

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form*. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of Property

Historic name Melton Hill Hydroelectric Project
Other names/site number Melton Hill Dam
Name of related multiple property listing Historic Resources of the Tennessee Valley Authority Hydroelectric Project, 1933-1979

2. Location

Street & Number: 2009 Grubb Road
City or town: Lenoir City State: Tennessee County: Loudon
Not For Publication: ☐ N/A Vicinity: ☐ N/A Zip: 37772

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this ☒ 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 ☒ meets ☐ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

☐ national ☒ statewide ☒ local

Applicable National Register Criteria: ☒ A ☐ B ☒ C ☐ D

Signature of certifying official/Title:

Date

State or Federal agency/bureau or Tribal Government

In my opinion, the property ☐ meets ☐ does not meet the National Register criteria.

Signature of Commenting Official:

Date

Deputy State Historic Preservation Officer,
Tennessee Historical Commission

Title:

State of Federal agency/bureau or Tribal
Government

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4. National Park Service Certification

I hereby certify that this property is:

- ☐ entered in the National Register
☐ determined eligible for the National Register
☐ determined not eligible for the National Register
☐ removed from the National Register
☐ other (explain:) _____

Signature of the Keeper

Date of Action

5. Classification

Ownership of Property

(Check as many boxes as apply.)

Private ☐
Public – Local ☐
Public – State ☐
Public – Federal ☒

Category of Property

(Check only **one** box.)

Building(s) ☐
District ☒
Site ☐
Structure ☐
Object ☐

Number of Resources within Property

(Do not include previously listed resources in the count)

Contributing	Noncontributing	
8	7	buildings
2	0	sites
5	0	structures
0	0	objects
15	7	Total

Number of contributing resources previously listed in the National Register 0

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6. Function or Use

Historic Functions

(Enter categories from instructions)

INDUSTRY/PROCESSING/EXTRACTION/
Energy Facility

RECREATION AND CULTURE/Outdoor
Recreation

TRANSPORTATION/Water-related

Current Functions

(Enter categories from instructions)

INDUSTRY/PROCESSING/EXTRACTION/
Energy Facility

RECREATION AND CULTURE/Outdoor
Recreation

TRANSPORTATION/Water-related

7. Description

Architectural Classification

No Style

OTHER: Hydroelectric Dam

Materials: Principal exterior materials of the property:

CONCRETE; STEEL; GLASS; ROCK; EARTH;
PORCELAIN

Narrative Description

The Melton Hill Hydroelectric Project takes its name from a geographical feature, a local knob of the same name, which U.S. Coast and Geological Survey established as a triangulation station in 1884. The project is located on the Clinch River, 23.1 miles upstream of the confluence of the Clinch River with the Tennessee River. Its location is nine miles south of Oak Ridge in Anderson County and nineteen miles west of Knoxville. In Loudon County, the nearest city is Lenoir City (2014 est. pop. 9,034). The Melton Hill Hydroelectric Project impounds the Melton Hill Reservoir (also called Melton Hill Lake), which extends forty-four miles upstream and has a maximum width of eight-tenths of a mile. The Melton Hill Reservoir has 5,470 surface acres and 193 miles of shoreline in Loudon, Anderson, Knox, and Roane Counties. Melton Hill is a run-of-river reservoir, in that water passes through without being stored long term. Thus, the water level of the reservoir changes less than two feet daily. The Melton Hill Dam is the only tributary dam with a navigational lock, which measures seventy-five feet wide by 400 feet long.¹ Construction of the project began in 1960 and was completed in 1964.

¹ "Melton Hill Reservoir," at TVA webpage <http://www.tva.gov/sites/meltonhill.htm>, accessed July 27, 2015.

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INVENTORY

The Melton Hill Hydroelectric Project (*see Photos 1, 2*) originally consisted of the concrete dam across the river, powerhouse, and navigational lock on the right bank. Construction also included a lock operation building adjacent to the lock and a visitor building on the hillside south of the dam and powerhouse. Since their construction these buildings and structures have not been significantly altered and retain their original exterior and interior design and detailing.

1. Melton Hill Dam, 1963 (Contributing Structure)

The Melton Hill project's dam is a concrete gravity non-overflow dam and spillway.² The spillway is in the middle of the natural river bed with the lock at the right bank and the powerhouse at the left bank. The spillway is 135 feet in length, with three forty-foot wide gates divided by seven-and-one-half-foot wide sloping piers (*see Photo 3*). The outer two piers are integral to the lock on the right and the powerhouse on the left. The piers support a roadway deck at elevation 802. The radial gates are operated by fixed-type, wire-rope hoists located on the operating deck (*see Photo 4*). The spillway profile is an ogee overfall section with a crest at elevation 754.³ The non-overflow section is in two sections, a shorter section from the right abutment face to the lock and a main section to the left of the powerhouse and the service bay. The right section is sixty feet in length. The top of this section is the same as that of the local wall, allowing a roadway access. The top of the left dam has roadway access to the intake deck and spillway bridge.⁴

The spillway was designed to discharge 124,000 cubic feet per second, but only 108,000 cubic feet per second was achieved with this design. Discharge was improved through reconfiguring the upstream end piers and lock wall. The total crest length is 1,020 feet and has a maximum height of 103 feet. Construction of the dam used 250,000 cubic yards of concrete.⁵

2. Powerhouse, 1964 (Contributing Building)

The powerhouse superstructure is 201 feet long by seventy-two feet wide, enclosing the generator room with two units and the service bay. It has structural steel frame walls of precast concrete panels and glass block. The roof is of precast concrete panels with a layer of asphalt roofing material. The façade (south) of the powerhouse has three bays, each with five horizontal rectangular concrete and aggregate panels. The center bay includes a large garage bay opening with an overhead-tracking, metal door and letters spelling MELTON HILL above it. This entrance leads into the generator room of the powerhouse. The upper level of the façade has three bays with corresponding dimensions to the lower portion, and each bay consists of three horizontal rectangular sections of all structural glass blocks with aluminum divider strips. To the east of this main body of the façade is a slightly recessed wing with a pedestrian entrance with a steel door flanked by asymmetrical walls of structural glass blocks (fourteen lights to the west and seventy lights to the east of the door). Above the entrance, the wall is poured concrete. There is a full-width, horizontal, metal vent above a security light. The east end of this wing connects laterally with the downstream side of the dam (*see Photo 5*).

² Commonly, dam design includes a section that permits the overflow of water from the reservoir (the spillway) and other sections that do not allow the passage of water (non-overflow). Together, these sections contribute to the total length of the dam structure that impounds the reservoir. A gravity type dam is one constructed of concrete or stone and uses the sheer weight of the structure to resist the horizontal pressure of the water pushing against it. Gravity dams are designed in sections that are independently stable.

³ Tennessee Valley Authority, *The Melton Hill Project: A Report on the Planning, Design, Construction, Initial Operations and Costs*, Technical Report No. 15, (Knoxville: Tennessee Valley Authority, 1966), 45.

⁴ Ibid., 43.

⁵ Ibid., 6.

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Most of the east elevation of the powerhouse is integral with the downstream side of the dam. Above the dam's deck level, the powerhouse's elevation has a smooth concrete skirtwall with ten horizontal rectangular concrete and aggregate panels above the skirt wall spanning the length of the east elevation. Above the panels are ten bays with dimensions corresponding to the panels. Each bay consists of three horizontal rectangular sections of all structural glass blocks with aluminum divider strips. A gantry crane is located on this elevation of the powerhouse, on the deck of the dam (*See Photo 6*).

The intake is a reinforced concrete structure that connects to the east elevation of the powerhouse as a gravity-type monolith forming an integral part of the dam. The intake has two waterways to the two turbines and a low-level drainage gallery for foundation inspection. Generator leads, communications equipment, cable trays, and control facilities are located in the intake structure. The top deck provides support for the upstream columns of the powerhouse superstructure frames and is the operating level of the intake gate gantry crane. The intake consists of two blocks, seventy-eight feet and eighty-one feet wide. The top of the intake has an exterior, thirty-six-foot wide deck for operation of the twenty-five-ton-capacity gantry crane (*also Photo 6*).⁶

At the south end of the east elevation of the powerhouse is a pedestrian entrance. It has an original aluminum and full light door. Beside the door are original aluminum letters that spell, "BUILT FOR THE PEOPLE OF THE UNITED STATES OF AMERICA, 1960-1964" (*see Photo 7*). This entrance leads into a small visitor balcony overlooking the generator room.

On the north elevation of the powerhouse, the reinforced concrete substructure is visible. Above this are three bays, each with five horizontal rectangular concrete and aggregate panels, as on the façade. There are no entrances on this elevation. The upper level of the north elevation of the powerhouse is the same as that of the façade - three bays with corresponding dimensions to the concrete and aggregate panels below, and each bay consists of three horizontal rectangular sections of all structural glass blocks with aluminum divider strips. The bays of structural glass blocks continue on the upper level of the west elevation, in ten bays, as on the east elevation. Below this clerestory level are ten corresponding bays each with five horizontal rectangular concrete and aggregate panels, as on the east elevation. The substructure on this elevation has six openings for the discharge of water (*see Photo 8*).

