**1 NAME**

**HISTORIC**

Edison National Historic Site

**AND/OR COMMON**

The Laboratory; Glenmont

---

**2 LOCATION**

**STREET & NUMBER**

Main Street at Lakeside Avenue

**CITY. TOWN**

West Orange

**STATE**

New Jersey

---

**CLASSIFICATION**

**CATEGORY**

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**4 AGENCY**

**REGIONAL HEADQUARTERS (If applicable)**

National Park Service, North Atlantic Region

**STREET & NUMBER**

15 State Street

**CITY. TOWN**

Boston

**STATE**

MA

---

**5 LOCATION OF LEGAL DESCRIPTION**

**COURTHOUSE, REGISTRY OF DEEDS, ETC.**

West Orange Tax Assessor's Office

**STREET & NUMBER**

66 Main Street

**CITY. TOWN**

West Orange

**STATE**

NJ

---

**6 REPRESENTATION IN EXISTING SURVEYS**

**TITLE**

---

**DATE**

---

**DEPOSITORY FOR SURVEY RECORDS**

---

**CITY. TOWN**

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**STATE**

---
Edison National Historic Site is an integral part of a vast urban area of adjoining cities and towns with little or no undeveloped land separating them. Both units of the site—the Laboratory and Glenmont (Edison's home)—are located in West Orange, New Jersey. The Laboratory unit occupies 5.69 acres on Main Street between Alden Street and Lakeside Avenue. About a mile west of the Laboratory, Glenmont is situated on 15.67 acres in a residential area known as Llewellyn Park.

The Laboratory

Existing land use in the immediate neighborhood of the Laboratory is industrial east of Main Street and generally commercial west of Main Street. West of the properties, abutting Main Street, the zoning is primarily single family residential.

The five Laboratory buildings, which were placed under the supervision of the National Park Service in 1956, are still standing. Areas of the laboratories have been unchanged since Edison's death and the closing of his invention factory. The major portion of the laboratory complex, constructed in 1887, consisted of six buildings with brick walls and wood frame roof and floor construction. These buildings made a yard, or quadrangle, enclosed by a high picket fence, with a guard at the gate. The Main Laboratory (No. HS 5) about 200 feet long and three stories high, contained Edison's combination office and library, the machine shops and stockrooms, a music room, a photography shop, a drafting room, and offices for the managerial staff. The 1931 appearance of the first floor and library has been maintained, while the rest of the building is utilized for museum storage and office space. The exterior of this structure is in essentially the same condition as the exterior of the other four laboratory buildings, which have been stabilized and are in good condition. No. HS 6, the Power House-Boiler Room, is located on Lakeside Avenue, directly to the rear of and adjoining the Main Laboratory. Although the Main Laboratory and the Power House-Boiler Room are numbered separately to distinguish their varied uses, they were built concurrently as a single unit and may be so considered historically. On the architect's blueprints, these structures were shown as one continuous building, and the brick work bond and connection of exterior walls also indicates that such was the case in actual construction.

The remaining four one-story buildings contained specialized laboratories and shops—No. HS 1: Physics and Electrical Laboratory; No. HS 2: Chemical Laboratory; No. HS 3: Chemical Storage and Pattern Shop; and No. HS 4: Metallurgical Laboratory. Presently, the four one-story laboratory buildings are being utilized for the storage of museum pieces, for display, and as office space. The Chemical Laboratory is the only single-story laboratory building being maintained and displayed as it appeared in the 1927-31 period.

Other buildings, some of which still survive, were added after 1887. The main archives building and museum storage vault were erected after Edison's death in 1931, as was the full-size replica of his original tar-papered "Black Maria," the first motion picture studio.
# SIGNIFICANCE

## PERIOD

- _PREHISTORIC
- _ARCHEOLOGY-PREHISTORIC
- _ARCHEOLOGY-HISTORIC
- _AGRICULTURE
- _ARCHITECTURE
- _ART
- _COMMERCE
- _COMMUNICATIONS
- _COMMUNITY PLANNING
- _CONSERVATION
- _ECONOMICS
- _EDUCATION
- _ENGINEERING
- _EXPLORATION/SETTLEMENT
- _INVENTION
- _INDUSTRY
- _LANDSCAPE ARCHITECTURE
- _LAW
- _LITERATURE
- _MILITARY
- _MUSIC
- _PHILOSOPHY
- _POLITICS/GOVERNMENT
- _RELIGION
- _SCIENCE
- _SCULPTURE
- _SOCIAL/HUMANITARIAN
- _THEATER
- _TRANSPORTATION
- _OTHER (SPECIFIC)

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## STATEMENT OF SIGNIFICANCE

The significance of Edison National Historic Site lies in the fact that the Laboratory complex and the Glenmont estate together memorialize the illustrious career, the scientific achievements and the private life of Thomas Alva Edison.

