NPS Form 10-900
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Utah Word Processor Format (02731)
(Approved 10/87)

OMB No. 1024-0018

MAR 08 1989

NATIONAL REGISTER

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
REGISTRATION FORM

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in Guidelines for Completing National Register Forms (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries. Use letter quality printer in 12 pitch, using an 85 space line and a 10 space left margin. Use only 25% or greater cotton content bond paper.

1. Name of Property Upper Beaver Hydroelectric Power Plant Historic District

historic name

other names/site number Upper Beaver Station, Telluride Power Company

2. Location

street & number State Highway 153 n/a not for publication

city, town Beaver x vicinity

state Utah code UT county Beaver code 001 zip code 84713

3. Classification

| Ownership of Property | Category of Property | No. of Resources within Property | |
|---|---|---|---|
| | | contributing | noncontributing |
| x private | ___ building(s) | 8 | 3 buildings |
| ___ public-local | x district | ___ | ___ sites |
| ___ public-State | ___ site | 2 | 1 structures |
| ___ public-Federal | ___ structure | ___ | ___ objects |
| | ___ object | 10 | 4 Total |

Name of related multiple property listing:

Electric Power Plants of Utah

No. of contributing resources previously listed in the National Register 0

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this _x_ nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property _x_ meets ___ does not meet the National Register criteria. ___ See continuation sheet.

Max J Evans — 1.31.89

Signature of certifying official — Date

UTAH STATE HISTORICAL SOCIETY

State or Federal agency and bureau

In my opinion, the property ___ meets ___ does not meet the National Register criteria. ___ See continuation sheet.

Signature of commenting or other official — Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:

✓ entered in the National Register. ___ See continuation sheet — Bruce J. Noble, Jr. — 4/20/89

___ determined eligible for the National Register. ___ See continuation sheet

___ determined not eligible for the National Register.

___ removed from the National Register.

___ other, (explain:) _____

for Signature of the Keeper — Date

6. Functions or Use

| Historic Functions (enter categories from instructions) | Current Functions (enter categories from instructions) |
|---|---|
| Industry/Processing/Extraction: energy facility | Industry/Processing/Extraction: energy facility |

7. Description

| Architectural Classification (enter categories from instructions) | Materials (enter categories from instructions) |
|---|---|
| Bungalow/Craftsman (powerhouse and residence) | foundation concrete<br>walls stone, wood<br>roof asphalt<br>other n/a |

Describe present and historic physical appearance.

(see continuation sheet)

x See continuation sheet

Constructed between 1907 and 1910, the Upper Beaver Hydroelectric Power Plant is situated in the Beaver River Canyon on the west slope of the Tushar Mountains. The plant consists of a powerhouse, rock and concrete dam, steel conduit, steel penstock, surge tank and operators' camp within which are four residences and eight ancillary structures. Of these sixteen buildings and structures, fourteen are included within the historic district. Of these fourteen, ten are contributing and four are noncontributing. Since its construction, the plant has sustained only minor alterations, such as the replacement of conduit, which do not compromise the plant's overall integrity of location, setting, design, materials, workmanship, feeling and association. The Beaver River Power Plant continues to represent an outstanding example of an early twentieth-century hydroelectric power station.

General Setting

Located in Beaver County, south central Utah, the Upper Beaver Hydroelectric Power Plant consists of dams, a system of conduit, a surge tank and penstock and the powerhouse site with its adjacent operators' camp. Utilizing water from the west slope of the Tushar Mountains, the plant lies approximately 12 miles east of Beaver on state highway 153 along the Beaver River, totally within the Fishlake National Forest. About 2.5 miles further east in the Beaver River Canyon is the system's main dam, Merchant Valley. Steel conduit connects this reservoir with the surge tank just southeast of the powerhouse. Three smaller pipelines from diversion dams to the southeast join with the main conduit or penstock. The penstock leaves the surge tank, crosses the state highway and enters the powerhouse on its southeast side.

The powerhouse and operators' camp lie between the Beaver River to the northwest and the state highway to the southeast. A driveway provides access from the highway, crosses the river and loops through the camp. This driveway forms the eastern edge of a central area of lawn, toward which the powerhouse and three residences face. At the north end of the camp, behind the residential area, are the garages and shops. Sitting some distance away from the other buildings are the barn and storage shed. Originally part of the camp, these structures are now divided from the compound by the highway.

1. Powerhouse

Between 1907 and 1908, workers constructed the Beaver River Power Company's powerhouse. Designed with elements of the Craftsman architectural style, the powerhouse is a rectangular-shaped structure of pink tuffa, rock-faced, random-coursed ashlar stone with an asphalt-shingled gable roof. A course of darker rock lies just above the concrete foundation. Stone for the powerhouse was quarried at a site about one-half downstream from the plant. Under the overhanging eaves are decorative brackets resting on a projecting stone and exposed purlin ends over the end walls. The screened windows are 6/2 double hung and have stone lintels and sills. The entrance on the east side has a 10-light transom over double 4-light doors, protected by screen gates. Above the door is a porch with a wood-shingled gable roof and square porch posts resting on a concrete pad. The porch was added to the powerhouse in 1949. In the west facade is a entrance with a 4-light transom over a screened 4-light wood door which opens into the fenced substation. Three openings on the north side have been filled with uncoursed ashlar. Above them, are six small openings. Waste water leaves the powerhouse on this side, passes into an underground corrugated metal culvert and through a rubble embankment into the Beaver River. In 1946, workers erected a small addition for a bathroom to the south side of the powerhouse. Constructed of the same stone, the extension has a concrete foundation, sloped roof with parapet wall and a screened 2-light awning window with a wooden lintel. Despite these alterations, this structure retains good historic integrity.

The Beaver powerhouse interior is roughly divided into two spaces. One half of the powerhouse is now empty, but until recently it contained transformers and a wood switchrack. This half of the powerhouse has a sunken floor which provided additional space for the transformers and switchrack. The other half of the powerhouse contains two turbine-generator units. These consist of Pelton wheels (built by the Abner Doble Company) each attached to a Westinghouse 2,200 volt alternating current generator. Two small Westinghouse 135 volt direct current exciters supply field for the generators. Hydraulic gate valves control the flow of water to the turbines, which feature hydraulic oil governors. The turbine-generator units rest on thick concrete pads. The capacity

of the Beaver station is about 2 megawatts. Other powerhouse equipment includes a modern switchboard and an overhead traveling crane (built by McFarlane Mfg. Co. of Denver, Colorado) with a capacity of 10 tons. The powerhouse roof is supported by steel Fink trusses.

