NPS Form 10-900 OMB No. 1024-0018

United States Department of the Interior
National Park Service

3490

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: Museum of Automobiles
Other names/site number: Site #CN0490
Name of related multiple property listing:
N/A
(Enter "N/A" if property is not part of a multiple property listing

2. Location

Street & number: 8 Jones Lane
City or town: Winrock State: AR County: Conway
Not For Publication: [ ] Vicinity: [X]

3. State/Federal Agency Certification

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

I hereby certify that this X nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property X meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

___national **_X_statewide** **__local**

Applicable National Register Criteria:

___A **___B** **_X_C** **___D**

4-3-19

Signature of certifying official/Title: **Date**

Arkansas Historic Preservation Program

State or Federal agency/bureau or Tribal Government

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

Signature of commenting official: **Date**

Title : **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

5·31·2019
Date of Action

5. Classification

Ownership of Property

(Check as many boxes as apply.)

Private:	☐
Public – Local	☐
Public – State	X
Public – Federal	☐

Category of Property

(Check only **one** box.)

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

Number of Resources within Property
(Do not include previously listed resources in the count)

Contributing	Noncontributing	
1		buildings
		sites
		structures
		objects
1		Total

Number of contributing resources previously listed in the National Register _____

6. Function or Use
Historic Functions
(Enter categories from instructions.)
RECREATION AND CULTURE/museum

Current Functions
(Enter categories from instructions.)
RECREATION AND CULTURE/museum

7. Description

Architectural Classification
(Enter categories from instructions.)
OTHER/Mid-Century Modern

Materials: (enter categories from instructions.)
Principal exterior materials of the property: _CONCRETE, METAL_

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
The Museum of Automobiles is located at 8 Jones Lane on top of Petit Jean Mountain to the southwest of Morrilton and to the southeast of Winrock. The Museum of Automobiles Building is an early and unusual example of a tensile structure, especially in Arkansas. The building is built on a continuous cast-concrete foundation and has walls built out of cast-concrete panels and cast-concrete columns. The four corner columns, from which the tensile cables stretch, are connected by cast-concrete beams that form a compression ring. The roof of the building is clad with a membrane and copper sheets, and slopes towards the building's center following the drape of the tensile cable system. The front façade of the building is fenestrated with large plate-glass windows while the other facades are devoid of fenestration. A pool with fountain, sidewalks, benches, and large parking lot are located to the west of the building.

Narrative Description
The Museum of Automobiles is located at 8 Jones Lane at the northeast corner of Jones Lane and AR Highway 154 on top of Petit Jean Mountain. The building is approximately nine miles to the southwest of Morrilton and three miles to the southeast of Winrock. The Museum of Automobiles is located in a fairly rural area near Petit Jean State Park, and the building is actually owned by the Arkansas Department of Parks and Tourism. The building's site has the parking lot to the west of the building with access off of Jones Lane, and trees scattered throughout the site.

The Museum of Automobiles Building is an early and unusual example of a tensile structure, especially in Arkansas. The building was built in 1964 and designed by the Little Rock architecture firm of Ginocchio, Cromwell, Carter, Dees, & Neyland. The Museum opened to the public on October 18, 1964. The building is built on a continuous cast-concrete foundation and has walls built out of cast-concrete panels and cast-concrete columns. The front façade of the building is fenestrated with large plate-glass windows while the other facades are devoid of fenestration. The four corner columns, from which the tensile cables stretch, are connected by cast-concrete beams that form a compression ring. The roof of the building is clad with a membrane and copper sheets, and slopes towards the building's center following the drape of the tensile cable system.

The main floor interior is one big open space where the cars are displayed. The tensile cable system allowed for the space to be uninterrupted by columns. The main floor also has the reception area and gift shop. The basement has car storage, a shop area, mechanical equipment room, a library, and restrooms.

A fountain with pool, sidewalks, benches, and large parking lot are located to the west of the building.

Front/West Façade

The front façade of the building is symmetrical in its design. It is approached by two concrete sidewalks and is fronted by the fountain and its rectangular pool. Between the pool and the building are three, square, concrete benches. A gravel planter is located in front of the center of the façade and allows a place for water running off of the roof to go.

The façade is divided into five large bays by the cast-concrete columns. The center bay of the façade is fenestrated by eight, stationary, rectangular, plate-glass windows. The bays flanking the center section of windows each have a single, metal-framed, plate glass door, with a rectangular transom window and rectangular sidelight followed by four, stationary, rectangular, plate-glass windows. Each of these bays also has a projecting, flat-roofed porch, supported by four square columns. The outer bays of the façade are each fenestrated by a group of five, stationary, rectangular, plate-glass windows. At each end of the façade is the large cast-concrete column where the cables of the tensile cable structure originate from.

The façade is dominated by the sloping roof, which is covered in copper sheets on its outward-facing plane. Above the slope of the roof are the large cast-concrete beams and cast-concrete columns that are part of the building's structure that support the tension of the cables. Each column is connected by three parallel beams and rests on a cast-concrete plinth.

Side/South Façade

Like the front façade, the south façade of the building is divided into five large bays by the cast-concrete columns. The central three bays are comprised of three, large, cast-concrete panels in between the columns. The outer two bays are comprised of two, large, cast-concrete panels in between the columns, with the outer panels being wider than the inner panels. At each end of the

façade is the large cast-concrete column where the cables of the tensile cable structure originate from.

The façade is dominated by the sloping roof, which is covered in copper sheets on its outward-facing plane. Above the slope of the roof are the large cast-concrete beams and cast-concrete columns that are part of the building's structure that support the tension of the cables. Each column is connected by three parallel beams and rests on a cast-concrete plinth.

Rear/East Façade

The rear façade of the building is divided into five large bays by the cast-concrete columns as are the other façades. Bays three and four from the south are comprised of three, large, cast-concrete panels in between the columns. The center of the central bay has a flat roof extension that directs runoff away from the building. Bay two from the south has a large pair of metal doors in the center flanked on each side by a cast-concrete panel. The doors are approached by a large cast-concrete ramp, which allows cars to be moved in and out of the display area. The outer two bays are comprised of two, large, cast-concrete panels in between the columns, with the outer panels being wider than the inner panels. At each end of the façade is the large cast-concrete column where the cables of the tensile cable structure originate from.

The façade is dominated by the sloping roof, which is covered in copper sheets on its outward-facing plane. Above the slope of the roof are the large cast-concrete beams and cast-concrete columns that are part of the building's structure that support the tension of the cables. Each column is connected by three parallel beams and rests on a cast-concrete plinth.

Towards the north end of the façade is an enclosure that is constructed of matching cast-concrete panels, and it contains the building's HVAC equipment.

Side/North Façade

The north façade of the building is divided into five large bays by the cast-concrete columns as are the other façades. The central three bays of the main floor are comprised of three, large, cast-concrete panels in between the columns. The center of the central bay has a flat roof extension that directs runoff away from the building. The outer two bays of the main floor are comprised of two, large, cast-concrete panels in between the columns, with the outer panels being wider than the inner panels. At each end of the façade is the large cast-concrete column where the cables of the tensile cable structure originate from.

The north façade, due to the slope of the building's site, also has a lower-level façade. The central three bays of the lower-level façade are divided into six sub-bays by concrete ribs. The left of the three central bays has a large garage door that takes up the center three sub-bays. The garage door allows cars to be taken in and out of the storage and shop areas. The outer two bays of the lower level are divided into five sub-bays by the concrete ribs.

The façade is dominated by the sloping roof, which is covered in copper sheets on its outward-facing plane. Above the slope of the roof are the large cast-concrete beams and cast-concrete

columns that are part of the building's structure that support the tension of the cables. Each column is connected by three parallel beams and rests on a cast-concrete plinth.

Interior

The upper level of the interior is comprised of one large open space, which is possible due to the tensile cable structural system. Inside the front entrance, partial walls delineate a lobby and gift shop area. The rest of the main level is devoted to the display of the automobiles. The automobiles are parked on white-gravel display areas that are separated by carpeted aisles with benches.

The lower level of the building has the support spaces, which are more utilitarian spaces. Most of the lower level is devoted to the storage area and the shop area of the building, which are located in the eastern part of the building. The western part of the building has the restrooms, mechanical room, and the library. A stairway, just to the south of the main entrance connects the two levels.

Integrity

The Museum of Automobiles Building has excellent integrity from the time of its construction in 1964. The exterior has not been altered since it was built, and still very much reflects the original design of the firm Ginocchio, Cromwell, Carter, Dees, & Neyland. The unusual tensile cable structural system is still very much visible on the building's interior, and the large open interior display space is still present. The setting around the museum still reflects the relatively rural character from the time of its construction, and the associated site features – parking lot, fountain and pool, and benches – also reflect the time of the Museum's construction.

8. Statement of Significance

Applicable National Register Criteria

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

- [ ] A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- [ ] B. Property is associated with the lives of persons significant in our past.
- [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.
- [ ] 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.)
_ARCHITECTURE___

Period of Significance
_1964_____

Significant Dates
_1964_____

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

Cultural Affiliation

Architect/Builder
Ginocchio, Cromwell, Carter, Dees, & Neyland, Architects

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 Museum of Automobiles is being nominated to the National Register of Historic Places under **Criterion C** with **Statewide significance** as an early and important example of tensile cable construction in Arkansas. The use of the tensile cable structural system in the Museum of Automobiles allowed the building to have a large open space on the main level, which was important for the building's purpose – displaying automobiles. One of only a few buildings in

Arkansas that used the system, the Museum of Automobiles is a significant example of the system.