The powerhouse's generator room floor houses two generators which are forty-seven feet in diameter and seven feet high. The generator room's interior has concrete paneled walls, a ceramic tile floor, steel beam and metal panel roof, and structural glass block clerestory windows. A small visitor balcony has its entrance from the deck of the dam on the east elevation (*see Photo 9*). The Melton Hill project has two generating units, each rated at 40,000 kilovolt-amperes, or 36,000 kilowatts at 0.9 power factor. The units produce 13,800 volts and operate at a speed of 85.7 revolutions per minute. The hydraulic turbines are 49,700-horsepower Kaplan adjustable blade design. The units are controlled remotely from the Fort Loudoun Hydroelectric Project. The generators were built in 1963 by Baldwin, Lima, Hamilton of Philadelphia. The main turbine shaft is thirty-four feet in diameter and seven feet, nine-and-three-quarter inches long.⁷ The powerhouse was equipped with a two-hundred-fifty-ton capacity overhead crane to handle the hydraulic turbine and electric generator parts.

Also located on this level are the twin governor cabinets (*see Photo 10*) and pressure tanks. The floor below the generator room is the pipe gallery that connects to the service bay. The service bay is integral to the dam and

⁶ Ibid., 55.

⁷ Ibid., 79.

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consists of an upstream bulkhead block and a downstream wall and slab. The bulkhead section is basically a section of the non-overflow dam. Its downstream face is stepped to accommodate the interior floor levels of the service bay. The draft tube access gallery lies downstream of the units. This is accessed from the pipe gallery via a spiral staircase. The low point of the draft tube is ninety-three feet below the generator room floor, at elevation 682 feet above sea level.⁸

At the ceiling of the powerhouse, the overhead crane spans the width and operates the entire length of the building. It is supported by girders attached to the upstream and downstream legs of steel frames. The crane has two, 125-ton capacity main hoists and two auxiliary hoists (*see Photo 11*).⁹

The interior includes a machine shop, control room, fan room, toilets, dark room, and a small file room. Bathrooms have original tile walls, terrazzo floors, added drop ceilings, original fixtures, marble stalls, and wood doors (*see Photo 12*). Stairwells have steel handrails, concrete treads, and concrete block walls. The control room has linoleum floors, concrete and brick walls, and a concrete panel ceiling (*see Photo 13*). There is no formal visitor lobby in the Melton Hill powerhouse.

3. Navigational Lock, 1963 (Contributing Structure)

TVA consulted the U.S. Army Corps of Engineers (USACE) in designing the navigational lock, which measures seventy-five feet in width by 400 feet in length and has a maximum lift of sixty feet (*see Photos 14 and 15*). This design is larger than the locks installed at other TVA projects, where space was reserved for addition of a future lock, which was not available at Melton Hill. The lock is located on the right (north) bank. The top of the lock chamber wall is at elevation 805 feet above sea level, ten feet above the maximum headwater level. There is metal railing around the lock.

The upper lock gate consists of two structural steel leaves mitered on a four-to-twelve slope. The leaves form a three-hinged arch with a vertical quoin and miter bearings at the ends of each leaf forming the hinges. The dead load of each gate leaf is supported by a bottom pintle. Each leaf of the upper lock gate measures forty-three feet, one-and-one-eighth inches wide by twenty-three feet, nine-and-five-eighth inches high. Each leaf is divided into panels by seven horizontal girders supported at the quoin and miter bearing ends. The upstream side has a water-tight skin plate, three-eighths-inch thick. The lower lock gate consists of two structural steel leaves mitered on a four-to-twelve slope. Each leaf is forty-three feet, one-and-one-eighth inches wide by seventy-eight feet, nine-and-three-eighth inches high (*see Photo 16*). Each leaf is divided into panels by twenty-three horizontal girders supported at the quoin and miter bearing ends. The upstream side has a water-tight skin plate, three-eighths-inch thick from the top to the eighth girder down, then one-half-inch thick below that line.¹⁰

Machinery for opening and closing the lock gates consists of four hydraulically operated units, one for each gate leaf. Each unit has a spring-loaded gate strut, a sector arm, a sector gear and rack, a hydraulic cylinder and rod, and limit switches that control the maximum force and speed when in operation. Each pair of operating units is controlled from a corresponding control shelter, one at the upstream end and one at the downstream end.¹¹ Segmental valves control the flow of water through culverts for filling or emptying the lock chamber. The culverts are ten feet high by eight feet wide. Each valve is operated by machinery recessed below the lock deck

⁸ Ibid., 64-65, 69-70, 95.

⁹ Ibid., 71.

¹⁰ Ibid., 109, 112, 114.

¹¹ Ibid., 114.

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and controlled from either of the two control shelters. The machinery consists of a vertical strut, a bell crank, a hydraulic cylinder with piston, and limit switches.¹²

4. Lock Control Building 1, 1964 (Contributing Building)

At the west end of the lock is a small, one-story control building of aluminum and concrete construction. The building has a concrete foundation and flat aluminum roof. The walls have metal panels on the lower half with fixed, two-part horizontal windows above and a single-light glass and metal door on the east elevation (*see Photo 17*).

5. Lock Control Building 2, 1964 (Contributing Building)

At the east end of the lock is a small, one-story control building of aluminum and concrete construction. It matches the Lock Control Building at the west end of the lock, with a concrete foundation, flat aluminum roof, metal-panel walls on the lower half with fixed, two-part horizontal windows above. The building has a single-light glass and metal door on the west elevation.

6. Lock Operation Building, 1964 (Contributing Building)

The Lock Operation Building is located on the north side of the lock and on the right bank of the river. This is a steel-frame, one-story building with a flat roof of asphalt roofing. The façade (south) has six bays. The building has an exterior of concrete and aggregate panels. The building was designed with a control room and public restrooms divided by an open breezeway. From west to east, the first four bays contain the control room and have walls consisting of banks of original structural glass blocks above concrete and aggregate panels. There are single-light glass and steel doors in the first and four bays (*see Photo 18*). The rear (north) elevation of the control room is the same except that only the far west bay has a single-light glass and metal door (*see Photo 19*). The fifth bay of the Local Operation Building is the breezeway. Its walls within the breezeway consist of concrete and aggregate panels. There is a single-light glass and steel door into the control room section from the breezeway. This elevation of the control room section also has a single-light fixed metal window. Between the door and the window, there is a two-part glass and metal security box. The sixth bay of the Lock Operation Building contains restrooms. The walls are concrete and aggregate on all elevations with a metal louvered vent on the façade and rear elevations. The façade has aluminum letters spelling out MELTON HILL LOCK. The wall within the breezeway has two solid metal doors with a louvered metal vent above each one. The west elevation of the building has three fixed, single-light windows above a basement level with that is integral to the lock structure. The basement has a garage bay with a metal, overhead-tracking door and two solid metal pedestrian doors.

The interior of the Lock Operation Building on the main floor contains the lockmaster's office, file room, kitchen, toilet, locker room, and operation room. The interior of the building has original terrazzo floors, glazed tile walls, marble window sills, and acoustical tile ceilings.¹³ The walls and floors of the restrooms are the same, and stall divider walls are marble.

7. Switchyard and Transmission Lines, 1964 (Contributing Structure)

The switchyard is located on the left (south) bank downstream of the non-overflow dam. The entire yard is on rolled earth fill surfaced with crushed rock. The initial area fenced for the switchyard was 100 feet wide by 153 feet long. An additional eighty-three feet were reserved to increase the length. The main switching structure is

¹² Ibid., 115, 117.

¹³ Ibid., 123-24.

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sixty-nine-kilovolts and located at the south side of the yard; the transformers are at the north end. The switching structure consists of five transverse framed steel bents, each with an integral tower and ground wire peak. The bents span thirty feet and are spaced on twenty-six-foot centers with concrete foundations. The 13.2-69-kilovolt transformer tower structure consists of three columns on thirty-foot centers connected by two rows of struts. The switchyard has three steel transmission lines, two to Fort Loudoun Dam and one to the city of Harriman¹⁴ (*see Photo 21*).

8. Switchyard Building, 1993 (Non-Contributing Building)

In the switchyard is a one-story, split-faced concrete block building with a flat metal roof. The main (east) façade consists of one bay with a metal, overhead track door (*see Photo 22*).

9. Visitor Building, 1964 (Contributing Building)

The visitor building is located on the hillside south of the dam. It has a reception area, restrooms, and a sheltered cantilevered overlook terrace. The two-story building is banked into the hillside. The building has a flat metal roof, concrete deck with a metal railing, and fixed aluminum windows. The building is approached on the south elevation, where it appears one-storied (*see Photo 23*). Metal hand-railing extends south from the building's east and west breezeways. In between the breezeways, the building has exterior walls on the south, west, and east of concrete and aggregate panels with a continuous clerestory of fixed, single-light, aluminum windows. The exterior walls of the breezeways have stone veneer on the east and west elevations. The flat roof overhangs the building with a wide eave on the north elevation, which also has a balcony that hangs out over the lower floor. The balcony has metal hand-railing as located on the south elevation. The underside of the roof on the north elevation has recessed light fixtures. The lower floor of the north elevation is symmetrical, with a center section of six concrete panels flanked by four original Formica panels below single, fixed-light windows, an original steel and full-light door, and one Formica panel below single, fixed-light window at the east and west ends (*see Photo 24*). The interior has wall surfaces of concrete and aggregate panels, drop ceilings, and linoleum floors. The lobby has ca. 1990 added fabric acoustic panels and carpeting. The restrooms have original marble partitions, tile walls and floors, and steel doors (*see Photo 25*).