The Beaver powerhouse has undergone little alteration since its construction. Most notably, the original switchrack and transformers have been removed from the building. The turbine-generator sets also may have been either replaced or substantially rebuilt. In addition, a small (but architecturally compatible) bathroom addition was built onto one end of the plant. Despite these compromises to the building's overall integrity, it still retains integrity of design, setting, location, materials, workmanship, feeling, and association. The powerhouse is a contributing element in the historic district.

2. Switchyard

The switchyard is located behind the powerhouse. It is of recent construction and consists of transformers and a steel switchrack. Because of its recent construction date it does not contribute to the historic district.

Operators' Camp

3. Superintendent's Residence and Office

Directly across the central lawn from the powerhouse is the superintendent's residence and office (no. 3). Exhibiting the Craftsman style, the two-story, wood-frame house with drop siding on the lower story and stained wood shingles on the upper story was constructed in 1907-08. Rectangular in shape, the house has a concrete foundation and an asphalt-shingled gable roof with intersecting gable dormer roofs. Exposed rafter and purlin ends extend from under overhanging eaves. On the north side is a pink stone exterior chimney. Windows are 2/2 double hung, 6-light fixed and pairs of 1/1 double hung. A rear porch has been added which has a shed roof, wood deck, a 2-light slider window and a series of 3 fixed 1-lights. On the west side is a front porch with a half-hip roof, concrete steps and square porch posts in sets of

three with decorative braces. The original wooden floor of the porch was replaced with concrete between 1946 and 1949. Two entrances with 1-light doors face the porch. The northernmost door enters the residential portion of the building while the southern door opens to the superintendent's office. In the north facade, facing the river, are sliding glass doors which open onto a wood deck. Two windows have been replaced with a fixed 1-light. Near the river is a picnic area behind the house. Although this residence has sustained some alterations, it still retains its historic integrity of location, design, setting, materials, workmanship, feeling and association and is a contributing building to the Upper Beaver Power Plant Historic District.

4-5. Boarding House

Originally built as a boarding house and school for the Telluride Institute, the residence (no. 4) just northeast of the powerhouse is currently used by a single family. Constructed in 1907-08, this two-story, wood-frame dwelling exhibiting the Craftsman architectural style has drop siding on the lower story and stained wooden shingles on the upper story. Resting on a concrete foundation, the house is cross-shaped with intersecting gable, asphalt-shingled roofs. Under the overhanging eaves are exposed rafter and purlin ends and corner boards demarcate the edges of the building. Windows are 2/2 double hung and fixed 6-lights with newer fixed 1-lights and a series of 3 1-lights on the first floor. Along the west and north side is a porch with a shed roof, square porch posts and braces resting on a concrete pad. The concrete porch slab replaced the original wooden floor between 1946 and 1949. One-light screened entrances face the east and west. This residence has several alterations. On the east side, a portion of the veranda has been enclosed and a shed-roofed extension added. Despite these changes, the building retains the majority of its historic integrity of location, design, setting, materials, workmanship, feeling and association and is a contributing building to the Upper Beaver Power Plant Historic District.

A gable roofed, wood frame structure connects the boarding house with a small, rectangular, wood-frame building. In the drop-sided connection are a 1-light door and a new 2-light aluminum window.

Currently gutted and unused, the cottage (no. 5) is a distinct dwelling from the boardinghouse although now connected. It has lap siding, a concrete foundation, a wood-shingled gable roof, and 2-light hopper windows. Facing north is a porch with a shed roof and screened openings. This building was probably connected to the boarding house in 1932. Added during the district's period of significance and retaining its integrity of location, design, setting, materials, workmanship, feeling and association makes this building a contributing element of the Upper Beaver Hydroelectric Power Plant Historic district.

6. Quarters and Shop

South, across the driveway from the superintendent's residence, is the quarters and shop building (no. 6). T-shaped, this structure has two distinct parts constructed in different years and for different purposes. Utah Power and Light Company accounting records state that this building was contructed in 1908-10 and 1923. Because the Craftsman architectural style of the front, residential portion matches the other structures erected in 1908, it can be assumed that the residence was built in 1908-10 to house plant operators. On the west end is a rectangular, two-story wood-frame residence with drop siding on the lower story and stained shingles on the upper. Resting on a concrete foundation, the residence has an asphalt-shingled gable roof with intersecting gabled dormers that contain 2/2 double hung windows and a 1-light door covered with a screen door. Other windows are pairs of 2/2 double hung, new fixed 1-and 2-lights. Also on the west facade is a porch which has a half-hip roof, square porch posts and decorative braces resting on a concrete pad. The concrete porch foundation replaced the original wood between 1946 and 1947. A 1-light door and screen door faces onto the porch. An exterior brick chimney appears on the east facade.

Intersecting the residential part of this building, is a rectangular, two-story structure with a concrete foundation, an asphalt-shingled roof and vertical wood planking siding. Used as a shop, this section was probably constructed in 1923. Windows are 6/2 double hung, 2-light and 6-light hoppers. The east entrance has a porch with a shed roof, wooden steps and a door and screen door. At the northeast intersection of the T-shape,

resting on a concrete block foundation, is a porch with a metal shed roof and screened openings.

As the addition of the shop to the residence occurred within the district's period of significance, it does not compromise the structure's integrity. Although some alterations have occurred--such as the small porch addition, some window replacements and changes to the front porch--this building retains its historic integrity of location, design, setting, materials, workmanship, feeling and association because it still appears as an architectually similar component of the operators' camp. It is a contributing building in the Upper Beaver Hydroelectric Power Plant Historic District.

Ancillary Structures

7. Blacksmith's Shop

Constructed in 1908 as a blacksmith shop, this rectangular, one-story building (no. 7) with a concrete foundation, board-and-batten siding and a wood-shingled gable roof is still used as a shop. Its windows have six lights and a wooden door faces south. Virtually unaltered since its construction, this structure retains its historic integrity of location, design, setting, materials, workmanship, feeling and association and is a contributing building in the Upper Beaver Hydroelectric Power Plant Historic District.

