rexburg, Idaho. Available at: https://www.rexburgstandardjournal.com/news/ashton-dam-is--years-old/article_2839684c-2fe6-5300-a186-6d093419fd6e.html. Accessed April 22, 2019.

Berg, Sven
2012 Ashton dam Dewatering Project Nears. Idaho Falls Post-Register 18 January 18. Idaho Falls, Idaho.

Blackfoot Optimist
1913 Ruling is Against St. Anthony Power. November 20. Blackfoot, Idaho.
1916a Power Company Progressing. April 6. Blackfoot, Idaho.
1916b Electricity for Heat. May 18. Blackfoot, Idaho.

Bureau of Reclamation
2005 Reclamation: Managing Water in the West. Hydroelectric Power. Available at: https://www.usbr.gov/power/edu/pamphlet.pdf. Accessed May 24, 2019.

Clyde, Calvin G., Eugene K. Israelsen, and Win-Kai Liu
1979A Resource Survey of Hydroelectric power Potential in Utah and Southeast Idaho. Paper 533. Utah Water Research Laboratory, Utah State University, Logan.

Corning Museum of Glass
2018 Rakow Research Library: Ask a Glass Question. Available at: https://libanswers.cmog.org/faq/144879. Accessed May 14, 2019.

Evening Capital News
1916 Commission to Render Decision. March 23. Boise, Idaho.
1920 Arco Light Service Battle Divides the Utility Commission. January 11. Boise, Idaho.

Fiege, Mark T., and Janet Ore
1988 Electric Power Plants in Utah, Multiple Property Listing. Prepared for Utah Power and Light Company. On file with Utah Department of State History.

Greater St. Anthony Chamber of Commerce
1993 The History of St. Anthony, Idaho. Derived from Fremont County Centennial Edition. Available at: https://stanthonychamber.com/history. Accessed May 9, 2019.

Hoyt, W. G.
1935 Water Utilization in the Snake River Basin. Water-Supply Paper 657. U.S. Department of the Interior. Government Printing Office, Washington, D.C.

Hydro Review
2013 Ames Hydro: Making History Since 1891. Available at: https://www.hydroworld.com/articles/hr/print/volume-32/issue-7/articles/ames-hydro-making-history-since-1891.html. Accessed September 28, 2018.

Idaho Office of the Governor
2019 Public Utilities Commission. Available at: https://govelect.idaho.gov/transition/900-PUC-2018-Transition-Docs.pdf. Accessed May 9, 2019.

Idaho Republican
1922 Notice of Special Meeting of Stockholders of Ashton and St. Anhony [sic] Power Company. August 31. Blackfoot, Idaho.

Institute for Energy Research
2017 History of Electricity. Available at: http://instituteforenergyresearch.org/history-electricity/. Accessed February 23, 2017.

Kittleman, S. W.
1925 Improvements at Ashton Plant. The Synchronizer 10(2):1–7. Utah Power & Light Company, Salt Lake City, Utah.

Kyle, Zach
2012 Ashton Dam Project Wraps Up. Idaho Falls Post-Register 6 November. Idaho Falls, Idaho.

Library of Congress
2018 The World's First Hydroelectric Power Plant Began Operation September 30, 1882. Available at: http://www.americaslibrary.gov/jb/gilded/jb_gilded_hydro_2.html. Accessed September 28, 2018.

Lincoln County Times
1914 Private Monopoly in State Public Utilities. January 1. Jerome, Idaho.

Lyon, Glade
2006 Ashton, Idaho: The Centennial History, 1906-2000, edited by Katherine Mearl Lyon. Waking Lion Press, West Valley City, Utah.

McAlester, Virginia Savage
2014 A Field Guide to American Houses. Alfred A. Knopf, New York, NewYork.

National Park Service
1997 National Register Bulletin: How to Apply the National Register Criteria for Evaluation. Department of the Interior, National Park Service, Washington, D.C.
2019 Secretary of the Interior's Standards for Architectural and Engineering Documentation. Available at: https://www.nps.gov/history/local-law/arch_stnds_6.htm. Accessed May 22, 2019.

NPG of Idaho
2016 Ashton Dam Reconstruction Complete. Available at: https://www.localnews8.com. Accessed April 22, 2019.

Oakley Herald
1918 In the Gem State. June 14. Oakley, Idaho.

PacifiCorp
1925 - 1949 Ashton Historical Photos. On file, PacifiCorp, Pocatello, Idaho.