Maintenance Base – 4 resources

The maintenance area consists of a main office building, a flammable materials shelter, a hazardous material storage structure, and an equipment shed:

10. Main Office Building, 1964 (Contributing Building)

The main office building was built in 1964 and is constructed of concrete block with a flat roof with metal coping. The façade (south) has four bays of metal overhead track doors with a center row of three lights and a single-light and steel pedestrian door. Between the entrance bays are three fixed aluminum awning windows. There is also a set of steel double doors on the façade (*see Photo 26*). The east elevation has a concrete block with three awning style horizontal windows below the roofline. The north end of this elevation has a stucco finish, as does the rear (north elevation, which also has three awning style horizontal windows below the roofline. The interior has concrete block walls and concrete floors and consists of several small offices with fluorescent light fixtures.

¹⁴ Ibid., 95-96, 98.

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11. Flammable Materials Storage Shed, 1964, (Contributing Structure)

Ca. 1964 storage structure for flammable materials. It is one-story, of concrete block construction, and has a flat roof. It has a large square opening on the façade that is covered with a chain-link gate (*see Photo 27*).

12. Hazardous Materials Storage Shed, 1964 (Contributing Structure)

Ca. 1964 storage shelter, one-story in height with a very low-pitched gable-front roof. The building is constructed of concrete block, has a solid metal door, and no windows (*see Photo 28*).

13. Equipment Shed, ca. 2010 (Non-Contributing Building)

Ca. 2010 equipment shed with four open bays on the façade. It has corrugated metal siding and a metal roof.

14. Visitor Building Picnic Area (Contributing Site)

To the south of the visitor building is an original picnic area, which has added picnic facilities.

15. Picnic Pavilion 1 (Non-Contributing Building)

This 1973 picnic pavilion has a gable roof of asphalt shingles and concrete foundation. The roof is supported by square, wood posts.

16. Picnic Pavilion 2 (Non-Contributing Building)

This 1973 picnic pavilion has a gable roof of asphalt shingles and concrete foundations. The roof is supported by square, wood posts.

17. Fishermen's Bath House, ca. 2000 (Non-Contributing Building)

To the west and downstream from the dam is a parking area and bath house for fishermen. This is a one-story building with a gable-front roof of metal and split-faced concrete block walls. The façade (north) wall is recessed under the roof eave and has two solid metal doors. In the gable field of the north elevation are two fixed, triangular windows (*see Picture 29*).

Recreation Area – 5 resources (*see Photos 30-33*)

18. Recreation Area, 1964 (Contributing Site)

The Melton Hill project was designed with a recreation area, including a campground and picnic area, to the east of the dam and on the south side of the reservoir. There are concrete sidewalks, original concrete and ca. 2000 metal picnic tables and benches, and metal grill stands located among the rolling terrain down to the water's edge (*see Photo 30*). Within this contributing site is also a boat ramp (*see Photo 31*) and swimming beach (*see Photo 32*).

19. Recreation Area Picnic Pavilion, ca. 1980 (Non-Contributing Building)

This 1980 picnic pavilion has a gable roof of asphalt shingles and concrete foundation. The roof is supported by square, wood posts.

20. Recreation Area Picnic Pavilion, ca. 2000 (Non-Contributing Building)

This ca. 2000 picnic pavilion has a shed roof of wood boards and exposed wood beams. It is supported by massive tapered posts with stone veneer. The rooftop has solar panels.

21. Bathhouse 1, 1964 (Contributing Building)

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This original bathhouse is a standardized designs used by TVA for its recreational areas. It is one-story, of concrete block construction and with a saltbox roof of asphalt shingles. The exterior has an added surface of stucco. The main façade has integral recessed entrances with solid steel doors. The gable fields have three asymmetrical fixed aluminum windows.

22. Bathhouse 2, 1964 (Contributing Building)

This original bathhouse is a standardized designs used by TVA for its recreational areas. It is one-story, of concrete block construction and with a saltbox roof of asphalt shingles. The exterior has an added surface of stucco. The façade (south) has integral recessed entrances with solid steel doors. The gable fields have three asymmetrical fixed aluminum windows. The rooftop has solar panels (*see Photo 33*).

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8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- ☒ A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- ☐ B Property is associated with the lives of persons significant in our past.
- ☒ C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- ☐ D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations N/A

(Mark "x" in all the boxes that apply.)

Property is:

- ☐ A Owned by a religious institution or used for religious purposes.
- ☐ B removed from its original location.
- ☐ C a birthplace or grave.
- ☐ D a cemetery.
- ☐ E a reconstructed building, object, or structure.
- ☐ F a commemorative property.
- ☐ G less than 50 years old or achieving significance within the past 50 years.

Areas of Significance

ENGINEERING

RECREATION

TRANSPORTATION

Period of Significance

1960-1965

Significant Dates

1960-1964

Significant Person

(Complete only if Criterion B is marked above.)

N/A

Cultural Affiliation

N/A

Architect/Builder

Architect: Tennessee Valley Authority; U.S.

Army Corps of Engineers

Builder: Tennessee Valley Authority

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Statement of Significance Summary Paragraph

The Melton Hill Hydroelectric Project meets National Register Criteria A and C for its historical and engineering significance at the local and state levels as an integral part of the Tennessee Valley Authority Hydroelectric Project. Its period of significance is from 1960, when the project commenced, to 1965, in keeping with the fifty-year guideline. The Melton Hill Hydroelectric Project is significant in the improvement of navigation of the Tennessee River system, expansion of energy, and improvement of quality of life through transmission of electricity, control of seasonal flooding, and creation of public recreational facilities. The Melton Hill Hydroelectric Project was one of twenty-five (25) dam sites constructed by the Tennessee Valley Authority (TVA) for the purpose of generating electrical power from, improving navigation of, and controlling seasonal flooding of the river system of the region. The main objective of the 1933 Tennessee Valley Authority Act was the creation of a continuously navigable nine-foot channel from the mouth of the Tennessee River to Knoxville, as well as flood control, power generation, and public benefits. The Melton Hill Hydroelectric Project was the twenty-first major project proposed by TVA in its 1936 report to Congress. It is significant at the local, state, and national level. The project's significance in engineering is reflected in TVA's overall plan for an integrated system of river management through site-specific designs tested on scaled models. It is significant in recreation because of the extensive outdoor opportunities it fostered. The Melton Hill project is significant in transportation as the only TVA project on a tributary with a navigational lock. The Melton Hill Hydroelectric Project meets the registration requirements set forth in the Multiple Property Documentation Form, Historical Resources of the Tennessee Valley Authority Hydroelectric Project, 1933-1979.

Narrative Statement of Significance

The Tennessee Valley Authority (TVA) was created under President Roosevelt's New Deal program as part of his "First One Hundred Days." Roosevelt envisioned "a corporation clothed with the power of government but possessed of the flexibility and initiative of a private enterprise." To this end, Congress passed the TVA Act on May 18, 1933.¹⁵ The multi-purpose legislation sought to improve navigation and flood control of the Tennessee River, spur agricultural and industrial development in the Tennessee Valley, and provide for national defense via government facilities in the proximity of Muscle Shoals, Alabama (Sec. 1). The act authorized the TVA Corporation to acquire real estate for the construction of dams, reservoirs, power houses, transmission lines, or navigations projects at any point along the Tennessee River and its tributaries (Sec. 4i).¹⁶

Among TVA's achievements was the averted disaster to the city of Chattanooga during a twenty-day deluge of rain in early 1957. Flood waters overloaded the Holston, Clinch, and Little Tennessee Rivers, all tributaries of the Tennessee River. TVA orchestrated precise flood storage and careful release across its system of dams, based on constant monitoring of 600 gauge stations. TVA's flood control, carefully balanced among the main river's three projects above Chattanooga (Fort Loudoun, Watts Bar, and Chickamauga Dams), was estimated to have averted \$66 million in damage to Chattanooga.¹⁷

¹⁵ "History of the Tennessee Valley Authority," at TVA website http://www.policyalmanac.org/economic/archive/tva_history.shtml accessed April 16, 2015.

¹⁶ Tennessee Valley Authority Act of 1933, at TVA website http://www.policyalmanac.org/economic/archive/tva_history.shtml, accessed April 16, 2015

¹⁷ North Callahan, *Bridge Over Troubled Waters: A History of the Tennessee Valley Authority*, (Cranbury, NJ: A.S. Barnes and Co., Inc., 1980), 195-96.