8. Garages

North of the quarters and shop, is a garage with a row of bays (no. 8). This wood-frame building has a concrete foundation, board-and-batten siding and a wood-shingled gable roof with small exposed rafter ends. Across the west facade are a series of sliding wood garage doors. In the rear is a low extension with a shed roof. On the north end, is a small extension constructed of staves for a wooden pipeline which apparently served as a coal shed. The structure retains its historic integrity of location, design, setting, materials, workmanship, feeling and association. This building contributes to the Upper Beaver Hydroelectric Power Plant Historic District.

9-10. Storage Sheds

Between 1942 and 1944, after the Lower Beaver Plant's wood stave pipeline was replaced with steel, workers constructed two storage sheds at the Upper Beaver station with the wood staves. Located to the north and west of the blacksmith's shop near the river, these two long sheds have wood stave siding, corrugated metal shed roofs and bays for storage. The northwestern shed (no. 9) has two bays with doors and 5 open bays, while the northeastern shed (no. 10) contains a row of all open bays. Although these structures retain their integrity of location, design, setting, materials, workmanship, feeling and association, they are noncontributing elements in the Upper Beaver historic district because they were constructed outside the district's period of significance.

11-12. Barn and Storage Shed

Separated from the operators' camp by the highway are the barn (no. 11) and another storage shed (no. 12). The original barn was erected in 1908 to house both cows and horses. However, in 1939, the barn was rebuilt with wood staves from the Lower Beaver pipeline. Of post-and-beam construction, the barn has a gable-roofed, rectangular central mass with shed-roofed wings on either side. Four doors open on the southwest side. Because this structure was constructed within the district's period of significance and is unaltered, it retains its historic integrity of location, design, setting, materials, workmanship, feeling and association. It is a contributing building in the Upper Beaver Hydroelectric Power Plant Historic District.

To the south of the barn is a wood-frame shed with horizontal board-and-batten siding and a wood-stave gable roof. Built for storage in 1940 and thus outside the district's period of significance, this shed is a noncontributing element although it retains its integrity of location, design, setting, materials, workmanship, feeling and association.

13. Merchant Valley Dam

Merchant Valley Dam (no. 13) originally was a rock-filled, timber-crib structure built on top of a base of boulders, gravel, and

clay. Over the years the dam has been rebuilt so that it no longer even remotely resembles the original. The dam was raised in height in 1929. Subsequent alterations have given the dam the appearance of a new structure. The dam now features a concrete base which might be old. On top of this, however, has been piled an overwhelming amount of loose rubble that is crudely held together by concrete mortar. This mortar, sloppily placed between and over the rocks, appears fairly fresh. Other major features of Merchant Valley Dam include a recently constructed concrete spillway with a wood extension, located at the center of the dam. The top and upstream side of the dam also appears to be of recent construction, with relatively new concrete. A few feet downstream from the dam, on the north side of the Beaver River, is a small valve house covered with corrugated metal. This structure, which appears to be of relatively recent construction, is associated with the conduit carrying water from the dam to the powerhouse. All told, Merchant Valley dam, especially with its new concrete cap and spillway, looks like a modern structure. It no longer retains integrity of design, setting, materials, workmanship, feeling, location, and association. Therefore, it has been excluded from the historic district.

14. Conduit

The Beaver River conduit is not comprised of one pipeline or flume. Rather, it consists of a system of steel pipelines (not counting the penstock) thousands of feet in total length. The system includes the Main Flow Line (Conduit No. 1), which runs from Merchant Valley Dam to the surge tank; two shorter, smaller lines (East Fork and Dry Hollow, Conduit Nos. 2 and 3, respectively) which feed into the Main Flow Line; and the South Fork line (Conduit No. 4), which oddly enough feeds directly into the penstock. In addition, a short length of pipe, the Spring Line (Conduit No. 5), feeds into the South Fork pipeline. Each of these small, ancillary pipelines (nos. 2-5) have small intake structures at the places where they originate. This entire system is remarkable because it shows that a tremendous effort was made to collect water, not only from the Beaver River, but from a number of smaller stream drainages which fed into it. The expense of installing and maintaining the pipelines, most of which were probably put in after 1910, must have been relatively great.

Although the Beaver conduit system may have some engineering significance, its overall integrity has been lost. Between about 1938 and 1958, the small intake structures and the pipelines themselves have been gradually repaired and replaced in a piecemeal fashion, to the point that they no longer retain the associations of their historic configuration. Today, the conduit system more accurately represents developments of the 1940s and 1950s. The Beaver conduit system thus lacks overall integrity of its original design, materials, workmanship, and thus feeling and association. For these reasons it has been excluded from the historic district.

15. Surge Tank

The surge tank (no. 15) is located about 4,500 feet southeast of the Beaver Powerhouse, along the south edge of Beaver Canyon. The surge tank is located at an elevation of 8,320 feet, about 1,000 feet higher than the powerhouse. The surge tank is large riveted steel structure approximately 80 feet tall. The surge tank was installed in ca. 1910 after problems with waterhammer developed in the penstock and main conduit. The surge tank is virtually unaltered since its original construction. It retains integrity of design, setting, feeling, location, materials, workmanship, and association. It contributes to the historic district.

16. Penstock

The penstock (no. 16), fabricated by the Pelton Water Wheel Company, is a riveted steel pipe approximately 4,500 feet in length. The penstock runs between the surge tank and the powerhouse. It descends over 1,000 ft. in elevation, and provides a head at the turbines of 1,069 feet. Over its length, the penstock decreases in diameter from 28 inches to 20 inches. In addition, over its length the steel that the penstock is made of gradually increases in thickness. This allows the penstock at the bottom to withstand the great pressure of the water flowing through it. Just before it reaches the powerhouse, the penstock is carried over State Highway 153 by a narrow truss bridge somewhat wider than the pipe itself. This bridge may have been a later addition to the penstock, perhaps when State Highway 153 was improved.

The penstock maintains integrity of design, setting, materials, workmanship, feeling, location, and association. It is a contributing feature in the historic district.

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties: ___nationally x statewide ___locally

Applicable National Register Criteria x A x B x C ___D

Criteria Considerations (Exceptions) ___A ___B ___C ___D ___E ___F ___G

| Areas of Significance (enter categories from instructions) | Period of Significance | Significant Dates |
|---|---|---|
| Industry | 1905 - 1939 | 1907-1910, 1926, |
| Engineering | | 1932, 1939 |

Cultural Affiliation
n/a

Significant Person
Nunn, Lucien Lucius (L.L.)