The use of the tensile cable system also allowed the building to be dramatically styled. The drape of the roof followed the drape of the cable system while the encircling concrete columns that form the compression ring kept the cables of the system taut. The Museum of Automobiles was designed by the noted Arkansas architects, Dietrich Neyland and Robert Millett, of the firm of Ginocchio, Cromwell, Carter, Dees & Neyland. Neyland had been introduced to Modern architecture early on in his architecture career through his internship with the Weiner Brothers in Shreveport, Louisiana, and then with Richard Neutra, and Millett had studied under Walter Gropius as a student at the Massachusetts Institute of Technology. Both exhibited their fondness for Modern design when they designed the Museum of Automobiles. Neyland's use of modern design, not just for the Museum of Automobiles, but throughout his time with the Cromwell firm, "clearly established a new and exciting direction for us [Cromwell] and he remained in the forefront of design for the firm until his retirement in 1980."[1]

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

HISTORY OF THE PROPERTY

Some of the earliest settlement in Conway County began southeast of the Menifee vicinity in the Cadron Creek Valley. In 1778 John Standlee and some others explored the area near the mouth of Cadron Creek, and he selected a place that he wished to return to to live. He eventually returned to the site in 1814 and lived there until his death in August 1820. Settlement continued in the area in the 1810s and 1820s with the arrival of John C. Benedict and his family in the spring of 1818 and B. F. Howard who settled on the Arkansas River above the mouth of Cadron Creek in 1828.[2]

By the 1820s there were enough people in the area for the creation of Conway County, which occurred in October 1825. Conway County was named for the Conway family, and at the time of its creation by the Territorial Legislature, included parts of Faulkner, Van Buren, Pope, Perry and Yell counties. The first county seat was at Cadron.[3]

Railroad construction in Conway County was the single most significant event in the county's development. In 1853, a charter was granted to the Cairo & Fulton Railroad to construct an east-west connecting line from Little Rock to Fort Smith. After two years of little progress on the Fort Smith Branch, a new company, the Little Rock & Fort Smith Railroad, was formed and chartered in 1855. The railroad moved slowly westward from what is now North Little Rock. Construction was interrupted by the Civil War in 1860 and did not resume until 1866. An initial survey for a potential line west to Fort Smith from Little Rock planned to take the railroad

[1] Truemper, John J., Jr., FAIA. *A Century of Service 1885-1985 at the Firm of Cromwell Truemper Levy Parker & Woodsmall.* Little Rock: August House, 1985, p. 23.
[2] *Historical Reminiscences and Biographical Memoirs of Conway County, Arkansas.* Little Rock, AR: Arkansas Historical Publishing Company, 1890, p. 20.
[3] *Ibid*, p. 11.

through Lewisburg. Residents of the town were asked to donate money to help build the railroad line to ensure it would pass through their town. They refused to raise the $2,000 that the Little Rock & Fort Smith Railroad wanted. The citizens felt the town's position was so strategic in Conway County that the railroad would have to come through it anyway. As a result, the Little Rock & Fort Smith Railroad re-surveyed the proposed line, and moved it to pass north of Lewisburg.[4]

Petit Jean Mountain was a landmark in the Conway County area, and had been since at least the time that some of the white explorers traveled the Arkansas River in the early nineteenth century. Thomas Nuttall mentioned the mountain in 1819 as did Henry Downs, a government surveyor, in 1821. In addition, during the 1853 U.S. Pacific Railroad Survey of the 35th parallel, Heinrich Balduin Möllhausen created a woodcut of the mountain. However, the ruggedness of the mountain meant that settlement on its summit was slow to happen. By the Civil War, only five families lived on the mountain, but once the railroad land in the area became available, Conway County sought people to settle in the area. The recreational potential of the mountain was used to help lure settlers, and in 1889 Michael Brown built the mountain's first resort hotel. By 1900, one hundred family farms existed on Petit Jean.[5]

During the early twentieth century, life on the mountain changed as cotton prices crashed, and droughts, blights, and insect infestations occurred. In addition poor soil management practices, caused farming to become more difficult and the mountain's population decreased. The decrease in population continued during the Great Depression and World War II, although some activity during the 1920s and 1930s to establish and construct Petit Jean State Park did bring some new residents and outdoor enthusiasts to the area. In 1953, noted Arkansas author Bernie Babcock moved to Petit Jean and she was soon followed by wealthy New Yorker Winthrop Rockefeller, who took a worn-out cotton plantation and transformed it into Winrock Farms, a cattle operation featuring Santa Gertrudis cattle.[6]

Winthrop Rockefeller was born on May 1, 1912, in New York City to John D. Rockefeller, Jr., and Abby Aldrich Rockefeller. Since Rockefeller grew up with a privileged lifestyle, he attended the Lincoln School at Columbia University Teachers College, and also attended the private Loomis School in Windsor, Connecticut. Although Rockefeller also attended Yale University from 1931 until 1934, he left during his third year without earning a degree.[7]

After he left Yale, instead of starting in a position near the top of the family's oil company, Rockefeller took a job as an apprentice in the oil fields. However, in 1937, he took a position with Socony-Vacuum, a company which had developed out of the family's Standard Oil of New

[4] Smith, Sandra Taylor. "Morrilton Commercial Historic District." National Register of Historic Places Registration Form. In the files of the Arkansas Historic Preservation Program. 2002.
[5] Higgins, Donald. "Petit Jean Mountain." *The Encyclopedia of Arkansas History and Culture.* http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=6317#.
[6] Higgins, Donald. "Petit Jean Mountain." *The Encyclopedia of Arkansas History and Culture.* http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=6317#.
[7] Dillard, Tom W. "Winthrop Rockefeller." *The Encyclopedia of Arkansas History and Culture.* http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=122.

York. Rockefeller's unconventional lifestyle, when compared to the rest of the family, continued during World War II when he enlisted in the Army as a private in 1941. His career in the Army led to him being promoted to captain in December 1942 and to major in November 1943.[8]

Rockefeller's life after World War II was not happy. He was known as a heavy drinker and suddenly married Barbara "Bobo" Sears on February 14, 1948. Soon afterwards, his son, Winthrop Paul Rockefeller, was born and within a year, he and Sears were divorced. Rockefeller hated the restrictive lifestyle that he was expected to follow, and fled from it to visit Arkansas businessman Frank Newell in 1953. Within a year of his visit, he bought a large farm in Petit Jean Mountain that he named Winrock Farms.[9]

Rockefeller's name recognition, fortune, and success with economic development led him into Arkansas politics. Rockefeller ran for governor in 1964 against Orval Faubus, but was defeated. However, in 1966, he ran against, and defeated, former Supreme Court justice James D. (Jim) Johnson. Rockefeller would win a second term as governor in 1968, but was defeated when he ran for his third term in 1970.[10]

Although Rockefeller was interested in farming and politics, he had other interests, including automobiles, which led to the establishment of the Museum of Automobiles in the mid-1960s. The beginning of the automobile collection that would be housed in the Museum of Automobiles began in 1961 when Rockefeller purchased a collection of automobiles from the James Melton Autorama in Hypoluxo, Florida, a museum that Melton had opened in 1953. The collection was originally displayed near Norwalk, Connecticut, but he moved the collection to Florida, where he felt there would be more potential for visitation. The site he chose for the museum was on U.S. 1 and included a building that had been built from materials salvaged from the demolished Royal Poinciana Hotel in Palm Beach. In addition to his automobiles, the Autorama also had displays of music boxes, opera costumes, and other toys and antiques. However, shortly after Melton died in 1961, the Autorama closed. When the collection was sold off, Rockefeller bought the core of the collection.[11]

In order to house and display the collection, Rockefeller had the firm of Ginocchio, Cromwell, Carter, Dees, & Neyland design a striking modern building on top of Petit Jean Mountain near his farm. The Cromwell firm had its beginnings in 1885 when the architect Benjamin J. Bartlett and his son came to Arkansas after their design for the Arkansas School for the Blind was selected. In 1886, Charles Thompson joined the firm and in the early twentieth century Theo Sanders and Frank Ginocchio also joined the firm. The firm became known as Thompson,

[8] Dillard, Tom W. "Winthrop Rockefeller." *The Encyclopedia of Arkansas History and Culture.* http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=122.
[9] Dillard, Tom W. "Winthrop Rockefeller." *The Encyclopedia of Arkansas History and Culture.* http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=122.
[10] Dillard, Tom W. "Winthrop Rockefeller." *The Encyclopedia of Arkansas History and Culture.* http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=122.
[11] Breslauer, Ken. *Florida Roadside Attractions History: The Complete Guide to Florida Tourist Attractions Before Disney*. Gaithersburg, MD: Signature Book Printing, 2018, pp. 42-43.

Sanders, and Ginocchio in 1927. Thompson retired in 1938 and eventually Sanders withdrew from the firm, and Edwin Cromwell joined the firm to succeed Sanders.[12]

Under Cromwell's leadership, the firm grew and prospered, and in 1954 engineering services were added to the firm.[13] It was during this period of growth that the firm began working on several projects for Winthrop Rockefeller, including the Museum of Automobiles, and two of the firm's most talented architects, Dietrich Neyland and Robert Millet, were put in charge of the design. The engineering of the design was completed by Oliver Gatchell.

