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 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: Timpanogos Cave Historic District Boundary Increase and Additional Documentation
Other names/site number: Timpanogos Cave National Monument
Name of related multiple property listing**:** N/A (Enter "N/A" if property is not part of a multiple property listing)

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2. Location

Street & number: Timpanogos Cave National Monument
City or town: Pleasant Grove State: UT County: Utah
Not For Publication: [ ] Vicinity: [X]

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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 _X_ meets ___ does not meet the National Register criteria.

7/2/2025

Signature of commenting official: **Date**

Utah State Historic Preservation Office

Title : SHPO **State or Federal agency/bureau or Tribal Government**

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	
3	3	buildings
5	1	sites
21	13	structures
3	0	objects
32	17	Total

Number of contributing resources previously listed in the National Register 8

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6. Function or Use

Historic Functions

(Enter categories from instructions.)

LANDSCAPE/Park
RECREATION AND CULTURE/Rock Art
RECREATION AND CULTURE/Outdoor Recreation
RECREATION AND CULTURE/Museum
GOVERNMENT/Government Office

Current Functions

(Enter categories from instructions.)

LANDSCAPE/Park
RECREATION AND CULTURE/Outdoor Recreation
RECREATION AND CULTURE/Museum
GOVERNMENT/Government Office

7. Description

Architectural Classification
(Enter categories from instructions.)
OTHER: National Park Service Rustic
OTHER: National Park Service Modern

Materials: (enter categories from instructions.)
Principal exterior materials of the property: CONCRETE, STONE/Sandstone, ASPHALT, WOOD/Weatherboard, WOOD/Shingle, METAL/Steel, SYNTHETICS/Rubber

Narrative Description
(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

Summary Paragraph

This registration form constitutes a boundary increase and additional documentation for the existing Timpanogos Cave Historic District, which was listed in the National Register of Historic Places (National Register) in 1982.[1] It increases the original 11-acre district boundary to encompass 130 acres of the 250-acre Timpanogos Cave National Monument (the Monument); expands the period of significance and adds new areas of significance to evaluate historically significant buildings, structures, and sites that were not included in the original documentation; and updates the list of contributing and non-contributing resources. Located in north-central Utah's American Fork Canyon, the district contains 40 contributing resources (7 buildings, 25 structures, 3 objects, and 5 sites) and 17 non-contributing resources (3 buildings, 13 structures, and 1 site). Contributing resources include the Timpanogos Cave System—the scientifically important cave formations at the base of Mount Timpanogos that were the reason for the Monument's creation in 1922—and buildings and structures that were constructed by the US Forest Service and National Park Service from 1922 to 1966 to enhance the visitor experience and provide for the management of the Monument. Eight of the resources were previously listed in the National Register under the original district documentation: the Custodian's Residence (also known as the Superintendent's Residence, Rock House, and Building No. 2), American Fork River Bridge, Campground Comfort Station (Building No. 126), Cave Comfort Station (Building No. 127), Storage Building, Custodian's Residence Root Cellar (Cold Cellar 1), Caretaker's House Root Cellar (Cold Cellar 2), and Old Cave Trail. Non-contributing resources are those that either were built after the end of the period of significance in 1966 or have been altered to the extent that they no longer possess historic integrity.

[1] Mary Shivers Culpin, *National Register of Historic Places Nomination Form: Timpanogos Cave Historic District, Utah County, Utah*, NRIS #82001760 (National Park Service, Denver, CO, 1982).

Narrative Description

The Timpanogos Cave Historic District encompasses 130 acres of the 250-acre Timpanogos Cave National Monument, established by presidential proclamation on October 14, 1922, and managed by the National Park Service (NPS). The Monument is in Utah County in north-central Utah about 35 miles southeast of Salt Lake City. The closest cities are Pleasant Grove, about 6 miles southwest, and American Fork, about 7 miles southwest of the Monument. Utah State Route 92, a two-lane highway that travels between Interstate 15 (about 10 miles west) and US Route 189 (about 10 miles southeast), provides vehicular access to the Monument.

Setting

Timpanogos Cave National Monument occupies the steep walls of the American Fork Canyon at the base of the north slope of Mount Timpanogos, the second-highest mountain in the Wasatch Range at 11,750 feet (ft) above sea level (asl). Elevations within the Monument range from 5,477 ft asl to 8,045 ft asl. The American Fork River travels generally southwesterly through the lower elevations of the Monument from its headwaters to where it empties into the northern end of Utah Lake. Route 92 roughly parallels the south bank of the river through the canyon. The Uinta-Wasatch-Cache National Forest managed by the US Forest Service surrounds the Monument and includes the Lone Peak Wilderness Area north of the Monument and the Mount Timpanogos Wilderness Area southwest of it.

The Monument landscape consists of steep ledges and rugged terrain punctuated by rocky pinnacles and sawtooth ridges. The canyon's narrow riparian corridor quickly ascends into semi-arid alpine forests and shrubland. The steep terrain prohibits the accumulation of a substantial soil layer except in valleys and flatter forested slopes. The alpine landscape is predisposed to slumping, landslides, and slope failures that occur when saturated. Vegetation in the Monument is generally characterized by alpine forests with communities dominated by conifers. A smaller proportion of the vegetated area consists of deciduous forests and oak/shrub areas. Mixed conifer and aspen forests are found on the cooler north-facing slopes where rich, moist soils support trees, understory shrubs, forbs, and grasses. Chaparral/shrub communities are typically found on the dry south-facing slopes. Many south slopes, however, are too rocky and dry to support vegetation. Several rare plant communities have been observed in the Monument, primarily near the trail to the caves and the limestone outcroppings above the caves. The climate in the Monument is characteristic of the mid-latitude Rocky Mountains, where temperatures are below freezing with regular snowfall in the winter and reach 90°F in the summer.

Resource Descriptions

The Monument's primary natural resources are three high-elevation (alpine) limestone caves (east to west: Timpanogos, Middle, and Hansen), together known as the **Timpanogos Cave System (contributing site, Photos 1 and 2)**. The caves are at an elevation of 6,703 ft asl and follow a transverse fault to the nearby Wasatch Fault. They contain 1.2 miles of surveyed passages, including two human-made tunnels connecting them, and spectacular natural formations (speleothems) generated by infiltrating shallow groundwater. The formations include stalactites that grow from the ceiling, helictites that grow sideways or vertically, and flowstones that grow when water flows over cave surfaces.

The Timpanogos Cave System is notable for an abundance of helictites, which are rare spiral structures formed by the capillary, counter-gravity movement of water through tiny canals. The formations in the

caves have distinct colorations, which result from the precipitating minerals in the rising hydrothermal fluids. Small lakes within the caves support cave-specialized microorganisms and invertebrates. Water is pumped out from the caves to prevent path flooding. Timpanogos Cave, the eastern cave and the largest of the three, has several parallel fissures along faults in the rocks. The cave is about 600 ft long and oriented on a southwest-northeast axis. Climate conditions within the caves remain, as they have for centuries, fairly consistent. The greatest impacts on the caves come from human use. The Monument's operating season for cave tours generally runs from mid-May through mid-October.

The cave trails and resources associated with and inside the three caves are described first, followed by the Monument's built resources arranged along the flatter terrain of the narrow canyon floor and accessible from Route 92.

Cave Trails and Associated Resources

The **Cave Access Trail (1887/1933–1936/1941–1942/1951–1952/1966, contributing structure, CRIS ID 011583,[2] Photos 3–6)** is an asphalt-paved trail that ascends the north slope of Mount Timpanogos to the cave entrances from the Visitor Center on Route 92 at the east end of the Monument. The trail is about 1.5 miles long and splits near the top to access the Hansen Cave entrance and the Timpanogos Cave exit. It consists of four segments developed at different times. The upper segment from the split to Hansen Cave was built from 1933 to 1936 along an alignment derived from trails cut by Martin Hansen after discovering the cave in 1887, and the segment between the Hansen Cave entrance and the Timpanogos Cave exit was constructed in 1936. Construction of the lower part of the trail to the split began in 1941 but paused after the completion of only 0.4 miles due to World War II. The rest of the lower part of the trail was completed in 1952.

The trail's width ranges from 4 to 6 ft and maintains an even camber by following the topography and using switchbacks; the alignment of some areas may have been altered over time to allow easier access for equipment up and down the trail. The subbase varies depending on the segment's age and topographic condition and is poured concrete, mortared or dry-laid rubblestone, or bedrock. Drainage features along the trail include check-dams, swales, and drains. The drains are on the interior side of the trail and covered in metal grates; pipes and culverts carry water under the trail to empty onto the slope. The trail passes through three constructed tunnels cut into the rock: one about 0.4 miles from the bottom, one with a metal grate door shortly after the first tunnel, and one shortly before the Hansen Cave entrance.

Interpretive features along the trail consist of waysides, signs, and self-guided tour markers, which are wood blocks incised with a number corresponding to an interpretive narrative, "Along the Way," that is available in the Visitor Center. The markers are mounted on metal L-profile rods inserted into drilled holes in rock ledges along the trail. Inscribed bronze panels inset into the asphalt interpret geologic rock formations and divisions along the trail. A dashed yellow and red centerline demarcates areas along the trail at high risk of rock falls. Views and vistas along the trail vary as the route passes beneath vegetative canopies and opens into clearings. Panoramic views northward toward Swinging Bridge Canyon and the Lone Peaks Wilderness

[2] The NPS Cultural Resources Information System (CRIS) is a centralized database that contains, among other things, records of Historic Structures (CRIS-HS), Cultural Landscapes (CRIS-CLI), and Archeological Sites (CRIS-AR). The CRIS-HS and CRIS-CLI are evaluated inventories of a park's historic buildings, structures, objects, and cultural landscapes that have historical, architectural, and/or engineering significance. The CRIS-AR is an unevaluated inventory of a park's precontact and postcontact archeological resources and includes basic information about site location, type, known or inferred integrity, and current National Register status.

Area are possible at the higher elevations, and points along the trail descending from the Timpanogos Cave exit have distant views of the Utah Valley to the west.

The **Cave Access Trail Walls and Fences (1933–1936/1941–1942/1951–1952/1966, historic associated feature,[3] Photos 5 and 6)** includes built structures used to reinforce the trail edge and provide additional safety for visitors. Mortared rubblestone seat walls are employed around switchbacks and overlooks. High fences near steep drop-offs are constructed of mortared rubblestone piers with sawtooth stone coping and oxidized metal chain-link rails. Other sections of the trail have oxidized metal tubular posts with or without tubular rails. One narrow section has a metal chain attached to the interior rock face. Most extant dry-laid rubblestone retaining walls were initially built in 1933–1936. The NPS improved the Hansen Cave entrance in the 1930s and widened it with a mortared rubblestone wall with sawtooth coping in 1966. A mortared rubblestone wall with plank benches, built in the 1960s, encircles an exterior terrace at the Timpanogos Cave exit.

The **Old Cave Trail (1887/1921–1922, contributing structure, Photos 7 and 8)** is an unmaintained earthen trail developed by local outdoor enthusiasts and the US Forest Service. The lower section ascends the north slope of Mount Timpanogos from Cave Camp on Route 92 at the west end of the Monument and intersects with the current Cave Access Trail about 0.5 miles from and 1,200 ft in elevation above the Visitor Center. The Old Cave Trail's alignment is derived from trails cut by Martin Hansen after discovering Hansen Cave in 1887. It employs narrow switchbacks, some with dry-laid rubblestone retaining walls. The original lashed and bolted log guides are no longer extant. The upper section of the Old Cave Trail ascends the slope east of the current Cave Access Trail to the Timpanogos Cave entrance. Some sections of the trail are carved out of the talus slopes and ledge, and other sections have coarse rubblestone retaining walls. Slope failure and rock falls have destroyed parts of the upper section along the ledge east of the Cave Access Trail intersection and parts of the lower section's first 150 ft.

The **Cave Comfort Station (1939, contributing building, CRIS ID 011586, Photo 9)** is about 300 ft from the entrance to Hansen Cave at the outer curve of a switchback. It is a one-story, square, mortared rubblestone building designed by architect Edward A. Nickel of the NPS Branch of Plans and Design and constructed by WPA labor using limestone quarried from nearby cliffs. The comfort station is on a steep slope, and the rear wall incorporates a rock ledge. It has a low-pitched, concrete slab, shed roof reinforced with limestone facing. Entrances and small window openings filled with wood plank shutters are in the west and south elevations. The three entrances contain vertical-plank doors with metal braces. Two of the doors have a small glazed panel. A concrete platform surrounded by a rubblestone wall is in front of the west entrance. The interior has a poured concrete floor, parged walls, and wood stall dividers. The NPS improved the comfort station ca. 1961 with the construction of a larger sewage vault.

The Grotto (1938–1939, contributing structure, Photo 10) is a small natural cave west of the Hansen Cave entrance that the NPS altered for use by visitors and staff. An entrance was blasted into the west wall, and the natural opening was enclosed with a low mortared rubblestone parapet wall. Low wood-plank benches on mortared rubblestone bases were installed on the south wall. The western end of the cave was enclosed with a mortared rubblestone wall and used as a concession counter. The NPS later infilled the counter and installed a door to create the Ranger's Room, where park rangers wait for tour groups and store their packs. A separate door exits the Ranger's Room onto a ledge known as the Lunch Bench.

[3] "Historic associated feature" is used to enumerate and describe the small-scale component features of a landscape, or a system of features, that are not individually countable according to National Register guidelines but that collectively constitute a single countable resource.

The **Hansen Cave Entrance Pavilion (2003, non-contributing structure, Photo 11)** is a shelter structure built by the NPS at the entrance to Hansen Cave. The pavilion was designed to be visually compatible with the historic trail features and has square, mortared rubblestone piers that support a timber-framed, low-pitched shed roof. The interior side rests on exposed bedrock. It serves as a sheltered area for guests waiting for cave tours and can withstand heavy snow loads or rock falls.

The **Rock Trap (1972, non-contributing structure)** is a system of chain-link curtains, gates, and guidewires that catches rock fall above the Hansen Cave entrance and Cave Comfort Station. The curtain and gates are maneuvered using a motor mounted on a steel grate platform and accessed by metal ladders. The NPS upgraded the system in 1999 and again in 2024.

The **Cave Tour Trail (1921–1922/1938–1939, contributing structure, Photos 12–15)** is a primarily concrete one-way path through the caves from the Hansen Cave entrance to the Timpanogos Cave exit. The section in Timpanogos Cave was built in 1921–1922, and the sections in Middle and Hansen caves were built in 1938–1939. The Hansen Cave entrance is a tunnel constructed below the natural cave opening that is filled with a vertical-plank and metal-strap door. It opens into a vestibule that has a secondary door into the main cave. The secondary door is constructed of wood planks and metal bolts, has a slatted transom for bats, and is surrounded by a mortared rubblestone wall. The **Hansen Cave Features (1887–1893, historic associated feature, Photo 13)** consist of evidence of early tourism and mining—such as drill holes, wooden pegs, iron hooks, and historic graffiti—visible in the first cave room. The path is narrow and ascends several sets of concrete and rock stairs. At the steepest ascents, tubular metal railings and handholds are attached to the walls. Steel grate catwalks with tubular metal railings cross cave pools and openings. A spur from the main Cave Tour Trail ascends a set of stairs into Middle Cave, which is narrow and has one large cavernous room in the center with a poured concrete floor. A side passage near the back of Timpanogos Cave, used from 1922 to 1939 to allow a one-way tour loop through the cave, is now closed to the public. The Timpanogos Cave exit has a wood plank door with a welded metal frame and bolted straps in a wide, segmental-arch opening flanked by mortared rubblestone walls.

Two human-made tunnels connect the three caves. The **Hansen Tunnel (1936–1937, contributing structure, Photo 16)** is a 75-ft-long tunnel between Hansen and Middle caves, and the **Timpanogos Tunnel (1937–1938, contributing structure)** is a 180-ft-long tunnel between Middle and Timpanogos caves. Both tunnels are 4 ft wide and 7 ft high with poured concrete floors. The tunnels allow an increased passage of air that reduces average humidity and increases the likelihood of seasonal climate variations. Air-tight insulated steel doors installed between the caves in 2015 prevent airflow and have improved climate stabilization.

The **Cave Lighting System (1995–1996, non-contributing structure)** consists of floodlights affixed to metal bases near cave features and smaller lights along the Cave Tour Trail. Electrical cables are concealed where possible in chiseled conduits, under trail sediment, or behind rock or concrete. Different lighting systems have been used since a local outdoor organization first had one installed during the winter of 1921–1922. The lighting was replaced multiple times to improve safety, maintenance, and sensitivity to the damp environment of the caves. Varied lighting schemes incorporated colored lights, indirect lights or spotlights, and incandescent or daylight bulbs to accentuate formation colors or to create a sense of mystery. Non-contributing remnants of earlier lighting systems include wood pegs inserted into drillholes in the cave walls and disused wires.

The **Timpanogos Cave Exit Pavilion (1976–1977, non-contributing structure, Photo 17)** is a shelter that covers the terrace outside the Timpanogos Cave exit. It consists of rectangular, mortared rubblestone piers

that support a steeply pitched, timber-frame, shed roof with exposed rafter tails and plank sheathing. The interior side of the roof is anchored to the cliff. In the early twenty-first century, the NPS built an addition on the west end of the pavilion to shelter stairs descending to the Cave Access Trail. The stairs provide an alternative to a segment of the trail and are poured concrete and stone with tubular metal railings. The addition has square piers and matches the original pavilion.

The **Exit Bathroom (21st c., non-contributing building)** is a small, wood-frame building near the Timpanogos Cave exit. It has a shed roof, vertical-plank walls, a concrete foundation, and two wood-paneled doors to separate toilet rooms. A steep, dry-laid, stone staircase ascends a bluff from the Cave Access Trail to the Exit Bathroom.

Canyon Resources

The resources along the canyon floor are described from west to east, beginning with Route 92.

Route 92 (1878/1932–1933, contributing structure, Photo 18), also known as American Fork Canyon Road and the Timpanogos Highway, is a two-lane, asphalt-paved road that runs generally west–east through the Monument from the west entrance near Pleasant Grove to the east entrance in American Fork Canyon. The Monument boundary includes 0.67 miles of the road along the south bank of the American Fork River. The road has narrow gravel or grass shoulders occasionally lined with stones. Initially constructed by the American Fork Wagon Road Company as a toll road that followed the former route of a narrow-gauge railroad to mines in the area, the road was improved in 1890 and realigned and widened by the US Bureau of Public Roads in 1932–1933. Alterations since then have been limited to the raising of the roadbed in some sections; installation of culverts, guardrails, and guides; and occasional repaving. The eastern section of Route 92 within the Monument closely follows the river, and its base was rebuilt with precast concrete blocks.

The **American Fork River Culvert (1960s, non-contributing structure, CRIS ID 052223)** is a single-span reinforced concrete deck bridge that carries the Route 92 roadway over the American Fork River at the west Monument boundary. The extant culvert replaced one first depicted at this location on a 1937 map of Cave Camp (see below).

The **Wagon Road Trace (1878, contributing structure, CRIS ID TICA00001.003, Photo 19)** is a short segment of the original American Fork Wagon Road Company earthen toll road that originally ran the length of the canyon. The segment within the Monument is at the west Monument boundary. It begins at Route 92 just east of the American Fork River Culvert and runs slightly southwest above the riverbank, continuing for about 100 yards past the Monument boundary before disappearing under a rockslide. This segment of the nineteenth-century road was not altered or overlain by the construction of Route 92.

The **Storage Building (1922–1923, contributing building, CRIS ID 011585, Photo 20)** is a small, square, mortared rubblestone building built into the slope south of Route 92 near the west Monument boundary. It faces northwest toward the Wagon Road Trace and the river. The building has a low-pitched, concrete slab, gable roof. The northwest elevation has a window opening and a door opening beneath a shared wood lintel. A timber ridge board is visible on the facade.

The **Camp Store Foundation and Retaining Walls (1922, contributing structure, CRIS ID 023004, Photo 21)** are built into the slope south of Route 92 near the west Monument boundary, just east of the Wagon Road Trace. The foundation was part of a wood-frame building constructed in 1922 as a concessions

outpost and expanded in 1928 to include a bunkhouse with a large covered porch off the west elevation. The NPS removed the building in 1963. The foundation consists of mortared rubblestone and poured concrete walls that form an irregular rectangle about 16 ft by 62 ft. The north wall adjacent to Route 92 has a set of steep concrete steps at the east end. The east and south walls are buried into the steep hillside. Several walls are crumbling, and sediment and vegetation have built up in the interior. Mortared fieldstone retaining walls tie into the northeast and southwest corners of the foundation. The east wall is about 3 ft high and runs about 100 ft along Route 92. The west wall is about 5 ft high and runs about 75 ft above the Wagon Road Trace.