Architect/Builder
Lepper, W.H./unknown

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

(se continuation sheet)

x See continuation sheet

The Upper Beaver Power Plant is eligible for the National Register of Historic Places under Criteria A, B, and C. Constructed between 1907 and 1910, the station clearly retains the characteristics of an early twentieth-century hydroelectric development. Improvements to the operators' camp throughout its existence reveal the importance of continued efficient functioning of the plant to the power company. Under Criterion C, The Beaver River Power Plant is significant within a local context because it embodies the distinctive characteristics of an early twentieth-century, high-head hydroelectric power plant. Situated in the Beaver River canyon of the Tushar Range, Beaver River Power Plant's engineering features were ideally suited to its mountainous setting. Power companies built numerous high-head plants in Utah during the late nineteeth and early twentieth centuries. They were the most efficient type of hydroelectric technology for generating power on Utah's relatively small mountain streams. The Beaver River Power Plant is also significant under Criterion B for its association with L.L. Nunn, builder of Upper Beaver and a prominent hydroelectric entrepreneur who developed a vast system of hydroelectric plants throughout Utah and the Intermountain West. Nunn is most often recognized for his Ames plant near Telluride, Colorado, and for his plants in Provo Canyon, Utah. Yet Nunn developed numerous other smaller, less well-known plants. The Beaver plant represents the lesser-known side of Nunn's work.

Although settlers began populating Beaver County in the 1850s, significant silver deposits were not discovered until the 1870s in the San Francisco Mountains, west of Milford. Development

proceeded slowly until 1880 when the Utah Southern Extension Railroad arrived in Milford and a branch line was laid twenty-four miles west to the mining town of Newhouse. In 1900, the Los Angeles and Salt Lake Railroad, which had acquired the Utah Southern Extension, completed its line through the county. With its location at the junction of the main line and the branch to Newhouse, Milford prospered and in 1903 incorporated as a town.

Attracted by the industrial activity, in the early 1900s developer L.L. Nunn began examining the Beaver River country for possible hydroelectric power sites. At that time, the Newhouse Mines and Smelters Company, west of Milford, used steam power for electrical generation. Due to the lack of a nearby source of clean water and the expense of coal or wood, this method proved inadequate and unreliable. Recognizing a large, potential customer requiring a steady and cheap source of power which hydro-generation could provide, Nunn sent survey crews into the west slope of the Tushar Mountains searching for sufficient water resources for a hydroelectric development. Deciding upon the Beaver River as the best site, in 1903 Nunn organized the Beaver River Power Company with himself as president. Between 1903 and 1905, Nunn's workers measured fluctuations in water flow while Nunn made construction plans.

In 1905, work on the system commenced under the supervision of A.B. Blainey. A rock dam diverted water from Beaver River into a spiral-riveted steel pipeline which carried water two and a quarter miles to the penstock. Three feeder lines that brought water from small diversion dams on the East Fork, Dry Hollow and South Fork tributaries were laid soon after the main conduit and joined the pipeline and penstock to augment total water flow.

Between 1907 and 1910, workers constructed the pink stone powerhouse and operators' camp, consisting of three residences, a blacksmith's shop, a shop near the powerhouse (demolished), a horse and cow barn and an icehouse. The architect for the powerhouse and residences--and apparently the entire camp compound--was W. H. Lepper of Salt Lake City. Lepper first appeared in the Salt Lake City directories in 1907. That year, a Salt Lake Tribune advertisement for the Federal Heights suburb

noted Lepper as the "landscape artist" for the project. In the next few years, Lepper served as the architect for several Federal Heights homes which exhibited Craftsman-style features. At the same time, Lepper was designing the station at Upper Beaver, with Craftman residences and typically suburban landscape details, such as a central park area and a curving driveway. Between 1908 and 1911, Lepper designed several industrial structures in Salt Lake City--the Morrison, Merrill and Company warehouse, the Salt Lake Hardware Company building and warehouse--and a chapel in Logan, Utah. By 1912, Lepper was working with a man named Rutherford but by 1921 had joined the prestigious Salt Lake architectural firm of Ware and Traganza. The Polk City Directory noted that in 1923 Lepper had moved to Chicago.

By April, 1908 the Merchant Valley dam and pipeline, the powerhouse, a small shop near the powerhouse and at least one residence had been constructed, as well as several temporary structures. Completion of the rest of the camp soon followed. When the generators began producing electricity that month, a 40,000 volt transmission line carried the power fifty-three miles west to the Cactus Mill owned by Newhouse Mines and Smelters Company at Newhouse. From the transformers at the Newhouse substation, power soon went to the Indian Queen Consolidated Mining Company. The power company then installed a substation at Milford to provide electricity for the town and adjacent mining districts.

In about 1910, engineers for the Beaver River Power Company decided to install a surge tank. Apparently problems with water hammer in the penstock and main conduit prompted erection of the tank, which is approximately 1,000 feet in elevation above the powerhouse.

The Upper Beaver station served not only for power generation but also as an auxiliary campus for the Telluride Institute. Established by L.L. Nunn at his Olmsted Station in Provo Canyon, the school sought to provide young men with practical and classroom training in electrical engineering. Students from Olmsted also lived in the residences at Upper Beaver and gained on-the-job experience. On a flat area, at the top of the hill northeast of the station, the young engineers built a baseball diamond, currently used as a U.S. Forest Service picnic grounds.

As industries in Beaver County increased, Upper Beaver began supplying more customers within the county. Between 1908 and 1917, new transmission lines went to more mines and the communities of Minersville and Marysville. During the economic boom of World War I, Nunn and associates constructed another power station three miles downstream from Upper Beaver--the Lower Beaver Plant--which went on line in 1918. This station helped supply generation for the silver mines in the Milford area. Also in 1917-1918, Nunn organized the Telluride Power Company (the third by this name) by consolidating the Beaver River Power Company and the Southern Utah Power Company. Managed by several of Beaver River's directors, Southern Utah Power had operated in Piute, Sevier and Sanpete counties. The consolidation thus greatly increased service area and power from the Beaver River began to flow to customers beyond just Beaver County.

By 1958, Telluride served agricultural, industrial and mining customers in about 7,000 square miles and more than sixty-four communities in southern and central Utah. When Nunn died in 1921, the controlling interest of Telluride passed to the two educational foundations he had created--the Telluride Association and Deep Springs. In 1958, trustess for the foundations agreed to sell Telluride Power to Utah Power and Light, its present owner.