Already famous as the inventor of the electric light and power system, Edison moved his industrial enterprises to his newly-built laboratory in West Orange on November 24, 1887; and here he continued his work for the next forty-four years, until his death on October 18, 1931, at the age of 84. From his creative mind, and then from the hands of the skilled artisans on his staff, were to evolve the first successful motion picture camera and commercial films, improved phonographs with their cylinder and disc records, ore milling machinery, better processes for Portland cement, the new long-life alkaline storage battery, and a host of other important inventions. In addition to his inventions and his work in industrial development, Edison made two significant discoveries in pure science. One was "etheric force," the electromagnetic waves later used in radio transmission; the other, a fundamental phenomenon of electronics which has since become known as the "Edison Effect" and which led to a world-wide advance in communication and space technology.

Still standing are the buildings which Edison erected in 1887 to prove his conviction that industrial or inventive research should be carried on by an organized group or team, working together in a laboratory properly equipped for the speedy, systematic solution to problems involved. The interiors of many of the buildings are little changed from their appearance in the inventor's time. Some contain exhibits like his original tinfoil photograph of 1877, his 1889 "Strip Kinetograph" and other motion picture apparatus, and early electric light and power equipment. His Library/Exhibition Hall remains as it looked the night Edison died.

Buildings from which some or all of the equipment has been removed nonetheless remain significant as part of the original 1887 Laboratory complex and as the site of important experimentation. In the Physics Laboratory (no. HS 1), for instance, from 1912-15, Edison carried on his pioneer work in the production of educational motion pictures and in later years he tested the alkaline storage battery for automobiles. In the Main Laboratory building (No. HS 5), the third floor served many varying functions. The Music Room above the library and office was used by Edison for listening to new phonograph recordings, sometimes in the company of artists, friends, and associates. His earliest work on motion pictures was also on this floor. At the rear, the large room was divided into smaller rooms wherein many experiments were conducted on, among other things, motion picture and the early long-playing cylinder records of 1895-97.
MAJOR BIBLIOGRAPHICAL REFERENCES

"Historic Structures Report" Edison National Historic Site, North Atlantic Regional Office 1965;

GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 21.36

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VERBAL BOUNDARY DESCRIPTION

See site plan

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

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FORM PREPARED BY

NAME/TITLE Anne Booth, Architectural Historian
ORGANIZATION NARO, 15 State Street
STREET & NUMBER Boston
CITY OR TOWN Mass.
DATE 2/23-3778
TELEPHONE

CERTIFICATION OF NOMINATION

STATE HISTORIC PRESERVATION OFFICER RECOMMENDATION

YES NO NONE

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

IN COMPLIANCE WITH EXECUTIVE ORDER 11593. I HEREBY NOMINATE THIS PROPERTY TO THE NATIONAL REGISTER, CERTIFYING THAT THE STATE HISTORIC PRESERVATION OFFICER HAS BEEN ALLOWED 90 DAYS IN WHICH TO PRESENT THE NOMINATION TO THE STATE REVIEW BOARD AND TO EVALUATE ITS SIGNIFICANCE. THE EVALUATED LEVEL OF SIGNIFICANCE IS ( ) NATIONAL ( ) STATE ( ) LOCAL.

FEDERAL REPRESENTATIVE SIGNATURE

FOR NPS USE ONLY
I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DIRECTOR, OFFICE OF ARCHAEOLOGY AND HISTORIC PRESERVATION
ATTEST:

KEEPER OF THE NATIONAL REGISTER

DATE 3/12/1980
Grounds within the historic complex consist of the paved entrance drive, two paved parking areas, the paved low flat roof of the main vault, graveled areas between Nos. HS 2, 3, and 4, a narrow area of grass bisected by a narrow concrete walk east of No. HS 4, and grass with shrubs and trees over the remaining open space. It is thought that, with the exception of the two paved parking areas, this condition approximates the historic scene, but little research has been done on this subject to determine the historic appearance with any degree of certainty. Accordingly, no restoration attempt has been made.

Ivy planting around the various Laboratory structures, apparently first dating from about 1905 and later extended, was not sufficiently pruned and cut back after 1931, with the result that it engulfed the buildings. However, most of it has been removed incident to rehabilitation of the buildings. A portion of it has already been permitted to grow back.