The **West Entrance Sign (1941, contributing object, CRIS ID 052222, Photo 22)** is on the south side of Route 92 directly in front of the Camp Store Foundation. It consists of a square, mortared rubblestone pier; a square wood cross post; and an inscribed plank sign that hangs from the cross post. The NPS Branch of Plans and Design designed the sign, which was built by WPA workers. The sign was severely damaged by a car in 2025, but the NPS collected and inventoried most of the stones and will reconstruct the sign in the same location in as close to original condition as possible. The identical **East Entrance Sign (1941, contributing object, CRIS ID 051695)** is on the north side of Route 92 at the east Monument boundary.

The **Route 92 Stone Retaining Walls (1921–1928, contributing structure, CRIS ID 606418, Photos 23 and 24)** are mortared rubblestone walls built by the US Forest Service to support the north shoulder of Route 92 near the west end of the Monument. The first section of wall, constructed in 1921–1922, is about 144 ft long and varies in height from 6 to 15 ft above the adjacent ground surface. A set of stone steps near the west end was infilled when the roadbed was raised ca. 1952, and dry-stacked rocks were added at the same time to increase the wall height. The wall was extended about 500 ft eastward in 1928 and drops to a height of about 3 to 4 ft above ground at its east end.

The **Caretaker's House Root Cellar (1922–1923, contributing structure, CRIS ID 023003, Photo 25)** is a subterranean storage structure built into the west section of the Route 92 Retaining Wall. It has a low-pitched, poured concrete, front-gable roof and mortared rubblestone walls. A centered entrance contains a vertical-plank door with a diamond-shaped light. The structure is about 11 ft by 7 ft.

Cave Camp (1922, contributing site, Utah State No. 42UT1898, CRIS IDs TICA00001.004–TICA00001.0007, Photo 26) is a 1.5-acre naturalistic landscape between the north side of Route 92 and the American Fork River that was used as a campground from 1922 through 1969. The site is at a slight widening of the river's flood plain that is lower than the adjacent roadway. Cave Camp is lightly wooded and retains small-scale landscape and archeological features associated with its mid-twentieth-century use, including a weather station, rock fire rings and rock alignments, and an unpaved campground road segment. Vegetation consists of deciduous (cottonwood and boxelder) and coniferous (white fir and Douglas fir) trees.

The **American Fork River Walls (1921–1967, contributing structure, CRIS ID 606420, Photos 27–29)** are dry-laid and mortared rubblestone walls that channelize most of the river within the Monument and stabilize the adjacent embankments. The oldest walls are at the west end of the Monument in Cave Camp and include a 150-ft-long segment along the south bank of the river with a lower foundation of poured concrete and remnant pipe stanchions from a former handrail along the top. Additional segments of wall were built in the 1930s and 1940s. Following a flood in 1966, segments of the walls were covered with concrete reinforcement. After late twentieth-century flood events, other segments were rebuilt to be compatible with the earlier walls.

The **Service Road (1962, contributing structure)** is a 500-ft-long asphalt road that begins on the north side of Route 92, near the center of the retaining walls, and curves northeast through Cave Camp to access NPS facilities. The east end of the road overlays an earlier camp road.

The **Cave Camp Entrance Road Trace (1922, contributing structure, Photo 24)** is a dirt and grass remnant of the original entrance road from Route 92 to Cave Camp. It begins at the east end of the Route 92 Retaining Wall and parallels the wall as it runs due west through the trees to meet the Service Road.

The **Campground Comfort Station (1928, contributing building, CRIS ID 011584, Photo 30)** is between the east end of the Route 92 Retaining Walls and the west end of the Cave Camp Entrance Road Trace. It is a one-story, rectangular, side-gable, coursed rubblestone building that initially contained restrooms and is now used for storage. The building measures about 24 ft long by 15 ft wide and has a jerkinhead roof covered in composite shingles (installed ca. 2020) with exposed wood rafter tails. The roof overhangs the walls and shelters two horizontal ribbons of multi-light, wood-frame, awning windows in the north elevation. Wood-paneled doors with wood surrounds are centered in the east and west side elevations. The gable ends are clad in clapboard and have diamond-shaped windows with wood trim.

The **USFS Stone Pier (by 1930, contributing object, Photo 31)** is a square, mortared cobblestone pier excavated during Route 92 roadwork and placed on the north side of the Cave Camp Entrance Road Trace. It measures about 4 ft square and 5 ft high. A pipe that formerly held a flag protrudes from the top. Two sides of the pier have spaces for plaques outlined by smaller river cobbles. One space is rectangular, and the other matches the outline of the US Forest Service emblem.

The **Maintenance Building (1962, altered 1989–1990, non-contributing building, Photo 32)** is on the south side of the Service Road about 150 ft northeast of the Campground Comfort Station. The building consists of a one-story, rectangular, four-bay garage constructed during the NPS Mission 66 program and expanded with the construction of an office to the west (1989) and a wood-frame storage addition to the east (1990). It has a low-pitched, composite and gravel, shed roof with metal coping; sand-colored concrete block walls; and a poured concrete slab foundation. The garage bays have aluminum overhead track doors under vertical-plank infill. The office addition has a flat roof and sand-colored block walls. Entrances have hollow-core steel doors, and fenestration consists of paired metal-framed casement windows with header block sills.

The **American Fork River Bridge (1940–1941, contributing structure, CRIS ID 011588, Photo 33)** is a single-span arch, mortared rubblestone bridge that carries the Service Road from the Maintenance Building over a sharp southward bend in the American Fork River to the Custodian's Residence (see below). It replaced an earlier footbridge at this location. The bridge measures 40 ft long and about 16 ft wide and was designed by engineer L. L. Hohl at the NPS Branch of Engineering. The bridge deck is paved with asphalt and lined with a mortared rubblestone seat wall. Reconstruction of the river walls in 1966 narrowed the visible portion of the bridge.

The **Greenhouse (2001, non-contributing structure)** is a one-story, rectangular, metal-frame greenhouse directly northeast of the bend in the river. The fully glazed structure has a front-gable roof, a concrete slab foundation, and a double door in the east elevation.

The **Custodian's Residence (1941, contributing building, CRIS ID 011587, Photo 34)** is on the north side of the river about 75 ft northeast of the Maintenance Building and faces southwest toward the bend in the river. It is a one-story, rectangular, late Craftsman-style house that was originally built as the Monument

custodian's residence and converted to administrative offices in 1999. Architect C. T. Lundgrand of the NPS Branch of Plans and Design designed the building, also known as the Superintendent's Residence, Rock House, or Building No. 2. The building measures about 64 ft long by 27 ft wide. It has a wood-shingled, side-gable roof with exposed rafter tails and mortared rubblestone walls with vertical board-and-batten planks in the gable ends. A rubblestone end chimney projects from the north end of the facade (southwest) elevation, and a rubblestone ridge chimney is near the center of the roof. A projecting roof overhang shelters a recessed entrance and projecting bay at the center of the facade. The entrance contains a twelve-light, wood-frame door with eight-light sidelights. Two gabled ells extend from the rear (northeast) elevation, and a wood-frame enclosed vestibule with a shed roof fills the space between the ells. Fenestration consists of double-hung, multi-light wood windows set in recessed openings of varying sizes with angled rubblestone sills and stone lintels.

The Custodian's Residence is surrounded on the southwest and southeast by a flat lawn with several large shade trees and has a paved parking area on the northwest side and a paved sidewalk along the northeast side. The **Custodian's Residence Walkway (1941, contributing structure, Photo 34)** is a curved flagstone path that leads from the parking area to the main entrance. The **Custodian's Residence Retaining Walls (1941 and 1966, contributing structures, Photo 35)** consist of a 3-ft-high mortared rubblestone wall about 8 ft northeast and parallel to the house's rear elevation, built in 1941 with the house to retain the adjacent slope, and a freestanding wall built in 1966 of rounded river rock perpendicular to the south end of the older wall. The **Custodian's Residence Root Cellar (1941, contributing structure, CRIS ID 052221, Photo 35)** is built into the slope immediately northeast of the residence, about 5 ft east of the retaining wall and opposite the house's rear entrance. The structure measures about 9 ft by 12 ft and has a flat concrete slab roof covered with earth and mortared rubblestone walls. It has a vertical-plank door with bolted iron straps and hardware and a large cut-stone lintel.

The **Weather Station (1940s, contributing structure)** consists of bolted metal access stairs that ascend a hill northeast of the Custodian's Residence to a rain gauge catchment area. The catchment area has three wood paddles embedded with iron brackets in a concrete weight that is partially underground.

The **American Fork Hydroelectric Pipeline Remnants (1901 and 1953, contributing site, CRIS ID TICA00001.008)** are the remnants of a 12,000-ft-long pipeline built by Utah Power and Light to convey water from the American Fork River to the Upper American Fork Plant, a hydroelectric facility outside the district. About 2,000 ft of the pipeline ran through the Monument along the canyon's south-facing slope above the river and had numerous tunnels and trestles along its length. Welded steel pipes replaced the original wood stave pipes in 1953. In 2005, PacifiCorp, the owner of the pipeline, decommissioned and removed most of it. The alignment of the pipeline is visible as scar lines on the landscape, and extant remnants consist of wood bracing and tunnels.

The **Swinging Bridge Picnic Area (1961–1963, contributing site, Photos 36–40)** is a wooded picnic area on the north side of Route 92 near the center of the Monument. An asphalt-paved switchback ramp and curvilinear paths lead down the steep south riverbank, and the paths cross the river via two footbridges (described below) to two groves of picnic sites on the north riverbank. Dry-laid and mortared rubblestone retaining walls form flattened cuts and terraces for about 30 paved circular or rectangular picnic sites with picnic tables and fire rings or grills.

The **Swinging Bridge Parking Lot (1961–1963, contributing structure)** is on the north side of Route 92 and terraced about 8 ft above the picnic area. It is a rectangular, double-loaded, asphalt-paved parking lot with perpendicular marked spaces. A single entrance from Route 92 accesses the east side of the parking

lot, which has stone curbing. The north edge has a mortared rubblestone retaining wall that rises to a tall seat wall where the switchback access ramp descends easterly to the picnic area. Poured concrete drainage channels with rubblestone edging are cut into the curbing at the northeast and northwest corners of the lot.

The **Swinging Bridge Comfort Station (1963, contributing building, Photos 37 and 38)** is a one-story, rectangular, wood-frame and masonry building on the south riverbank at the base of the access ramp. It has a shallow-pitched, side-gable roof that is covered in gravel and overhangs the walls. The lower 5 ft of wall is painted concrete block, and the upper part is plywood. The building sits on a poured concrete pad. Horizontal awning windows in vinyl frames run under the eaves along each elevation. Metal doors offset in the side elevations access separate gender restrooms, and a door centered in the south elevation accesses a maintenance room.

The **Comfort Station Shed (ca. 2010, non-contributing structure, Photo 38)** is a wood-frame structure between the Comfort Station and the river. It has an asphalt-shingled shed roof, vertical-plank walls, a wood door centered in the east elevation, and a row of small fixed windows along the top of the north elevation.

The **Swinging Bridge Picnic Area Lower Footbridge (1983, contributing structure, Photo 39)** carries a picnic area path over the river west of the Comfort Station. It is a single-span, wood truss bridge with additional vertical wood slats resting on rubblestone retaining walls. The deck is paved with asphalt and is about 16 ft long. The bridge replaced an earlier footbridge at the same location that washed out in a flood and was designed to match the Upper Footbridge.

The **Swinging Bridge Picnic Area Upper Footbridge (1961, contributing structure, Photo 40)** carries a picnic area path over the river east of the Comfort Station. It is a single-span, wood Warren truss bridge with additional vertical wood slats and knee braces resting on rubblestone retaining walls. The deck is paved with asphalt and is about 18 ft long. Structural members are attached with bolts.

The **Canyon Nature Trail (1974, non-contributing structure)** is a 0.25-mile, asphalt-paved pedestrian trail that meanders east along the north riverbank between the Swinging Bridge Picnic Area and an NPS staff area (see Quarters 8 and Quarters 9 below). It begins at the east edge of the picnic area and passes through the flattened, semi-wooded terrace and talus slopes north of the river. Benches, waysides, and signs are distributed along it. A poured concrete and rubblestone spillway carries the trail over Swinging Bridge Creek, a tributary of the American Fork River near the trail's midpoint. The eastern end of the trail, where the topography is steepest, has mortared and dry-laid rubblestone retaining walls. Shortly before crossing the river to terminate at a parking lot on Route 92, the trail splits and descends the riverbank via two spurs. The western spur makes a tight switchback, and the eastern spur descends a steep run of poured concrete stairs.

The **Canyon Nature Trail Footbridge (1987, non-contributing structure)** carries the Canyon Nature Trail over the American Fork River about 900 ft east of the Swinging Bridge Picnic Area. It is a steel, Brown truss, pedestrian bridge with wood handrails, a wood plank deck, and poured concrete abutments. The bridge has square- and rectangular-profile, hollow steel structural members welded together and horizontal, L-profile, steel rails welded to the exterior. The south end has two poured concrete steps faced in rubblestone. The bridge replaced a 1974 footbridge that washed out in 1983.

Parking Lot C (1951, contributing structure) is a small, single-loaded pull-off parking area on the north side of Route 92 at the east end of the Canyon Nature Trail. It has a row of perpendicular marked spaces and stone curbing.

The **Access Road (1956–1962, contributing structure)** runs from the north side of Route 92 between two NPS staff buildings on the north side of the river and then curves west and ascends the north canyon wall in Swinging Bridge Canyon for about 0.2 miles to a water tank outside the Monument boundary. The road is paved in asphalt from Route 92 to terraced parking on the slope north of the staff buildings. Mortared rubblestone and poured concrete walls retain the terraces. The road continues to the water tank as a single-lane gravel road.

The **Rock Bridge (1956–1957, contributing structure, Photo 41)** is a mortared rubblestone and poured concrete, single-span arch bridge that carries the Access Road over the American Fork River. It measures about 40 ft long and 17 ft wide and has low seat walls that flare at the ends and terminate at square piers. The headwalls are incorporated into the river retaining walls. A pair of stone piers is at the south end of the bridge. The NPS Western Office of Design and Construction designed the bridge.

Quarters 8 (1962, contributing building, Photo 42) is on the west side of the Access Road and faces south. It is a one-story, wood-frame, Mission 66 Ranch house used as a residence for NPS staff. The building has a low-pitched, standing-seam metal, side-gable roof and composite weatherboard-clad walls. The foundation is poured concrete. The main entrance is recessed in the center of the south elevation and sheltered under a shed-roof porch. Fenestration consists of one-over-one vinyl sash in vinyl surrounds, arranged singly or in pairs, and a tripartite picture window west of the entrance. A single-bay garage extends from the east side of the house and has a metal overhead garage door in the east elevation.

Quarters 9 (1962, contributing building, Photo 43) is on the east side of the Access Road and faces south. It is a one-story, wood-frame, Mission 66 Ranch house built as a residence for NPS staff and now used as administrative offices. The building has a low-pitched, standing-seam metal, side-gable roof and composite weatherboard-clad walls. The main entrance is recessed near the center of the south elevation and sheltered under a shed-roof porch. Fenestration consists of single or paired one-over-one vinyl sash windows in vinyl surrounds and a tripartite picture window west of the entrance. A garage bay at the west end of the south elevation has been infilled with vinyl siding and a sliding vinyl window.

The **Radio Tower Powerhouse and Site (ca. 1975, non-contributing structure)** is on the west side of the Access Road, partway up the slope past the NPS staff buildings. The site occupies a flattened area on the south-sloping canyon wall. The powerhouse at the south edge of the site has a corrugated metal shed roof and concrete block walls. The tower site encompasses three tubular metal towers and concrete footings of former structures.

The **Pictograph (CE 400–1300, contributing site, CRIS ID TICA00001.001, Photo 44)** is an isolated 8-inch-tall anthropomorphic figure painted in a red pigment on a vertical stone cliff northeast of the NPS staff buildings. The style of the image, including a trapezoidal body, is typically associated with Fremont rock art and suggests the image may have been created within the last 1,000 years. Although well known to Monument staff, the pictograph was first documented in 1975, when it was assessed as faded but otherwise unaltered or disturbed.[4] A 2008 description of cultural resources provided by Monument staff identifies the condition of the pictograph as "poor" and identifies water erosion as a threat to the resource.

[4] Adrienne Anderson, *Archeological Evaluation, Timpanogos Cave National Monument*, Trip Report to the Chief, Midwest Archeological Center, December 24, 1975 (On file, Timpanogos Cave National Monument, American Fork, UT).

The **River View Picnic Area (ca. 1990, non-contributing site, Photo 45)** is a 0.15-acre, wooded picnic area on the north side of the American Fork River east of the NPS staff buildings. The picnic area has asphalt-paved trails, picnic tables, fire circles, and an amphitheater. The amphitheater is on the northeast side and is constructed of poured concrete blocks. A wood-frame viewing platform overlooks the river, and a set of stone steps descends toward the river.

The **Canyon View Trail (1984, non-contributing structure)** is an unused earth and stone trail that ascends the canyon wall north of the River View Picnic Area. It incorporates short retaining walls and switchbacks and terminates at a natural overlook about 125 ft north of the river. The overlook retains the ruins of a mortared rubblestone seat wall. The trail was constructed by the Youth Conservation Corps but was never completed or opened to the public.

The **Canyon View Trail Footbridge (1984, non-contributing structure)** carries a paved path near the start of the Canyon View Trail across the American Fork River from the River View Picnic Area to the north side of Route 92. It is a single-span, steel, bowstring truss bridge with wood and metal railings and plank decking. The bridge's abutments are poured concrete and mortared rubblestone.

The **Visitor Center Parking Lot (2019, non-contributing structure)** is an asphalt-paved parking lot on the south side of Route 92 opposite the River View Picnic Area. It has two double-loaded aisles with angled vehicle spaces, a concrete-paved island with picnic tables, and concrete curbing. A poured concrete retaining wall forms the south edge.

The **Visitor Center (2019, non-contributing building, Photo 46)** is immediately south of Route 92 at the east end of the Visitor Center Parking Lot. Built to replace a Mission 66 Visitor Center destroyed in a 1991 fire, it is a low-profile, contemporary, one-story building that serves as the Monument's primary visitor contact station, interpretive center, and store. The building has several intersecting, low-pitched roof planes that are covered in gravel and overhang the walls. The walls are clad in horizontal wood boards, random ashlar stone, and board-form concrete. The building has plate glass window walls and clerestory windows with black muntins. An attached comfort station wing that extends south from the southeast corner has wood cladding. The main entrance is in the building's south elevation and opens onto a poured concrete patio surrounded by coursed stone seat walls with concrete coping and metal handrails. A sign for the Monument is incorporated into the wall adjacent to the Visitor Center Parking Lot. The patio also has a shade structure with geometric metal supports and a frosted glass canopy.

Statement of Integrity

The Timpanogos Cave Historic District retains integrity of location, setting, materials, design, workmanship, feeling, and association to the period of significance (1878–1966) defined in Section 8 of this documentation. Buildings and structures remain in their original locations. Although trail alignments evolved during the period of significance to address challenges associated with the steep topography, the general locations of the Cave Access Trail and Cave Tour Trail have integrity to 1966. Abandoned trails and trail segments like the Old Cave Trail and the lower side passage of the Cave Tour Trail in Timpanogos Cave are intact and contribute to integrity of location. The adjacent US Forest Service lands preserve the Monument's integrity of setting in a rugged and undeveloped mountain and forest landscape, with expansive views north across the canyon and west into the Utah Valley from the upper segments of the Cave Access Trail. The presence of the American Fork River and roadway along the canyon floor and the natural underground caves above the river also contribute to integrity of setting.