1995 Ashton Hydro Plant SPCC Plan, Exhibit B, Powerhouse Site Plan. PacifiCorp Power, Portland, Oregon.
2011 Ashton/St. Anthony Hydroelectric Development. Available at: http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/EnergyGeneration_FactSheets/RMP_GFS_Ashton.pdf. Accessed April 25, 2019.
2012 Ashton Dam Reconstruction Enters Final Year. Available at: www.pacificorp.com/about/newsroom/2012nrl/adrefy.html. Accessed April 22, 2019.

Pengilly, Susan
2010 Letter to Mark Stenberg, PacifiCorp. Re: PacifiCorp; Ashton Dam Remediation Project FERC Proj. No. P-2381. March 12. On file with PacifiCorp.

Roberts, Daniel G.
1976 Final Report on the 1974-1975 Camas Creek-Little Grassy Archaeological Survey. Archaeological Report #5. Idaho State University Museum of Natural History, Pocatello.

Southworth, Don, Kevin C. O'Dell, Erica Hanson, and Michael R. Polk
1999A Cultural Resources Survey and Inventory of the Soda, Grace/Cove, and Oneida Hydroelectric Power Plants in Caribou and Franklin Counties, Idaho. Archaeological Report No. 907-01. Prepared by Sagebrush Consultants, L.L.C., Ogden, Utah, for Duke Engineering & Services, Inc. Copies available from Sagebrush Consultants, L.L.C.

Stenberg, Mark
2010 Letter to Don Watts, Idaho Historic Preservation Office. Re: PacifiCorp consultation request for the Ashton Dam Remediation Project. FERC Project No. P-2381. January 25. On file with PacifiCorp

Trego, Byrd
1920 Beets, Politics and Progress: Chapter XVIII. Idaho Republican 30 August. Blackfoot, Idaho.

Twin Falls Times
1913 New Power Plant. August 19. Twin Falls, Idaho.

Utah Power & Light Company
1925a Ashton Development General Layout. Utah Power & Light Company, Salt Lake City.
1925b Ashton Development: Map Showing Location of Cottages. Utah Power & Light Company, Salt Lake City.
1974 Ashton Development General Layout. Utah Power & Light Company, Salt Lake City.
1984 Ashton Hydroelectric Project: Plant Facilities Map. Utah Power & Light Company, Salt Lake City.

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# APPENDIX C

## Photographs

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**Figure C-1. Overview of employee housing area. Facing west. April 30, 2019.**