Surrounding the Laboratory Unit on the street sides is chain link fencing with barbed wire top. This succeeded an earlier wooden picket fence, but it still dates from before 1931.

1. Physics Laboratory (No. HS 1)

Erected in 1887 and known in early days as the "Galvonometer Room," this is a long (3 bays by 9) one-story brick structure with a shallow pitched ridge roof. It was lighted by tall 8/8 double hung sash windows which are capped by arches composed of three rows of brick headers. A similar arch caps the double wood and glass front entrance door at the southwest end. The simple wood trim of the cornice line is underscored on the long sides by a single ornamental row of headers spaced to resemble dentilation. Building No. 1 (approximately 2,500 square feet of floor space) originally contained a great variety of electrical testing equipment, but is presently used for display of museum materials and as a movie theater in the front portion while the rear portion is used for administrative offices. Change in use necessitated some changes in interior appearance. Many instruments and much of the equipment are now in storage.

2. Chemical Laboratory (No. HS 2)

Constructed in 1887 (approximately 3,543 square feet of floor space), this building served continuously until Edison's death in 1931. It is a long, one-story brick structure with three attached metal lean-to's of varying heights and covered with tar paper. It is of the same design and basic dimensions as No. HS 1, to which it lies parallel, except for the presence of brick chimneys. It has arched windows and doors and simple dentilated brick and wood trim cornice. On the interior, the rear corner occupied by the inventor's office desk, chair, and old lab coat is much the same today as in a photograph taken in 1888. In other respects, the interior remains essentially as it was in 1927-31, when Edison engaged in his last major research to find a practicable domestic source of natural rubber for use in time of war. Work tables, apparatus,
hundreds of bottles of chemicals, and books and pamphlets are all still in place. This structure is used as an historical exhibit.

3. Chemical Stockroom and Pattern Shop (No. HS 3)

Erected in 1887 (approximately 3,759 square feet of floor space), and of the same design as Nos. 1 and 2 to which it lies parallel, this one story brick structure is divided into front and rear sections. The Chemical Stockroom contained "some of everything" in line with Edison's policy of keeping on hand every conceivable material for invention and technical development. Thousands of such chemicals remained in the Stockroom until 1941, when they were carefully listed and removed. Two of the smaller rooms are presently used for storage of museum object materials.

The Pattern Shop section remains essentially as it was during Edison's lifetime, with all the motorized woodworking equipment and hand tools, together with some materials stock. A good selection of wooden patterns for casting Edison machinery and parts formerly kept in the building, is temporarily stored in other site structures.

Some modern woodworking power tools are now used in the Pattern Shop for carpentry and cabinet work connected with current buildings rehabilitation and maintenance activity.

4. Metallurgical Laboratory (No. HS 4)

The Metallurgical Laboratory (1887) is the final one in this series of parallel buildings of basically the same size and design. Usually the style of the doors and the presence or absence of windows at the ends, show the only design differences between the four, except, of course, for the addition of lean-tos. It was designed for metal research work, but as time passed, it became the scene of many other Edison inventive pursuits. Among these were experiments dealing with disc and cylinder electrical appliances. A massive installation of heavy machinery for phonograph record blanks was removed for World War II "scrap" collection by Thomas A. Edison, Inc. research laboratory in 1941. Two rooms are now used as offices, and others for a photographic darkroom and storage. The front half of this building is used as work space by the chief museum curator and staff. The rear half of the building is used as temporary storage for archives and museum collections. The lean-to near the front originally a fire house for the laboratory, later became a repository for various heavy equipment items. Its front section is presently restored as a firehouse with Edison era equipment.
5. Main Laboratory (No. HS 5)

This is the largest of the 1887 structures with three stories plus a partial basement, comprising approximately 37,872 square feet of floor space. It lies perpendicular to and South of Nos. HS 1-4. The west end is accented by large two-story windowed arches, three on the end and two on each side (7 total), directly above which is a prominent cornice. Above this are the arched 3/3 double hung windows seen on the third floor of the remainder of the building. Windows decrease in size with each of the three floor levels. The tallest and widest windows on the first floor are round arched, whereas the remainder are capped by segmental arches. The west end feature is set off at the corners and on the sides by chimneys which resemble pilasters as they descend the building. The roof of the building is flat.

On the first floor of the Main Laboratory are preserved the inventor's library and office, his general stock room and a complete machine shop with its own lathes, drill presses, and milling machines used for precision work. Almost no change has taken place in interior appearance since 1931 and the equipment is still operable.