Integrity of materials is reflected in the presence of native rock and stone construction, exterior finishes that harmonize with the surrounding environment, native vegetative species, and the natural cave formations. NPS landscape management practices discourage invasive plants and prioritize the protection of the cave environment. Individual buildings and structures in the district are well-preserved examples of NPS Rustic or NPS Modern designs integrated into the natural setting through the use of low profiles and native materials. Carefully constructed views and vistas along the trails and the spatial organization of built resources in the landscape also contribute to design integrity. Buildings and structures constructed after 1966 do not contribute to the district but are compatible with the historic resources and do not detract from the original designs. Integrity of workmanship is evident in the intact historic stone masonry buildings and retaining walls.

The above aspects of integrity combine to create integrity of feeling and association. The resources built in the 1920s and 1930s convey their associations with the Monument's early development by the US Forest Service and the NPS. Although the loss of the Mission 66 Visitor Center in a 1991 fire diminishes the Monument's association with the Mission 66 program, the extant Mission 66 resources in the Monument sufficiently convey the program's design and development principles. The district's overall feeling of a secluded retreat in the forest with opportunities to picnic along the rushing river, ascend the steep canyon wall, and explore the underground world of the caves is intact.

TIMPANOGOS CAVE HISTORIC DISTRICT
DATA SHEET

CONTRIBUTING RESOURCES

NOTE: Asterisk (*) indicates resource previously listed in the National Register

RESOURCE NAME	ALTERNATE NAME(S)	CRIS ID(S)	FMSS ID(S)[5]	BUILT DATE(S)	PHOTO NO.
Buildings = 7 (4 previously listed)					
Cave Comfort Station*	Building No. 127	011586	75102	1939	9
Storage Building*		011585	113421	1922–1923	20
Campground Comfort Station*	Building No. 126	011584	74993	1928	30
Custodian's Residence*	Superintendent's Residence, Rock House, Building No. 2	011587	74988	1941	34
Swinging Bridge Comfort Station		None	75069	1963	37, 38
Quarters 8	Residence	None	75107	1962	42
Quarters 9	Park Headquarters	None	75108	1962	43
Structures = 25 (4 previously listed)					
Cave Access Trail	Timpanogos Cave Trail	011583	75091	1887/1933–1936/1941–1942/1951–1952/1966	3–6
Historic Associated Feature					
Cave Access Trail Walls and Fences		None	None	1933–1936/1941–1942/1951–1952/1966	5, 6
Old Cave Trail*	Historic Cave Trail	None	None	1887/1921–1922	7, 8
The Grotto		None	82939	1938–1939	10

[5] The NPS uses the Facility Management Software System (FMSS) to identify, manage, and track all park maintenance repairs, including deferred maintenance.

RESOURCE NAME	ALTERNATE NAME(S)	CRIS ID(S)	FMSS ID(S)[5]	BUILT DATE(S)	PHOTO NO.
Cave Tour Trail		None	82945	1921–1922 (Timpanogos Cave section) 1938–1939 (Hansen and Middle Cave sections)	12–15
Historic Associated Feature					
Hansen Cave Features		None	None	1887–1893	13
Hansen Tunnel		None	None	1936–1937	16
Timpanogos Tunnel		None	None	1937–1938	None
Route 92	American Fork Canyon Road, Timpanogos Highway	None	None	1878/1932–1933	18
Wagon Road Trace		TICA 00001.003	None	1878	19
Camp Store Foundation and Retaining Walls		023004	82954	1922	21
Route 92 Stone Retaining Walls		606418	82954	1921–1928	23, 24
Caretaker's House Root Cellar*	Cold Cellar 2	023003	232938	1922–1923	25
American Fork River Walls		606420	82954	1921–1967	27–29
Service Road		None	None	1962	None
Cave Camp Entrance Road Trace		None	None	1922	24
American Fork River Bridge*		011588	82930	1940–1941	33
Custodian's Residence Walkway		None	None	1941	34
Custodian's Residence Retaining Walls		None	None	1941 and 1966	35
Custodian's Residence Root Cellar*	Cold Cellar 1	052221	None	1941	35
Weather Station		None	None	1940s	None

RESOURCE NAME	ALTERNATE NAME(S)	CRIS ID(S)	FMSS ID(S)[5]	BUILT DATE(S)	PHOTO NO.
Swinging Bridge Parking Lot	Parking Lot D	None	82935	1961–1963	None
Swinging Bridge Picnic Area Lower Footbridge		None	None	1983	39
Swinging Bridge Picnic Area Upper Footbridge		None	None	1961	40
Parking Lot C	Canyon Nature Trail Parking	None	82932	1951	None
Access Road		None	82924	1956–1962	None
Rock Bridge		None	82925	1956–1957	41
Sites = 5 (0 previously listed)					
Timpanogos Cave System	Timpanogos, Middle, and Hansen Caves	None	78364	N/A	1, 2
Cave Camp	Utah State No. 42UT1898	TICA 00001.004 – TICA00001.007	74910; 82928	1922	26
American Fork Hydroelectric Pipeline Remnants		TICA 00001.008	None	1901, 1953	None
Swinging Bridge Picnic Area		None	75062; 82934 – pathways; 75080 - picnic sites	1961–1963	36–40
Pictograph		TICA 00001.001	None	CE 400–1300	44
Objects = 3 (0 previously listed)					
West Entrance Sign		052222	None	1941	22
East Entrance Sign		051695	None	1941	None
USFS Stone Pier		None	None	By 1930	31
Total Contributing Resources = 40 (8 previously listed)					

NON-CONTRIBUTING RESOURCES

RESOURCE NAME	ALTERNATE NAME(S)	CRIS ID	FMSS ID(S)	BUILT DATE(S)	PHOTO NO.
Buildings = 3					
Exit Bathroom		None	106808	21st c.	None
Maintenance Building	Utility Building	None	74971	1962, altered 1989–1990	32
Visitor Center		None	116248	2019	46
Structures = 13					
Hansen Cave Entrance Pavilion		None	82942	2003	11
Rock Trap		None	82938	1972	None
Cave Lighting System		None	82940	1995–1996	None
Timpanogos Cave Exit Pavilion		None	82941	1976–1977	17
American Fork River Culvert		052223	None	1960s	None
Greenhouse		None	None	2001	None
Comfort Station Shed		None	None	Ca. 2010	38
Canyon Nature Trail	Five Senses Nature Trail	None	74909	1974	None
Canyon Nature Trail Footbridge		None	None	1987	None
Radio Tower Powerhouse and Site		None	82927	Ca. 1975	None
Canyon View Trail		None	82920	1984	None
Canyon View Trail Footbridge		None	None	1984	None
Visitor Center Parking Lot		None	82918	2019	None
Sites = 1					
River View Picnic Area	Canyon Picnic Area	None	82919; 105194: pathway	Ca. 1990	45
Total Non-contributing Resources = 17					

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.)

[X] 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.

[X] 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.

[X] D. Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark “x” in all the boxes that apply.)

[ ] 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
(Enter categories from instructions.)
EXPLORATION/SETTLEMENT
CONSERVATION
ARCHITECTURE
LANDSCAPE ARCHITECTURE
ETHNIC HERITAGE: NATIVE AMERICAN

Period of Significance
CE 500–CE 1300
1878–1966

Significant Dates
CE 500–CE 1300: Formative/Fremont Era
1878: Construction of wagon road through American Fork Canyon
1887: Exploration of caves by Martin Hansen
1966: Completion of Mission 66 development in Monument

Significant Person
(Complete only if Criterion B is marked above.)
N/A

Cultural Affiliation
Native American
European American

Architect/Builder
Nickel, Edward A., NPS Branch of Plans and Design (Cave Comfort Station)
Lundgrand, C. T., NPS Branch of Plans and Design (Custodian's Residence)
Benson, Harvey P. (Mission 66 landscape architect)
Larson, Jon R. (Mission 66 landscape architect)

Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

The Timpanogos Cave Historic District is significant under Criterion A at the local level in the area of Exploration/Settlement and at the national level in the area of Conservation and under Criterion C at the national level in the areas of Architecture and Landscape Architecture. The district's significance under Criterion A is derived from its associations with the late nineteenth-century discovery and early exploration of Hansen Cave by local lumbermen and miners and the early twentieth-century effort to conserve the Timpanogos Cave System as a nationally important natural and scientific resource. The contributing resources within the district that are significant under Criterion A were built as part of the area's initial development as a tourist site in the late nineteenth and early twentieth centuries, its development under US Forest Service protection and management from 1921 to 1933, or its development by the NPS under two significant twentieth-century federal funding programs: the New Deal (1933–1942) and Mission 66 (1956–1966).[6] Buildings and landscape elements designed and constructed from 1921 to 1966 are significant under Criterion C as examples of NPS Rustic and Mission 66 architectural forms and styles.

The district also has significance under Criterion D at the state level in the area of Ethnic Heritage: Native American. A single pictograph documents an ancient Native American presence in the Monument. No prehistoric (Precontact Period) cultural materials and features have to date been identified in association with the pictograph; however, the presence of the rock art indicates that Native Americans were present within the area of the present-day Monument. Any as-yet-unidentified archeological deposits have the potential to yield important new information to help more accurately date the pictograph and to document ancient lifeways and activity. Archeological features associated with nineteenth-century tourism and the development of the Monument have the potential to contribute to a greater understanding of the historical development of the region.

This documentation expands the existing Timpanogos Cave Historic District to encompass 130 acres of the 250-acre Monument and provides additional relevant information about the district's development and significance. The period of significance for Criteria A and C extends from the construction of the first major access road through American Fork Canyon in 1878 to the completion of the Mission 66 development program in the Monument in 1966. The period of significance for Criterion D is about CE 500–CE 1300, which corresponds to the Formative and Fremont eras.

Narrative Statement of Significance (Provide at least **one** paragraph for each area of significance.)

CRITERION A – EXPLORATION/SETTLEMENT

The Timpanogos Cave Historic District has local significance under Criterion A in the area of Exploration/Settlement for its resources associated with the initial exploration of the caves in American

[6] The NPS Mission 66 Era Resources MDPF considers the nationwide Mission 66-era development period to include the 1966–1972 "PARKSCAPE U.S.A." (Parkscape) program that essentially extended the Mission 66 program under NPS Director George B. Hartzog Jr. However, no substantial Parkscape development occurred at Timpanogos Cave National Monument. See Ethan Carr, Elaine Jackson-Retondo, and Len Warner, Rodd L. Wheaton, John D. Feinberg, and Carly M. Piccarello (Carr et al.), *National Register of Historic Places Multiple Property Documentation Form: National Park Service Mission 66 Era Resources*, 2015.

Fork Canyon in the late nineteenth century. Martin Hansen (1847–1934), a teamster and logger in American Fork, is credited with discovering the first of the caves in the **Timpanogos Cave System** on the south wall of American Fork Canyon. An immigrant from Denmark, Hansen settled in American Fork in 1861 after coming to Utah with pioneers from the Church of Jesus Christ of Latter-day Saints, who established towns in the 1850s on the plains west of Mount Timpanogos. Like the Native Americans who lived there before them, the Latter-day Saints[7] availed themselves of the area's natural resources, including the steady supply of timber in the surrounding mountains and canyons. Timber cutters traversed the canyons in the Wasatch Range, where they established seasonal logging communities and sawmill camps. The Utah Valley's increasing populations continuously fueled the need for lumber. After exhausting the timber supplies on the valley floors, loggers found it necessary to climb higher on canyon walls and decimated stands of choice hardwood. Timber extraction depleted the forestry reserves and noticeably impacted other vegetation and wildlife in the mountains.[8]

Ranchers and lumbermen from American Fork and Pleasant Grove likely followed Native American paths to carve the first road into American Fork Canyon. They used horse teams to pull plows and scrapers and used picks and shovels to remove rocks and flatten a roadbed. The road was passable to Dutchman Flat, 15 miles into the canyon, by the late 1850s but required constant maintenance due to floods and snowslides.[9] In the summer of 1870, brothers Jacob and William Miller discovered an outcrop of rich lead-carbonate ore and gold 12 miles into American Fork Canyon that excited investors and prompted others to establish mining claims in the canyon. In 1871–1872, the Miller Company spent $300,000 to construct a narrow-gauge rail line from the Utah Southern Railroad at American Fork along the primitive road through the canyon to its mines. Construction crews blasted portions of the canyon wall to clear the right-of-way. As construction proceeded up the canyon, the grade became too steep for steam engines and forced the line to terminate at Deer Creek (about 4.5 miles past the district).[10]

As development increased in the Utah Valley, more people became aware of the scenic and rugged landscape and rock formations in American Fork Canyon. The narrow-gauge mining railroad through the canyon advertised sightseeing trips in the 1870s that attracted visitors from Salt Lake City and the surrounding towns. However, the Miller Company abandoned its mines and pulled up the railroad tracks after its ore bodies were depleted. When tourism promoters lamented the railroad's removal in 1878, entrepreneurs formed the American Fork Wagon Company the same year to operate a toll road on the former railroad grade. Present-day **Route 92** follows the general alignment of the wagon road and covers it, except where the **Wagon Road Trace** remains along the river at the west edge of the district. The toll road served ranchers, mineral speculators, and an increasing number of tourists drawn to view the canyon's rugged features.

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[7] The Style Guide of the Church of Jesus Christ of Latter-day Saints uses "the Church" to refer to the institution and "Latter-day Saints" to refer to individuals.

[8] Hubert Howe Bancroft, *History of Utah* (San Francisco, CA: The History Company, 1890), 726–728; Laurence P. James and James E. Fell, "Alta, the Cottonwoods, and American Fork," in *From the Ground Up: A History of Mining in Utah*, ed. by Colleen Whitley (Logan, UT: Utah State University Press, 2006), 272; Cami Pulham, *Heart of the Mountain: The History of Timpanogos Cave National Monument* (American Fork, UT: Timpanogos Cave National Monument, National Park Service, 2009), 14.

[9] Alan C. Stauffer, *Histories of American Fork Canyon* (Pleasant Grove, UT: US Forest Service, 1971), 5.

[10] Alan C. Stauffer, *State of Utah Historic Sites Survey: Narrow Gauge Railroad Grade of American Fork Canyon* (Orem, UT, 1971), 1; Richard I. Crosland and Charmaine Thompson, *Heritage Resource Inventory of American Fork Area Mine Closures, Utah County, Utah* (Provo, UT: Uinta National Forest, US Forest Service, US Department of Agriculture, 1994), 6, 10; Stauffer, *Histories of American Fork Canyon*; Bancroft, *History of Utah*, 740–741, 743; James and Fell, "Alta, the Cottonwoods, and American Fork," 282.

An 1880 Salt Lake City guidebook recommended that visitors take the Utah Southern Railroad to American Fork and hire horses from the proprietor of a hotel there to ride along the narrow road up the canyon, where they would encounter striking rock formations, a colossal tree marred by lightning strikes, and burned canyons. Tourist pamphlets and publications reproduced numerous photos of an iconic "hanging rock" created by the construction of the railroad bed in the 1870s as an example of the canyon's rugged and scenic qualities. Locals also widely publicized Dance Hall Cave, a large cavern 4 miles into the canyon where Alva A. Green Sr. hosted music and dancing in the 1880s.[11] The notion of mysterious underground caverns with otherworldly formations of rock suited the romantic mindset of the late nineteenth century. In other parts of the country, increasing numbers of visitors had flocked to other caves, such as Mammoth Cave in Kentucky, where tours had been given since 1816. The discoveries of Luray Cave and Shenandoah Caverns in western Virginia in 1878 and 1884, respectively, fueled American fascination with the underground world. The 1885 discovery of Lehman Caves in Nevada, less than 200 miles southwest of American Fork Canyon, set the stage for the public's interest after the discovery of Hansen Cave.[12]

While cutting timber in the canyon in October 1887, Martin Hansen allegedly followed mountain lion tracks up to the entrance of a cave, where he saw animal bones and debris littering the floor. The following winter, Hansen convinced other local men to help him develop the cave for recreational purposes. The men cut a steep trail up the side of the mountain to the cave—the predecessor to the lower section of the **Old Cave Trail** and the upper section of the **Cave Access Trail**—and placed a wood door over the cave entrance. The trail had very few switchbacks and used ladders made of lashed logs to ascend the cliff face in places. Hansen led tour groups through the cave, which became known locally as Hansen Cave, for a small fee until 1891, when he abandoned the unprofitable venture.[13]

Unbeknownst to Hansen, a group of men from Pleasant Grove pillaged stone formations from Hansen Cave in 1892–1893. Mistaking the cave flowstone for onyx (onyx marble), the men filed for mineral rights to the cave and leased their claim to the Duke Onyx Company of Chicago, Illinois. To remove the stone, the miners drilled holes into the flowstone, inserted and soaked wood pegs with water, causing the wood to expand and fracture the stone. They enlarged the cave entrance to remove large slabs, which they loaded onto carts, lowered down the steep slopes, and hauled out of the valley using horses. Hansen Cave "onyx" was reportedly transported by freight car to the eastern United States for sale.[14] The miners discontinued operations in the cave after discovering that the stone was not onyx and was too brittle to be profitable. However, occasional articles describing Hansen Cave in the local newspaper, the *American Fork Citizen*,

[11] H. L. A. Culmer, *Tourists Guide Book to Salt Lake City and Vicinity* (Salt Lake City, UT: J. C. Graham & Co., Printers, 1880), 26–27; Stauffer, *Histories of American Fork Canyon,* 36.

[12] Olmsted Center for Landscape Preservation (OCLP), *Timpanogos Cave NM Landscape, Timpanogos Cave National Monument, Cultural Landscapes Inventory* [100% DRAFT] (National Park Service/Olmsted Center for Landscape Preservation, Boston, MA, 2024), 26.

[13] Pulham, *Heart of the Mountain,* 14–15; Jared Farmer, *On Zion's Mount: Mormons, Indians, and the American Landscape* (Cambridge, MA: Harvard University Press, 2008), 195.

[14] The distribution and sale of flowstone from Hansen Cave is largely undocumented. The stone was reportedly used in decorative work at New York City's American Museum of Natural History, for a mantel in Salt Lake City's Temple of the Church of Jesus Christ of Latter-day Saints, and in domestic furniture. Pulham, *Heart of the Mountain,* 14–15.

likely encouraged further damage to its formations over the next two decades.[15] The **Hansen Cave Features** preserve evidence of the early tourism and mining activities.

CRITERION A – CONSERVATION

The Timpanogos Cave Historic District has national significance under Criterion A in the area of Conservation for its resources associated with the early twentieth-century conservation movement that resulted in the protection of the caves as part of the Wasatch National Forest; the designation of Timpanogos Cave National Monument; and the development of recreational facilities in the Monument by local organizations, the US Forest Service, and the NPS. The district exemplifies the national value of conservation and corresponding public investment that together have served to protect and enhance the country's natural and cultural heritage.

Development of Federal Conservation Policy

A growing land conservation consciousness in the late nineteenth century led to efforts to protect the Wasatch Range from mineral and forest exploitation. Americans began to acknowledge the need for public regulation and planning as the physical consequences of the country's rapid westward expansion and its ongoing growth and development became more apparent. Congress created the Division of Forestry within the Department of Agriculture in 1881. The division had no regulatory authority but compiled and shared information on the country's natural resources as policy makers considered various proposals for their conservation. On March 30, 1891, President Benjamin Harrison signed the Forest Reserve Act, which enabled the president to "set apart and reserve … public land bearing forests … or in part covered by timber or undergrowth, whether of commercial value or not, as public reservations." By the end of 1892, Harrison had created 15 reserves encompassing over 13 million acres held in trust by the Department of the Interior.[16]

In 1896, Secretary of the Interior David R. Francis appointed a commission that included the ecologist Gifford Pinchot to determine the best approach to managing the forests under the department's jurisdiction. On February 22, 1897, at the commission's recommendation, President Grover Cleveland created 13 new forest reserves covering 21,279,840 acres, including the first in the new state of Utah: the Uintah Forest Reserve, which encompassed 842,000 acres northeast of the Monument between Heber Mountain and the Green River. That June, Congress passed the Organic Act of 1897, which mandated administration of the forest reserves to protect water and timber supplies. Pinchot became chief of the Division of Forestry in 1898 and argued that oversight of the forest reserves in the United States belonged under him in the Department of Agriculture rather than under the Department of the Interior. President Theodore Roosevelt eventually transferred the reserves to Pinchot's division, renamed the US Forest Service, on February 1, 1905. Congress renamed the forest reserves as national forests on March 4, 1907, and Pinchot established

[15] "Wonderful Canyon Cave should be Tourist Mecca," *American Fork Citizen* (American Fork, UT), March 16, 1916.