Under the Telluride Power Company's management, numerous improvements were made to the Upper Beaver station. Required to live in a relatively remote setting, company employees had to be as self-sufficient as possible. Near the barn, sheds and corrals kept farm animals such as cows, horses, pigs and chickens. (Besides the barn, all of these structures have been demolished.) To adequately house and equip its operators, the company added several buildings. In 1918, an additional cottage was erected but it burned in 1930 and was subsequently "retired" (put out of use) in 1932. The row of garages was added in 1926, providing covered storage for automobiles. Greater changes occurred to the site in the 1930s and 1940s. Possible in 1932, a cottage was added to the boarding house. After workers upgraded the wood-stave pipeline to Lower Beaver with steel pipe, the men used wood staves to construct a new barn in 1939 and two sheds behind the superintendent's house between 1942 and 1944. Concrete porch

foundations replaced the deteriorated wood porch foundations of all the residences in 1947. Between 1938 and 1959, virtually all of the original pipelines were replaced with new welded steel conduit.

New construction at Beaver during the 1920s and 1930s did not significanctly alter the overall character of the plant. But such changes were important, for they represented the efforts of the Telluride Power Company to upgrade its existing facilities so as to maintain an effecient, reliable network of plants. Thus the period of significance for the Beaver plant has been extended beyond the 1927 ending date for the period of significance outlined in the multiple property nomination form.

9. Major Bibliographical References

Previous documentation on file (NPS):

____preliminary determination of individual listing (36 CFR 67) has been requested
____previously listed in the National Register
____previously determined eligible by the National Register
____designated a National Historic Landmark
____recorded by Historic American Buildings Survey # _____
____recorded by Historic American Engineering Record # _____

x See continuation sheet

Primary location of additional data:

x State Historic preservation office
____Other State agency
____Federal agency
____Local government
____University
x Other

Specify repository:
Utah Power and Light Company

10. Geographical Data

Acreage of property 5.5 acres

UTM References

| | Zone | Easting | Northing | | Zone | Easting | Northing |
|---|---|---|---|---|---|---|---|
| A | 1/2 | 3/7/0/4/6/0 | 4/2/3/6/3/7/0 | B | 1/2 | 3/7/0/5/3/0 | 4/2/3/6/4/1/0 |
| C | 1/2 | 3/7/0/5/3/0 | 4/2/3/6/5/3/0 | D | 1/2 | 3/7/0/5/9/0 | 4/2/3/6/5/5/0 |

x See continuation sheet

Verbal Boundary Description

x See continuation sheet

Boundary Justification

x See continuation sheet

11. Form Prepared By

name/title Mark Fiege/Janet Ore, Consulting Historians
organization for Utah Power and Light Co. date November 1988
street & number 144 South 900 East #10 telephone (801) 532-5456
city or town Salt Lake City state Utah zip code 84102

Architect's File on W. H. Lepper, State Historic Preservation Office, Salt Lake City, Utah.

"Beaver Plant is Rich in History." The Circuit (January 1977): 8-9.

"The Beaver River Power Company." Engineering Report by the Telluride Institute, May 1908. Microfilm Roll 335, Utah State Historical Society, Salt Lake City, UT.

"Copy of Report to Federal Power Commission By Telluride Power Co. Utah Project #814 To effective date of license Sept. 1, 1929." Report located in Upper Beaver Station historical files.

Daughters of Utah Pioneers. Monuments to Courage: A History of Beaver County. Beaver, UT: Beaver Printing Co, 1974.

Engineering Files of Greg Solberg, plant operator at Upper Beaver Station.

Historic Files of Upper Beaver Station. Collection includes some blueprint drawings, correspondence and reports.

"Telluride Power Co." The Circuit (December 1958): 10-11.

"UP & L Files to Acquire Telluride Power." The Circuit (January 1958): 11.

"UP & L Takes Helm of Telluride Power." The Circuit (May 1958): 6-7.

Utah Power & Light Company, Property Accounting Department. Expenditure Requisition History File, Upper Beaver Station.

"Western Hydroelectric Transmission Developments." Journal of Electricity, Power and Gas 34 (5 June 1915): 471.

UTM References:

| | |
|---|---|
| E - 12/370740/4236560 | F - 12/370740/4236510 |
| G - 12/370580/4236500 | H - 12/370490/4236390 |
| I - 12/371690/4235900 | J - 12/371810/4236010 |

Verbal Boundary Description:

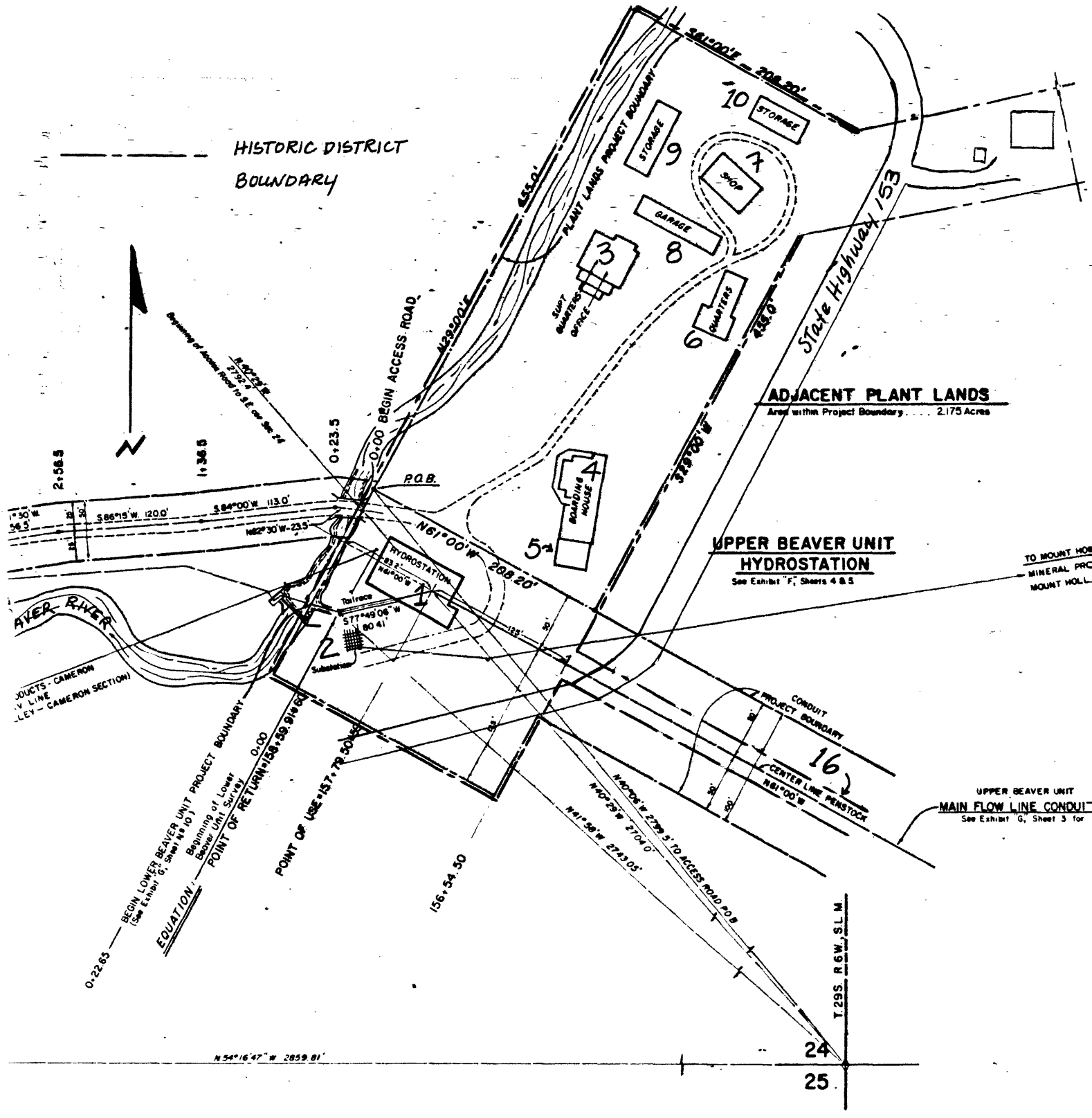
The Beaver Hydroelectric Plant Historic District is located in the center of section 24 T29S R6W on USGS topograqphic map Shelly Baldy Peak, Utah. The boundaries for the historic district generally follow the project boundaries for the FERC license (see map). The Point of Beginning lies N 29 E 20 ft. from centerline of the east side of the access bridge into the Beaver plant. Boundary then proceeds N 29 E for 455 ft., then proceeds S 61 E for 208.2 ft. to the NE corner of the FERC boundary. At this point, the boundary proceeds NE for 550 ft. to a point behind the barn, then turns 90 degrees S for 75 ft., then turns 90 degrees SW and continues to the FERC boundary. The boundary then proceeds along the FERC project boundary S 29 W for 490 ft. to within 10 ft. of the north edge of the penstock. The boundary parallels the penstock 10 ft. from the center line of the penstock S 61 E for 4,500 ft., including the surge tank. The boundary then returns 10 ft. from the south side of the penstock's centerline for 4500 ft. N 61 W to the FERC boundary of the hydroelectric plant on the west side of State Highway 153. It then proceeds S 29 W for 97 ft., then goes N 61 W for 208.2 ft. then N 29 E for 175 ft. to the Point of Beginning.

Boundary Justification:

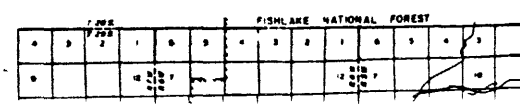
The boundary for the Upper Beaver Hydroelectric Power Plant Historic District was chosen because it encompasses those intact structures which are associated with the operation of the Beaver facility. Because they lack integrity, the conduit system of the plant and the Merchant Valley Dam were excluded from the district. Part of the district is a linear corridor that encompasses the Beaver penstock. This part of the boundary was drawn to so as to include within the district the path of the penstock as it traverses the landscape. The remaining portion of the boundary encompasses the

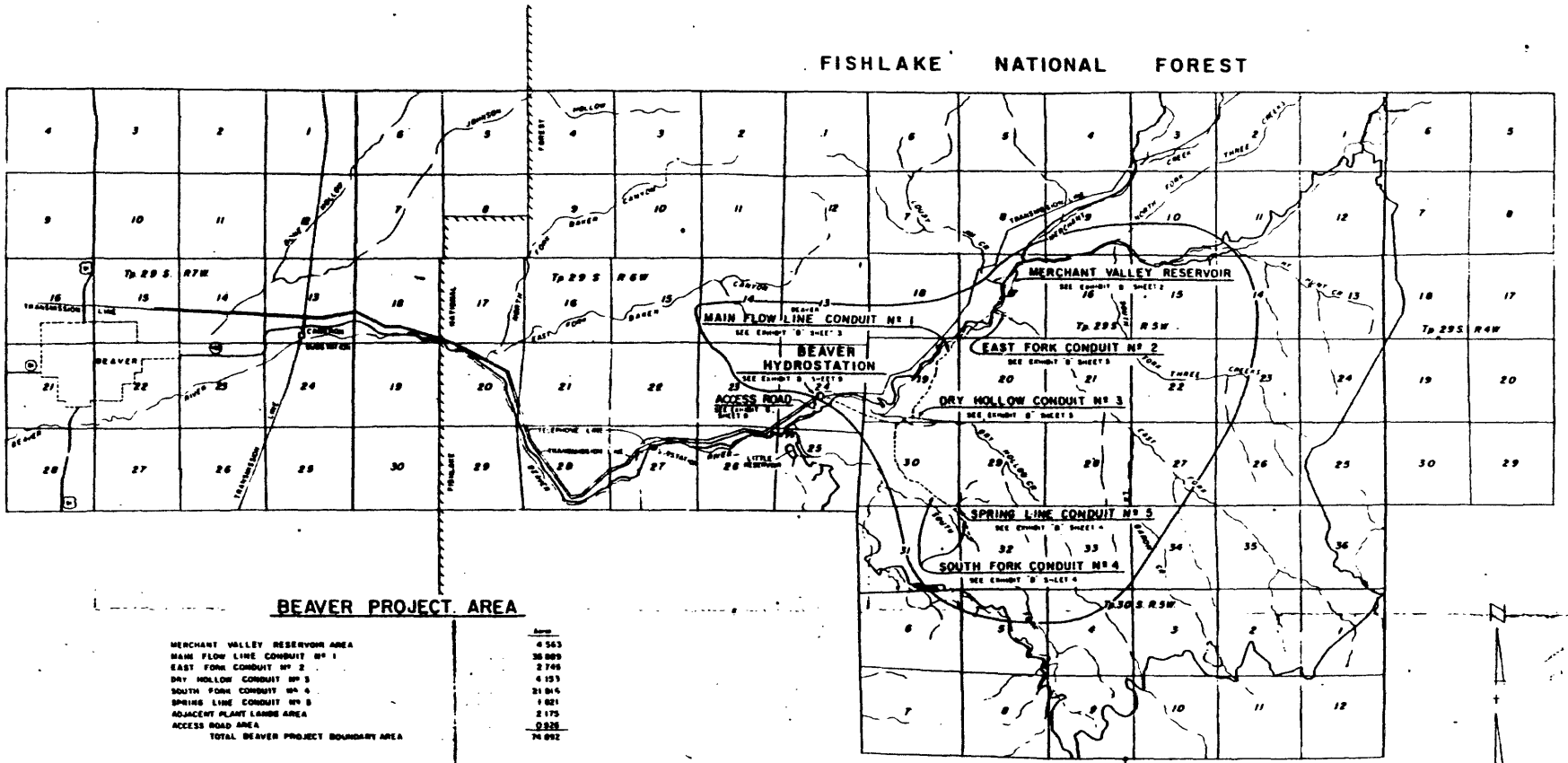
general area upon which the Beaver powerhouse and associated buildings are situated. This plot of ground is distinguishable because it is in the bottom of the canyon, on relatively level ground that has been cleared of trees.