The library/office is a great hall with a 30' high ceiling and two tiers of galleries rising from its main floor. There may be seen Edison's desk, the cot on which he took "catnaps," and scores of prints, pictures, sculptured pieces, and other personal memorabilia.

No. HS 5 is the only Laboratory structure with nearly a full basement. Here may be found bin after bin of heavy materials and parts for Edison inventions and products. The interior presents much the same appearance today as it did during the inventor's lifetime.

Portions of the first floor are being used for exhibits, curator's office and file room. The archivist occupies rooms on the second floor.

6. Power House--Boiler Room (No. HS 6)

Also built in 1887, No. HS 6 joins the Main Laboratory (No. HS 5) at the back, or east end. It is a one-story brick structure (approximately 2,703 square feet of floor space) without a basement. A tapered brick stack rises from the shallow ridged roof. Two large brick arched windows with steel mullions occupy about two-thirds of the front facade. Set assymetrically between them is a double door which is set off by a shallow portico having an engaged column to either side which supports a friezed cornice. Just to the left of this door a low, shallow, arched opening has been bricked in. No. HS 6 served as a Laboratory complex heating and power plant until about 1919, when a new power house and steam generating plant were erected by Thomas A. Edison, Inc. The old boilers were removed in 1933 by Henry Ford, along with the steam engines and generators, for addition to his Greenfield Village exhibit at Dearborn, Michigan. Shortly thereafter the old boiler room section immediately adjacent to No. HS 5 was refurnished as an exhibit room, and a display on Thomas Edison's life, formerly in the Chicago "Century Of
Progress" exposition, was installed. In 1963, the modern boiler and controls, protected by newly constructed brick walls, but utilizing the old 80' brick chimney stack, were installed as part of the Laboratory heating system.

After 1927, the Power House was remodeled to serve as an entrance and reception room for Thomas A. Edison, Inc. In 1963 this room was reduced in size and the rear space was converted into a winter theater for showing Edison motion pictures to site visitors. In 1971 this room was remodeled for use as a visitor entrance station and for museum exhibit space.

7. Blacksmith Shop (No. HS 7)

This is a corrugated metal one-story building (approximately 310 square feet in floor space), erected by Edison in 1919 between Nos. HS 2 and 3 at the northeast end. It has wood-frame doors and windows. Many items of tools and equipment once used in this shop are now stored in the museum collection.

8. Small Storage Vault (No. HS 8)

Built in 1913, on the southeast side of No. HS 1, this is a one-story reinforced concrete structure (approximately 198 square feet of floor space). In addition to a concrete foundation and floor, it has a heavy overhanging cornice of the same material. The roof is flat. Access is by one entrance with steel doors. No. HS 8 has been used continuously for storage of Laboratory records. Most of the safes now in the Main archives and Museum Storage Vault, were kept here until 1942.

9. Gate House, (No. HS 9)

This is a small, shingle-style frame structure erected in 1890 as an entrance Gatehouse or Security Guard Station to the Laboratory. It has approximately 267 square feet of floor space. The foundation is concrete. Decorative shingles are set off by wood trim and shutters. The gable roof is now asphalt shingled. Each plane of a two-facet bay on the front has a decorative window with colored lights and a triangular inset in the upper half, as does the door. Little is known about the original appearance of the interior of the Gate House. It is now used by the National Park Service as a security guard office.

10. Black Maria (No. HS 13)

Situated to the northeast of No. HS 11, this is a 1954 replica of Edison's first (1893) motion picture studio, which was located on a nearby site. The building has 790 square feet of floor space. It is one story, wood frame, with tar-covered walls and roof and is so designed that one large section of the roof, hinged on its lower edge, can be raised like the lid of a box, while the whole structure, being pivoted in the center, can be turned completely around on a circular tract to face in any direction. Such were
the means Edison used to illuminate the stage of his studio by sunlight, regardless of
the time of day, when making pictures with early films of slower emulsion speed than
those of today.

11. Blue Amberol Vault (No. HS 33)

This all-concrete two-story structure was built ca. 1915 and has a heavy cornice
reminiscent of the Storage Vault built in 1913. With 1,002 square feet of floor space,
it is fitted with shelving and concrete partitions. Temperature and humidity are con­
trolled by equipment housed in a small metal-walled shed adjoining. A large stock of
nitrate-base Edison motion picture film formerly stored here was recently transferred
to the Library of Congress. The building derives its name from early storage of Edison
Blue Amberol cylinder phonograph record molds. The vault is located northeast of the
Black Maria and is currently used as storage space for the archival collection.