[16] *An Act to Repeal Timber-culture Laws, and for Other Purposes*, Public Law 561, *US Statutes at Large* 51 (1891), 1103; Dave Stack, "The Forest Reserve Act: Celebrating the 125th Anniversary of the National Forest System," *National Museum of Forest Service History Newsletter*, Vol. 28 (1), February 2016, pp. 1, 3, https://forestservicemuseum.org/wp-content/uploads/2017/04/nmfsh-february-2016.pdf; Robert L. Dorman, *A People of Progress: The Origins of Conservation in America, 1850–1930* (University of New Mexico. Manuscript on file at Marsh-Billings-Rockefeller National Historical Park, Woodstock, VT, 1997), 41–45.

district offices to oversee the forests in 1908. A vast expansion of the national forest system occurred over the next decade, as scientific forest management became a widely accepted national goal.[17]

The American Fork Canyon area, including the area of the Monument, became part of the Wasatch Forest Reserve created by Roosevelt on August 16, 1906. The original reserve, renamed the Wasatch National Forest in 1907, consisted of 86,440 acres east of Salt Lake City and Provo between Cottonwood and Timpanogos creeks. The boundaries of the forest changed over the next decade as the Forest Service consolidated and transferred lands for management purposes. The Wasatch National Forest eventually included most of the land set aside as the Uintah Forest Reserve in 1897.[18]

Congress also addressed growing concerns about looters, vandals, and miners pillaging archeological sites in the United States by passing the Antiquities Act of 1906, which was signed by President Roosevelt on June 8, 1906. The act grants the president the authority to protect historic landmarks, historic (postcontact) and prehistoric (precontact) structures, and other objects of historic or scientific interest on lands owned or controlled by the federal government. It also makes it a crime to take antiquities from federal lands without a permit. Areas protected under the act are designated national monuments and stewarded by federal agencies. Importantly, the act stipulates that the establishment of national monuments, unlike that of national parks, requires only a presidential proclamation and not an act of Congress. The first national monuments included Devils Tower (1906) in Wyoming, Chaco Canyon (1907) in New Mexico, Muir Woods (1908) in California, Grand Canyon (1908) in Arizona, and Natural Bridges (1908) and Mukuntuweap (1909, later renamed Zion) in Utah. Four national monuments created in 1908–1911 protected underground caverns discovered in the first decade of the twentieth century: Jewel Cave (1908) in South Dakota, Oregon Caves (1909) in Oregon, Shoshone Cavern (1909) in Wyoming, and Lewis and Clark Cavern (1911) in Montana. The initial agency overseeing each monument—the Department of the Interior, the Department of Agriculture, or the War Department—depended largely on the site's location and its previous federal jurisdiction.[19]

Recreational use of national forests increased in the early twentieth century alongside automobile travel and tourism in general. In 1913, the Chief Forester's annual report noted "Recreation use of the Forests is growing very rapidly, especially on Forests near cities of considerable size." However, provisions for public recreation within forest reserves had received little attention under the Department of the Interior. When the Forest Service became the administrative agency for the national forests, it was not equipped with personnel or funding for recreational development, and its facilities consisted of crude campgrounds, often limited to pit toilets and picnic tables. The Forest Service conducted a comprehensive study of recreational uses in national forests in 1917, partly as a response to the creation of the NPS within the Department of the Interior the previous year, and expanded recreational planning and development after World War I

[17] Shaun R. Nelson, ed., *History of Uinta National Forest: A Century of Stewardship* (Provo, UT: Uinta National Forest, 1997); Charles S. Peterson and Linda E. Speth, *A History of the Wasatch-Cache National Forest* (Logan, UT: Utah State University, 1980).

[18] Peter L. Stark, *Names, Boundaries, and Maps: A Resource for the Historical Geography of the National Forest System of the United States, The Intermountain Region (Region Four)*, 2020, https://forestservicemuseum.org/wpcontent/uploads/2020/02/Intermountain-Region-Feb2020.pdf, pp. 283–284; Peterson and Speth, *A History of the Wasatch-Cache National Forest*.

[19] Francis P. McManamon, "Antiquities Act of 1906," *National Park Service*, accessed November 15, 2023, https://www.nps.gov/subjects/archeology/antiquities-act.htm; Richard W. Sellars, "A Very Large Array: Early Federal Historic Preservation – The Antiquities Act, Mesa Verde, and the National Park Service Act," *Natural Resources Journal* 47, no. 2 (2007), 267, 270, 282; Richard West Sellars, *Preserving Nature in the National Parks: A History* (New Haven, CT: Yale University Press, 1997), 13–14.

(1914–1918). Congress started appropriating funds for campgrounds in national forests in fiscal year 1925, and the Forest Service maintained about 1,500 developed campgrounds by 1930.[20]

US Forest Service Protection and Development in American Fork Canyon

In the summer of 1913, a group from Lehi, Utah, including teenaged boys James W. Gough (1897–1986) and Frank Johnson (1898–1927[21]), visited American Fork Canyon. While exploring the ledges above Hansen Cave, the two boys discovered an entrance to a second cave (now known as Timpanogos Cave) behind a large boulder. They returned two weeks later with supplies to explore the new cave further. James and his father, James C. Gough (1868–1961), sent samples of rock from the cave to local naturalist John Hutchings (1889–1977). Learning that the samples were high in zinc, the trio determined the cave could be a profitable mining venture and filed a claim for the "Lone Star Lode" with the Utah County Assessor in 1915. The men let the claim lapse, but rumors of the second cave circulated in the area for several years.[22]

On June 30, 1921, Wasatch National Forest Supervisor Dana Parkinson received a letter from an American Fork photographer, Edwin Poulsen, with information about the Goughs' cave discovery and alleged plans to sell formations from it to a university in Chicago. Parkinson and Poulson visited James C. Gough, who requested $10,000 to divulge the cave's location to them and insisted that he had a right to mine it. Parkinson thus increased surveillance of the area around Hansen Cave and asked Forest Service Deputy Supervisor Walter G. Mann and Ranger Vivian West to look for the second cave. A July 30, 1921, article in the *American Fork Citizen* about the rumors of "Another Beautiful Cave" in American Fork Canyon attracted a group of recreational hikers from Payson, Utah, to the area.[23] Following advice from Martin Hansen, the group explored the slopes around Hansen Cave on August 14, 1921, and found the covered entrance to the second cave.

The hikers decided to organize the Payson Alpine Club to protect the new cave from the vandalism and destruction they had seen in Hansen Cave. The night after their discovery, they elected Vearl Manwill (1900–1966) as president of the club and his sister, Elon Manwill (1902–1965), as secretary. Two weeks later, on August 28, 1921, the club members returned to map and photograph the new cave. Mann and West from the Forest Service were in the area that day and followed the group to the cave. The men immediately recognized the need to protect the natural features from miners and souvenir hunters and officially declared the cave a Public Service Site under Forest Service jurisdiction.[24] The cave was initially referred to as the "Cave of the Crystal Chimes" due to the music made by tapping on the stalactites in it.

About October 15, 1921, Martin Hansen's son George Heber Hansen (1884–1951) and grandson Wayne E. Hansen (1903–1989) discovered the entrance to a third cave while hunting in the canyon. They returned

[20] William C. Tweed, *Recreation Site Planning and Improvement in National Forests 1891–1942* (Washington, DC: US Forest Service, 1980), iii, 3, 6, 13.

[21] Birth and death dates for Johnson are based on US Census records for a John Frank Johnson listed in the same ward as James W. Gough in 1910.

[22] Pulham, *Heart of the Mountain,* 15–16.

[23] Pulham, *Heart of the Mountain,* 16–17; Ralph Iorio, *The History of Timpanogos Cave National Monument, American Fork Canyon, Utah* (National Park Service, 1968), 7–8; "Another Beautiful Cave Discovered," *American Fork Citizen* (American Fork, UT), July 30, 1921.

[24] A Public Service Site is an administrative designation within a national forest or reserve that permits recreational or service development, such as picnic areas, campgrounds, resorts and lodging, restaurants, filling stations, and commercial buildings, for the proper usage of the resources. Pulham, *Heart of the Mountain*, 18–20.

with several members of the Hansen family, including 74-year-old Martin, to explore further using rope to rappel down into the deep cave. The *American Fork Citizen* reported on their discovery on November 19, 1921. However, the Forest Service postponed further exploration of Middle Cave, named for its location between the entrances to the other two known caves, because of the difficult entrance to it.[25]

Once the Forest Service knew the location of the second cave, the agency took steps to protect and restrict access to it. On September 3, 1921, District Forester R. E. Gerry released a memorandum stating: "In order that the beauties of the cave may be preserved for the people of Utah and general public, immediate action should be taken to preserve the same from vandalism or it will meet the fate of the Hansen Cave … the beauties of the cave should be protected by whatever means available."[26] A few days later, Regional Forester R. H. Rutledge appropriated $250 to install a door at the cave entrance. Because the agency did not have access to funding for recreational improvements at that time, Forest Service staff sought to gain public support for the cave's development as a tourist attraction. They hoped to involve a separate organization in the site's administration, similar to an arrangement that existed with the Utah Outdoor Association in the Wasatch Mountains near Salt Lake City.[27]

In early September 1921, Wasatch National Forest Supervisor Parkinson presented plans for an access trail, ranger cabin, and cave lighting system to a group of business owners from American Fork, Alpine, Lehi, and Pleasant Grove known as the American Fork Commercial Club (AFCC), which agreed to work with the Forest Service on raising funds for initial improvements. The AFCC became involved with a local outdoor group, the Wasatch Mountain Club of Pleasant Grove, and formed the Timpanogos Outdoor Committee (TOC) to spearhead the lighting project. The TOC, later known as the Timpanogos Cave Committee (TCC), decided to raise funds for the lighting system by charging fees for cave tours, which they would manage under the direction of the Forest Service. At Parkinson's suggestion, the group partnered with the Utah Outdoor Association to obtain access to a required charter from the Department of Agriculture. On October 24, 1921, after much deliberation among the various groups involved, Parkinson officially announced the cave's name as Timpanogos Cave.[28] The Forest Service initially stationed Ranger L. L. Hammer at the base of Hansen's trail to protect the cave from unauthorized visitors and vandals. In November 1921, the Forest Service hired a second ranger, Errol "Mick" Halliday.

Forest Service crews started construction on a trail to Timpanogos Cave in the autumn of 1921. The **Old Cave Trail** completed the following spring was 1 mile long, 2 ft wide, and ascended 1,200 ft from the canyon floor to the cave entrance. The lower section of the trail followed the alignment of Hansen's trail and cut through soil and talus slopes. The upper section branched off from Hansen's trail about halfway up the slope and continued toward Timpanogos Cave. Workers had to cut into the limestone cliff face, where they drilled shot holes by hand and blasted a ledge for the trail. At Timpanogos Cave, the Forest Service blasted a more accessible arched entrance several feet downhill from the natural opening (Figure 1). Powder smoke from the blasting blackened the cave walls and formations near the opening and left scars. Inside the

[25] Pulham, *Heart of the Mountain,* 22–24; Iorio, *The History of Timpanogos Cave National Monument,* 12–13.

[26] Quoted in Pulham, *Heart of the Mountain,* 20–21.

[27] Pulham, *Heart of the Mountain,* 20; Iorio, *The History of Timpanogos Cave National Monument,* 11.

[28] The word Timpanogos comes from the native Timpanogos (also Timpanogots or Tumpanawach) people who lived in and around the Monument when the first European explorers arrived. Cave tourism boosters hoped to capitalize on the popularity of the nearby Mount Timpanogos as a destination for recreational hikers. Other names proposed for the cave included "Utah's Wonder Cave," "Utah's Fairy Cave," "Cave of the Crystal Cliff," "Cave of the Elves," and "Timpanogos Wonder Cave." Pulham, *Heart of the Mountain,* 21–22; Farmer, *On Zion's Mount,* 196.

cave, workers created the **Cave Tour Trail** by leveling and filling portions of the floor with gravel, enlarging crawl spaces, and building wood stairs and bridges over deep pits and pools (Figure 2).

The TOC hired two local companies to install a cave lighting system (not extant) during the winter of 1921–1922. The workers ran an electric power line from a generating station at the canyon floor (outside the district) to the Timpanogos Cave entrance. Local volunteers assisted the contractors with the arduous work of hauling equipment up the steep slopes. Guided tours through Timpanogos Cave began in May 1922 and were led by the two rangers and Forest Service crews. The popularity of the tours led the Forest Service to mitigate congestion within the cave by trenching a trail through a side passage to convert the Cave Tour Trail to a loop route.[29] An estimated 10,000 people visited the cave by the end of that year.[30]

In the spring of 1922, Forest Service crews improved an area at the canyon floor for visitor use. They cleared a site on the north side of Route 92, just east of the trailhead; brought in soil; and leveled the site for parking and camping. The oldest sections of the **American Fork River Walls** date to the construction of the campground, which was known as **Cave Camp**. The entrance to the campground from Route 92 is visible as the **Cave Camp Entrance Road Trace** at the east end of the site. Workers strung lights from posts and trees, built two small pit toilets, and placed picnic tables and fire rings throughout the area (Figure 3).[31]

Continued legal pressure from mining claim prospectors prompted Regional Forester Rutledge to write to Chief Forester William B. Greeley in Washington, DC, on September 15, 1922, asking for the establishment of a national monument at the cave under the authority of the 1906 Antiquities Act. President Warren G. Harding had established Lehman Caves National Monument (now part of Great Basin National Park) earlier that year on Forest Service land in Nevada. On September 30, a mining interest known as the Joy Group claimed mineral rights to the Timpanogos Cave area and served the Forest Service with an order to vacate it. Harding quickly issued Proclamation No. 1640 to create Timpanogos Cave National Monument on October 14, 1922. The monument encompassed 250 acres and all three known caves in the **Timpanogos Cave System**: Timpanogos, Middle, and Hansen. Mining interests continued to claim rights to the caves, but courts eventually ruled in favor of the Forest Service.[32]

Ranger Halliday constructed a four-room caretaker's residence (not extant) across the road from the trailhead in the fall and winter of 1922–1923. The house, also known as Residence #1 or Wood House, was sited lower than the adjacent roadway, which required the construction of the western segment of the **Route 92 Stone Retaining Walls** with a staircase built into it to provide access to the road. Halliday likely built the **Caretaker's House Root Cellar** into the north side of the Route 92 retaining wall at the same time as the house. The Forest Service also built a section of the American Fork River Walls at the north edge of the residence site.[33]

Basil Walker (1895–1957) of Pleasant Grove, Utah, ran a small concessions operation at Cave Camp in the summer of 1922 using two tents connected by a rain fly.[34] The Forest Service granted him an official

[29] Iorio, *The History of Timpanogos Cave National Monument*, 13–15; Pulham, *Heart of the Mountain*, 24–25.

[30] Iorio, *The History of Timpanogos Cave National Monument*, 16–17, 19.

[31] Iorio, *The History of Timpanogos Cave National Monument*, 15.

[32] The Forest Service held an official dedication ceremony for the Monument on July 25, 1924. Iorio, *The History of Timpanogos Cave National Monument*, 17–18.

[33] OCLP, *Timpanogos Cave NM Landscape*, 72, 79.

[34] Any relation of Basil Walker to the later Monument Ranger-Custodian Thomas Walker is unknown.

concessioner permit that fall, and Walker helped Halliday build a combined store and residence (not extant) on the south side of the road near the trailhead. The extant stone **Camp Store Foundation and Retaining Walls** remain from the wood-frame building. Basil; his wife, Florence; and their children lived in the camp store building during the summer for several years. Walker also sold concessions at the entrance to Timpanogos Cave.[35]

During the fall and winter of 1922–1923, Halliday also built the small stone **Storage Building** into the slope at the trailhead and a nearby wood-frame building (not extant) for additional pit toilets. In the fall of 1923, the Forest Service installed a ground-return telephone line (not extant) that enabled the concessioner at the canyon floor to communicate with rangers at the cave entrance via a hand-crank phone. The TOC recorded 15,570 visitors to the caves in 1923.

With no federal appropriations for improvements, daily operations, or staffing, the Monument had to rely on visitor fees to fund the site custodian's $1,000 annual salary, two seasonal employees, and necessary maintenance. The Old Cave Trail required constant maintenance and repairs each spring after seasonal runoff and snow slides. The initial cave lighting system eventually failed due to the damp cave conditions, so the TOC raised money to install a new system (not extant) in 1924–1925.[36] Later improvements to the Cave Tour Trail included replacing the original wood walkways and stairs with steel in 1929.[37]

Halliday replaced the Cave Camp pit toilets in 1928 with flush toilets housed in a new stone **Campground Comfort Station** that required the extension of the Route 92 Stone Retaining Wall eastward along the roadway (Figure 4). By 1930, the Forest Service installed the **USFS Stone Pier** with an agency emblem and a flagpole along Route 92 near Cave Camp to delineate the Monument's boundary.[38] In 1932–1933, the US Bureau of Public Roads improved the road through the canyon for visitors to the Monument. A crew of 30 to 40 men realigned and rebuilt Route 92 from the west entrance to the Wasatch National Forest to the west Monument boundary in the summer of 1932 and completed the roadway through the Monument the following summer.[39] Visitation declined through the Great Depression (1929–1939), however.

New Deal Development at the Monument

President Franklin D. Roosevelt's New Deal economic development programs, begun in the first year of his presidency (1933), provided the funding and labor assistance for the first substantial infrastructure and visitor amenity projects at the Monument. A general reorganization of the executive branch by Roosevelt transferred the Monument's administration to the NPS in 1934, when annual visitors numbered just over 5,000. The NPS had a well-established planning process by that time, which enabled the agency to take full advantage of the New Deal programs. Under Thomas C. Vint, the NPS Landscape Division was redesignated the Branch of Plans and Design in 1933 and used comprehensive master plans for each park to coordinate all development and design review. The master plans included textual descriptive statements and maps and drawings showing the proposed developments. The Civilian Conservation Corps (CCC),

[35] OCLP, *Timpanogos Cave NM Landscape*, 51–52; Pulham, *Heart of the Mountain*, 32.

[36] OCLP, *Timpanogos Cave NM Landscape*, 52; Pulham, *Heart of the Mountain*, 34; US Forest Service (USFS), *Timpanogos Cave National Monument, American Fork Canyon, Wasatch National Forest, Utah* (Pamphlet, Utah, 1930), 7.

[37] USFS, *Timpanogos Cave National Monument*, 8.

[38] Iorio, *The History of Timpanogos Cave National Monument*, 23; USFS, *Timpanogos Cave National Monument*, 2–3; OCLP, *Timpanogos Cave NM Landscape*, 52, 72; Pulham, *Heart of the Mountain*, 33–37.

[39] Iorio, *The History of Timpanogos Cave National Monument*, 24; Pulham, *Heart of the Mountain*, 38.

created by Roosevelt in March 1933 to provide work for unemployed young men on public land conservation projects, carried out master plan projects in national parks across the country. The Public Works Administration (PWA), established by Congress in June 1933, and Works Progress Administration (WPA), established by Roosevelt in May 1935, also provided funding for hundreds of NPS projects, including road and trail construction and campground development.[40]

CCC workers began the earliest New Deal development at the Monument. From 1933 to 1942, 116 CCC camps operated in Utah, with 47 of them under the supervision of the Forest Service. On June 28, 1933, the first camp in the state, Camp F-5, was established in American Fork Canyon in the Wasatch National Forest (outside the district, on the current site of the Granite Flat Campground). The 200 men enrolled in the camp's Company 940 were older than the unemployed men and included 75 carpenters, farmers, lumbermen, miners, and others (categorized by the CCC as Local Experienced Men or LEM) from Salt Lake City. The camp operated only during the summer and fall of 1933 and started building trails in the Monument for the TCC.