Dietrich Neyland was born in Shreveport, Louisiana, to J.C. and Mary Neyland, and he was the grandson of the German architect Dietrich Augustus Rulfs. Neyland attended Tulane University, and during his senior year he was awarded the American Institute of Architects medal, the Albert Toledano Prize for Excellence of Architectural Thesis, and the S.S. Lobouisse Award. Prior to World War II, he served an internship with architect Richard Neutra, and from 1943 until 1946, Neyland served in the U.S. Navy. Neyland then became an associate in the Shreveport firm of Van Oss & Flaxman before moving to Little Rock in 1950 to join the firm of Ginocchio and Cromwell. At Cromwell Neyland was a design principal, partner, president, chairman of the board, and chairman emeritus. After Neyland retired in 1980, he received a Masters Degree in Studio Art at UALR. According to his obituary, Neyland "was described as an unassuming man who shunned the limelight, preferring to remain in the background even at the dedications of the buildings he designed. As an architect and an artist, he signed his paintings and the foundations' wet cement of all his buildings with 'TL,' which he told others, stood for his 'brush name,' Thadeus Longfellow. But in reality, it stood for 'Thanks, Lord.'"[14] It has been written of Neyland that "Because of his reluctance to accept a highly visible role, he did not, perhaps, attain the level of public recognition so amply warranted by his achievements. Nonetheless, his work clearly established a new and exciting direction for us [Cromwell] and remained in the forefront of design for the firm until his retirement in 1980."[15]

Robert Millet was born in Portland, Maine, on October 29, 1923. He studied at the University of Illinois, which is where he met his wife, Marion Davidson, before they moved to Boston in 1946 and he began studies at the Massachusetts Institute of Technology (MIT). While at MIT, Millet studied under Walter Gropius who had come to the United States in the late 1930s to escape the rise of the Nazi party. Millet graduated from MIT in the 1950s and moved to Arkansas to take a position at the Cromwell firm. Millet, like Neyland, was part of Cromwell's effort to bring "Modernist" architects to Arkansas in order to create a "modern Arkansas." Millet and Neyland's strengths complemented each other since Millet specialized in engineering and

[12] Witsell, Charles. "Cromwell Architects Engineers, Inc." *The Encyclopedia of Arkansas History and Culture.* http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=3261.
[13] Witsell, Charles. "Cromwell Architects Engineers, Inc." *The Encyclopedia of Arkansas History and Culture.* http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=3261.
[14] Obituary for Dietrich Neyland. Found at: https://www.littlerockfuneralhome.com/obituaries/Dietrich-Neyland-1798/#!/Obituary, and Toms, Mason. "Miesian Style Comes to Arkansas: The Mid-Century Modern Work of Dietrich Neyland." In the files of the Arkansas Historic Preservation Program.
[15] Truemper, John J., Jr., FAIA. *A Century of Service 1885-1985 at the Firm of Cromwell Truemper Levy Parker & Woodsmall.* Little Rock: August House, 1985, p. 23.

Neyland was better as a designer, although he often created designs that were "very imaginative but not always practical."[16]

The building that Millet and Neyland designed was unusual in that it employed a tensile cable structural system. Although the idea of a tensile structure had been used for millennia and is best expressed in a tent with a ridge pole and guy ropes, it wasn't until the nineteenth century that Russian engineer Vladimir Shukhov became one of the first people to develop practical calculations of stresses and deformations of tensile structures. The first use of the system was for eight structures that Shukhov designed for the Nizhny Novgorod Fair of 1896. Even so, the system was never put into widespread use although it was championed during the late twentieth century by German architect and engineer Frei Otto. One of Otto's first large-scale examples of the system was the West German Pavilion at Expo 67 in Montreal and also famously employed it in his design for the Olympic Stadium at the 1972 Summer Olympics in Munich, Germany.[17]

However, the concept of using cables to support a roof, such as the system at the Museum of Automobiles, was first used in the early 1950s with the construction of the J. S. Dorton Arena at the North Carolina State Fairgrounds, which was dedicated in 1953 (NR-listed April 11, 1973). The main structure of the building is comprised by "two oblique-angled parabolic concrete arches in compression … [that] form the major structural element in the building." Furthermore, "steel cables span the opening in two mutually opposed directions to form a saddle-surface roof. … The cable roof network is covered with a bottom layer of lapped corrugated metal strips, a layer of rigid insulation board and a layer of standard bonded roofing."[18] As with the Museum of Automobiles, this allowed for a large interior space that did not need support columns.

The use of the tensile cable structural system that was used for the Museum of Automobiles building was a system that the Cromwell firm had employed once before. The Union National Bank Drive-In, which had been built on Hayes Street (now University Avenue) in 1957 employed a similar system, but in a circular configuration. Not only was the building one of the first drive-in banks in the state, but "its roof design was unique in that it was completely suspended by cables from the surrounding free-standing columns."[19] However, the system that was used for the Museum of Automobiles, was much larger in scope, allowing for a building that was 150'x150' and covered almost a half-acre of space.

With respect to the design parameters of the Museum of Automobiles, John Truemper of the firm noted:

[16] Toms, Mason. E-mail to the author. 16 October 2018.
[17] Drew, Philip. *New Tent Architecture*. New York: Thames & Hudson, 2008, p. 27, and Information on Vladimir Shukhov found at: http://shukhov.org/shukhov.html.
[18] North Carolina State Department of Archives and History. "J. S. Dorton Arena, Raleigh, Wake County, North Carolina." National Register of Historic Places Registration Form. From the files of the North Carolina State Historic Preservation Office, 1972.
[19] Truemper, John J., Jr., FAIA. *A Century of Service 1885-1985 at the Firm of Cromwell Truemper Levy Parker & Woodsmall*. Little Rock: August House, 1985, p. 53.

> The most challenging requirement of the 150 foot square museum was that it be column-free – and as he [Rockefeller] said it, "not look like a grocery store." The roof was supported by cables and a compression ring surrounding the structure, transferring the roof loads to four corner columns. A basement level to house offices and work areas was constructed before the upper museum floor was even designed. The resulting building was highly unusual from a structural standpoint but proved very successful both functionally and aesthetically. Engineered by Oliver Gatchell, it was featured in numerous publications and generated nearly as much attention as the wonderful antiques it housed.[20]

When the Museum of Automobiles opened to the public on October 18, 1964, there were 33 cars on display. The museum included the cars from Melton's Autorama along with other cars from the Rockefeller family.[21]

Shortly after Rockefeller died on February 22, 1973, a memorial service was held at the Museum on March 4, 1973, and it was attended by over 4,000 people. The Museum remained open until the fall of 1975 when the cars in the collection (except Rockefeller's personal vehicles) were sold to Harrah's Museum in Reno, Nevada. However, the Museum did not stay closed for long. A group of ten men reopened the Museum on June 6, 1976, with a collection of 33 cars that had been loaned by members of surrounding antique car clubs. Ten days later, the group formed a nonprofit organization and leased the building from the State of Arkansas. Herman "Buddy" Hoelzeman, who was the Museum's director under Rockefeller, was reappointed director of the Museum under the new organization.[22]

Today, the Museum of Automobiles is still open to the public as a museum, and exhibits approximately 50 cars ranging from a 1904 Oldsmobile to a 1967 Ford Ranchero once owned by Elvis Presley and motorcycles ranging from a 1913 Harley-Davidson to a 1969 Rokon, and the collection also includes a 1923 Climber Touring, which was manufactured in Little Rock. In addition, the Museum of Automobiles Building is still a striking example of Mid-Century Modern design by the firm of Ginocchio, Cromwell, Carter, Dees, & Neyland, and a rare example of tensile cable architecture in Arkansas.[23]

SIGNIFICANCE OF THE PROPERTY

Neyland's work on buildings after World War II was a great departure from trends in the state's architecture at the time. The work of the Cromwell firm right after World War II was described as "solid, safe, and conservative." However, Ed Cromwell wanted to take the firm in a new

[20] Truemper, John J., Jr., FAIA. A Century of Service 1885-1985 at the Firm of Cromwell Truemper Levy Parker & Woodsmall. Little Rock: August House, 1985, p. 35.
[21] Orsburn, Young M. "Museum of Automobiles." *The Encyclopedia of Arkansas History and Culture.* http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=4096.
[22] Orsburn, Young M. "Museum of Automobiles." *The Encyclopedia of Arkansas History and Culture.* http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=4096.
[23] Information on the Museum of Automobiles found at: https://www.museumofautos.com/.

direction due to the potential for innovative architecture in the Post-War period. As John Truemper wrote in his book on the Cromwell firm, "Cromwell set out to find a first-rate designer to thrust the firm – and Arkansas architecture – into a new era of design excellence. He found that talent in Dietrich Neyland…"[24] Truemper went on to write that, "Neyland's International Style of architecture, which utilized glass, concrete and steel in innovative ways, represented a sometimes startling departure from the traditional. It embodied, however, a fundamentally practical approach to solving client needs…"[25]

This approach was definitely reflected in the design for the Museum of Automobiles. The design used cable and concrete in innovative ways. Yet, at the same time, it did allow for a practical approach to solving the needs of Rockefeller as the client – the need to have a large open space without columns that could easily display his automobile collection. Also, as Mason Toms writes in his work on Neyland with respect to the Union National Bank Drive-In, "The concrete structural columns and concrete ring from which the suspension cables are anchored are integral to the visual aesthetics of this design…"[26] This is also true with the Museum of Automobiles where the visual interest of the building's design is a direct result of the structural columns, concrete ring and the shape of the copper-clad roof draped on the structural cables.