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TVA first requested funding for the Melton Hill project on September 30, 1957, submitting its 1959 fiscal year budget program to the Bureau of the Budget. The entire budget program included \$8 million for a project on the Clinch River near Oak Ridge. The Bureau's allowance to TVA for FY 1959 was more than \$9 million short of its overall request, mostly from denying funding for the Clinch River project because its policy was for no new start-ups in 1959. TVA appealed, and the appeal was denied. Finally, the Bureau allowed \$50,000 of a \$16,850,000 appropriation to TVA, for preliminary design studies for the Melton Hill project. The matter went to House and Senate subcommittees, where TVA officials were questioned on the repayment of costs to the federal government, whether the project would be constructed on the corporate financed budget, and whether the U.S Army Corp of Engineers should instead construct the project, before approving the Bureau's allowance to TVA. Tennessee Senator Estes Kefauver noted that the Corp of Engineers estimated the project had a benefit-to-cost ratio of 1.4 to 1, that it would provide 72,000 kilowatts of power, improve navigation on the Clinch River, and foster significant recreational benefits. President Eisenhower signed the bill on September 2, 1958, allocating \$50,000 for design studies for the Melton Hill project.¹⁸

TVA made a similar \$8 million request for the Melton Hill Project for FY 1960, which the Bureau of the Budget again cut to \$50,000. TVA urged a total allowance of \$500,000; the Bureau recommended \$200,000, from a total TVA budget of \$15,286,000, for continuation of design work for Melton Hill. The House approved, but the Senate amended the bill, allocating \$1,000,000 for Melton Hill. The House objected, and the Senate acquiesced; Eisenhower, however, vetoed the bill due to the inclusion of sixty-seven other projects. The House upheld the veto, and the House Committee on Appropriations recommended reducing all project budgets in the bill by two-and-one-half percent. Eisenhower again vetoed the bill, but both the House and Senate over-rode the veto, making the bill law.¹⁹

For FY 1961, TVA for the third time requested funding for the Melton Hill Project, in the amount of \$8,100,000. The Bureau of the Budget informed TVA it would allow one-half (\$4,050,000) for Melton Hill, and that the balance should be derived from power proceeds. TVA protested, but accepted the terms on the conditions that the proposed division of costs was recognized as "purely arbitrary," that TVA's acceptance did not constitute a precedent for future project funding, and that the Bureau recognize that TVA's mission and program differ from those of other "old-line" government agencies and should be pigeon-holed into their budgeting patterns.²⁰

The political nature of negotiations for the Melton Hill project demonstrates a waning support of prioritizing TVA projects in the national budget and a greater attention to cost/benefit ratios to constituents' tax dollars. Melton Hill was the first dam undertaken by TVA following a ten-year hiatus from new dam construction projects. The project represents a shifting paradigm: Melton Hill is the only project not fully funded through Congressional appropriations. All power installation expenditures were covered by funds derived from the sale of power and/or power bonds. It is also the only TVA dam on a tributary with a navigational lock. Construction of the project began September 6, 1960. The closure of the dam and filling of the reservoir began May 1, 1963, and the lock was open for navigation on June 10 of the same year. Delays in delivery of the project's two generating units postponed commercial operation until the following year when Unit 1 was placed in service on July 3, 1964, and Unit 2 on November 11, 1964.²¹

¹⁸ Tennessee Valley Authority, *The Melton Hill Project*, 11-12.

¹⁹ Ibid., 13-14.

²⁰ Ibid., 14-15.

²¹ Ibid., 1.

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The Melton Hill Hydroelectric Project marked the resumption of TVA dam construction after a decade of focusing on steam plants. The project also marks the initiation of new policy in an effort to revitalize TVA through new missions. To that end, TVA reversed its policy of limited land acquisition, as a way of securing large swaths of land for water-related industrial development. The new Tributary Area Development program reached full practice, and controversy, in projects at Columbia, which was abandoned, and Tellico, which was completed only due to a Congressional exemption to TVA of the Endangered Species Act. Melton Hill escaped the criticism of those projects because of its multi-faceted functions in power generation and navigation.²²

Still, due to the extensive public exposure the project received in leading up to its initiation, the land acquisition program for Melton Hill was conducted with a high degree of care. The publicity influenced the local real estate market, which was booming across the region since the early 1950s. Land speculation within the reservoir area was active for several years before construction began, complicating land appraisals. TVA endeavored to offer fair and reasonable prices to residents, at the exclusion of “windfall profits.” Also adding to the complex appraisal process was the wide variety and classifications of real estate, from rural farms to commercial properties with high revenue, to trailer parks.²³

The spectrum of property type underscored the post-war economic boom and the ex-urban movement of the period. The project site was surrounded by the cities of Oak Ridge, Clinton, Knoxville, and Lenoir City, all exerting an urban influence into their respective outlying counties. Key considerations in determining real estate value, as well as future land use planning, included population trends, local economy and employment levels, availability of utilities, and building costs.

The Tennessee State Planning Commission issued the report “Melton Hill Reservoir – Comprehensive Plan for Land Use Development in December of 1960. The foreword of that report touted “the first effort, to our knowledge, in the state whereby reservoir-affected cities and counties with their planning staffs have joined hands with the State Planning Commission and the Tennessee Valley Authority in preparing a future land use plan based upon population patterns, regional resources, and land use needs.” These towns and counties adopted zoning ordinances in advance of reservoir completion, in order to ensure shoreline development according to plan. The cities of Oak Ridge and Clinton secured proper legislation from the State for establishing port authorities and also began recreational development, allowing for boat harbors to be built “in the dry,” pre-impoundment.²⁴

Recreational development was just one aspect of the cooperative planning efforts among city and county governments, guided by TVA and the State Planning Commission. An integrated rail, highway, and air transportation system was recommended, as well as the identification of potential sites for industrial development. The Planning Commission’s report also emphasized the preservation of the historic sites of Eagle Bend and the Carden Farm, both near Clinton, and the Block House Valley site, through a combination of public and private agencies and zoning.²⁵

Area municipalities used the Melton Hill project as occasion to revise existing zoning policies and practices. Knox and Anderson Counties made revisions to zoning ordinances that would apply to their respective

²² Erwin C. Hargrove, *Prisoners of Myth: The Leadership of the Tennessee Valley Authority, 1933-1990*, (Princeton, NJ: Princeton University Press, 1994), 161, 172.

²³ Tennessee Valley Authority, *The Melton Hill Project*, 227-228.

²⁴ *Ibid.*, 5.

²⁵ *Ibid.*, 232.

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shorelines of the Melton Hill Reservoir. The cities of Clinton and Oak Ridge took steps to establish port authorities. This cooperative planning effort assisted TVA in land acquisition and road relocation.²⁶

Total land costs for the project amounted to \$3,746,683, which included acquisition by fee or condemnation proceedings, flowage easements, and highway relocation. Direct construction costs, such as labor, materials, equipment, transportation, totaled \$25,914,739. Indirect construction costs, including accounting, timekeeping, office supplies, and police service, came to \$2,043,315. Design and engineering expenditures, which included salaries and expenses of executive engineers, technicians, and inspectors, amounted to \$3,026,664. Additionally, there were installation costs at the Fort Loudoun Hydroelectric Project for the remote operation of Melton Hill in the amount of \$66,160. These amounts plus other categorized costs brought the total project cost to \$38,489,245. Approximately fifty-two percent of the total costs were derived from power proceeds.²⁷

Employment at the Melton Hill project rose steadily from late September of 1960, peaking by late 1961-early 1962. TVA categorized employees by type of work. At peak of project, office staff numbered approximately 100 workers; operators and mechanics, 300; masons and drillers, 500; carpenters, 700; electricians, iron workers, painters, and sheet metal workers, 850. This represented an approximate total of 2,450 employees on site during the 1961-1962 winter. This number gradually declined through 1964.²⁸

The project required relocation of seventy-five families from the reservoir. No schools or churches were affected. A total of 448 tracts, composing an area of 5,303 acres, were acquired for the project. Additionally, 764 acres were transferred from the Atomic Energy Commission's Oak Ridge Reservation to TVA. Of the total land, ninety-five percent (397 of 416 tracts) were acquired through voluntary sale, while seventeen tracts had to be condemned for refusal of sale.²⁹

SIGNIFICANCE IN ENGINEERING

The Melton Hill Hydroelectric Project is an integral part of the overall engineering design of the TVA system. The dam was built utilizing the most advanced methods of its time. The Melton Hill dam's release provides power to the Watts Bar Hydroelectric Project downstream. Above Melton Hill Dam, the Melton Hill Reservoir extends upstream to the tailwaters of TVA's Norris Hydroelectric Project. Releases from the Norris Dam provide power to the Melton Hill Hydroelectric Project.