12. Diamond Disc Vault (No. 32)

This vault is identical to HS 33 in size, age, and construction with the exception of
there being no exterior shed on HS 32. Temperature and humidity are controlled by
internal equipment. Disc record masters were stored in this building prior to their
transfer to Greenfield Village in 1974. The building has been insulated on the interior
and electrical service installed underground. The vault is located just east of Build­
ing 4 and is currently used to store artifacts.

13. Water Tower (No. HS 34)

This structure consists of a 75,000 gallon steel tank erected 160' 10" above the ground
by the Chicago Bridge and Iron Works in 1922. The tank provided needed water supply and
pressure for the newly installed sprinkler system in the laboratory buildings, a precau­
tion taken as a result of the severe fire of 1914. The tank is 22' in diameter and
supported by four braced iron legs set in concrete. A balcony and handrail circle the
tank at its base. A ladder is attached to one support leg and a sliding hatch on the top
provides internal access. The tank is located just east of Building 4 adjacent to vault
32. Maintained as an exhibit, the tank is drained.

14. Main Storage Vault (No. HS 12)

This Building was constructed in 1941 in response to a need for a main storage facility
for documents and objects which would be safe, secure and environmentally controlled.
The vault was constructed to be as near bomb-proof as possible. The construction provided
for a central vault 15½' x 9' 1/3' surrounded by reinforced concrete walls 5' 10" thick with
the floor 3' thick and the ceiling 4' thick. These walls are poured around a steel frame
with 6" beams as columns, between a floor and roof each of 10" and 6" beams criss-cross.
The building surrounding this central vault is approximately 50' x 90' on the outside with
4' thick reinforced concrete walls. Openings into the vault consist of two doors, a small window and a fresh air intake, 12" x 12". The top of the vault is exposed, the rest is below ground.

Internal temperature and humidity control are provided through an air handling system located in the southern section of the vault and a cooling tower outside the southwest entrance. The vault is used for storage of the site's archives and artifact collection.

Glenmont

Glenmont, the estate of Thomas A. Edison, was built in 1880 and purchased by Edison in 1886. It is located in Llwellyn Park, an exclusive private residential area, established and developed to provide an escape for the affluent New York executive of the period. Although the edges have been nibbled away by the Freeway development to the west, and some of the estates have been reduced by subdivision into smaller lots; the remaining estates, with their broad sweeps of lawn and new mature groves of trees, maintain much of the character for which Llwellyn Park was established.

The property consists of 13½ acres of attractively landscaped grounds on which are situated the Edison's twenty-three room house, a Gardener's Cottage and Potting Shed, Greenhouse, Garage, Barn, Pump House, and Hose House.

Full information is lacking on exactly how the Glenmont grounds looked in 1931 when Edison died, but it is known that some specimen trees have died and that perhaps 20 were blown down in storms. A few of these have since been replaced with identical specimens, and trees are now being replaced as they die.

Changes have gradually taken place in the appearance of historic grounds and in the flower and vegetable gardens, which are not as expansive as they once were. The garden formerly existing southeast of the garage, is now in lawn and some of the original footpaths are partly overgrown with shrubbery. Foundation planting around the house is now minimal.

Various historic cast-iron seats and benches on the grounds are being maintained and additional benches matching those already there have been installed. Several other cast-iron garden ornaments and a few bird feeders are still in place although in need of repair.

Existing landscaping, lawns, drives, paths and a visitor parking area, on the former Tilney Johnson property adjoining Glenmont are being maintained as they were part of the environment familiar to the Edisons. This Landscape Management Zone comprises 2.13 acres.
15. Glenmont (No. HS 10)

This multi-gabled Queen Anne Style mansion was built in 1880 following the plans of H. Hudson Holly, a New York architect. The finest materials were used both in construction and in household furnishing. From quarries at Greenwich, Connecticut, came the bluestone blocks for the basement. The first story was built of pressed brick from Baltimore, trimmed with Wyoming freestone. The second and third floors are of a stick and shingle design. The exterior woodwork of the house was painted gray when it was built, but was changed to red ca. 1905-10. The roof is slate and from it rise the panelled brick chimneys typical of the Queen Anne Style. There is evidence in photographs and in the brickwork itself that painted bands at one time decorated several of the chimneys.

Entry to the house is by cut stone steps from a Porte Cochere up to the massive oak front door to either side of which runs an open porch. Beyond the door lies a foyer, paneled with quartered oak, from which rises the red mahogany grand staircase. Rooms on the first floor include a small library, a reception room containing a pipe organ, a drawing room, a dining room which joins the "den" at the rear, and various service rooms. A large conservatory lies adjacent to the reception room and near the drawing room. Every summer, until ca. 1941-42, the glass panes were removed from the conservatory to facilitate ventilation.