Millett, the other architect involved with the building's design was described as a "deeply talented architect" who was also known for his innovative solutions in architecture and design. One example of his innovative approach to design was for the terminal building at the Little Rock National Airport, which had a plan that expressed the concept of the airport as a "'conduit' between the automobile and the airplane." He was also known for his designs for industrial facilities, "Where the efficient handling of people and materials in complicated process manufacturing is of the utmost importance."[27]

The use of a tensile cable structural system was unusual for Arkansas, especially given that the type of system used at the Museum of Automobiles was only first used approximately ten years before the building's construction. However, the use of the tensile cable structural system in the Museum of Automobiles allowed the building to have a large open space on the main level, which was important for the building's purpose – displaying automobiles. One of only a few buildings in Arkansas that used the system, the Museum of Automobiles is a significant example of the system. Due to the fact that the Museum of Automobiles is an early and important example of tensile cable construction in Arkansas, it is being nominated to the National Register of Historic Places under **Criterion C** with **Statewide significance**.

[24] Truemper, John J., Jr., FAIA. *A Century of Service 1885-1985 at the Firm of Cromwell Truemper Levy Parker & Woodsmall*. Little Rock: August House, 1985, p. 23.
[25] Truemper, John J., Jr., FAIA. *A Century of Service 1885-1985 at the Firm of Cromwell Truemper Levy Parker & Woodsmall*. Little Rock: August House, 1985, p. 23.
[26] Toms, Mason. "Miesian Style Comes to Arkansas: The Mid-Century Modern Work of Dietrich Neyland." In the files of the Arkansas Historic Preservation Program.
[27] Truemper, John J., Jr., FAIA. *A Century of Service 1885-1985 at the Firm of Cromwell Truemper Levy Parker & Woodsmall*. Little Rock: August House, 1985, p. 28.

9. Major Bibliographical References

Bibliography (Cite the books, articles, and other sources used in preparing this form.)

Breslauer, Ken. *Florida Roadside Attractions History: The Complete Guide to Florida Tourist Attractions Before Disney*. Gaithersburg, MD: Signature Book Printing, 2018.

Dillard, Tom W. "Winthrop Rockefeller." *The Encyclopedia of Arkansas History and Culture.* http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=122.

Drew, Philip. *New Tent Architecture*. New York: Thames & Hudson, 2008.

Higgins, Donald. "Petit Jean Mountain." *The Encyclopedia of Arkansas History and Culture.* http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=6317#.

Historical Reminiscences and Biographical Memoirs of Conway County, Arkansas. Little Rock, AR: Arkansas Historical Publishing Company, 1890.

Information on the Museum of Automobiles found at: https://www.museumofautos.com/.

Information on Vladimir Shukhov found at: http://shukhov.org/shukhov.html.

North Carolina State Department of Archives and History. "J. S. Dorton Arena, Raleigh, Wake County, North Carolina." National Register of Historic Places Registration Form. From the files of the North Carolina State Historic Preservation Office, 1972.

Obituary for Dietrich Neyland. Found at: https://www.littlerockfuneralhome.com/obituaries/Dietrich-Neyland-1798/#!/Obituary.

Orsburn, Young M. "Museum of Automobiles." *The Encyclopedia of Arkansas History and Culture.* http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=4096.

Smith, Sandra Taylor. "Morrilton Commercial Historic District." National Register of Historic Places Registration Form. In the files of the Arkansas Historic Preservation Program. 2002.

Toms, Mason. "Miesian Style Comes to Arkansas: The Mid-Century Modern Work of Dietrich Neyland." In the files of the Arkansas Historic Preservation Program.

Toms, Mason. E-mail to the author. 16 October 2018.

Truemper, John J., Jr., FAIA. *A Century of Service 1885-1985 at the Firm of Cromwell Truemper Levy Parker & Woodsmall.* Little Rock: August House, 1985.

Witsell, Charles. "Cromwell Architects Engineers, Inc." *The Encyclopedia of Arkansas History and Culture.* http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=3261.

Witsell, Charles and Gordon Wittenberg with Marylyn Jackson Parins. *Architects of Little Rock: 1833-1950*. Fayetteville, AR: The University of Arkansas Press, 2014.

Previous documentation on file (NPS):

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

Primary location of additional data:

_X_ State Historic Preservation Office
_X_ Other State agency
____ Federal agency
____ Local government
____ University
____ Other
Name of repository: _Arkansas Department of Parks and Tourism _____

Historic Resources Survey Number (if assigned): _CN0490 _____

---

10. Geographical Data

Acreage of Property _Approximately 25 acres.__

Use either the UTM system or latitude/longitude coordinates

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

2. Latitude: Longitude:

3. Latitude: Longitude:

4. Latitude: Longitude:

Or
UTM References
Datum (indicated on USGS map):

[ ] NAD 1927 or [X] NAD 1983

1. Zone: 15	Easting: 509922	Northing: 3887665
2. Zone: 15	Easting: 510247	Northing: 3887660
3. Zone: 15	Easting: 510263	Northing: 3887398
4. Zone: 15	Easting : 509929	Northing: 3887362

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

Part of Parcel #001-10516-000-E, more specifically beginning at the northwest corner of Parcel #001-10516-000-E at UTM Point 15/509922/3887665, proceed easterly along the northern boundary line of Parcel #001-10516-000-E for 1,050 feet to UTM Point 15/510247/3887660, thence proceed southerly perpendicular to the northern boundary of Parcel #001-10516-000-E for 900 feet to the southern boundary of Parcel #001-10516-000-E at UTM Point 15/510263/3887398, thence proceed westerly along the southern boundary of Parcel #001-10516-000-E for 1,100 feet to the southwest corner of Parcel #001-10516-000-E at UTM Point 15/509929/3887362, thence proceed northerly along the western boundary of Parcel #001-10516-000-E to the point of beginning.

Boundary Justification (Explain why the boundaries were selected.)

The boundary includes the Museum of Automobiles Building and its immediate surroundings.

---

11. Form Prepared By

name/title: _Ralph S. Wilcox, National Register & Survey Coordinator _____
organization: _Arkansas Historic Preservation Program _____
street & number: _1100 North Street _____
city or town: _Little Rock _____ state: _AR_____ zip code:_72201_____

e-mail: _ralph.wilcox@arkansas.gov
telephone: _(501) 324-9787
date: _October 25, 2018

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.)

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: Museum of Automobiles

City or Vicinity: Winrock, vic.

County: Conway County State: Arkansas

Photographer: Ralph S. Wilcox

Date Photographed: September 3, 2018

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

1 of _15_. West façade of the Museum of Automobiles and its immediate surroundings, looking east.

2 of _15_. West façade of the Museum of Automobiles, looking east.

3 of _15_. West façade of the Museum of Automobiles, looking northeast.

4 of _15_. South façade of the Museum of Automobiles, looking northeast.

5 of _15_. South façade of the Museum of Automobiles, looking northwest.

6 of _15_. East façade of the Museum of Automobiles, looking northwest.

7 of _15_. East façade of the Museum of Automobiles, looking southwest.

8 of _15_. North façade of the Museum of Automobiles, looking south.

9 of _15_. North façade of the Museum of Automobiles, looking southeast.

10 of _15_. West façade of the Museum of Automobiles, looking southeast.

11 of _15_. Interior view of the Museum of Automobiles, looking southeast.

12 of _15_. Interior view of the Museum of Automobiles, looking northwest.

13 of _15_. Detail view of the tensile cable system of the roof, looking southeast.

14 of _15_. Detail of the northwest corner anchor block for the tensile cable system, looking northwest.

15 of _15_. Detail view of the tensile cable and steel beam intersection, looking northeast.