**Figure C-2. Overview of employee housing and shop area. Facing northwest. April 30, 2019.**

**Figure C-3. Overview of employee housing and shop area. Facing north. April 30, 2019.**

**Figure C-4. Overview of employee housing and shop area. Facing north. April 30, 2019.**

**Figure C-5. Overview of shop area. Facing north-northeast. April 30, 2019.**

**Figure C-6. Overview of shop area. Facing west. April 30, 2019.**

**Figure C-7. Overview of dam, powerhouse, and switchyard. Facing northwest. April 30, 2019.**

**Figure C-8. Overview of dam with employee housing and shop area at top of cliff. Facing southeast. April 30, 2019.**

**Figure C-9. Overview of employee housing and shop area from west side of river. Facing southeast. April 30, 2019.**

**Figure C-10. Building 1. Facing east-southeast. April 29, 2019.**

**Figure C-11. Building 1. Facing south. April 29, 2019.**

**Figure C-12. Building 1. Facing west. April 29, 2019.**

**Figure C-13. Building 1. Facing north-northeast. April 29, 2019.**

**Figure C-14. Building 2. Facing east. April 30, 2019.**

**Figure C-15. Building 2. Facing southeast. April 30, 2019.**

**Figure C-16. Building 3. Facing southwest. April 30, 2019.**

**Figure C-17. Building 3. Facing west. April 30, 2019.**

**Figure C-18. Building 3. Facing southeast. April 30, 2019.**

**Figure C-19. Building 3. Facing south. April 30, 2019.**

**Figure C-20. Building 4. Facing southwest. April 30, 2019.**

**Figure C-21. Building 4. Facing south. April 30, 2019.**

**Figure C-22. Building 4. Facing southeast. April 30, 2019.**

**Figure C-23. Building 5. Facing northeast. April 30, 2019.**

**Figure C-24. Building 5. Facing north. April 30, 2019.**

**Figure C-25. Building 5. Facing west. April 30, 2019.**

**Figure C-26. Building 5. Facing southwest. April 30, 2019.**


**Figure C-27. Building 6. Facing west. April 29, 2019.**

**Figure C-28. Building 6. Facing north. April 29, 2019.**

**Figure C-29. Building 6. Facing east. April 29, 2019.**

**Figure C-30. Building 7. Facing southwest. April 30, 2019.**

**Figure C-31. Building 7. Facing south-southeast. April 30, 2019.**

**Figure C-32. Building 7. Facing south. April 30, 2019.**

**Figure C-33. Building 7. Facing north. April 30, 2019.**

**Figure C-34. Building 8. Facing west. April 30, 2019.**

**Figure C-35. Building 8. Facing south. April 30, 2019.**

**Figure C-36. Building 8. Facing east. April 30, 2019.**

**Figure C-37. Building 8. Facing northeast. April 30, 2019.**

**Figure C-38. Building 9. Facing north. April 29, 2019.**


**Figure C-39. Building 9 (with Building 1 in background). Facing southwest. April 29, 2019.**


**Figure C-40. Building 9. Facing southeast. April 29, 2019.**

**Figure C-41. Building 10. Facing west. April 30, 2019.**

**Figure C-42. Building 10. Facing north. April 30, 2019.**


**Figure C-43. Building 10. Facing southeast. April 30, 2019.**

**Figure C-44. Building 10. Facing east. April 30, 2019.**

**Figure C-45. Structure 1, spillway. Facing southwest. April 30, 2019.**

**Figure C-46. Structure 1, stepped concrete on downstream side of dam. Facing southeast. April 30, 2019.**

**Figure C-47. Structure 1. Facing north. April 30, 2019.**

**Figure C-48. Structure 1. Facing northwest. April 30, 2019.**

**Figure C-49. Structure 1. Facing east. April 30, 2019.**

**Figure C-50. Structure 2. Facing southeast. April 30, 2019.**


**Figure C-51. Structure 2. Facing northwest. April 30, 2019.**

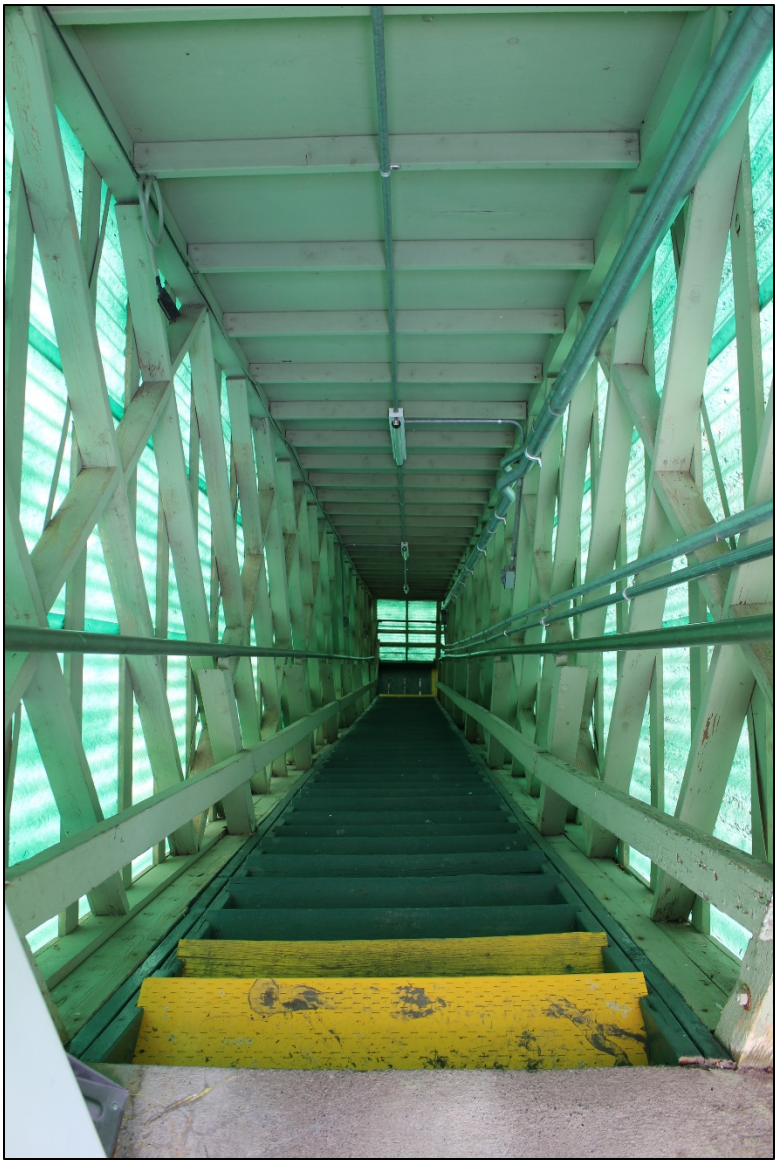

**Figure C-52. Structure 2, interior from top. Facing northwest. April 30, 2019.**

**Figure C-53. Structure 3. Facing north. April 30, 2019.**