The TCC had started developing plans in July 1933 to construct tunnels connecting the three caves. The project would open more sections of the caves to the public and improve the flow of visitors by allowing entry to one cave and exit from another. Before work could begin, however, an improved access trail to Hansen Cave was needed to transport workers and equipment safely. CCC crews from Camp F-5 began cutting a new 2-ft-wide trail to Hansen Cave from the midpoint of the Old Cave Trail. About 300 ft from Hansen Cave, they had to carve the trail out of the rock ledges. After a series of accidents on the treacherous terrain, the TCC chose to suspend the project.[41]

The Forest Service moved CCC Company 940 in the winter of 1933 to an erosion control camp in Woods Cross (north of Salt Lake City) then to other locations in Davis County, including Camps F-48 and F-49. From September 1935 to the summer of 1938, members of Camp F-43 in Pleasant Grove built facilities throughout the Wasatch National Forest, including sections of the American Fork River Walls along a realigned section of the river through Cave Camp in the winter of 1936.[42]

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[40] Linda F. McClelland, *Presenting Nature: The Historic Landscape Design of the National Park Service, 1916 to 1942* (Washington, DC: National Park Service, 1994), 116, 196–197; Harlan D. Unrau and G. Frank Williss, *Administrative History: Expansion of the National Park Service in the 1930s* (Denver, CO: National Park Service, 1983), 75–77, 96–101; Donald C. Swain, "The National Park Service and the New Deal, 1933–1940," *Pacific Historical Review* 41 (1972), 324, 327; John C. Paige, *The Civilian Conservation Corps and the National Park Service, 1933–1942: An Administrative History* (Washington, DC: National Park Service, 1985), 9–10, 17–18, 21–24, 30–34, 79; John A. Salmond, *The Civilian Conservation Corps, 1933–1942: A New Deal Case Study* (Durham, NC: Duke University Press, 1967), 13–23, 145–161, 192–193, 210–217.

[41] Pulham, *Heart of the Mountain*, 42; Iorio, *The History of Timpanogos Cave National Monument*, 25.

[42] Alison T. Otis, William D. Honey, Thomas C. Hogg, and Kimberly K. Lakin, *The Forest Service and the Civilian Conservation Corps: 1933–42* (Washington, DC: US Forest Service, US Department of Agriculture, 1986); Kenneth W. Baldridge, *The Civilian Conservation Corps in Utah, 1933–1942: Remembering Nine Years of Achievement* (Salt Lake City, UT: University of Utah Press, 2019); Roger Roper, *CCC Camps, Projects, and Associated Individuals in the Utah SHPO CCC Database*, Utah State Historic Preservation Office, Salt Lake City, UT; Charmaine Thompson, "A Century of Stewardship: Civilian Conservation Corps on the Uinta National Forest," US Forest Service, 1997, https://www.fs.usda.gov/detail/uwcnf/learning/history-culture/?cid=stelprdb5052898, accessed November 2023; Historic Utah, "The Giant's Thumbprint – A History of the Civilian Conservation Corps in Davis County," https://www.historicutah.net/2021/05/the-giants-thumbprint-history-of.html, May 17, 2021, accessed November 2023; Iorio, *The History of Timpanogos Cave National Monument*, 28.

NPS Associate Director Arthur Demaray and Harry Langley, a landscape architect from the San Francisco NPS office, visited the Monument in 1935 and formulated a plan for resuming the trail and tunnel projects (Figure 5). The NPS allocated $11,000 of its Congressional appropriations for fiscal year 1936 to Monument improvements and resumed the projects initially planned by the TCC that included connecting the three caves via tunnels. The TCC continued to operate seasonal tours through Timpanogos Cave during construction.

A team from Zion National Park 275 miles southwest of the Monument surveyed the caves in September 1935 and again in early 1936. In April 1936, a crew consisting of men recently laid off from a nearby mine began widening the trail started by the CCC to 4 ft. The workers excavated the ledge and rock faces with pneumatic drills, sometimes standing on platforms composed of boards balanced on steel plugs drilled into the rock face; at least one crew member drilled into the rock while suspended from a rope tied around his waist. The crew completed the section of the Cave Access Trail between the Old Cave Trail and the Hansen Cave entrance, including the oldest sections of the **Cave Access Trail Walls and Fences**, in October 1936. They also constructed a trail between the entrances to Hansen and Timpanogos caves for guides to get back to the beginning of the Cave Tour Trail without having to backtrack through the cave system. NPS staff then decided to abandon the upper section of the Old Cave Trail that traversed an area prone to rock- and snowslides, and instead incorporated the guide's trail into the Cave Access Trail.[43]

Federal public works funding, WPA labor, and contributions from the TCC enabled the NPS to complete the trail and tunnel work by 1939. Drilling for the cave tunnels began in Hansen Cave at the end of October 1936 but had to stop almost immediately because the rock dust was damaging the cave formations and was detrimental to the health of the workers. Crews resumed the project in February 1937 with a wet drill method that minimized dust and completed the 4-ft-wide by 7-ft-high **Hansen Tunnel** between Hansen and Middle caves by the end of the month. They deposited the waste rubble in low spots on the floor of Hansen Cave or discarded it outside the cave. Work on the **Timpanogos Tunnel** between Middle and Timpanogos caves started in June, but the NPS ran out of funding for the project by July and had to wait until the following May to restart. The tunnel reached Timpanogos Cave on August 22, 1938. Staff immediately observed changes to the airflow through the cave system that impacted each cave's unique biome. To minimize these environmental effects, the NPS installed solid wood doors (not extant) at the tunnel entrances instead of the originally planned iron grillwork.[44]

Work crews extended the Cave Tour Trail through Hansen and Middle caves, built steel catwalks and stairways where necessary in Middle Cave, and replaced rusted iron stairs and catwalks in Timpanogos Cave with stone and concrete structures. The trail was carefully aligned to protect the cave formations and follow natural passages. Workers also improved a small shelter cave known as **The Grotto** near the Hansen Cave entrance into a waiting room for cave tour groups by adding rock benches along one side and an electric pump to supply drinking water. A $4,096 federal grant and $3,070 from the TCC funded the installation by WPA crews of lighting in Hansen and Middle caves and an update to the lighting system in Timpanogos Cave over the winter of 1938–1939. A one-way tour through all three caves officially opened on April 30, 1939.[45]

[43] Pulham, *Heart of the Mountain*, 44; Iorio, *The History of Timpanogos Cave National Monument*, 26–27.

[44] Pulham, *Heart of the Mountain*, 42, 45–46; Iorio, *The History of Timpanogos Cave National Monument*, 27; *The Salt Lake Tribune*, "New Caverns in Timpanogos to Be Opened," August 9, 1935, 22.

[45] Iorio, *The History of Timpanogos Cave National Monument*, 30; *The Salt Lake Tribune*, "Officials Plan Timpanogos Cave Opening," March 23, 1940, 9; Pulham, *Heart of the Mountain*, 46.

In 1939, WPA crews built the **Cave Comfort Station** at the Hansen Cave entrance. The comfort station was designed by architect Edward A. Nickel of the NPS Branch of Plans and Design and used limestone quarried from a nearby cliff and mortar made from sand and cement and hauled up the trail by horse and mule. The comfort station had chemical toilets, rather than standard plumbing.[46]

In the late 1930s, Ranger-Custodian Thomas Walker had suggested that the trailhead across the road from Cave Camp be moved to a proposed parking lot and headquarters area east of the campground. The move would allow the trail to start about 165 ft higher and decrease its overall grade. Engineering surveys determined that the new trail could feasibly join the existing Cave Access Trail near its midpoint (Figure 6). Construction began using WPA labor in the fall of 1941. The crews completed the lower 2,000 ft of the Cave Access Trail by February 1942, when work stopped after the ending of the CCC and WPA programs.[47]

In 1940, the NPS and TCC had begun planning a new residence for the custodian and his family. They used a WPA crew and local quartzite deposits quarried for the project. The **Custodian's Residence** was built on the north side of the American Fork River in 1941. Workers also built the **Custodian's Residence Walkway**, the first section of the **Custodian's Residence Retaining Walls**, and the **Custodian's Residence Root Cellar**; extended the camp entrance road to the north side of the house; and replaced a pedestrian bridge with the wider **American Fork River Bridge** to carry the road across the river. The **Weather Station** on the slope next to the residence also likely dates to the early 1940s. Ranger-Custodian Walker and his family moved into the residence in January 1942. Leftover stone from the project was used to construct the **East Entrance Sign** and **West Entrance Sign** marking the Monument boundaries along Route 92.[48]

By the early 1940s, when the number of annual visitors rose above 12,000, the NPS Branch of Plans and Design had produced a master plan for the Monument to direct subsequent development (Figure 7). The plan included a new headquarters area at the east end of the Monument, a picnic area on the north side of the road in Swinging Bridge Canyon near the center of the Monument, and a utility area to replace the caretaker's house and garage at the west end of the Monument. However, wartime funding cuts put the build-out of these projects on hold.[49]

With the onset of World War II, federal priorities shifted to supplying the war effort and, by 1942, the New Deal programs that had sustained the parks during the Great Depression were discontinued and wartime budgets for maintaining the system were slashed. A substantial number of NPS employees joined the armed services, leaving facilities understaffed. The lack of funding and labor forced most parks to defer maintenance and improvement projects. Consequently, park infrastructure deteriorated, which sometimes required temporary closure or visitor restrictions at some parks. These conditions persisted during the decade following the war as national resources were dedicated to rebuilding Europe under the Marshall Plan and the exigencies of the Cold War (1947–1991).

[46] Iorio, *The History of Timpanogos Cave National Monument*, 29–30; Pulham, *Heart of the Mountain*, 46.

[47] Pulham, *Heart of the Mountain*, 48.

[48] Pulham, *Heart of the Mountain*, 47; Iorio, *The History of Timpanogos Cave National Monument*, 30.

[49] NPS, "General Development and Utility Layout Plan, Part of the Master Plan, Timpanogos Cave National Monument" Plan NM-TC-2100A (Branch of Plans and Design, National Park Service, January 1943).

Post-World War II and Mission 66 Planning and Development at the Monument

After World War II, increased wages and leisure time resulting from the nation's general prosperity, combined with the increasing popularity of the automobile, led to significant increases in the number of visitors to national parks. From 1946 to 1955, the National Park System's annual visitation more than doubled from 21,752,000 to a record 50 million. Annual visitation at the Monument rose by over 20 percent in that time period, from 56,919 in 1945 to 72,400 in 1955. Improved and asphalt-paved roads made recreating in the Wasatch National Forest accessible to the Salt Lake City metropolitan population and contributed to increased visitation at the region's Forest Service and NPS sites. In 1951–1953, the State of Utah improved Route 92 through American Fork Canyon and the scenic Alpine Loop Road connecting it to Provo Canyon.[50]

The TCC's influence over the management and development of the Monument began to wane after the death of its president, Stephen L. Chipman, in March 1945. Clifford Young was chosen to serve as the organization's acting president. Zion National Park Superintendent Charles Smith wrote to the NPS Regional Director Lawrence C. Merriam urging him to have the federal agency assume more control over the Monument and its operations. The TCC met with Smith and began the operational transfer of the Monument to the NPS in 1946. In November of that year, the TCC held its last formal meeting and officially handed the NPS control of the Monument. The TCC officially dissolved on January 1, 1947.[51]

The increase in visitation at the Monument strained its already inadequate visitor facilities and small staff. The harsh environment inside and outside the caves also deteriorated infrastructure that was never intended to support so many visitors. The damp cave climate rusted the steel walkways and eroded the dirt trails until they became unsafe for use. In the late 1940s, Ranger-Custodian Thomas Walker worked with the Zion National Park maintenance division and seasonal staff to make necessary improvements. Workers replaced the rusting steel stairs at the Cascade of Energy (a flowstone formation) in Timpanogos Cave with a set of concrete stairs. They also installed a concrete surface, the first hardened section of the Cave Tour Trail, in the large space near the middle of Timpanogos Cave known as the Camel Room. Horses hauled the materials for the hardened trail up the Cave Access Trail. In 1951–1952, Walker supervised minor improvements to the visitor facilities at Cave Camp, including the replacement of picnic tables and fireplace rings and the burial of aboveground electrical cables. NPS staff also renovated and modernized the Camp Store and former caretaker's house.[52]

At the same time, Walker revived the 1943 general development plan for the Monument (see Figure 7), which had been suspended during the war, and identified additional parking as most critical to ongoing operations. Crews completed three new parking areas near the east end of the Monument in September 1951, of which only **Parking Lot C** remains.[53] Through the winter and into the spring, they worked on finishing the Cave Access Trail between the parking area on the south side of Route 92 (what was then known as Parking Lot A) and the existing trail. Construction progressed rapidly, except in two sections where tunnels had to be blasted through ledge. The new section of the Cave Access Trail, which cost

[50] National Park Service Public Use Statistics Office, NPS Stats, Annual Visitation (All Years) Park Report, Timpanogos Cave National Monument; Pulham, *Heart of the Mountain*, 53.

[51] Pulham, *Heart of the Mountain*, 49–52.

[52] Pulham, *Heart of the Mountain*, 52.

[53] Parking Lot A was replaced by the current Visitor Center Parking Lot in 2019, and Parking Lot B on the north side of Route 92 opposite the Visitor Center was removed.

$11,622, opened to visitors in 1952. It was graded with an inward tilt that captured runoff and siphoned it through drainpipes that ran below the trail to empty onto the canyon wall.[54]

Walker acquired two small army surplus buildings from Lake Mead National Recreation Area and had them placed at the new trailhead for temporary use as a ticket office and a concession stand. He also had a crew install pit toilets near Parking Lot A. Construction of a footbridge at the site of the **Swinging Bridge Picnic Area Lower Footbridge** was likely associated with water storage and supply improvements completed in Swinging Bridge Canyon that allowed the connection of a waterline and sewer system to the new trailhead.[55] Around the same time, Utah Power & Light undertook major repairs on the hydroelectric pipeline that ran by easement through the north section of the Monument. It replaced the original wood-stave pipes with welded steel and agreed to maintain the electrical lines from its plant to the caves.[56]

In 1955, the NPS named Walker as Superintendent of the Monument and gave him an expanded budget with the ability to hire permanent staff. Annual visitation to the Monument topped 75,000 by 1956, and the number of people staying at the Monument campground more than doubled in 1955–1960 from 2,300 to 6,650. The improved trail and trailhead facilities resulted in a greater number of visitors ascending Mount Timpanogos to tour the caves. Before 1960, only one-third of Monument visitors participated in a cave tour; in 1960, after improvements, about half toured the caves.[57]

The growing demands on a stressed national park system threatened to erase the great investment during the New Deal era. Even together, NPS leadership and conservation groups were unsuccessful in gaining Congressional support for more funding.[58] The ambitious systemwide improvement project known as Mission 66, initiated in 1955 by NPS Director Conrad L. Wirth (1899–1993), redefined the role of the country's national park system for a post-World War II society. The end of the decade-long program coincided with the 50th anniversary of the NPS in 1966. Under this program, the NPS authorized hundreds of construction projects, implemented new planning procedures and design concepts, expanded the size and scope of the national park system, and reshaped the NPS identity in American culture. The top-down nature of the development program, disseminated to individual parks through specialized and regional offices, resulted in overall consistency across the park system with respect to facilities and infrastructure, even as the diversity of the parks warranted individual solutions to some problems.

After a personal endorsement by President Dwight D. Eisenhower and approval by the Bureau of the Budget, federal appropriations were released for Mission 66, making it the largest investment ever initiated for the national park system. Funds were distributed in early 1956 to launch the program at the beginning of fiscal year 1957 and run for ten years. Initially, Congress approved a $68-million annual NPS budget in 1957, a significant increase from 1955's $32 million, and projected a $700-million total expenditure on the Mission 66 program. By 1962, yearly NPS budgets exceeded $100 million; by 1966, the NPS spent a total of more than $1 billion. Mission 66 enabled the NPS to bring national parks up to modern standards by

[54] Pulham, *Heart of the Mountain*, 53–54; Iorio, *The History of Timpanogos Cave National Monument*, 33–34.

[55] The footbridge was replaced after a washout in 1983 and is considered a contributing resource in the district. OCLP, *Timpanogos Cave NM Landscape*, 56, 75.

[56] Pulham, *Heart of the Mountain*, 52, 54.

[57] Iorio, *The History of Timpanogos Cave National Monument*, 36.

[58] Linda Flint McClelland, *Building the National Parks* (Baltimore, MD: Johns Hopkins University Press, 1998), 463; Ethan Carr, *Mission 66 Modernism and the National Park Dilemma* (Amherst, MA: University of Massachusetts Press, 2007), 6–7; Larry M. Dilsaver, ed., *America's National Park Service: The Critical Documents* (New York, NY: Rowman and Littlefield Press, 1994), Ch. 4.

initiating construction projects to rehabilitate old buildings and structures and construct new ones; hiring new employees; encouraging the development of campgrounds outside park boundaries; improving visitor access through interpretation; purchasing land for new parks; and creating a new identity for the agency, which involved branding the use of the "Arrowhead" logo (created in 1951) throughout the system and updating park staff uniforms. Every park in the system received improvements, and most were substantially improved. Construction included new and improved roads, trails, campgrounds, comfort stations, amphitheaters, administration buildings, and employee housing. For the first time at many sites, adequate water, sewer, and electric services were installed.[59]

The Mission 66 program enabled the cohesive implementation of development plans at the Monument to address critical physical planning and operational objectives. Ranger Kevin McKibbin and NPS landscape architects Harvey P. Benson and Jon R. Larson prepared the Monument's Mission 66 master plan certified by Superintendent Walker in 1961. Regional NPS staff planned the design of buildings and layout of facilities, but Walker and his staff, with input from regional NPS personnel, scoped the management and operational objectives. The plan's primary goal was management of the Monument as a "Natural Area" with special consideration for preserving the cave formations and ecology. Preservation of the setting, especially on the canyon floor, was the secondary goal. The Monument's terrain already restricted development, but the NPS designers imposed use restrictions on all designated areas in the Monument.[60]

The master plan proposed a new visitor center at Parking Lot A, a new picnic area on the north side of the American Fork River, additional staff housing, and a maintenance facility at the Cave Camp site (Figure 8). Under new NPS design guidance, the Monument's visitor center would have an auditorium and exhibits so that visitors without the time or ability to ascend the trail to the caves could still gain an understanding of them. The visitor center would also consolidate previously separate visitor services such as the concessions, ticket office, comfort stations, and staff offices.[61]

Before the NPS released the appropriations for large Mission 66 projects at the Monument, Walker and his staff began infrastructure improvements and addressed deferred repairs. From 1956 to 1960, the focus was on improvements to the Cave Access Trail, which was prone to erosion and washouts, and the three caves. Monument staff experimented with asphalt paving surfaces on the trail. Crews widened narrow trail sections and built dry-laid stone retaining walls to reinforce weak slope walls and prevent erosion and slope failure. The trail surfacing project cost $12,000 and reduced annual maintenance costs. Monument staff placed numbered posts along the trail to identify areas of interesting flora or views.[62] The posts consisted of sections of metal bedframe embedded into the rock face and wood blocks engraved with numbers.[63] Walker and his staff also carried out general improvements inside the caves, such as excavating some of the Cave Tour Trail, lowering the trail bed to alleviate low ceilings and obstacles, and replacing deteriorated metal stairs with concrete steps and metal handrails.[64]

[59] Carr et al., *National Park Service Mission 66 Era Resources*, E-3–9.

[60] Kevin McKibbin, Harvey P. Benson, and Jon R. Larson, *Master Plan for the Preservation and Use of Timpanogos Cave National Monument* (American Fork, Utah: Timpanogos Cave National Monument, National Park Service, US Department of the Interior, 1963–1964), Chapter 1, 1–3.

[61] Pulham, *Heart of the Mountain*, 55–56.

[62] Pulham, *Heart of the Mountain*, 56–57; Iorio, *The History of Timpanogos Cave National Monument*, 35; OCLP, *Timpanogos Cave NM Landscape*, 40.

[63] Cami McKinney, former Program Manager for Resource Stewardship, Interpretation and Visitor Services, Timpanogos Cave National Monument, personal communication with authors, June 2023.

[64] Pulham, *Heart of the Mountain*, 58–61.