# Beaver Hydro. Plant
# Historic District




This map is a part of the application for an amendment to license the Beaver F.E.R.C. Project Nº 814, made by the undersigned this 26 th day of JULY, 1982






## BEAVER PROJECT AREA

| | Acres |
|---|---|
| MERCHANT VALLEY RESERVOIR AREA | 6 563 |
| MAIN FLOW LINE CONDUIT Nº 1 | 35 889 |
| EAST FORK CONDUIT Nº 2 | 2 746 |
| DRY HOLLOW CONDUIT Nº 3 | 4 193 |
| SOUTH FORK CONDUIT Nº 4 | 21 845 |
| SPRING LINE CONDUIT Nº 5 | 1 821 |
| ADJACENT PLANT LANDS AREA | 2 175 |
| ACCESS ROAD AREA | 0 926 |
| TOTAL BEAVER PROJECT BOUNDARY AREA | 76 092 |

John R. Kunz states he is by occupation Manager, Civil Engineering of Utah Power and Light Company, that the project works of the Beaver F.E.R.C. Project Nº 814 shown on this map were made under the direction and authority, and said project works are accurately represented on this map.

John R. Kunz
Manager, Civil Engineering

This map of the Beaver F.E.R.C. Project Nº 814 is a part of the application for an exemption for a small hydroelectric project, made by the undersigned this _____ day of _____, 1983.

Vice President
UTAH POWER & LIGHT COMPANY

EXHIBIT "B"