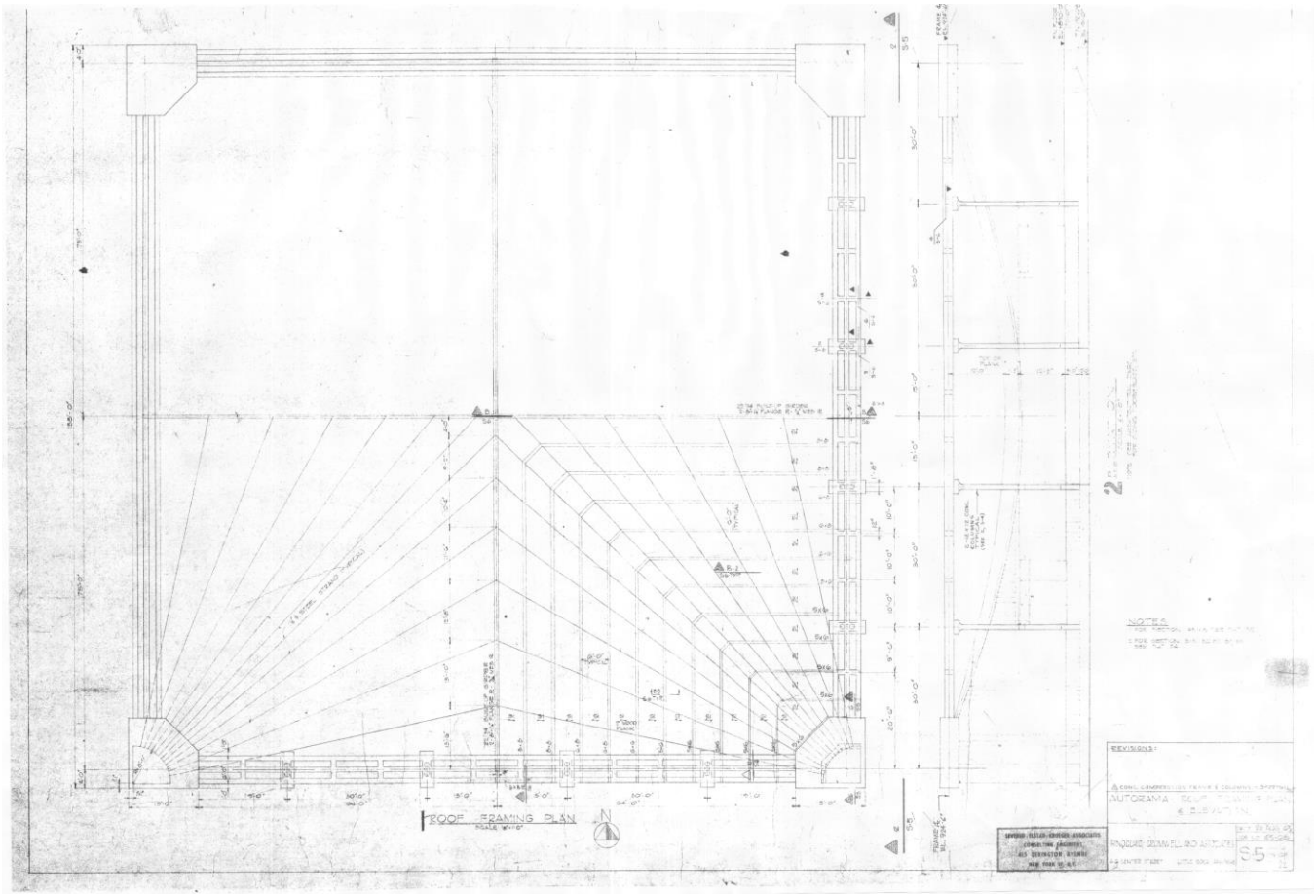


Figure 1: Roof cable plan for the Museum of Automobiles. From the files of the Arkansas Department of Parks and Tourism.

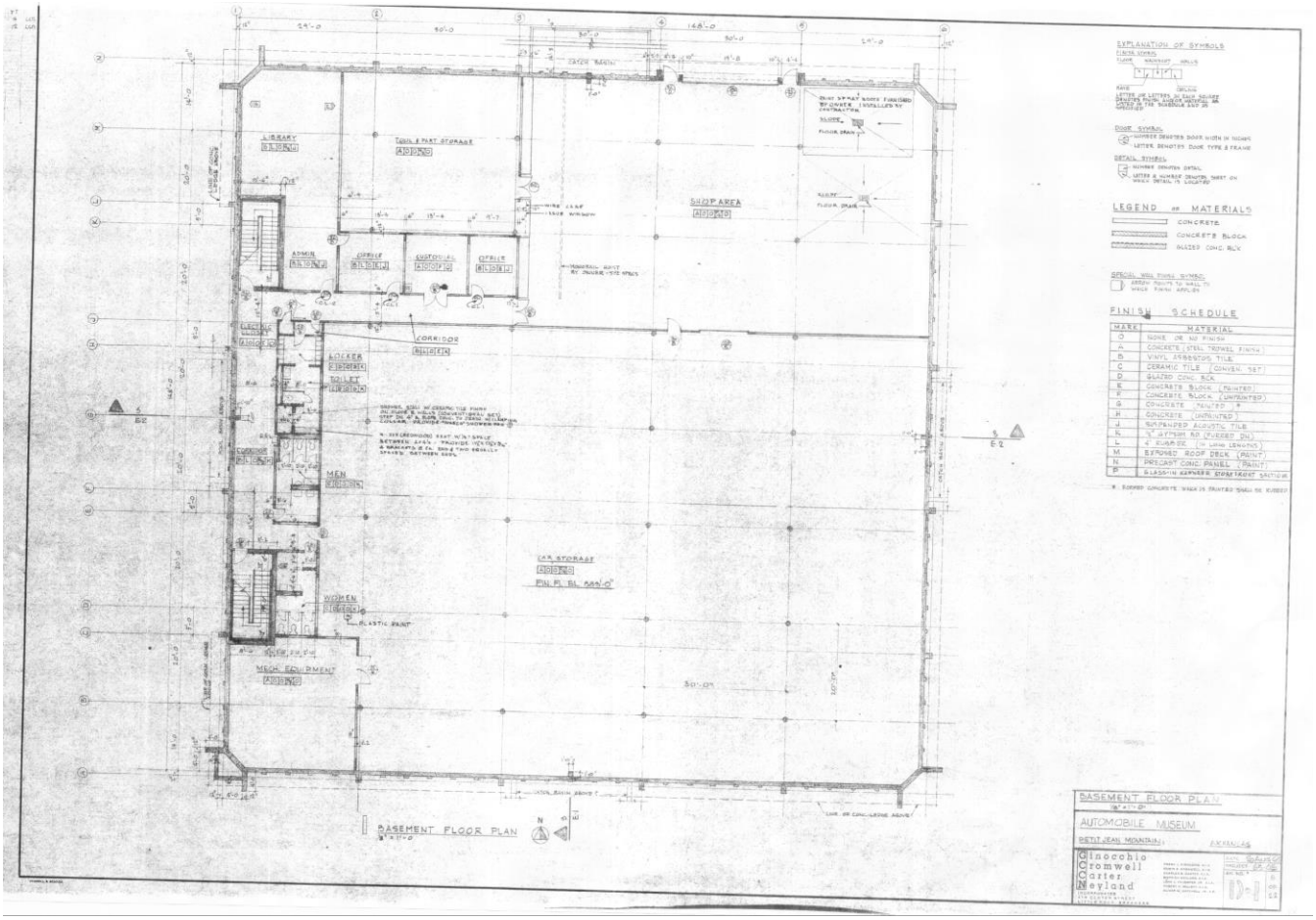


Figure 2: Basement floor plan for the Museum of Automobiles. From the files of the Arkansas Department of Parks and Tourism.

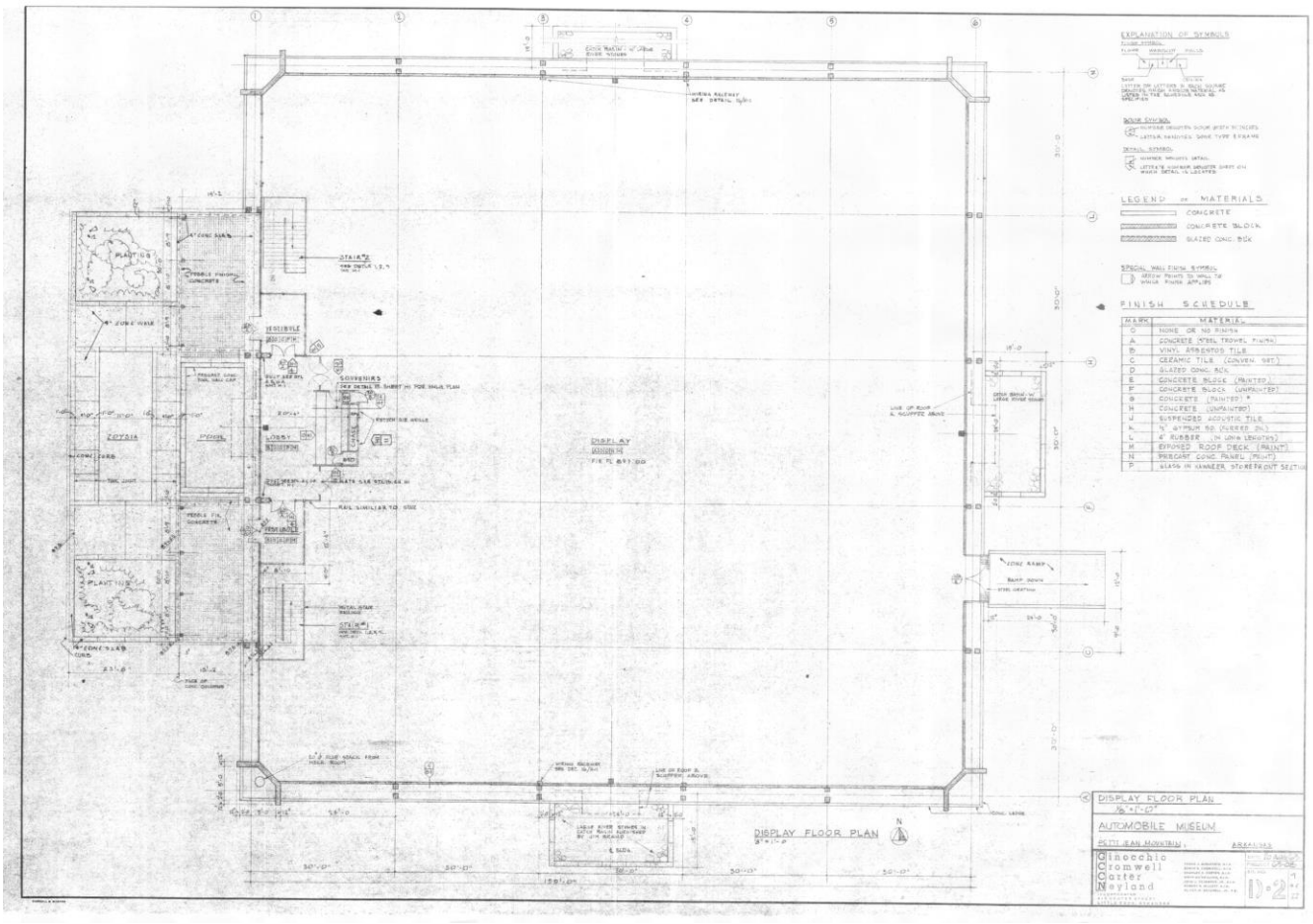


Figure 3: Display floor plan for the Museum of Automobiles. From the files of the Arkansas Department of Parks and Tourism.