Exploratory field survey began in July of 1953 for the Melton Hill project. Fifty-one core drill location were staked at mile twenty-four on the Clinch River, and twenty-five acres of land were mapped. Several more extensive surveys were conducted at mile twenty-three, the site ultimately selected. Topographical mapping was done at the dam site and downstream for the study of access routes between the site and Tennessee State Highway 95. Soundings and probings were made for studying a navigable channel from the Watts Bar pool to the dam. Survey was required for the design of protective measures at two Atomic Energy Commission installation sites on the reservoir – the reactor area near the dam and radiation-testing facilities at mile forty-two. Surveying and mapping included basic control surveys, aerial photography of 180 square miles, land ownership reconnaissance surveys on small-scale photographic mosaics and deed copying, marking and

²⁶ Ibid.

²⁷ Ibid., 16, 257.

²⁸ Ibid., 134.

²⁹ Ibid., 71, 228, 229.

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mapping contours. The TVA also mapped the relocation of roads, rail lines, and utility lines, drainage surveys for malaria control, and numerous other adjustments and computations as the work progressed.³⁰

The Melton Hill Hydroelectric Project was designed from investigative tests conducted on small-scale models at the TVA laboratory at Norris. These tests addressed erosion control, energy dissipation, and wave reduction specific to the site. For the Melton Hill project, tests were performed on several aspects, including the spillway apron, turbine intake gates, filling and emptying of the lock, and spillway pier design to permit maximum discharges and to eliminate vortices, wave heights, and velocities in the navigational channel.

Two models were used for spillway studies. The 1:31-scale model was two-bay and was used to design the apron. A 1:75-scale model was used to finalize the overall design. The former performed well at all anticipated operating conditions. Engineers therefore attempted to reduce or even eliminate the apron and also tested it at a higher elevation, which would result in a reduction of rock excavation at the actual site. Discharges for these tests ranged from 5,000 to 118,400 cubic feet per second (cfs). Thirteen apron schemes were tested. These tests, however, only established the basic apron design. The 1:75-scale model integrated the results of the apron tests into the overall design.

Specific objectives included determining the need for training walls, ascertaining safe tailwater operating ranges, and studying erosion at the ends of the spillway. Discharges for these tests ranged from 40,000 to 124,000 cfs and were coupled with decreasing rates of turbine discharge. Erosion effects were weighed against concrete volume and costs in selecting the final design of remedial structures.³¹

SIGNIFICANCE IN RECREATION

Following World War II, as middle class American households gained wealth and electricity, a by-product was outdoor leisure time. The TVA's contribution to recreational activities is noteworthy. The agency's hydroelectric projects' reservoirs attract outdoor enthusiasts who enjoy fishing, boating, camping, and hiking in the environs the TVA helped create, re-forest, and conserve.

The design of the Melton Hill project continued TVA's emphasis on public access and recreation. Visitors approach the dam from a winding road just off State Route 95 and are afforded a scenic view of the Clinch River. Visitors are then directed to the visitors building and overlook on the hillside south of the dam and powerhouse. This building is designed to provide the visitor with views of the dam and powerhouse as well as the reservoir. Adjacent to the visitors building is a picnic area which was expanded in recent years with the construction of two large picnic pavilions.

The Melton Hill project also continued TVA's emphasis on recreation with the creation of a campground, picnic areas and swimming beach and fishing and boating opportunities at the site. The campground was located to the east of the dam and has been enhanced over the years with the construction of picnic pavilions and upgraded picnic tables. The campground and picnic area have two bath houses which are standardized plans built by TVA. Fishermen are also afforded the opportunity to access the river downstream from the dam and there is a parking area and bath house to serve this area. The roads on either side of the river are used by bikers and runners.

³⁰ Ibid., 215, 218-220.

³¹ Ibid., 337-340.

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Since 1964, numerous privately-owned campgrounds have been built along the shoreline of the reservoir. The reservoir contains a nationally recognized rowing course and is a training facility for collegiate rowing teams.

SIGNIFICANCE IN TRANSPORTATION

The Melton Hill project was the first TVA facility with a navigational lock to be built on a tributary. Upon completion, the lock and reservoir opened a thirty-eight-mile navigable channel up the Clinch River to Clinton, seat of Anderson County. TVA purchased two riverfront sites near Clinton for potential industrial development. The improved navigation on the Clinch made possible the shipment of materials by barge for the construction of the Bull Run Steam Plant east of Oak Ridge. The City of Oak Ridge began developing a public-use commercial terminal in 1962.³²

SUMMARY

The Melton Hill Hydroelectric Project is one of twenty-five projects constructed by the Tennessee Valley Authority (TVA) for the purpose of generating electrical power from, improving navigation of, and controlling seasonal flooding of the river system of the region. The project brought construction jobs and later electricity to the rural area. During planning and construction, TVA provided technical assistance in municipal land use planning, road relocation and improvement, and shoreline development. The Melton Hill Hydroelectric Project brought new opportunities and spurred economic development in the surrounding counties. The Melton Hill project is an important component in the vast TVA system of flood control and power generating, as well as contributing to management of Clinch River navigation.

The Melton Hill Hydroelectric Project retains much of its integrity from its original design in the 1960s and later improvements in following decades. The dam, powerhouse, lock and lock control building have not been significantly altered and displays their original design in their exterior and interior detailing. The project continues to be an integral part of the TVA system. The Melton Hill Hydroelectric Project meets the registration requirements set forth in the Multiple Property Documentation Form, "Historical Resources of the Tennessee Valley Authority Hydroelectric Project," and this MPDF contains additional contextual information concerning TVA and its hydroelectric system.

³² Ibid., 246.

Melton Hill Hydroelectric Project

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9. Major Bibliographic References

Callahan, North. *TVA – Bridge Over Troubled Waters: A History of the Tennessee Valley Authority*. Cranbury, NJ: A. S. Barnes and Co., Inc., 1980.

“Economic Development.” At TVA webpage <http://www.tva.com/econdev/index.htm>. Accessed May 5, 2015.

Hargrove, Erwin C. *Prisoners of Myth: The Leadership of the Tennessee Valley Authority, 1933-1990*. Princeton, NJ: Princeton University Press, 1994.

“History of the Tennessee Valley Authority.” At TVA website http://www.policyalmanac.org/economic/archive/tva_history.shtml. Accessed April 16, 2015.

“Melton Hill Reservoir.” At webpage <http://www.tva.gov/sites/meltonhill.htm>. Accessed July 27, 2015.

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Tennessee Valley Authority. *Design of TVA Projects Technical Report No. 24, Vol. 1, Civil and Structural Design*. Washington, D.C.: U.S. Government Printing Office, 1952.

_____. *The Melton Hill Project: A Report on the Planning, Design, Construction, Initial Operations and Costs, Technical Report No. 15*. Knoxville: Tennessee Valley Authority, 1966.

Wheeler, W. Bruce. “Tennessee Valley Authority.” At webpage Tennessee Encyclopedia of History and Culture. Accessed May 29, 2015.

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Previous documentation on file (NPS):		Primary location of additional data:	
<input type="checkbox"/>	preliminary determination of individual listing (36 CFR 67 has been requested)	<input checked="" type="checkbox"/>	State Historic Preservation Office
<input type="checkbox"/>	previously listed in the National Register	<input type="checkbox"/>	Other State agency
<input type="checkbox"/>	previously determined eligible by the National Register	<input checked="" type="checkbox"/>	Federal agency
<input type="checkbox"/>	designated a National Historic Landmark	<input type="checkbox"/>	Local government
<input type="checkbox"/>	recorded by Historic American Buildings Survey #	<input type="checkbox"/>	University
<input type="checkbox"/>	recorded by Historic American Engineering Record #	<input type="checkbox"/>	Other
<input type="checkbox"/>	recorded by Historic American Landscape Survey #	Name of repository: Tennessee Valley Authority Knoxville, TN	
Historic Resources Survey Number (if assigned):			

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10. Geographical Data

Acreage of Property ≈ 338 acres **USGS Quadrangle** Bethel Valley 130 NE

Latitude/Longitude Coordinates

A. Latitude: 35.889337 Longitude: -84.323926

B. Latitude: 35.888974 Longitude: -84.289628

C. Latitude: 35.878049 Longitude: -84.324317

D. Latitude: 35.877473 Longitude: -84.289360

Verbal Boundary Description

The boundary for the Melton Mill Hydroelectric Project is depicted as a dashed line on the accompanying US Quadrangle map and TVA site plan map. The National Register boundary is consistent with the overall Melton Hill reservation boundary on the north and south sides. On the west, the National Register boundary departs from the southern reservation boundary at a right angle to continue north across Watts Bar Lake along the east side of the Highway 95 and rejoins the reservation boundary on the north bank. The overlapping north boundaries continue to the east along the north bank. The National Register boundary then falls to the southeast across Melton Hill Lake to rejoin the southern boundary. The eastern boundary line, thus, includes only that portion of the Melton Hill reservoir necessary to encompass the main land area of the district resources.

Boundary Justification

The boundary includes all facilities necessary for the operation of the hydroelectric project and/or associated with the mission of TVA of power generation, navigation, and public recreation. The boundary omits other TVA lands not directly associated with hydroelectric production.