# BEAVER PROJECT

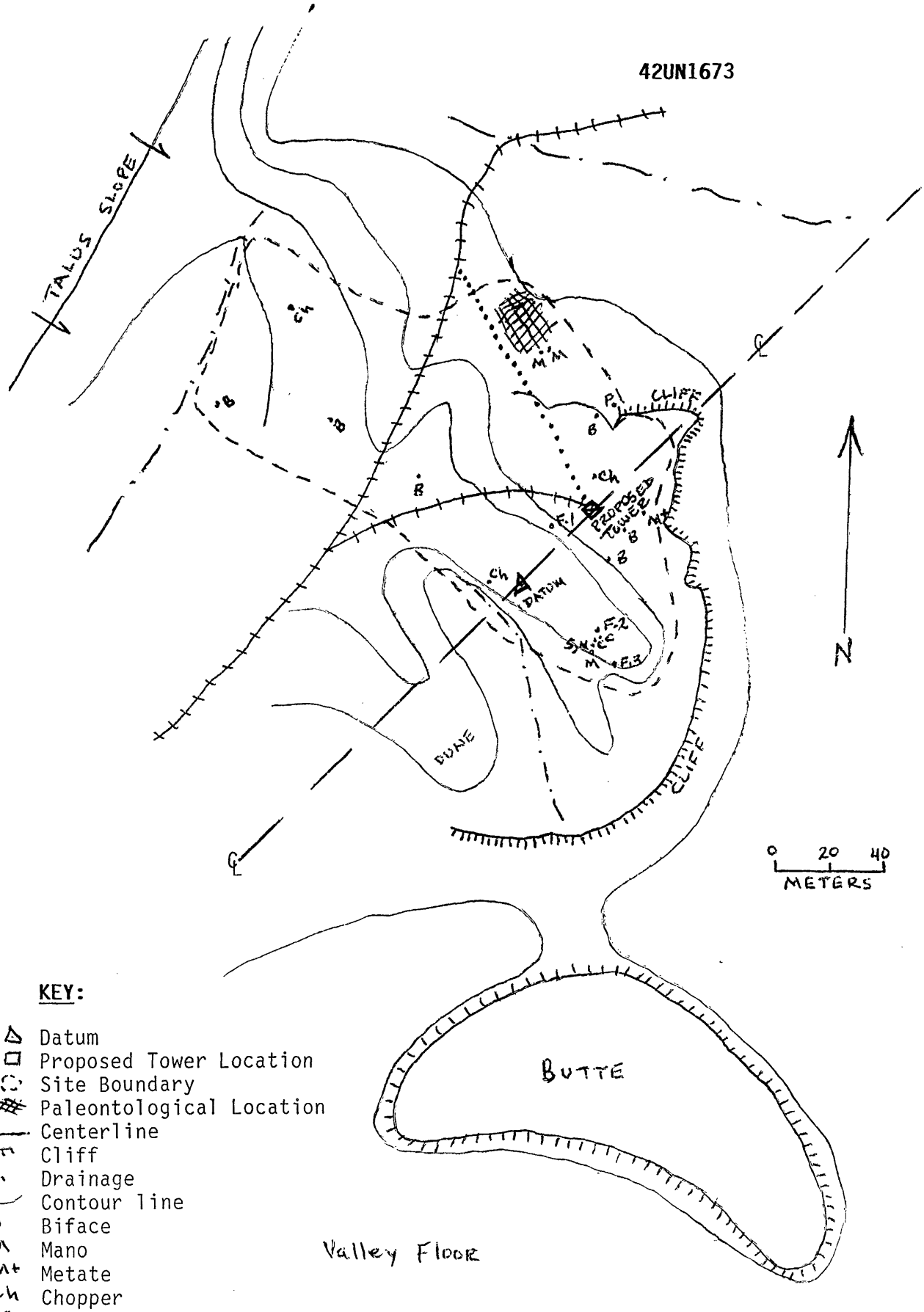
FERC PROJECT 814 - UTAH

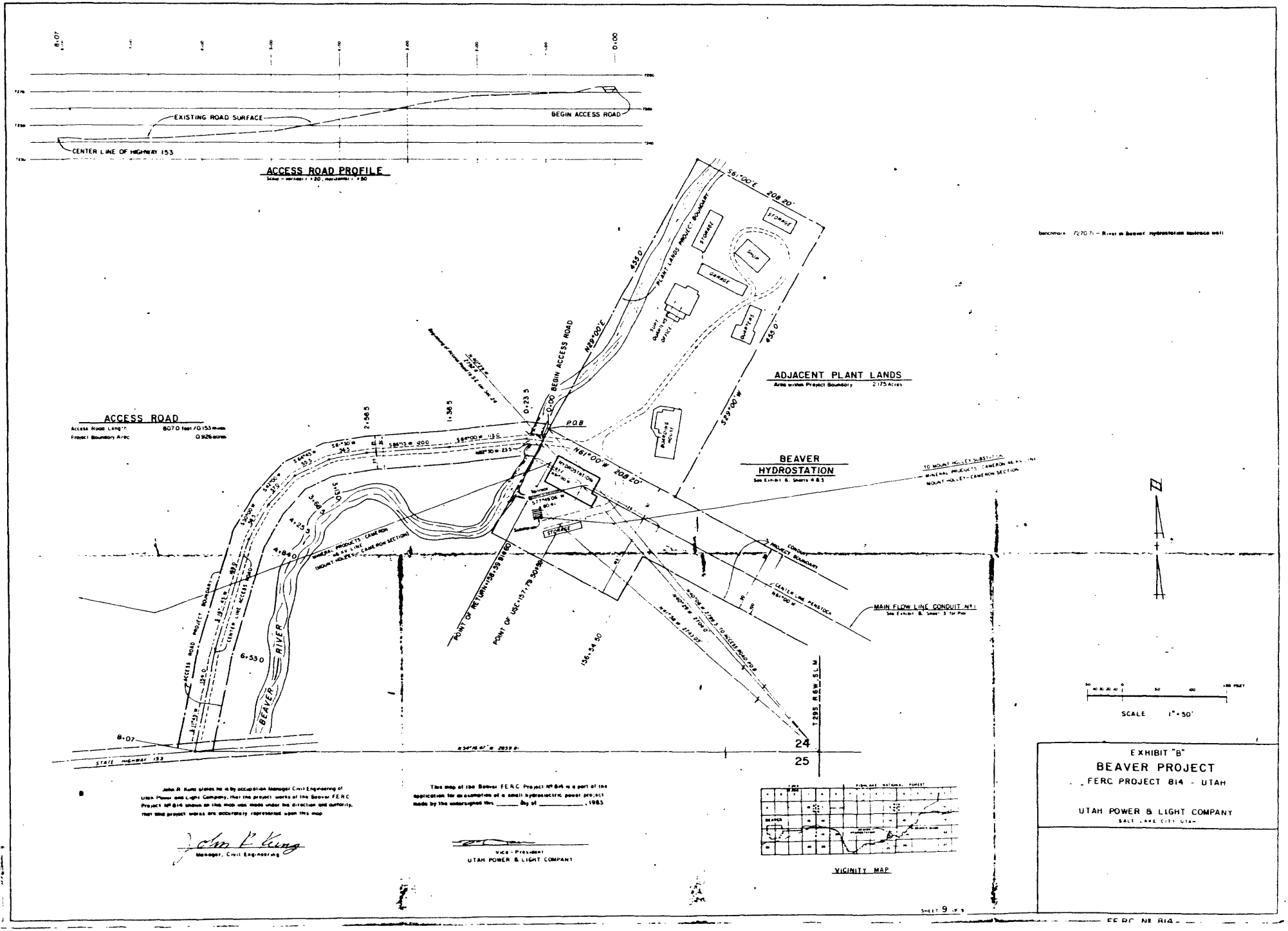
## GENERAL MAP

UTAH POWER & LIGHT COMPANY
SALT LAKE CITY, UTAH

SHEET 1 OF 9

FERC No. 814


42UN1673
TALUS SLOPE
Ch
B
M
P.1
CLIFF
PROPOSED TOWER
F.1
DATUM
F.2
F.3
DUNE
CLIFF
N
0 20 40
METERS
BUTTE
Valley Floor
KEY:
Datum
Proposed Tower Location
Site Boundary
Paleontological Location
Centerline
Cliff
Drainage
Contour line
B Biface
M Mano
Mt Metate
Ch Chopper
C Core
S Scraper
P Projectile Point
F.1 Feature Location
Original Flagged Access Route
Newly Flagged Access Route




John R. Kunz states he is by occupation Manager Civil Engineering of Utah Power and Light Company, that the project works of the Beaver FERC Project No 814 shown on this map was made under his direction and authority, that said project works are accurately represented upon this map.

John R. Kunz
Manager, Civil Engineering

This map of the Beaver FERC Project No 814 is a part of the application for an exemption of a small hydroelectric power project made by the undersigned this _____ day of _____, 1983

Vice - President
UTAH POWER & LIGHT COMPANY

Beaver Photograhp Log:

Beaver Hydroelectric Plant Historic District Photographs
near Beaver, Utah
Mark T. Fiege, photographer
July 1988
original negatives at Utah SHPO

Photo #:

1. Powerhouse (no. 1), view to west.

2. Same, detail of front entrance and masonry.

3. Superintendent's residence (no. 3), view to northeast.

4. Powerhouse site, showing porch of Superintendent's residence (no. 3) on left, Boarding house (no. 4) in center, and powerhouse (no. 1) at right, view to west.

5. Quarters and shop building (no. 6), view to south.

6. Superintendent's residence (no. 3) at left, garages (no. 8) in background, Boarding house (no. 4) in center, cottage (no. 5) at right, view to east.

7. Boarding house (no.4), view to east.

8. Blacksmith shop (no. 7), view to northwest.

9. Shed (no. 9), view to north.

10. Garages (no. 8), view to east.

11. Barn (no. 11), view to northeast.

12. Surge tank (no. 15) and penstock (no. 16), view to east.

13. Penstock (no. 16) crossing roadway, view to southwest.