The den addition was incomplete when Edison purchased the house in 1886. It was finished between 1886 and 1890. The central section of the den ceiling was originally a domed rectangular vault surrounded on its four sides by clerestory windows of stained glass and painted decorative panels, surmounted at the top by a flat, classical type painting of muses and cherubs (1890). In 1935, to avoid drafts, the opening was framed and a ceiling was added over. In 1966 the false ceiling was removed and the vault has since undergone restoration.

The entire Glenmont mansion is characterized by a richness of paneling and an elegance of detail.

On the second floor, five large chambers open onto a broad hall. In addition, there is a family living room built by the Edisons over the Porte Cochere and a sun porch on the south side. The third floor was devoted to servants' quarters.

Glenmont, originally lighted with gas, was electrified by Edison in 1889.
16. Gardener's Cottage and Potting Shed (No. HS 11)

This is a two-story reinforced concrete structure with basement, the first floor serving as a workshop with convenient doorway into the Greenhouse (No. HS 14) to which it is attached, and the second floor as quarters for the Glenmont gardener. The present structure (ca. 1895) occupies in part the site of an earlier potting shed and greenhouse and contains approximately 3,283 square feet of floor space. Some of the brick foundation walls of this earlier complex were used as foundations for the successor. A concrete string course at the second story level separated first from second floor on the exterior of No. HS 11. An elaborate concrete cornice begins directly above the plain second story windows (6/1 double hung sash) and includes a sharp overhang ornamented with false rafters. Above this, within a wide band, are a string of shallow blind arches. The roof above is flat.

17. Greenhouse (No. HS 14)

The Greenhouse, with No. HS 11 to which it is attached, is located about 400 feet to the northeast of the Edison house. It is a metal and wood frame structure on low concrete foundation walls and includes approximately 2,404 square feet of floor space under glass. It is not a hothouse in the ordinary sense, but served also as a conservatory for the exhibition of plants. For this reason, the upper courses of glass above the concrete walls on either side are curved and there are no side vents; and it is considerably higher than the usual hothouse. A north wing was added to the Greenhouse shortly after 1908. It adjoins the south side of the Gardener's Cottage and Potting Shed. A curved hood shelters the Greenhouse entrance at the eastern end and echoés, in its form, the curve of the long walls.

18. Garage (No. HS 15)

Built in 1908, with 4,404 square feet of floor space, this building is one of the earliest examples of monolithic poured concrete construction. It has two stories with partial basement. In it were housed the family automobiles, which were moved to their assigned places with the aid of a circular turntable set into the floor. Some apparatus used in servicing the old electric cars is still in place. The upper floor, originally consisting of eight rooms and a bath for a chauffeur's quarters, has been renovated into employee quarters. Heavy grounds maintenance equipment used at Glenmont is stored on the first floor which also provides parking for Glenmont employees.

The concrete exterior of the garage is elaborately ornamented. A concrete water table is surmounted on the first floor by rustication into which windows and doors are cut. These are capped by segmental voussoired arches. Below each window is a recessed panel. The windows themselves are double-hung with a system of triangular
lights in the upper sash and three vertical ones in the lower. The corners of the building are defined by pilasters on both the first and second stories. There is also one pilaster in the center of each short side and two on the long sides, those on the front framing the double entrance door. The floors are separated by an elaborate projecting cornice below which is heavy dentilation. Windows on the second floor are framed in concrete and retain the system of lights seen on the first floor. The whole building is capped by a heavy overhanging cornice above which is a low parapet, also of concrete. It is defined at the corners and center by low pilasters which are continuations of those below. Between them the parapet wall is relieved by a long, shallow inset panel.

19. Barn (No. HS 16)

The Victorian Style Barn (building date unknown) is basically an L-shaped structure of wood frame on a concrete foundation. It is one story high with a loft over the main portion and comprises 2,135 square feet of floor space. It was originally erected on the site of the present Garage and was moved, in 1908, to its present site in the service area, east of the Greenhouse and the Gardener's Cottage and Potting Shed.

The siding on the Barn is a combination of clapboards on the lower portion and shingles in the gables and over a flat trim strip on the long sides. The east face has a series of eight panels of drop siding, separated by flat trim, located between the window and door heads of the first floor and the sill of the loft door. The corner trim, division boards and skirting boards are placed on the same plane, dividing the wall areas into panels. The calf shed, which was the latest addition, is sided in vertical boarding of varying widths and types. No effort was made to match the architectural treatment of the main structure. The entire structure is painted dark green, causing it to blend with the grouping of evergreens which surround it.