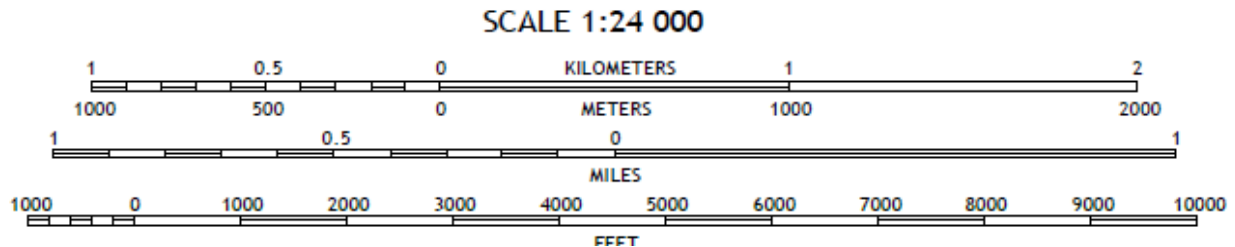
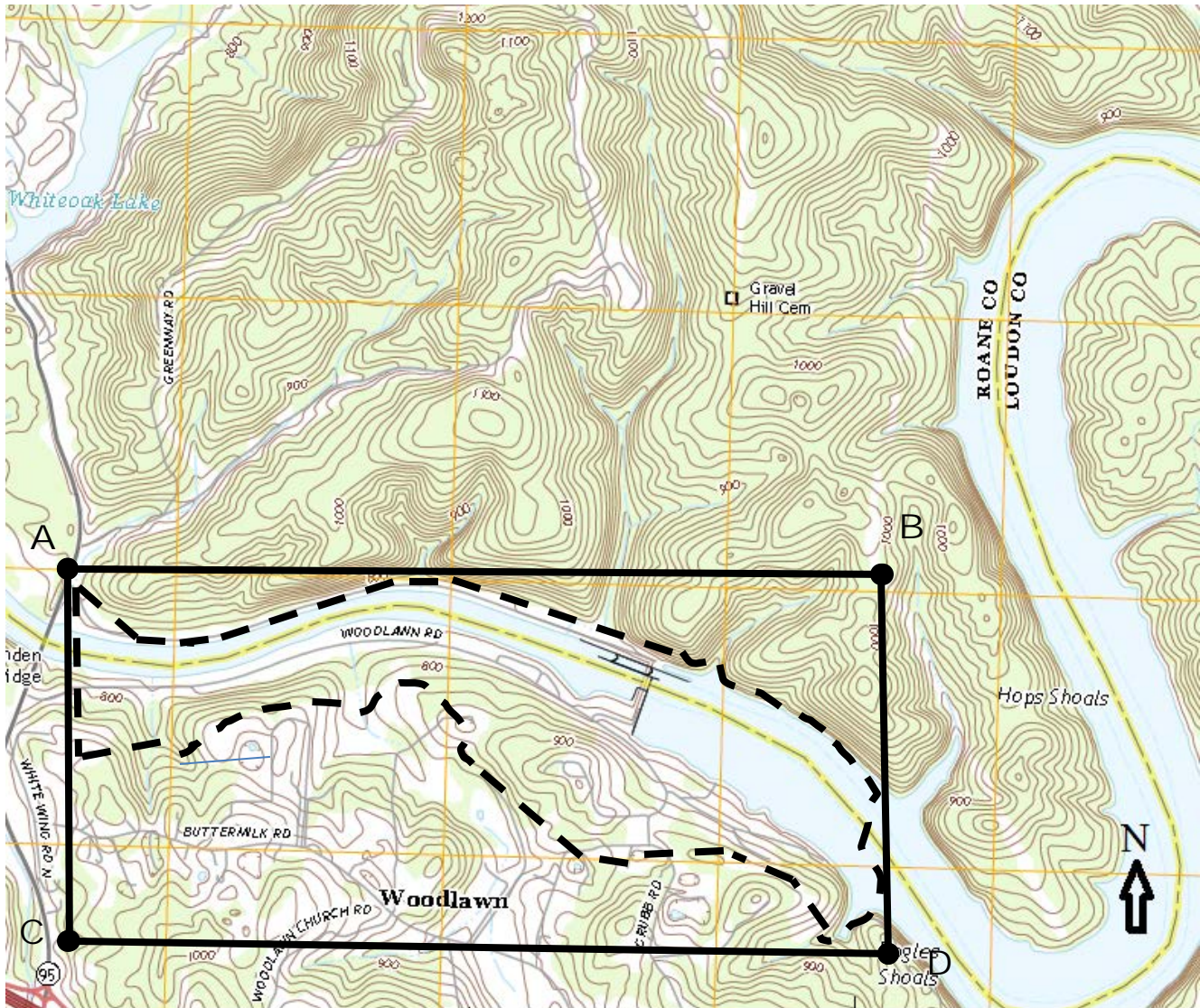
Melton Hill Hydroelectric Project

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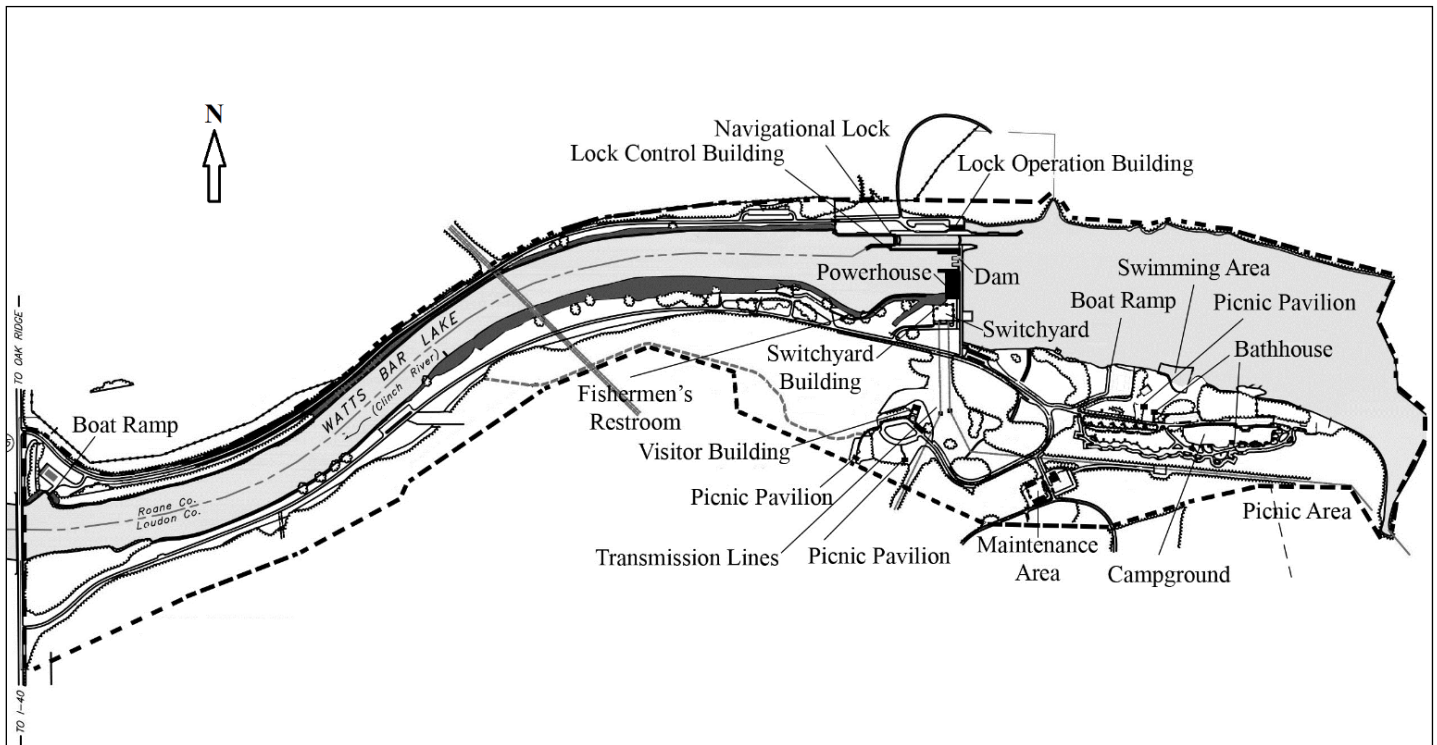
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Bethel Valley, TN, USGS Topographical Quadrangle depicting the National Register boundary for Melton Hill Hydroelectric Project



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Site Plan and National Register Boundary for the Melton Hill Hydroelectric Project.
(See 11 x 17" map for enlarged view)

Melton Hill Hydroelectric Project

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11. Form Prepared By

Name Andra Kowalczyk Martens; Phil Thomason

Organization Thomason and Associates

Street & Number P.O. Box 121225

Date August 3, 2015

City or Town Nashville

Telephone 615-385-4960

E-mail Thomason@bellsouth.net

State TN Zip Code 37212

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A USGS map or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources.
Key all photographs to map.
- **Photographs** (refer to Tennessee Historical Commission National Register *Photo Policy* for submittal of digital images and prints)
- **Additional items:** (additional supporting documentation including historic photographs, historic maps, etc. should be included on a Continuation Sheet following the photographic log and sketch maps)

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 100 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management, U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.