The first major Mission 66 project at the Monument was the construction in 1956–1957 of the **Rock Bridge** to carry vehicles and pedestrians from Route 92 to the proposed employee residence area on the north side of the American Fork River. With the help of US Senator from Utah Wallace F. Bennett, the Monument received additional funding for Mission 66 capital construction projects in the 1960s.[65] The Mission 66 program allocated $38,000 to construct two employee residences, **Quarters 8** and **Quarters 9**, in the summer of 1962.[66] Concurrent with the completion of the residences and the **Access Road** to them, the NPS constructed the **Service Road** and Maintenance Building at Cave Camp in 1962.[67]

Cecil Doty from the NPS Western Office of Design and Construction designed the Monument's Mission 66 Visitor Center (not extant) in conjunction with the well-known Utah architecture firm of Howell Q. Cannon (1908–2002) and James M. Mullen (1912–2002). The large project was put out to bid, and a local contractor was chosen in 1963. Superintendent Walker hosted the building's dedication in June 1964. The building contained an entrance lobby characteristic of Mission 66 visitor centers, an exhibit room, several offices, restrooms, a concession stand, and a covered patio. It had a low profile within the surrounding landscape, used a blend of native and economic materials, and operated as the Monument's primary visitor contact station. The total cost of design and construction was $146,808.[68] The Mission 66 Visitor Center burned down in 1991 and was replaced by the current Visitor Center in 2019.

While the visitor center was under construction in 1963, NPS crews dismantled the Camp Store near Cave Camp, leaving only the stone Camp Store Foundation and Retaining Walls. The same year, the NPS completed the **Swinging Bridge Picnic Area** along the river about halfway between the visitor center and Cave Camp. Development consisted of the **Swinging Bridge Parking Lot** adjacent to Route 92, the **Swinging Bridge Comfort Station** on the south bank of the river, 30 picnic sites arranged along curvilinear pathways on the north bank of the river, and the **Canyon Nature Trail** along the north bank between the picnic area and the employee residences. The **Swinging Bridge Picnic Area Upper Footbridge** was built across the river on the opposite side of the comfort station from the Lower Footbridge to access the picnic area and nature trail from the parking lot. In 1963, the NPS hired Witt Construction Company to build a 100,000-gallon steel water tank on Forest Service land in Swinging Bridge Canyon just outside the Monument's north boundary for potable water and fire protection. The company also laid a water line from the tank to the visitor center, employee residences, and picnic area.[69]

On July 18–19, 1965, torrential rains triggered a flash flood and several mud- and rockslides that ravaged American Fork Canyon and damaged Monument facilities along the river, causing more than $100,000 in damage. Rock debris and mud covered the trails, buried picnic tables in the picnic area, and filled the Custodian's Residence. Water currents washed away water pipes in Swinging Bridge Canyon and sections of the highway, stranding more than 20 visitors at the Swinging Bridge Picnic Area on the night of July 18.

[65] Pelham, *Heart of the Mountain*, 58–59.

[66] Iorio, *The History of Timpanogos Cave National Monument*, 36; Pulham, *Heart of the Mountain*, 59.

[67] The Maintenance Building is a non-contributing resource in the district because of major additions in 1989 and 1990 that expanded the original split-block four-bay garage with an attached office. Pulham, *Heart of the Mountain*, 59.

[68] Sarah Allaback, *Mission 66 Visitor Centers: The History of a Building Type* (Washington, DC: National Park Service, 2000), 245, 261; Pulham, *Heart of the Mountain*, 59–60.

[69] Pulham, *Heart of the Mountain*, 59–60; National Park Service, "Physical Improvements – Mission 66, Part of the Master Plan, Timpanogos Cave National Monument," Plan NM-TC-3104, Landscape Architectural Branch, Western Office, Division of Design & Construction, March 1958.

Runoff on the mountain eroded a section of the Cave Access Trail between the two tunnels. No buildings were destroyed and no visitors were injured, but Walker and his staff had to focus on repairs for the remainder of the season. Crews excavated the riverbed, which was filled with debris; reinforced the retaining walls with concrete; filled eroded trenches and added topsoil at the Swinging Bridge Picnic Area; and installed new picnic tables on top of tables buried in feet of sediment.[70]

A series of injuries due to rock fall in the 1960s led the NPS to improve signage along the Cave Access Trail. It also improved the trail between the Timpanogos Cave exit and the Cave Comfort Station, rerouting dangerous segments and widening it to a uniform 5 ft by cutting and filling the slope and installing a mortared stone base. In 1966, crews expanded the waiting area outside the Hansen Cave entrance by constructing a platform at the end of the Cave Access Trail with a 15-ft-tall retaining wall using stone blasted from a ledge above that had been prone to rock fall.[71]

The annual visitation totals continued to climb at the Monument through 1968, when it exceeded 220,000, and have fluctuated since then. Development since 1966 has consisted primarily of infrastructure and trail improvements to mitigate danger from rock fall, which became a chief concern with increasing visitation. In addition, the NPS has replaced buildings and structures affected by natural disasters such as floods that have washed out bridges and retaining walls along the river and the 1991 fire that destroyed the Mission 66 Visitor Center.

CRITERION C – ARCHITECTURE and LANDSCAPE ARCHITECTURE

Under Criterion C, the Timpanogos Cave Historic District is nationally significant in the areas of Architecture and Landscape Architecture as a well-designed collection of resources possessing hallmarks of the NPS Rustic and Park Service Modern design philosophies that informed national park development during the New Deal and Mission 66 eras, respectively. The administrative and visitor resources constructed by the NPS within the Timpanogos Cave System and at Cave Camp between 1921 and 1942 emphasize harmony with the natural environment through the use of rustic architectural styles, local materials and construction methods, and thoughtful siting. The resources in the NPS employee residence area and Swinging Bridge Picnic Area built between 1956 and 1966 combine mid-twentieth-century modern architectural styles with a continued emphasis on site-sensitive design. Together, the Monument's built resources comprise a visually cohesive overlay of functional areas on the natural environment that responds to the distinctive canyon landscape. The contributing resources retain sufficient integrity of design, materials, and workmanship to express their significance as components of the nationwide NPS design and planning programs.

Early NPS Design Philosophy

In the 1920s, the NPS Landscape Division refined and elaborated its evolving program of comprehensive park planning and the development of specific design standards and construction practices.[72] By the 1930s, the NPS had developed a comprehensive aesthetic that emphasized naturalistic landscape design principles and development in harmony with the surrounding environs. These principles were incorporated into park

[70] Pulham, *Heart of the Mountain*, 61; "Storms Trigger Slides, Thousands of Dollars Damage in Am. Fork Canyon," *American Fork Citizen*, July 22, 1965, p. 1.

[71] Pulham, *Heart of the Mountain*, 62–63.

[72] The Landscape Division became the Branch of Plans and Design in 1933.

master planning, which guided the development of all roads, trails, buildings, and other improvements within the national park system.[73]

The NPS approach to landscape design adapted well-established naturalistic landscape design principles to the practical needs of national parks. NPS practitioners consulted frequently on general policies and specific projects with leaders in the landscape architecture profession, including Frederick Law Olmsted Jr., John Nolen, and Henry Hubbard. In designing visitor access to a park's natural wonders without compromising natural scenery, NPS landscape architects created the visitor's experience of a place. Every development decision they made—the route of a road, the site of a campground or comfort station, the massing of a building—influenced a visitor's aesthetic reaction to a park.[74]

By the 1920s, park designs routinely accommodated automobile use in planning for roads, campgrounds, and other park facilities. A 1926 interagency agreement between the NPS and the Bureau of Public Roads, a predecessor to the Federal Highway Administration under the Department of Agriculture, helped integrate naturalistic design principles with technical engineering skills. Roads in the national parks were designed to provide scenic views by following natural contours, minimizing cut and fill, avoiding steep grades and sharp turns, and restoring banks to an untouched appearance.

In 1927, the NPS established a field headquarters in San Francisco that served as the office for its Landscape Division. The first division head was landscape architect Thomas C. Vint, who was a pivotal force in national park design until his retirement in 1961. His holistic approach to landscape preservation and harmonization is evident in the Landscape Division's establishment of design standards and construction guidelines for guardrails, bridge abutments, culverts, tunnel portals, and small recurring recreation facilities such as comfort stations (restrooms). Vint developed a program of master planning and design review that provided a consistent design aesthetic and approach to planning to be applied to all park units.[75]

NPS landscape architects used the concepts of "visual harmonization" and "cultural harmonization" to knit NPS design standards into the unique vernacular setting found at each park. Visual harmonization instructed careful siting of buildings and plantings and balancing built structures with natural features. Cultural harmonization meant designing buildings and structures that appeared to have been handcrafted from local, rough-hewn materials, usually logs or quarry-faced stone, and/or in a regional style. Thus, in rugged western mountainous parks, building features were often over-scaled, lines were never straight, and finishes were intentionally "primitive." This approach came to be known as the NPS Rustic style of architecture, although it is better defined as a broad design philosophy than a prescriptive style.[76]

By 1933, hallmarks of the widely implemented NPS approach were 1) preservation of the existing natural landscape; 2) provision of easy visitor access to major scenic features; 3) a master plan for each park to guide all development; 4) a design review process to ensure that individual projects harmonized with the

[73] McClelland, *Presenting Nature*, 80. The summary of NPS landscape design philosophy and practice presented here relies heavily on McClelland's 1994 study.

[74] Newton, *Design on the Land*, 535; McClelland, *Presenting Nature*, 33–34; Phoebe Cutler, *The Public Landscape of the New Deal* (New Haven, CT: Yale University Press, 1985), 57, 64; McClelland, *Presenting Nature*, 109.

[75] Vint took the title of chief landscape architect in October 1927 and later became chief architect. McClelland, *Presenting Nature*, 115–116, 126–131, 181–185, 196–197.

[76] Albert H. Good, *Park and Recreation Structures* (Washington, DC: US Government Printing Office, 1938), 5–8; William C. Tweed and Laura E. Soullière, *National Park Rustic Architecture, 1916–1942* (San Francisco, CA: National Park Service, Western Regional Office, 1977), i, 35.

landscape and did not conflict with the master plan; 5) road and trail designs that followed the topography and lay gently on the land; 6) landscape restoration to erase construction scars; 7) use of rustic and vernacular architectural styles employing local materials and "pioneer" construction methods; 8) standardized plans and specifications for recurring features such as guardrails and comfort stations; and 9) guidelines for stone masonry, road bank restoration, campground design, etc., to ensure landscape harmonization.[77]

The resources built from 1921 to 1942 at the Monument exemplify these hallmarks of NPS Rustic designs. The consistent use of locally quarried stone as a construction material, beginning with the **Route 92 Stone Retaining Walls**, creates a sense of unity and visual harmonization throughout the district. The buildings—the **Campground Comfort Station**, **Custodian's Residence**, and **Cave Comfort Station**—are all carefully sited to minimize visual and physical impacts on the natural environment. The Cave Comfort Station is literally built into the side of the canyon and appears to be part of the vertical rock face. The vernacular, rough-hewn architecture of the three buildings blends into the surroundings. The Custodian's Residence site design (Figure 9), including the stone **American Fork River Bridge**, incorporates the river rushing under the bridge and past the house within a channel created by the low stone **River Walls**. The alignment and design of **Route 92** through the Monument, executed by the Bureau of Public Roads, adhere to the naturalistic principles developed with the NPS. The flat and gently curving road follows the natural contours of the canyon floor and offers glimpses of the river and steep canyon slopes through the trees, with more expansive scenic views at occasional breaks in the vegetation. The **East and West Entrance Signs** at the east and west ends of the district bookend the experience of driving through it with a distinctive stone and wood design.[78]

The trails that provide visitor access to the Monument's primary attraction, the Timpanogos Cave System, demonstrate how NPS architects and engineers strove to seamlessly integrate infrastructure into the natural landscape. Construction of the **Cave Access Trail** beginning in 1933 used techniques devised to minimize the removal of native material and maintain the canyon's natural bedrock formation. The trail follows an alignment designed to frame scenic views of the surrounding mountains and create a variety of visual experiences while minimizing steep grades and extensive alterations to the natural rugged topography. The use of rough-cut stone and wood for the **Cave Access Trail Walls and Fences** also creates a sense of harmony between the natural and built environment. The craftsmanship used to build the walls is evident along most of the trail, although some newer parapet walls in more hazardous areas are not compatible with the earlier work. **The Grotto** carved out of the native cliff face near the entrance to Hansen Cave to provide a gathering area for cave tours also reflects NPS Rustic design principles of visual and cultural harmonization.[79]

Within the caves, the **Cave Tour Trail** follows a route carefully designed to protect the unique cave formations and follow natural passages. Regional Geologist J. Volney Lewis suggested in a letter to the NPS Regional Director that the alignment should be executed such that "the true character of the cave is impressed upon the visitor by the necessity of stooping … [and] walking over uneven surfaces." He further suggested that "people that go into a cave do not demand an easy trail" and urged that trail builders should avoid straightening and widening cave passages and make only minimal adjustments to the underground topography as necessary for safety. The trail moves from very narrow to more open spaces within the enclosed environment of the caves as the visitor views the varying colors and textures of the cave walls.

[77] McClelland, *Presenting Nature*, 2–4, 181–185.

[78] OCLP, *Timpanogos Cave NM Landscape*, 66, 184–185.

[79] OCLP, *Timpanogos Cave NM Landscape*, 28, 65, 73, 80, 185.

The linear spaces of the **Hansen and Timpanogos Tunnels** protect the integrity of the underground resources while creating a cohesive spatial experience through the caves.[80]

Mission 66 Design

The NPS approach to design under the Mission 66 program continued to emphasize visual and cultural harmonization with the natural environment but incorporated distinctive aspects of mid-twentieth-century architecture and landscape architecture. The design principles and construction techniques that became known as Park Service Modern relied on readily available materials such as steel, plywood, fiberglass, local stone, and concrete. As with NPS Rustic designs, Park Service Modern buildings tended to have low profiles and blend into the surroundings where possible. Design elements included low-pitched, gabled roofs, wide overhanging eaves, and irregular fenestration (the arrangement of windows and openings). Standard building plans issued by the Eastern and Western Offices of the NPS Division of Design and Construction streamlined the process and resulted in easily recognizable Mission 66 architecture across the country.[81]

In addition to over 100 visitor centers, the extensive Mission 66 visitor accommodation construction projects nationwide included 584 new comfort stations. The **Swinging Bridge Comfort Station** is a typical Mission 66 comfort station with sections for women and men separated by a shared, externally accessible plumbing chase; a low-pitched gable roof; concrete block walls; and awning windows under the eaves. It occupies a level site within the Swinging Bridge Picnic Area for maximum accessibility and, like most buildings of the type, is surrounded by a paved apron accessed by paved pedestrian paths.[82]

The NPS also built 743 new single and double housing units and 496 multiple housing units to accommodate the large number of new employees at national parks, many in rural areas. Congress set maximum construction costs for the new buildings. Although design modifications occurred throughout the Mission 66 era, the NPS issued standard housing designs in 1957 for one-, two-, three-, and four-bedroom buildings with low, rectangular-shaped, horizontal plans and built-up, flat and low-pitched roofs similar to residential architecture outside the park system. Many single-family units had carports or attached garages. Living room areas often had aluminum-frame picture windows with sidelights, and bedrooms had smaller windows. Materials ranged from wood-frame to fiberglass to masonry based on what was available in the area surrounding the park. Residential areas were generally built away from public view and included curvilinear access roads and cul-de-sacs with short, paved driveways or aprons leading to each residence.[83]

The two wood-frame employee residences built in 1962 at the Monument, **Quarters 8** and **Quarters 9** (Figure 10), are set back from the highway behind dense vegetation and flank a short curved access road built into the base of the canyon slope. The buildings conform to the three-bedroom, single-family plans with low-pitched gable roofs and attached garages. Despite the conversion of the Quarters 9 garage to office space and alterations to the exterior cladding and window materials on both buildings, the residences retain integrity to convey their original Mission 66 design and construction.

Due to the rise in automobile tourism and day trips, the NPS constructed 743 picnic areas, expanded thousands of existing picnic areas, and modified many existing campgrounds into picnic areas throughout

[80] J. Volney Lewis, Memorandum to the Regional Director, Cat #002, Region III, Santa Fe, NM, April 6, 1939, quoted in Pulham, *Heart of the Mountain*, 45; OCLP, *Timpanogos Cave NM Landscape*, 28, 120, 173.

[81] Carr et al., *National Park Service Mission 66 Era Resources*, F-64.

[82] Carr et al., *National Park Service Mission 66 Era Resources*, E-38, F-77–78.

[83] Carr et al., *National Park Service Mission 66 Era Resources*, E-19–22.

the park system under Mission 66. Picnic areas were designed to lessen environmental impacts by reducing visitor activity to day-use only. These areas were often built alongside new and existing campgrounds, the visitor center, interpretive displays, and circulation routes. Natural barriers such as ravines or creeks often separated picnic areas from adjacent areas. Mission 66 picnic areas were constructed intentionally at a lower density than earlier ones by increasing the size of each area. Picnic sites typically consisted of a single fireplace and three picnic tables. Landscape features were often built of concrete, instead of the stone used in earlier picnic areas.[84]

The **Swinging Bridge Picnic Area** is a good example of a day-use area established according to the principles of NPS park design under the Mission 66 program. NPS landscape architects designed the area to suit a site near the Monument visitor center, with the Swinging Bridge Parking Lot and Comfort Station on the narrow south riverbank between Route 92 and the river and the Swinging Bridge Upper and Lower Footbridges across the river connecting to curvilinear pathways through picnic sites on the wooded north riverbank. Damage to the picnic area from a 1965 flood required the replacement of picnic tables, soil and grass, and asphalt paths and the construction of new retaining walls along the river to match the earlier ones. However, these changes do not disqualify the picnic area from contributing to the district for its Mission 66 landscape design.

CRITERION D – ETHNIC HERITAGE: NATIVE AMERICAN

Precontact Period Native American land use in American Fork Canyon is not well documented in the archeological record, with the exception of the extensive research completed at one site at American Fork Cave in the nearby Uinta National Forest.[85] Identified sites suggest that Native Americans with habitation areas in the Utah Valley and around Utah Lake—including the ancestors of the Ute, Goshute, Northwestern Band of the Shoshone Nation, and Paiute Indian tribes—used the canyon seasonally and/or for resource-specific activities. To date, the only recorded archeological resource within the Monument boundary is a **Pictograph** on a rock wall behind an NPS staff building. The rock image has not been directly dated; however, the shape and style of the solitary red pigmented figure indicate it likely dates to the Formative/Fremont Era.[86] While Fremont rock art has been documented across Utah and the Colorado Plateau, the Timpanogos pictograph appears to be an isolated image within the Monument, and no associated archeological deposits have been identified in association with it. The presence of the pictograph demonstrates the importance of the exposed stone landscape at and around Timpanogos to ancient Native Americans, who intentionally created the image for purposes that are not known.

No archeological surveys have been completed nor any archeological sites documented in the Monument to date. Any prehistoric (precontact) archeological deposits that may be present have the potential to more accurately date the pictograph, to better understand its function(s), and to provide important information about when Native Americans were present and how they moved across the Monument's physical

[84] Carr et al., *National Park Service Mission 66 Era Resources*, E-8, E-16.

[85] George H. Hansen and William Lee Stokes, "An Ancient Cave in American Fork Canyon," *Utah Academy of Science, Arts & Letters, Proceedings*, 18 (1941); Michael Jefferey Hall, *A Reassessment of American Fork Cave (42UT135), Utah County, Utah* (Provo, UT: Brigham Young University, Department of Anthropology, Technical Series No. 83-51, 1983).

[86] Polly Schaafsma, *The Rock Art of Utah* (Cambridge, MA: Papers of the Peabody Museum of American Archaeology and Ethnology 65, 1971); Sally J. Cole, *Legacy in Stone: Rock Art of the Colorado Plateau and Four Corners Region* (Boulder, CO: Johnson Publishing, 1990.)

landscape. The Monument's collections include several calcified bones and two corncobs collected near the entrances of Hansen and Timpanogos caves; however, these objects are not associated with any known archeological features or documented sites. Because so little is known from the material record, any identified Native American archeological sites within the Monument have the potential to provide new and important information about indigenous lifeways.

Physical evidence of a number of landscape features related to white exploration and settlement of the region has been identified within the Monument, but to date no archeological investigations have been completed to evaluate and document their significance. The oldest of these finds is the 1878 **Wagon Road Trace** from the American Fork Wagon Road Company toll road that was improved and/or realigned after 1890. Linear features associated with the former railroad grade, **American Fork Hydroelectric Pipeline Remnants**, and utility lines in the canyon have also been identified, as have structural and landscape features in the ca. 1922–1969 **Cave Camp** recreational area. Archeological investigation and evaluation of these features have the potential to yield important new information about late nineteenth- and early to mid-twentieth-century historic infrastructure and tourism activities.