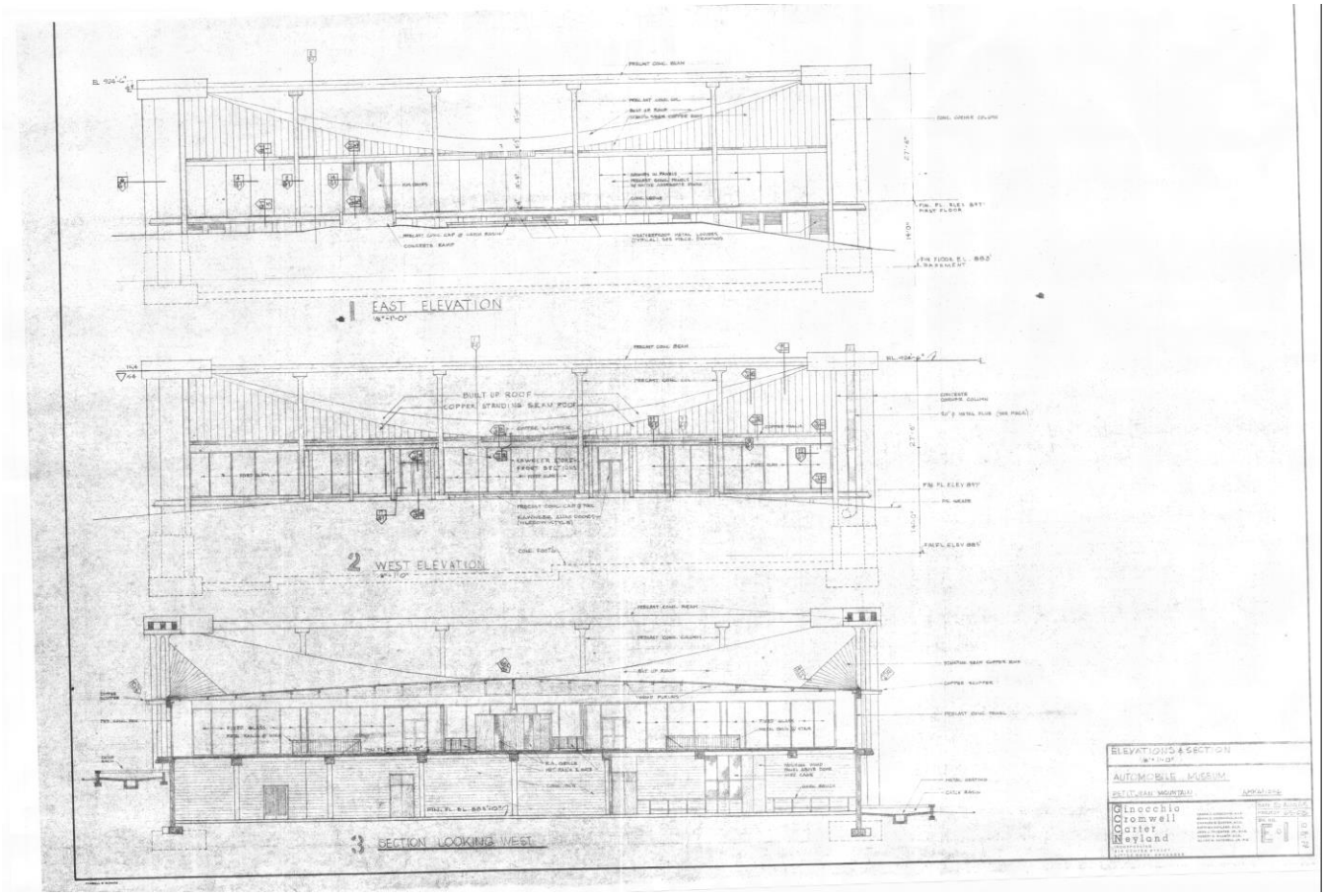


Figure 4: East and West elevation and Section plan for the Museum of Automobiles. From the files of the Arkansas Department of Parks and Tourism.

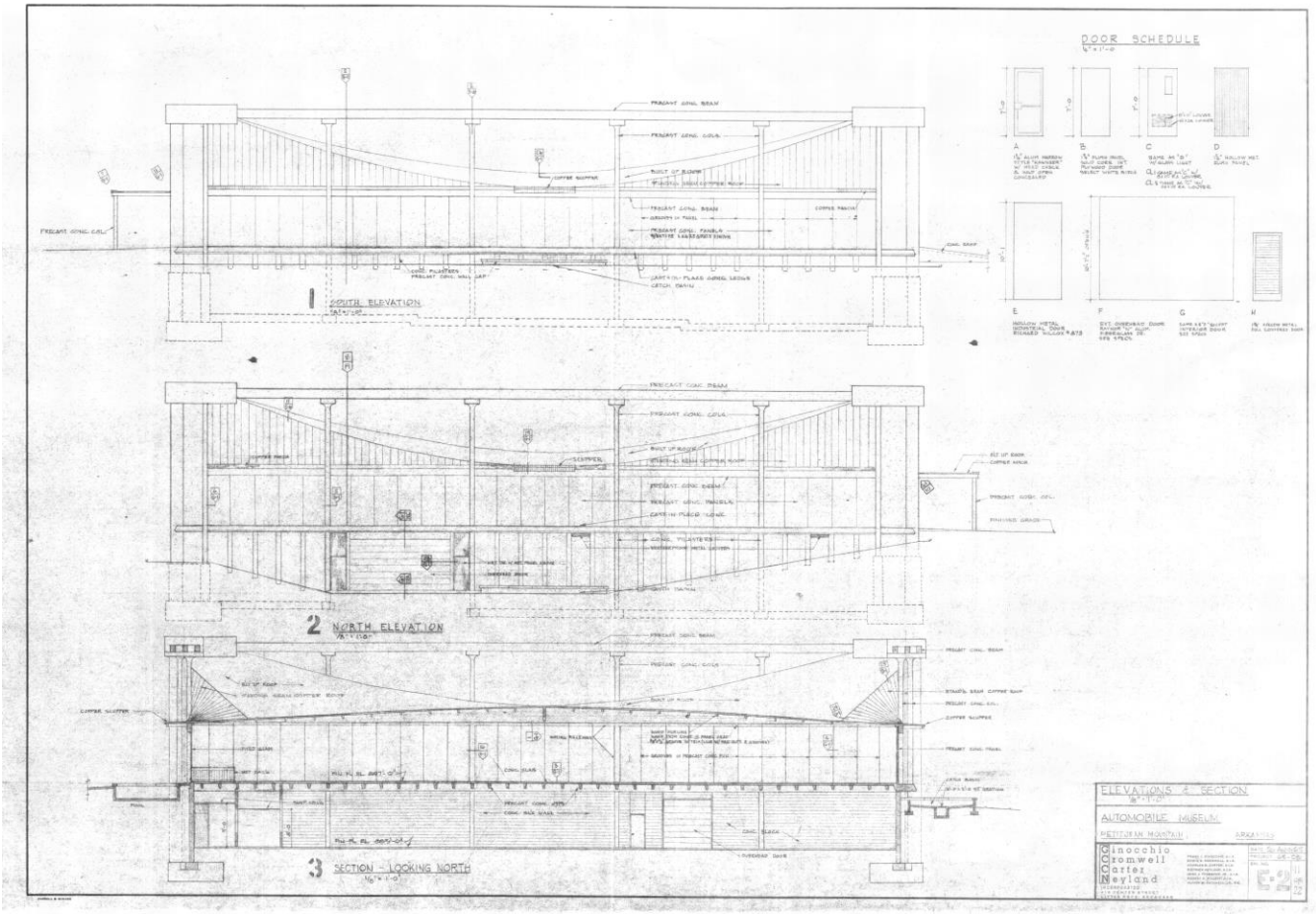
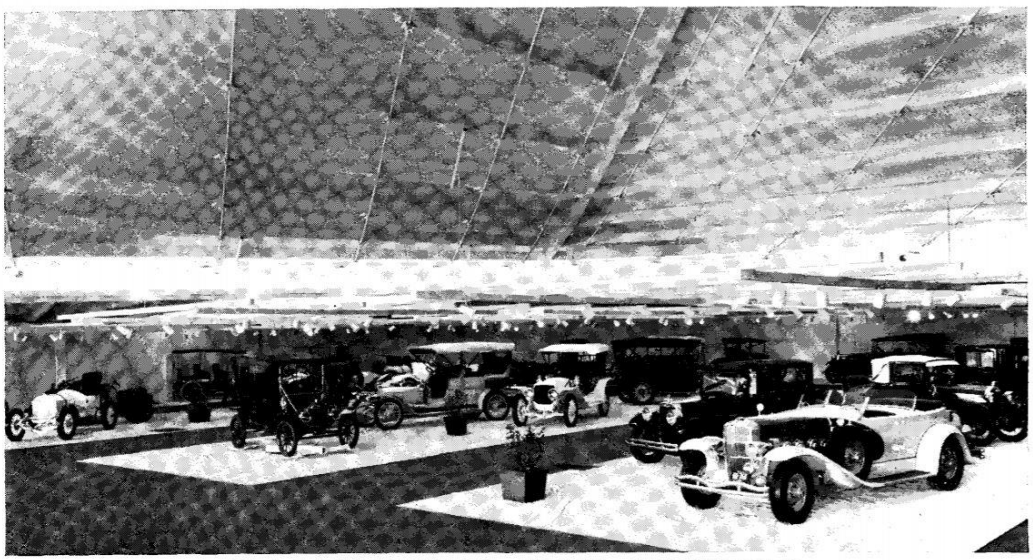