Melton Hill Hydroelectric Project

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Photographs

Photo Log

Name of Property: Melton Hill Hydroelectric Project

City or Vicinity: Lenoir City

County: Loudon

State: TN

Photographer: Philip Thomason

Date Photographed: June 17, 2015

Photo 1 of 30 General view of dam and locks, view to northwest.

Photo 2 of 30 Dam and Powerhouse, view to southeast.

Photo 3 of 30 Spillway gates from locks, view to southeast.

Photo 4 of 30 Spillway hoists, view to north.

Photo 5 of 30 Powerhouse façade (south).

Photo 6 of 30 Powerhouse, east elevation, view to northwest.

Photo 7 of 30 east elevation entrance, view to west.

Photo 8 of 30 Powerhouse, north and west elevations, view to southeast.

Photo 9 of 30 Powerhouse interior, overlooking generator room, view to south.

Photo 10 of 30 Powerhouse interior, generator governor cabinet.

Photo 11 of 30 Powerhouse interior, generator room, crane at ceiling.

Photo 12 of 30 Powerhouse interior, restroom in control room.

Photo 13 of 30 Powerhouse interior, control room.

Photo 14 of 30 Lock west entrance walls, view to west.

Photo 15 of 30 Interior of locks, view to east.

Photo 16 of 30 Lock west entrance gates, view to southwest.

Photo 17 of 30 Lock Control Building 1, view to west.

Photo 18 of 30 Lock Operation Building, south elevation, view to northwest.

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Photo 19 of 30 Lock Operation Building, north elevation, view to southwest.

Photo 20 of 30 Lock Operation Building, west elevation, view to east.

Photo 21 of 30 Switchyard, view to north.

Photo 22 of 30 Concrete building at switchyard, east elevation, view to west.

Photo 23 of 30 Visitor Building, south elevation, view to north.

Photo 24 of 30 Visitor Building, north elevation, view to southwest.

Photo 25 of 30 Visitor Building interior restrooms.

Photo 26 of 30 Maintenance area, main office building, south elevation, view to northwest.

Photo 27 of 30 Maintenance area, flammable storage shed, view to east.

Photo 28 of 30 Maintenance area, hazardous storage, view to south.

Photo 29 of 30 Fishermen's Bath House, view to south.

Photo 30 of 33 Recreation Area, view to northwest.

Photo 31 of 33 Boat Launch, view to northwest.

Photo 32 of 33 Beach Area, view to northeast.

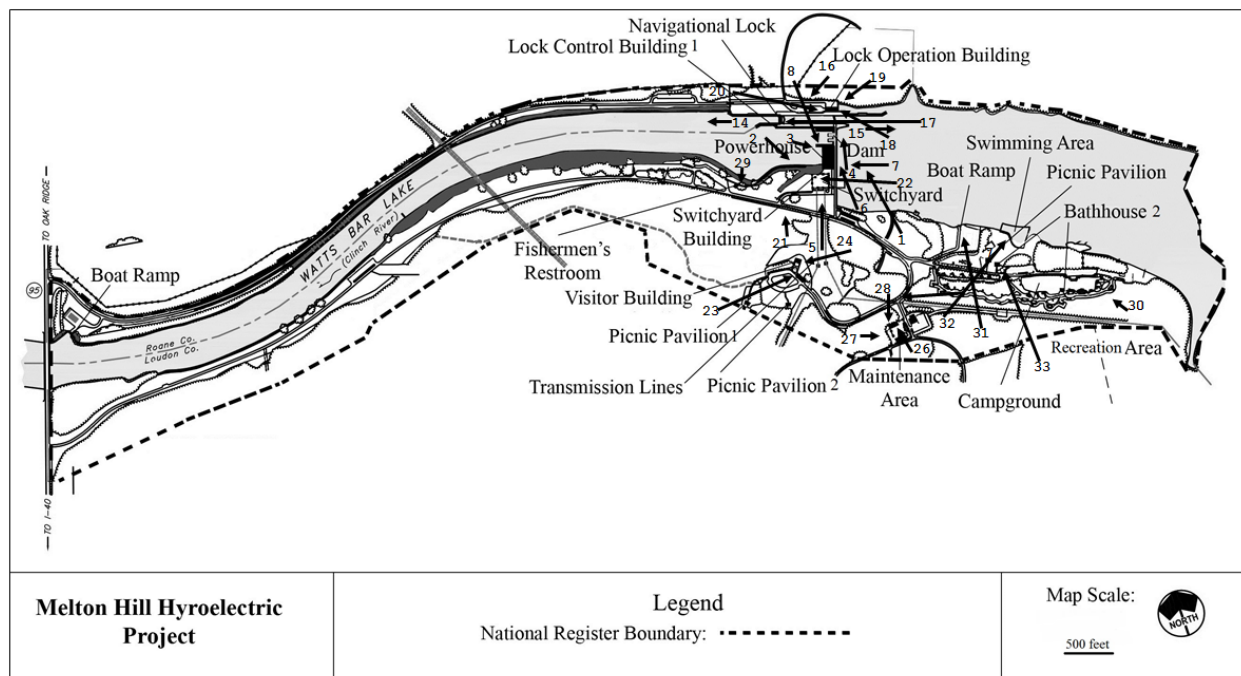
Photo 33 of 33 Bath House 2, view to northwest.

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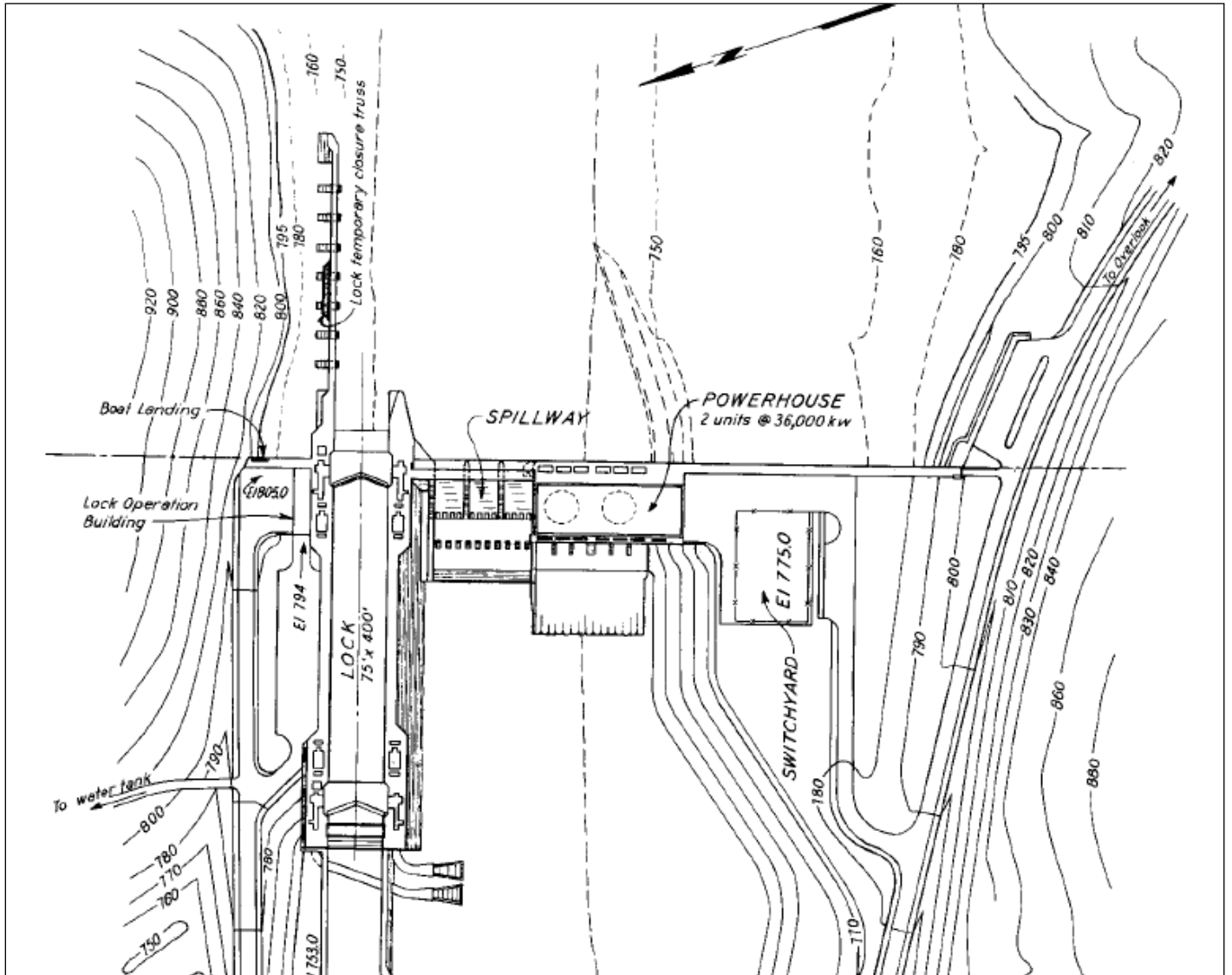
Melton Hill Hydroelectric Project Photo Key Map

(see 11 x 17" photo key map).