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Previous documentation on file (NPS):

____ preliminary determination of individual listing (36 CFR 67) has been requested
_X__ previously listed in the National Register
_X__ previously determined eligible by the National Register
____ designated a National Historic Landmark
___ recorded by Historic American Buildings Survey # _____
____ recorded by Historic American Engineering Record # _____
____ recorded by Historic American Landscape Survey # _____

Primary location of additional data:

_X__ State Historic Preservation Office
____ Other State agency
_X__ Federal agency
____ Local government
____ University
____ Other
Name of repository: _____

Historic Resources Survey Number (if assigned):

10. Geographical Data

Acreage of Property __130___

Use either the UTM system or latitude/longitude coordinates

Latitude/Longitude Coordinates (decimal degrees)
Datum if other than WGS84:_____
(enter coordinates to 6 decimal places)

A.	Latitude: 40.443430	Longitude: -111.715332
B.	Latitude: 40.444930	Longitude: -111.711124
C.	Latitude: 40.444931	Longitude: -111.703479
D.	Latitude: 40.443642	Longitude: -111.703479
E.	Latitude: 40.442184	Longitude: -111.707893
F.	Latitude: 40.442184	Longitude: -111.707904
G.	Latitude: 40.441082	Longitude: -111.708749
H.	Latitude: 40.438411	Longitude: -111.707394
I.	Latitude: 40.436739	Longitude: -111.712494
J.	Latitude: 40.440285	Longitude: -111.714255
K.	Latitude: 40.440246	Longitude: -111.715332

Verbal Boundary Description (Describe the boundaries of the property.)

The Timpanogos Cave Historic District boundary, as shown on the attached District Sketch Map, is an irregular polygon that begins at the northeast corner of the Timpanogos Cave National Monument authorized boundary and follows lines of convenience to include all identified above- and below-ground resources inside the authorized boundary of the Monument. The district boundary encompasses 130 of the Monument's 250 acres.

Boundary Justification (Explain why the boundaries were selected.)

The Timpanogos Cave Historic District boundary encompasses all identified above- and below-ground resources within the authorized boundary of Timpanogos Cave National Monument and excludes undeveloped areas of the canyon walls in the Monument.

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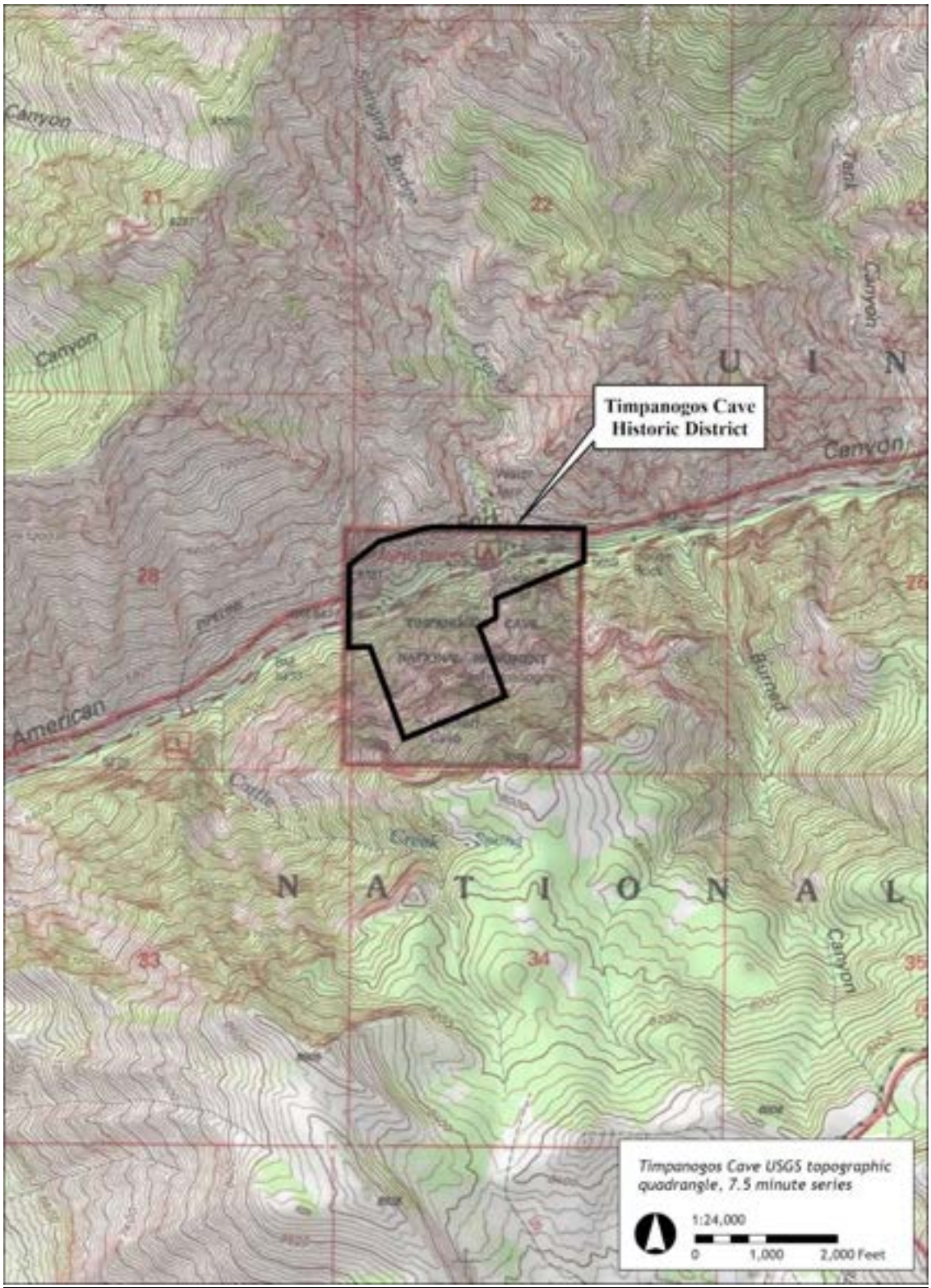
11. Form Prepared By

name/title: Laura Kline/Sr. Architectural Historian; Holly Herbster/Sr. Archaeologist
organization: The Public Archaeology Laboratory, Inc. (PAL)
street & number: 26 Main Street
city or town: Pawtucket state: RI zip code: 02760
e-mail: lkline@palinc.com
telephone: 401-728-8780
date: June 2025

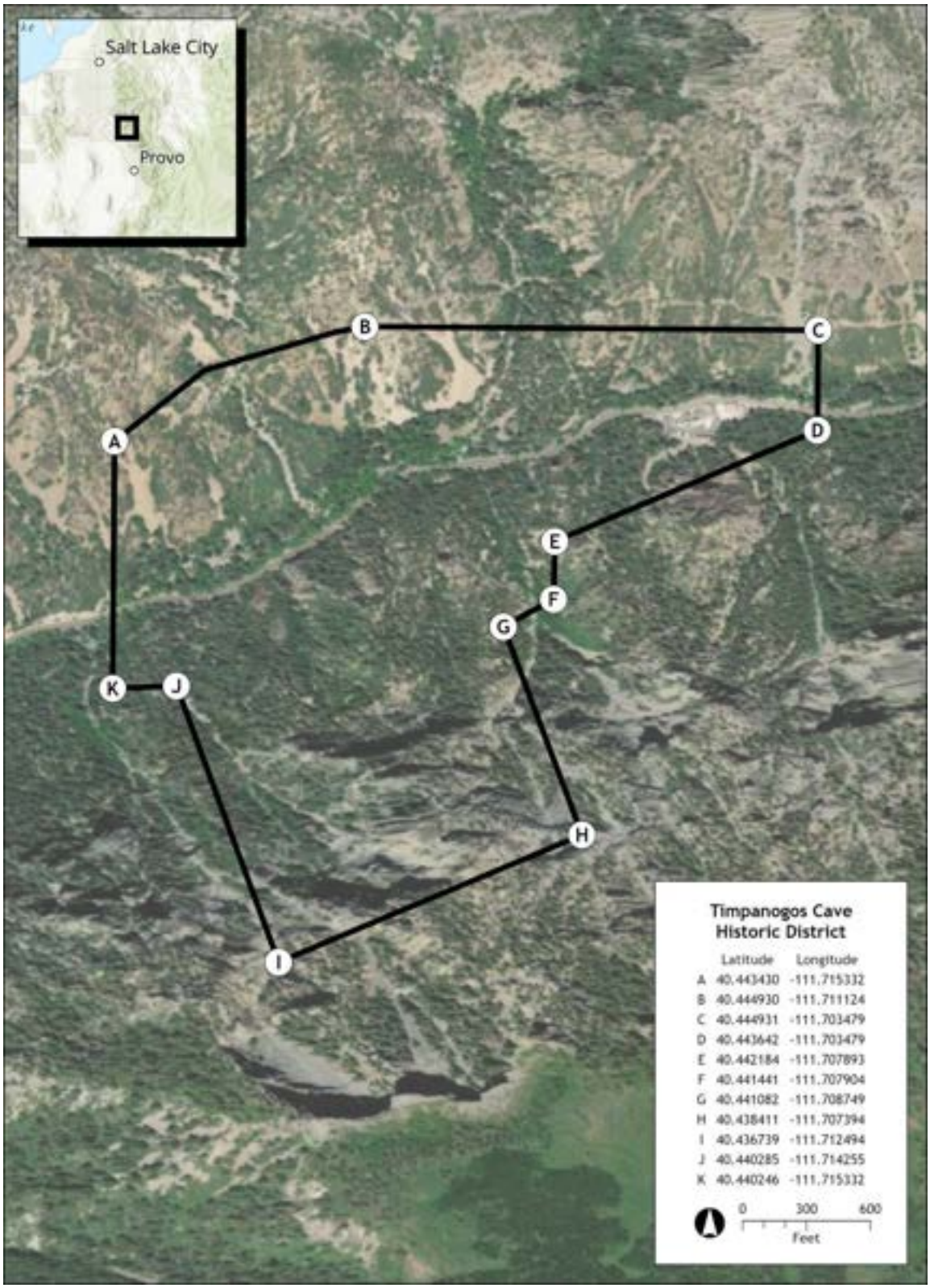
Additional Documentation

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 this map.
- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)



Timpanogos Cave Historic District USGS Map



Timpanogos Cave Historic District Coordinate Map

Figures

Figure 1. Photograph of Timpanogos Cave entrance (US Forest Service 1930).

Figure 2. Photograph of tourists on Cave Tour Trail inside Timpanogos Cave (US Forest Service 1930).

Figure 3. Photograph of tourists picnicking at Cave Camp (US Forest Service 1930).

Figure 4. Photograph of Campground Comfort Station (Hillary Tolson, "Campground comfort station," ca. 1935, Timpanogos Natl. Monument – Buildings Collection, University of Utah, Salt Lake City, UT).

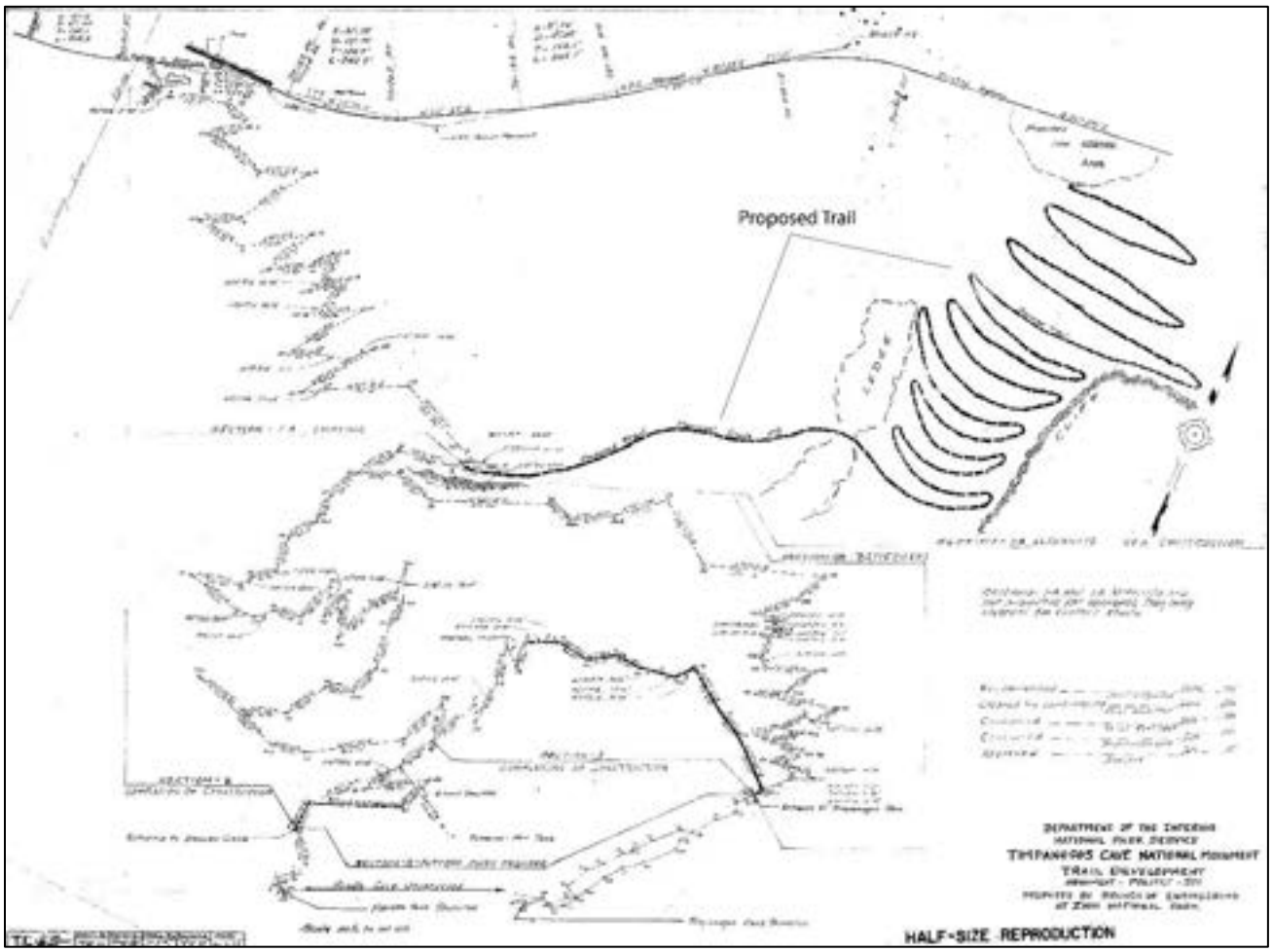


Figure 5. Trail Development plan for the Monument showing proposed Cave Access Trail as bold black line (NPS 1935).

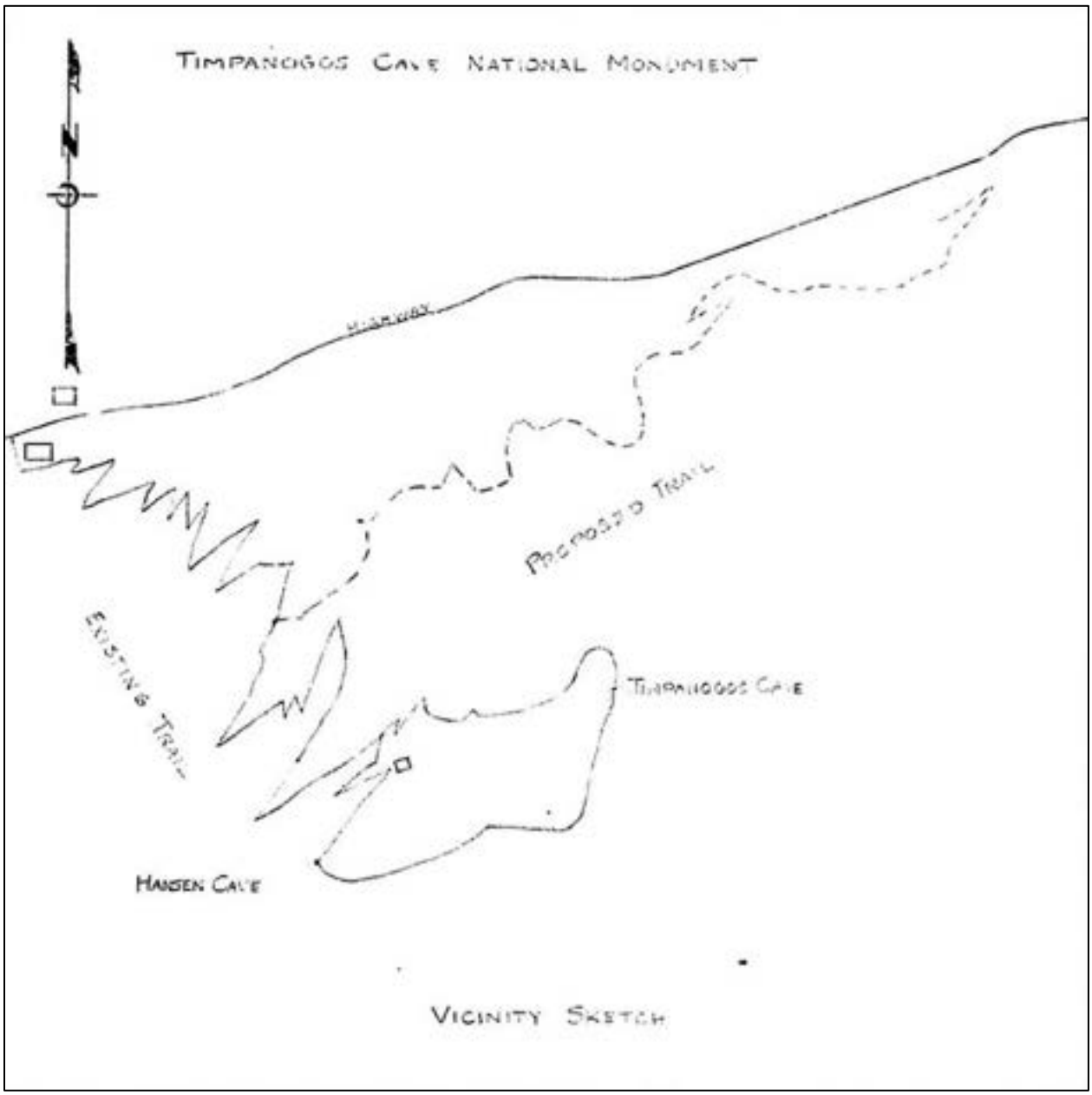


Figure 6. Detail from Trail Relocation plan showing modifications to Cave Access Trail alignment (NPS 1940).