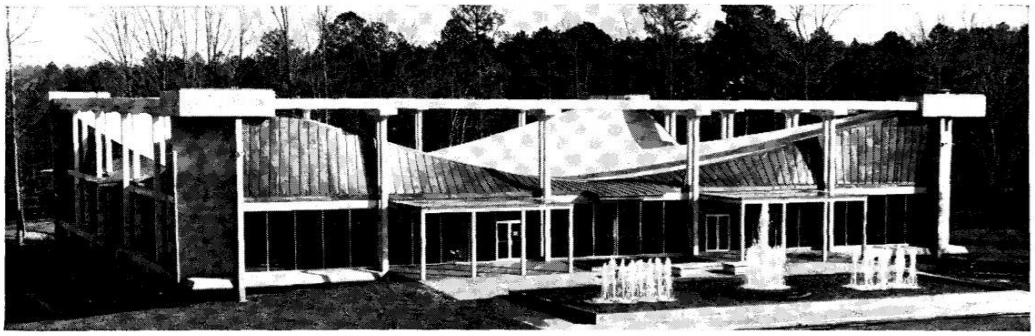
Figure 5: North and South elevation and Section plan for the Museum of Automobiles. From the files of the Arkansas Department of Parks and Tourism.

Figure 6: Postcard of the Museum of Automobiles, c.1965. From the files of the Arkansas Historic Preservation Program.

STEEL CABLES SUPPORT ROOF



OF ARKANSAS AUTO MUSEUM



It's the Museum of Automobiles, located on Petit Jean Mountain, near Morrilton (about 60 miles northwest of Little Rock, in central Arkansas). Owned by Winthrop Rockefeller, the structure houses more than forty antique vehicles.

The roof's unique construction provides a column-free exhibit space of 22,500 sq ft by hanging 24 high-strength steel bridge cables from four 35-ft-high corner posts. These are held erect by a squared variation of a compression 'ring.'

Radiating from the four corner posts, the steel cables pass through a cruciform steel strut back to each adjacent corner post. The strut stabilizes the roof and divides it into four equal parts. A grid of wood purlins is connected to the cables and roofing is nailed over it.

Bethlehem supplied about 4,100 ft of 1¼-in. steel strand for this structure. Every inch of it was prestretched and measured to conform to the precise requirements of the roof design. We also furnished a number of clamps and anchor sockets. *Bethlehem Steel Corporation, Bethlehem, Pa.*

Steel
Steel for Strength

Architect: Ginocchio, Cromwell, Carter & Neyland, AIA, Little Rock
Roof consultant: Severud-Perrone-Fischer-Sturm-Conlin-Bandel, New York
General contractor: Pickens-Bond Construction Company, Little Rock

BETHLEHEM STEEL

BETHLEHEM STEEL

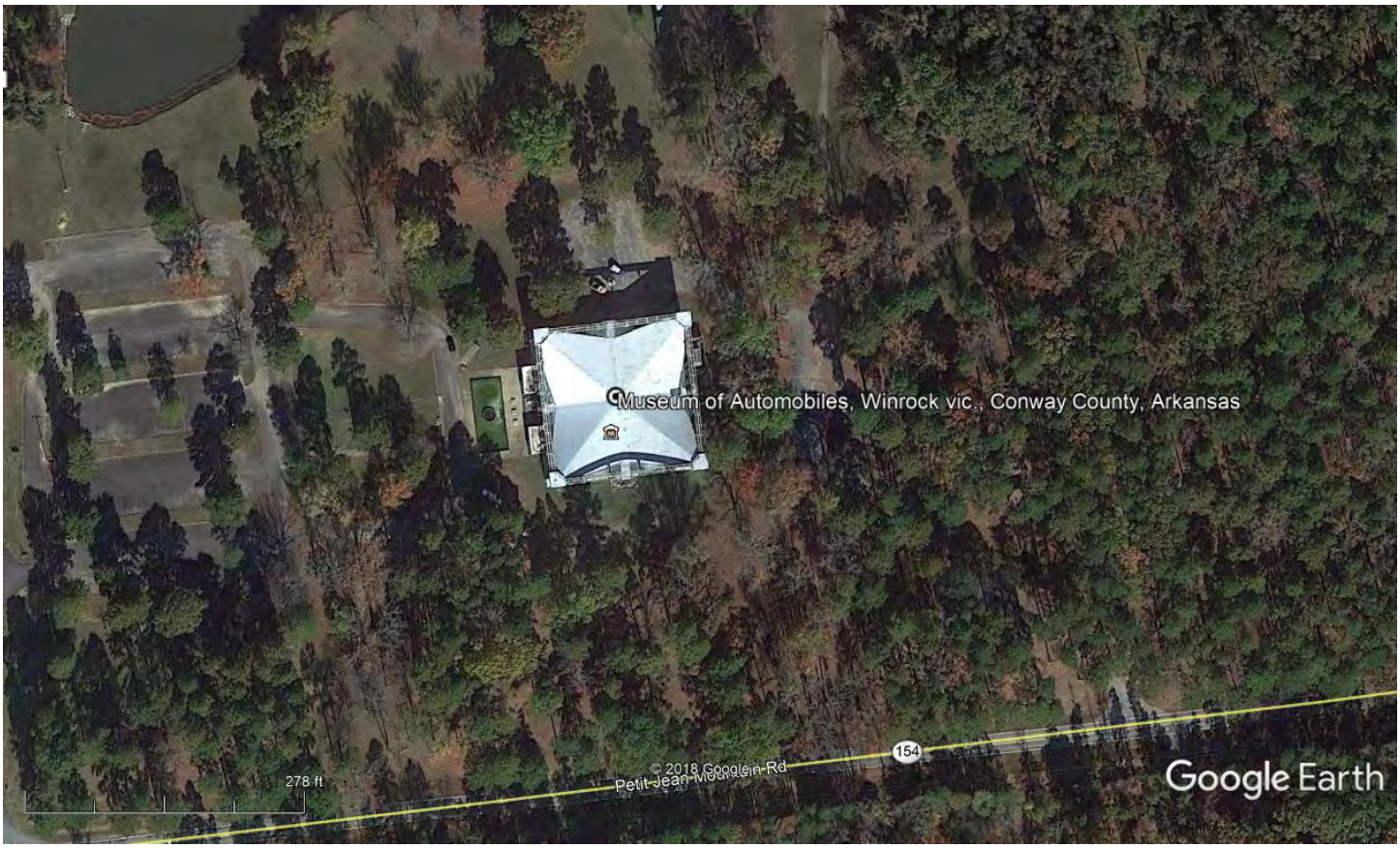
MAY 1966 P/A

89

Figure 7: Advertisement for Bethlehem Steel featuring the Museum of Automobiles. From *Progressive Architecture*. May 1966, p. 89.