Melton Hill Hydroelectric Project
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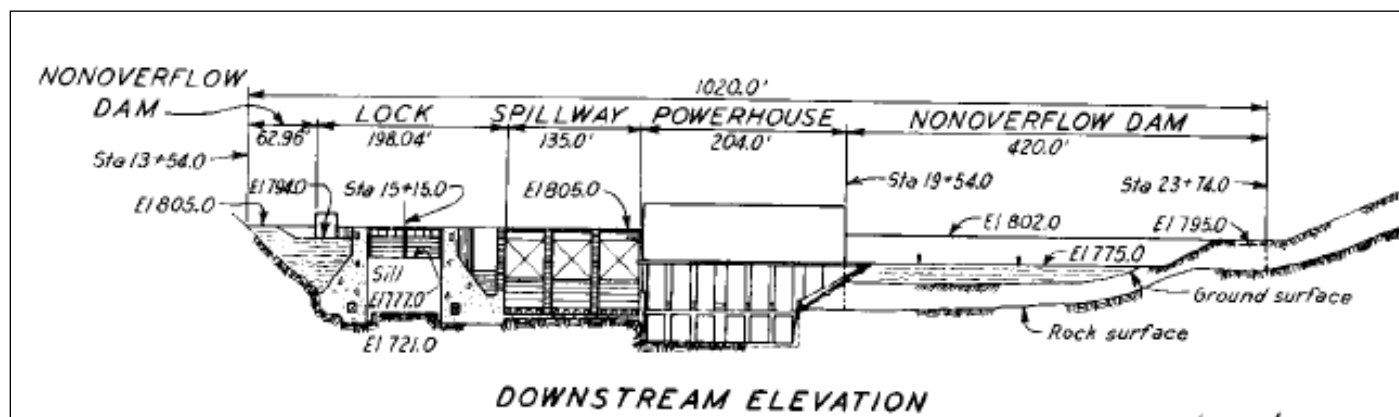
Site Plans



Site Plan of Melton Hill Hydroelectric Project

Melton Hill Hydroelectric Project
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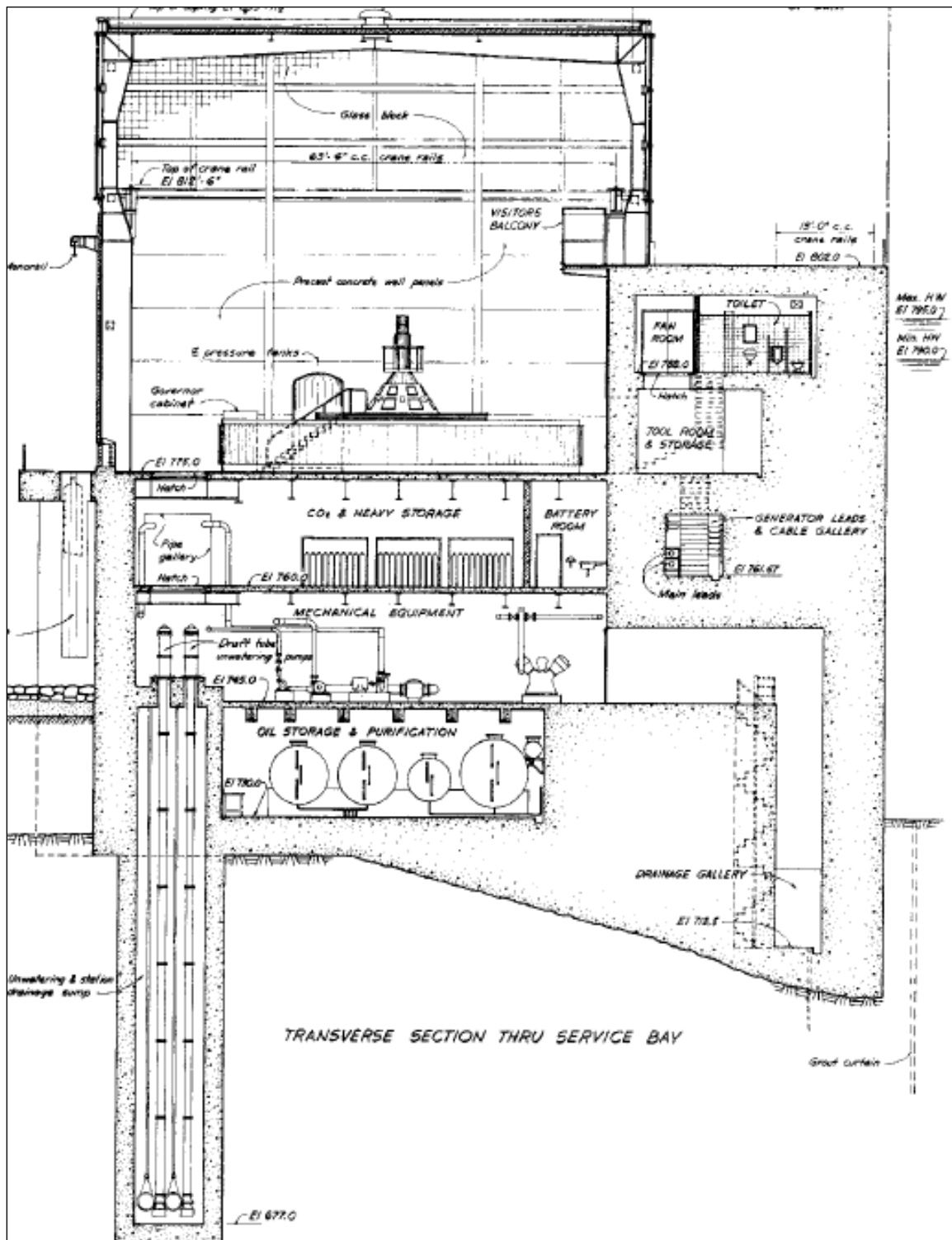
Loudon County, Tennessee
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Downstream Elevation of Melton Hill Hydroelectric Project

Melton Hill Hydroelectric Project
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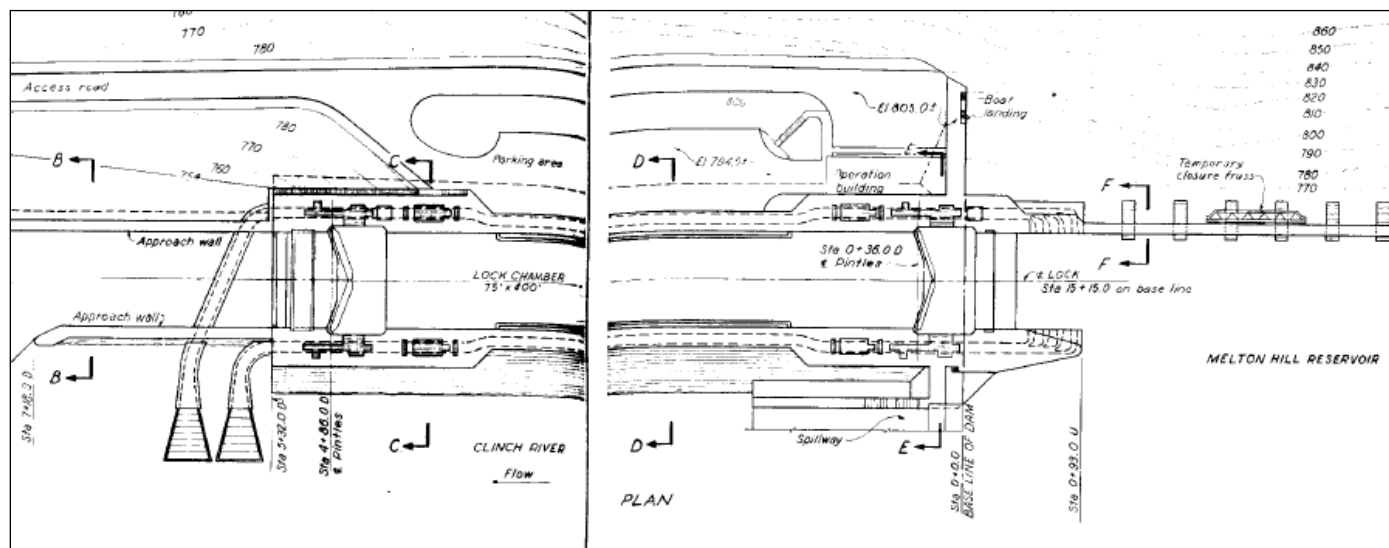
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Transverse Section Thru Service Bay of Power House at Melton Hill Hydroelectric Project

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Navigational Lock Plan for Melton Hill Hydroelectric Project on the Clinch River

Property Owner:

(This information will not be submitted to the National Park Service, but will remain on file at the Tennessee Historical Commission)

Name	Tennessee Valley Authority – Pat Ezzell		
Street & Number	400 West Summit Hill Drive 460WT7D-K	Telephone	865-632-6461
City or Town	Knoxville	State/Zip	TN 37902