The roof is slate. The cornices are Victorian with an overhang on the gables ornamented with a combination of fascia board and typically Victorian mouldings. The eave sides of the building are ornamented with false rafters, the ends of which are trimmed with concave cuts.

The main portion of the barn houses an entry, feed room, cow stable and open shed. The wing extending to the north, on a line with the east wall, contains a pony stable and chicken house. Interior walls and ceilings throughout the first floor are sheathed with flush board siding. In some cases beaded edge boards are used. The floors in the Barn are concrete or earth, depending on the use of the area.

A good deal of the old fixtures and equipment used in this structure still remains in place, but some space is given over to the storage of garden and grounds maintenance equipment.
20. Pump House (No. HS 17)

Inside this small frame structure are the old pump and Edison bi-polar motor which provided potable water for the Glenmont estate. Built between 1882 and 1886, it is set on a stone and mortar foundation and contains approximately 114 square feet of floor space. It has a groined gable roof with slate shingles. Set back under the roof edge of each gable are decorated barge boards with curved ends. Siding on the exterior of the Pump House consists of clapboards above a water table of panelled wood and painted diamond-shaped shingles in the pediments under the gables. Wood trim frames the siding and the one door.

21. Hose House (No. HS 18)

The Hose House was built in 1904-05 and reconstructed in 1964. It has approximately 29 square feet of floor space. The walls and door are covered with vertical flush board siding with no trim. The shed roof is shingled. The building is being put to its original use—to store fire hose.
The last sentence in the first paragraph under section 7 should correctly read, "About 1/3 of a mile west of the Laboratory, Glenmont is situated on 15.67 acres in a residential area known as Llewellyn Park."
The Laboratory complex itself is a pioneering concept. Built as a cohesive quad­rangle enclosed by a high picket fence with a guard at the entrance, it established a prototype for the many great industrial laboratories of today.

Glenmont, the home of Thomas Edison, has a three-fold significance: (1) association with the private side of the Edison family's life; (2) being the site of experimentation—in the pantry—as well as of much thought which led to invention; and (3) architectural significance. The significant historic resources of the 13½ acre Glenmont estate, in addition to the grounds are: Glenmont, the House (No. HS 10), Gardener's Cottage and Potting Shed (No. HS 11); Greenhouse (No. HS 14); Garage (No. HS 15); Barn (No. HS 16); Pump House (No. HS 17); and Hose House (No. HS 18).

Edison bought the estate in January, 1886, and brought his new bride there shortly afterward. The house is completely furnished and decorated very much as it was when Edison and his family occupied the house from 1886 until his wife's death in 1947. Contents included original furniture, rugs, wall coverings, fixtures, draperies, fireplace tools, books and many art objects such as paintings, sculpture, prints and engravings.

The Glenmont mansion is a fine example of Queen Anne Style architecture with its many gables and eight tall chimneys. The ingenuity of the architect is evident in the creation of shingle patterns, textured wall surfaces, railings and other special details in wood on all three stories.

Other buildings on the Glenmont estate are significant, not only because they are part of a whole, but because they provide excellent evidence of Edison's experimentation with concrete. Such are the Gardener's Cottage and Potting Shed (No. HS 11), and the Garage (No. HS 15). On a smaller scale, the small Storage Vault, (No. HS 8) and the Blue Amberol Vault (No. HS 33), within the Laboratory complex, also are the result of Edison's work with cement.

In the estate Greenhouses (No. HS 14) many of the plants used in the Glenmont gardens are still started. Likewise, the Gardener's Cottage continues to serve its original function.
This map shows historic and other buildings or physical features, within both present and proposed site boundaries, which on the basis of known evidence were in existence at the time of Thomas Edison's death on October 18, 1931.

**GLENMONT BUILDINGS KEY**
- Edison House
- Garage
- Stable
- Pumphouse
- Rose House
- Greenhouse
- Barn
- Library
- Main Laboratory
- Boiler Room
- Blacksmith Shop
- Wood Storage Building
- Small Storage Vault
- Gate House
- Blue Arboral Vault
- Copper Plating Building

**HISTORIC BASE**
**EDISON NATIONAL HISTORIC SITE**
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

**LABORATORY BUILDINGS KEY (EXISTING 1964)**
1. Physics Lab
2. Chemical Lab
3. Chemical Storage Room & Pattern Shop
4. Metallurgical Lab
5. Main Laboratory
6. Power House-Autolab Room
7. Blacksmith Shop
8. Wood Storage Building
9. Small Storage Vault
10. Gate House
11. Blue Arboral Vault
12. Copper Plating Building

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- Small Storage Vault
- Gate House
- Blue Arboral Vault
- Copper Plating Building

**NOTES**
- The map has basic data as of 1964 with new evidence added.
- The buildings no longer exist.
- This is the boundary used by the Park Service for this N.R. Nomination.

**UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE**

**EDISON NATIONAL HISTORIC SITE**

**HISTORIC BASE**

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1. Glenmount, Edison NHS
2. West Orange, New Jersey
3. Vernon Betts
4. Feb., 1975
5. Edison NHS
6. Front View looking West
7. 75-114
1. Physics Laboratory (HS 1)
   Edison National Historic Site
2. West Orange, New Jersey
3. Vernon C. Betts
4. Feb, 1975
5. Edison NHS
6. Front and right side view looking North
7. 75-105

JUN 28 1979
1. Chemical Laboratory (HS2), Edison National Historic Site.
2. West Orange, New Jersey
3. Vernon C. Betts
4. February, 1975
5. Park
6. Front and right side view, Looking North
7. 75-101
1. Chemical Stockroom and Pattern shop (HS 3)
   Edison National Historic Site
2. West Orange, New Jersey
3. Vernon C. Betts
4. February, 1975
5. Edison NHS
6. Front and Left Side View, looking east
7. 75-102

JUN 28 1979
1. Main Laboratory Building (HS 5)  
Edison National Historic Site  
2. West Orange, New Jersey  
3. Vernon C. Betts  
4. Feb. 1975  
5. Park  
6. West End and front view, looking E  
7. 75-203
1. Small Storage Vault (HS8) Edison national Historic Site/
2. West Orange, New Jersey
3. Vernon C. Betts
4. Feb. 1975
5. Edison NHS
6. Front and Left side view, looking north
7. 75-106
2. West Orange, New Jersey
3. Vernon C. Betts
4. February, 1975
5. Edison, NHS
6. Front and right side view, looking North
7. 75-101

JUN 28 1979
1. Greenhouse (HS 14) Edison NHS
2. West Orange, New Jersey
3. Vernon C. Betts
4. February 1975
5. Park
6. Front and right side view looking NW
7. 75-116

JUN 28 1979
1. Garage (HS No. 15) Edison NHS
2. West Orange, New Jersey
3. Vernon Betts
4. Feb., 1975
5. Park
6. Front and right side view, looking NE
7. 75-201
1. Barn (HS16) Edison NHS
2. West Orange, New Jersey
3. Vernon Betts
4. Feb., 1975
5. Park
6. Front and left side view, looking NW
7. 75-202

Jun 28 1979
1. Gardener's Cottage and Potting Shed, Edison NHS Building No. 11
2. West Orange New Jersey
3. Vernon Betts
4. Feb., 1975
5. Park
6. Front and right side view, looking NE
7. 75-115
1. Pump House (HS17) Edison NHS
2. West Orange, New Jersey
3. Vernon C. Betts
4. Feb., 1975
5. Edison NHS
6. Front and left side view looking NW
7. 75-112
1. Hose House (HS 18) Edison National Historic Site
2. West Orange, New Jersey
3. Vernon C. Betts
4. Feb, 1975
5. Park
6. Front and right side view, looking NE
7. 75-113

JUN 28 1979
1. Blue Amberol Vault, Edison National Historic Site
2. West Orange, New Jersey
3. Vernon C. Betts
Feb, 1975
5. Park
6. Front and Right Side View, looking East
7. 75-111

JUN 28 1979
1. Gatehouse, Edison National Historic site
2. West Orange, New Jersey
3. Vernon C. Betts
4. Feb, 1977
5. Patk
6. Front and Right side view, looking East
7. 75-207
1. Metallurgical Laboratory
Edison National Historic Site.
2. West Orange, New Jersey
3. Vernon C. Betts
4. Feb. 1975
5. Park
6. Front and left side view, looking East
7. 75-102

JUN 28 1979
1. Black Maria, Edison National Historic Site
2. West Orange, New Jersey
3. Vernon C. Betts
4. Feb, 1975
5. Park
6. Front View, looking South
7. 75-107
1. Power House and Boiler Room, Edison National Historic Site
2. West Orange, New Jersey
3. Vernon C. Betts
4. March, 1975
5. Edison NHS
6. Front View, looking NE
7. 75-208

JUN 28 1979