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

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

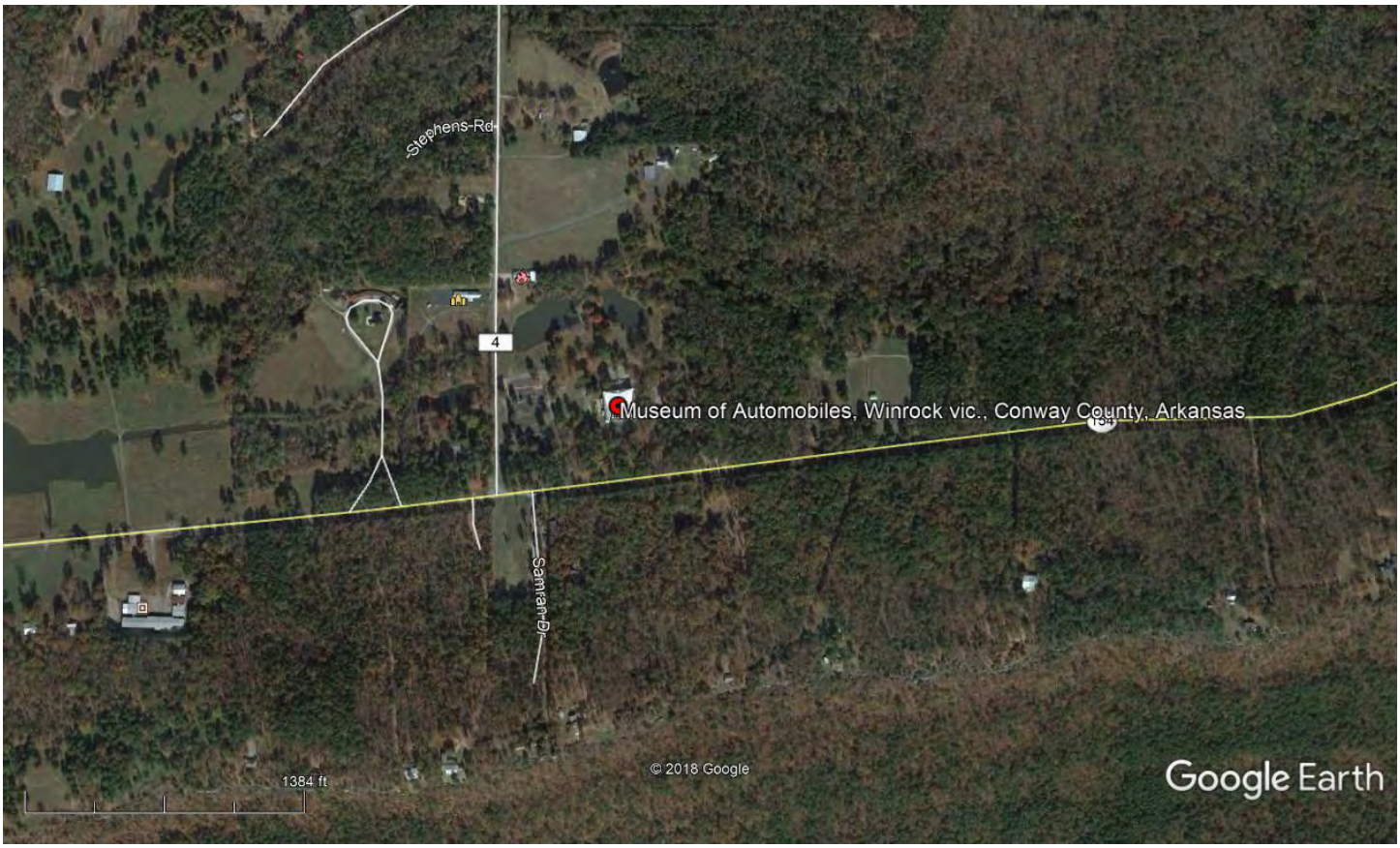


|----------278 feet----------|

Museum of Automobiles
Winrock vic., Conway County, Arkansas

15 509922E 3887665N
15 510247E 3887660N
15 510263E 3887398N
15 509929E 3887362N

North



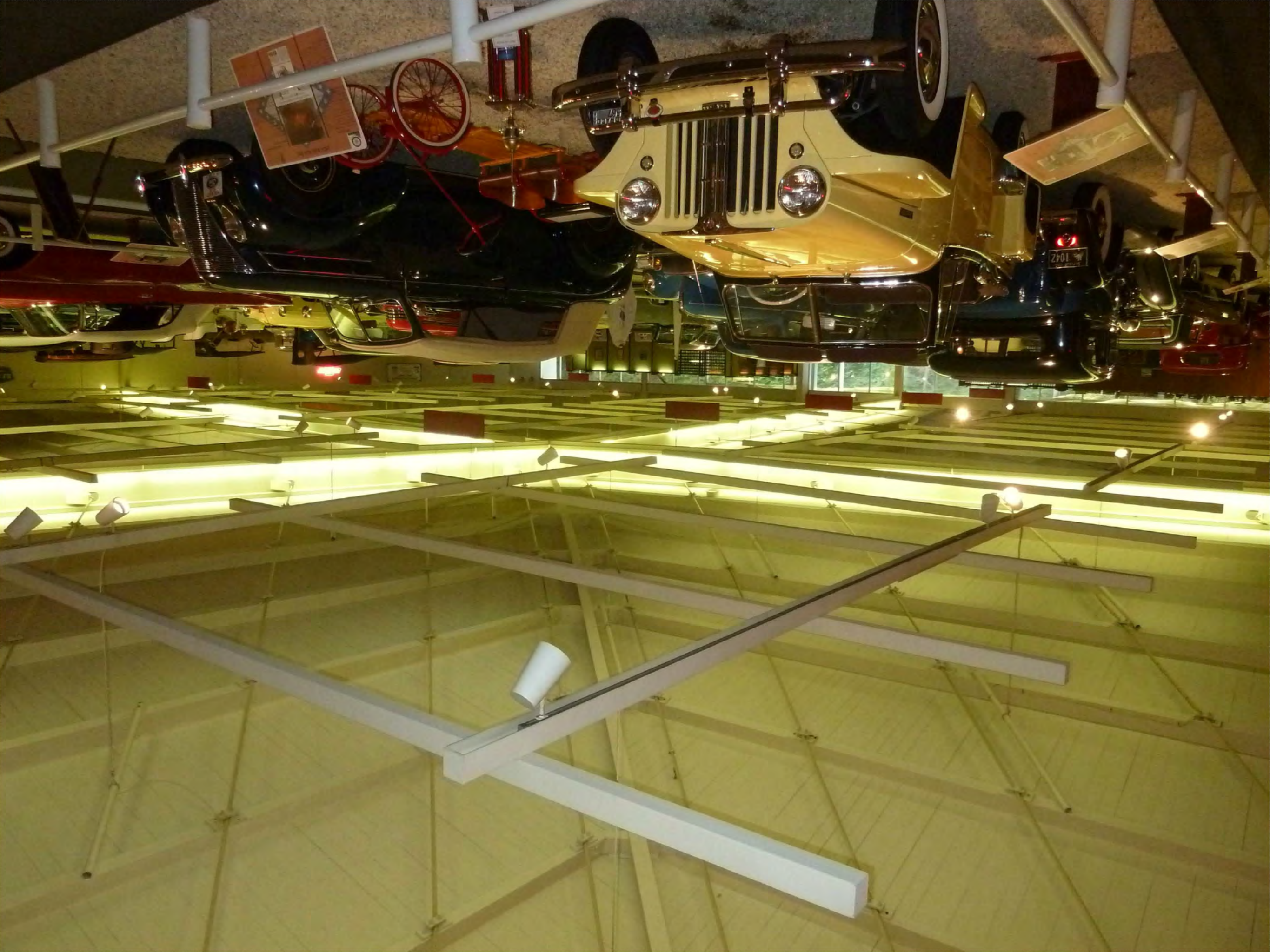
|----------1384 feet----------|

Museum of Automobiles
Winrock vic., Conway County, Arkansas

15 509922E 3887665N
15 510247E 3887660N
15 510263E 3887398N
15 509929E 3887362N

North


MOTAA



UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

Requested Action:	Nomination
Property Name:	Museum of Automobiles
Multiple Name:	
State & County:	ARKANSAS, Conway

Date Received:	Date of Pending List:	Date of 16th Day:	Date of 45th Day:	Date of Weekly List:
4/16/2019	5/2/2019	5/17/2019	5/31/2019	

Reference number:	SG100003990
Nominator:	SHPO
Reason For Review:	

__X__ Accept _____ Return _____ Reject **5/31/2019** Date

Abstract/Summary Comments:	Significant at the state level for its innovative design, utilizing tension cables to support a roof that provides an unobstructed space. This 1963 building is an early use of the technique in the state
Recommendation/ Criteria	Accept / C

Reviewer Jim Gabbert Discipline Historian

Telephone (202)354-2275 Date

DOCUMENTATION: see attached comments : No see attached SLR : No

If a nomination is returned to the nomination authority, the nomination is no longer under consideration by the National Park Service.

THE DEPARTMENT OF ARKANSAS
HERITAGE

Asa Hutchinson
Governor

Stacy Hurst
Director

Arkansas Arts Council

Arkansas Historic Preservation Program

Arkansas Natural Heritage Commission

Arkansas State Archives

Delta Cultural Center

Historic Arkansas Museum

Mosaic Templars Cultural Center

Old State House Museum

ARKANSAS HISTORIC PRESERVATION PROGRAM

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info@arkansaspreservation.org
www.arkansaspreservation.com

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April 3, 2019

Joy Beasley, Keeper and Chief
National Register and National Historic Landmark Programs
National Register of Historic Places
1849 C Street, NW
Mail Stop 7228
Washington D.C. 20240

RE: Museum of Automobiles – Winrock vic., Conway County, Arkansas

Dear Ms. Beasley:

We are enclosing for your review the above-referenced nomination. The enclosed disk contains the true and correct copy of the nomination for the Museum of Automobiles to the National Register of Historic Places. The Arkansas Historic Preservation Program has complied with all applicable nominating procedures and notification requirements in the nomination process.

If you need further information, please call Ralph S. Wilcox of my staff at (501) 324-9787. Thank you for your cooperation in this matter.

Sincerely,

Stacy Hurst
State Historic Preservation Officer

SH:rsw

Enclosure