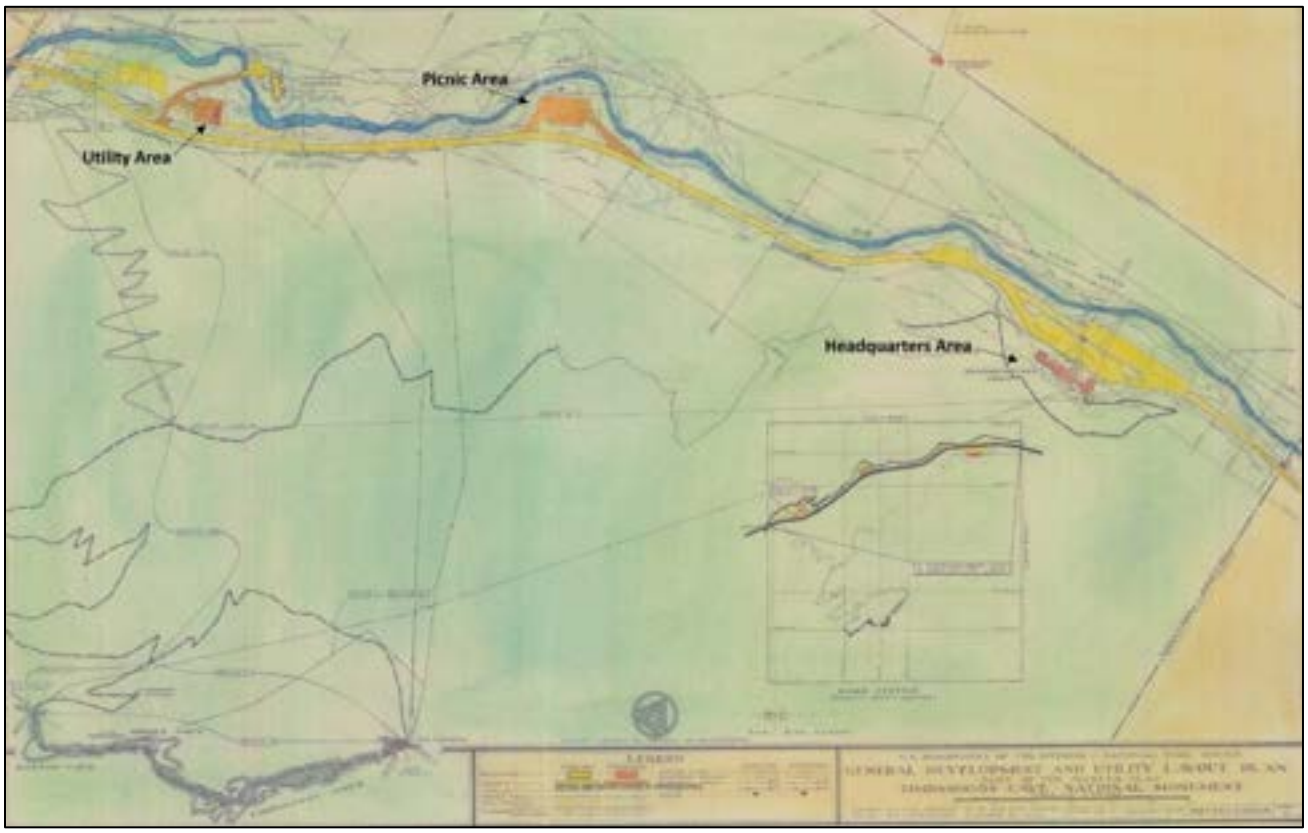


Figure 7. "General Development and Utility Layout Plan, Part of the Master Plan, Timpanogos Cave National Monument," showing proposed utility, picnic, and headquarters areas (NPS 1943 with author edits).

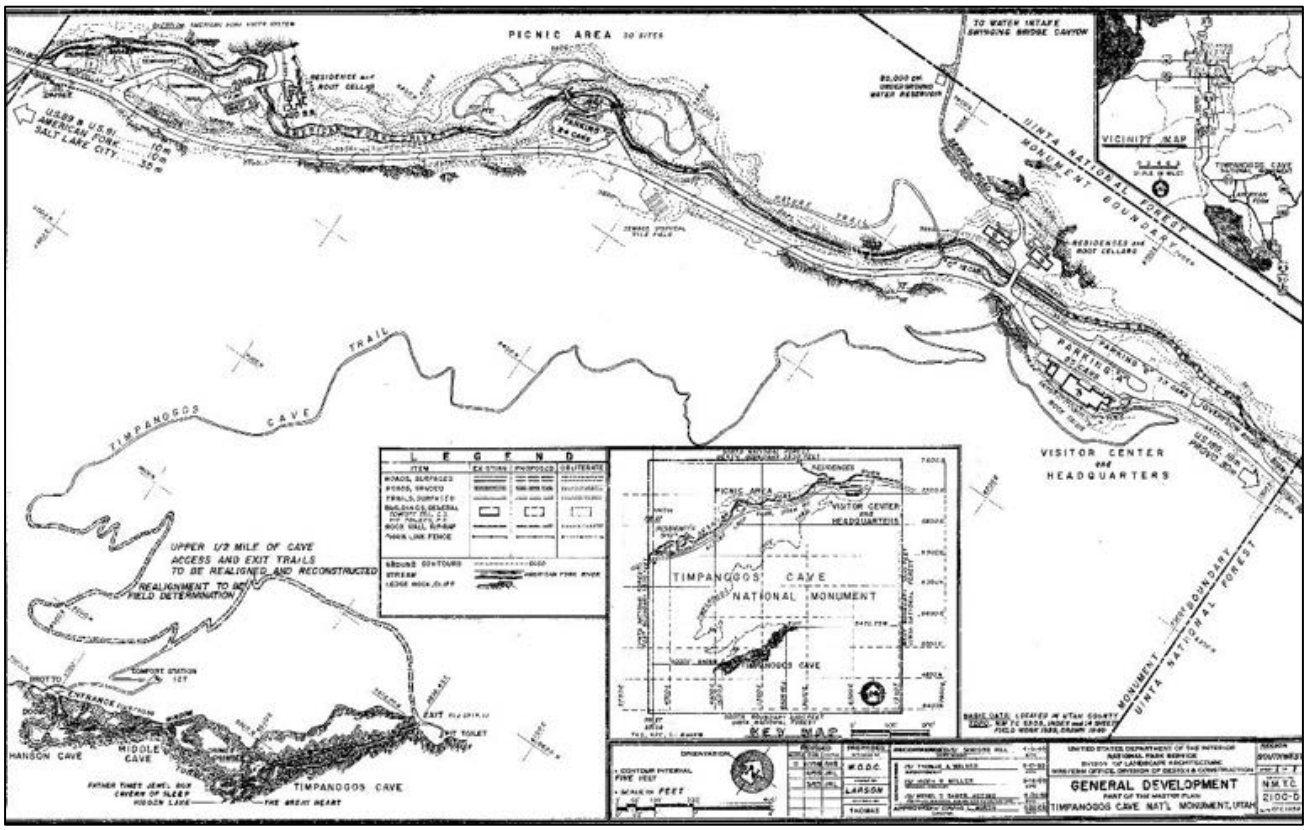


Figure 8. Mission 66 General Development plan for Timpanogos Cave National Monument, including a new visitor center and additional staff housing at the east end, a new picnic area near the center, and a new maintenance facility at the west end (NPS 1958 with revisions through 1963).

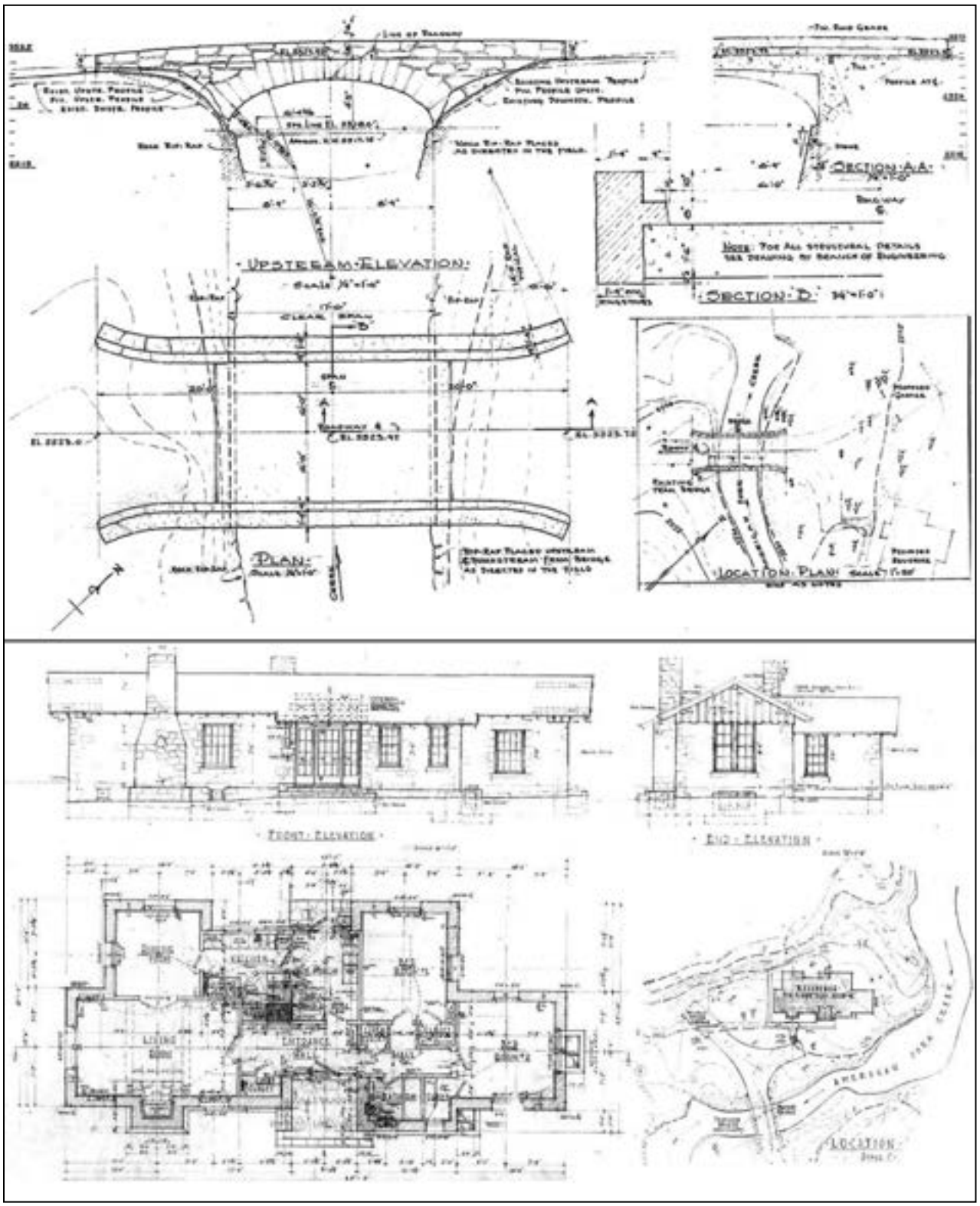


Figure 9. Plans for American Fork River Bridge at top and Custodian's Residence at bottom (NPS 1940, combined by author).

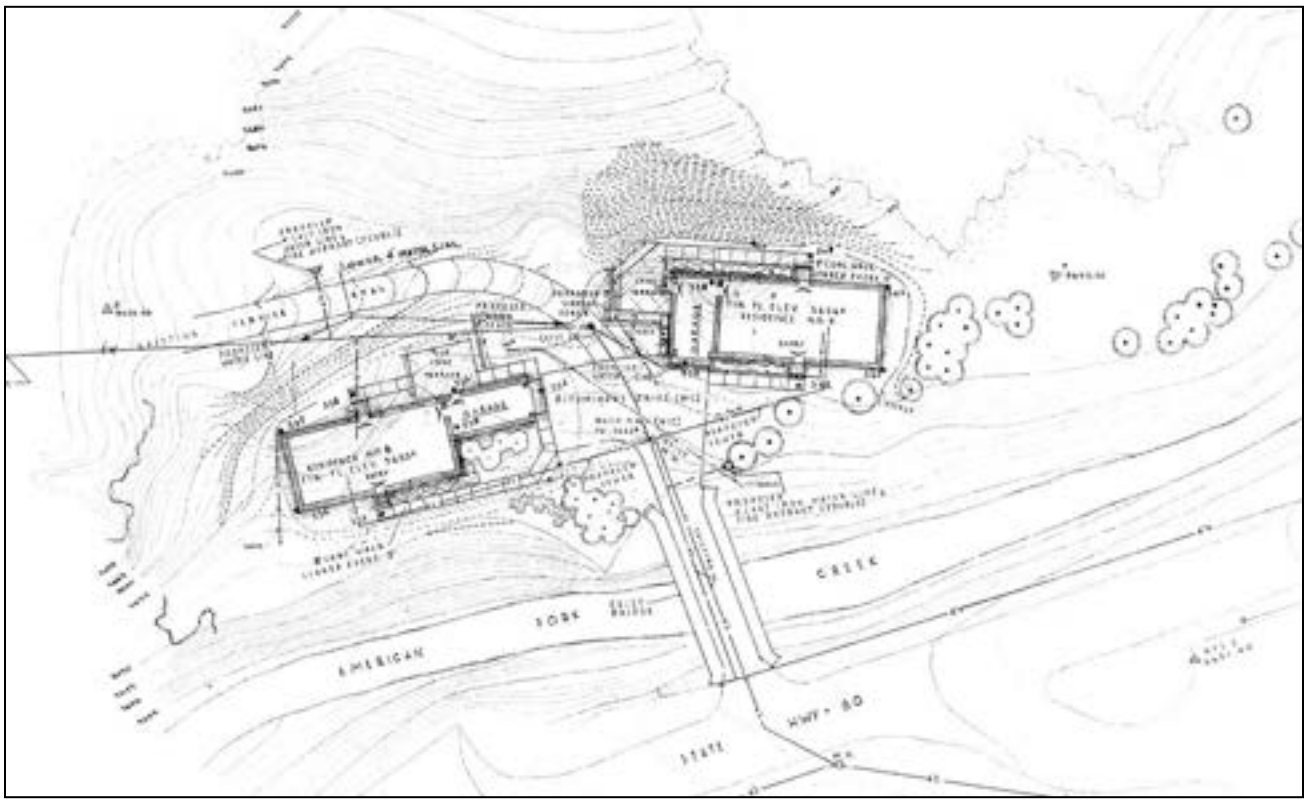


Figure 10. Residential Area Development plan showing the locations of Quarters 8 and 9 (NPS 1962).

Photographs

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photo Log

Name of Property: Timpanogos Cave Historic District

City or Vicinity: Pleasant Grove

County: Utah State: Utah

Photographer: Gretchen Pineo (PAL)

Date Photographed: June 6–7, 2023

Description of Photograph(s) and number, include description of view indicating direction of camera:

1 of 46. Cave formations in Middle Cave, view east.
2 of 46. Stalactites and helictites in Timpanogos Cave, view northeast.
3 of 46. Cave Access Trail, view north upslope from the first set of switchbacks.
4 of 46. Cave Access Trail, view southwest through tunnel.
5 of 46. Cave Access Trail and Walls, view east.
6 of 46. Cave Access Trail and Fences, view west.
7 of 46. Old Cave Trail, lower section, view west.
8 of 46. Old Cave Trail, upper section, view east.
9 of 46. Cave Comfort Station, west and south elevations, view northeast.
10 of 46. The Grotto, view east.
11 of 46. Hansen Cave Entrance Pavilion, view southwest from Cave Access Trail.
12 of 46. Hansen Cave entrance, view northwest.
13 of 46. Cave Tour Trail and Hansen Cave Features, view east.
14 of 46. Cave Tour Trail, steps to Middle Cave, view north.
15 of 46. Cave Tour Trail, steps in Timpanogos Cave, view northeast.
16 of 46. Hansen Tunnel, view southeast.
17 of 46. Timpanogos Cave Exit Pavilion, view south from Cave Access Trail.
18 of 46. Route 92 through the Monument, view east from Service Road entrance.
19 of 46. Wagon Road Trace, view south from Route 92.
20 of 46. Storage Building, view southeast from Wagon Road Trace.
21 of 46. Camp Store Foundation and Retaining Walls, view south from Route 92.
22 of 46. West Entrance Sign, view northeast from edge of Route 92.
23 of 46. Route 92 Retaining Wall, west segment, view south from Cave Camp.

24 of 46. Route 92 Retaining Wall, east segment, view east from Cave Camp Entrance Road Trace (visible at bottom).
25 of 46. Caretaker's House Root Cellar, north elevation built into Route 92 Retaining Wall, view south.
26 of 46. Cave Camp, campsite remnants, view northeast behind Maintenance Building.
27 of 46. American Fork River Walls, south bank near Custodian's House, view southeast.
28 of 46. American Fork River Walls, channel on south side of American Fork River Bridge, view southeast.
29 of 46. American Fork River Walls, south bank at River View Picnic Area, view south.
30 of 46. Campground Comfort Station, north and west elevations, view southeast, Route 92 Retaining Wall behind building.
31 of 46. USFS Stone Pier, view southeast in Cave Camp.
32 of 46. Maintenance Building, view south from American Fork River Bridge.
33 of 46. American Fork River Bridge and Walls, view northwest from lawn at Custodian's Residence.
34 of 46. Custodian's Residence, west and south elevations, view north, Walkway at left.
35 of 46. Custodian's Residence Root Cellar and Retaining Walls, view east.
36 of 46. Swinging Bridge Picnic Area, view southeast toward Lower Footbridge.
37 of 46. Swinging Bridge Comfort Station, south and east elevations, view northwest.
38 of 46. Swinging Bridge Picnic Area, view east from Lower Footbridge: left to right, Upper Footbridge, River Walls, Comfort Station Shed, Comfort Station north and west elevations.
39 of 46. Swinging Bridge Lower Footbridge, view north.
40 of 46. Swinging Bridge Upper Footbridge, view west toward Comfort Station and Shed.
41 of 46. Rock Bridge, view northeast from edge of Route 92.
42 of 46. Quarters 8, south and east elevations, view northwest.
43 of 46. Quarters 9, west and south elevations, view northeast.
44 of 46. Pictograph, view north.
45 of 46. River View Picnic Area, view east.
46 of 46. Visitor Center, north and west elevations, view southeast.

Photo 1. Cave formations in Middle Cave, view east.

Photo 2. Stalactites and helictites in Timpanogos Cave, view northeast.

Photo 3. Cave Access Trail, view north upslope from the first set of switchbacks.

Photo 4. Cave Access Trail, view southwest through tunnel.

Photo 5. Cave Access Trail and Walls, view east.

Photo 6. Cave Access Trail and Fences, view west.

Photo 7. Old Cave Trail, lower section, view west.

Photo 8. Old Cave Trail, upper section, view east.

Photo 9. Cave Comfort Station, west and south elevations, view northeast.

Photo 10. The Grotto, view east.

Photo 11. Hansen Cave Entrance Pavilion, view southwest from Cave Access Trail.

Photo 12. Hansen Cave entrance, view northwest.

Photo 13. Cave Tour Trail and Hansen Cave Features, view east.

Photo 14. Cave Tour Trail, steps to Middle Cave, view north.

Photo 15. Cave Tour Trail, steps in Timpanogos Cave, view northeast.

Photo 16. Hansen Tunnel, view southeast.

Photo 17. Timpanogos Cave Exit Pavilion, view south from Cave Access Trail.

Photo 18. Route 92 through the Monument, view east from Service Road entrance.

Photo 19. Wagon Road Trace, view south from Route 92.

Photo 20. Storage Building, view southeast from Wagon Road Trace.

Photo 21. Camp Store Foundation and Retaining Walls, view south from Route 92.

Photo 22. West Entrance Sign, view northeast from edge of Route 92.

Photo 23. Route 92 Retaining Wall, west segment, view south from Cave Camp.

Photo 24. Route 92 Retaining Wall, east segment, view east from Cave Camp Entrance Road Trace (visible at bottom).

Photo 25. Caretaker's House Root Cellar, north elevation built into Route 92 Retaining Wall, view south.

Photo 26. Cave Camp, campsite remnants, view northeast behind Maintenance Building.

Photo 27. American Fork River Walls, south bank near Custodian's House, view southeast.

Photo 28. American Fork River Walls, channel on south side of American Fork River Bridge, view southeast.

Photo 29. American Fork River Walls, south bank at River View Picnic Area, view south.

Photo 30. Campground Comfort Station, north and west elevations, view southeast, Route 92 Retaining Wall behind building.

Photo 31. USFS Stone Pier, view southeast in Cave Camp.

Photo 32. Maintenance Building, view south from American Fork River Bridge.

Photo 33. American Fork River Bridge and Walls, view northwest from lawn at Custodian's Residence.

Photo 34. Custodian's Residence, west and south elevations, view north, Walkway at left.

Photo 35. Custodian's Residence Root Cellar and Retaining Walls, view east.

Photo 36. Swinging Bridge Picnic Area, view southeast toward Lower Footbridge.

Photo 37. Swinging Bridge Comfort Station, south and east elevations, view northwest.

Photo 38. Swinging Bridge Picnic Area, view east from Lower Footbridge: left to right, Upper Footbridge, River Walls, Comfort Station Shed, Comfort Station north and west elevations.

Photo 39. Swinging Bridge Lower Footbridge, view north.

Photo 40. Swinging Bridge Upper Footbridge, view west toward Comfort Station and Shed.

Photo 41. Rock Bridge, view northeast from edge of Route 92.

Photo 42. Quarters 8, south and east elevations, view northwest.

Photo 43. Quarters 9, west and south elevations, view northeast.

Photo 44. Pictograph, view north.

Photo 45. River View Picnic Area, view east.

Photo 46. Visitor Center, north and west elevations, view southeast.