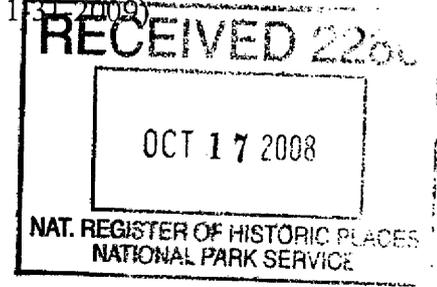


(Expires 10/31/2009)

United States Department of the Interior
National Park Service

1103



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 *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. 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. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Ottawa Street Power Station

other names/site number N/A

2. Location

street & number 217 East Ottawa Street not for publication N/A
city or town Lansing vicinity N/A
state Michigan code MI county Ingham code 065
zip code 48933

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 nationally X statewide locally. (See continuation sheet for additional comments.)

Brian O. [Signature] 10/3/08
Signature of certifying official Date

MI SHPO
State or Federal Agency or Tribal government

In my opinion, the property X meets ___ does not meet the National Register criteria. (___ See continuation sheet for additional comments.)

Signature of commenting official/Title

Date

State or Federal agency and bureau

4. National Park Service Certification

I, hereby certify that this property is:

entered in the National Register

Edson H. Beall

___ See continuation sheet.

___ determined eligible for the

National Register

___ See continuation sheet.

___ determined not eligible for the

National Register

___ removed from the National Register

___ other (explain):

per

11-26-08

Signature of Keeper Date
of Action

5. Classification

Ownership of Property (Check as many boxes as apply)

___ private

X public-local

___ public-State

___ public-Federal

Category of Property (Check only one box)

X building(s)

___ district

___ site

___ structure

___ object

Number of Resources within Property

Contributing Noncontributing

1 0 buildings

USDI/NPS NRHP Registration Form
Ottawa Street Station
Ingham County, MI

_____	_____	sites
_____	_____	structures
_____	_____	objects
<u> 1 </u>	<u> 0 </u>	Total

Number of contributing resources previously listed in the National Register N/A

Name of related multiple property listing (Enter "N/A" if property is not part of a multiple property listing.)

 N/A

Function or Use

Historic Functions (Enter categories from instructions)

Cat: GOVERNMENT Sub: public works

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Current Functions (Enter categories from instructions)

Cat: GOVERNMENT Sub: public works

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

7. Description

Architectural Classification (Enter categories from instructions)

Art Deco

Materials (Enter categories from instructions)

foundation Concrete

roof Asphalt

walls Brick

other Limestone

Granite

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.)

8. Statement of Significance

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

X A Property is associated with events that have made a significant contribution to the broad patterns of our history.

- B Property is associated with the lives of persons significant in our past.
- 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 a grave.
- D a cemetery.
- E a reconstructed building, object, or structure.
- F a commemorative property.
- G less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance (Enter categories from instructions)

Architecture _____
 Engineering _____
 Politics/Government _____

Period of Significance 1937-1950

Significant Dates 1937-39
1946

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

Cultural Affiliation N/A

Narrative Statement of Significance (Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

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 # _____

Primary Location of Additional Data

State Historic Preservation Office

Other State agency

Federal agency

Local government

University

Other

Name of repository: Library of Michigan

10. Geographical Data

Acreage of Property 1.35

UTM References (Place additional UTM references on a continuation sheet)

Zone Easting Northing Zone Easting Northing

1 16 700545 4734105 3 _____

2 _____ 4 _____

See continuation sheet.

Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.)

Boundary Justification (Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Kristine M. Kidorf

organization Kidorf Preservation Consulting date April 1, 2008

street & number 451 E. Ferry Street telephone 313-300-9376

city or town Detroit state MI zip code 48202

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A USGS map (7.5 or 15 minute series) indicating the property's location.

A sketch map for historic districts and properties having large acreage or numerous resources.

Photographs

Representative black and white photographs of the property.

Additional items (Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of the SHPO or FPO.)

name Dick Peffley, Lansing Board of Water and Light

street & number 1232 Haco telephone (517) 702-6000

city or town Lansing state MI zip code 48901

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. 470 et seq.). A federal agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number.

Estimated Burden Statement: Public reporting burden for this form is estimated to range from approximately 18 hours to 36 hours depending on several factors including, but not limited to, how much documentation may already exist on the type of property being nominated and whether the property is being nominated as part of a Multiple Property Documentation Form. In most cases, it is estimated to average 36 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form to meet minimum National Register documentation requirements. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, 1849 C St., NW, Washington, DC 20240.

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National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section 7 Page 1 Ottawa Street Station
Ingham County, Michigan

Description

Originally constructed in 1937-1939 with a major addition in 1946, the Ottawa Street Power Station is a monumental steel-framed industrial facility. The plant occupies a prominent location in downtown Lansing, in a partial city block bounded on the east by the Grand River, on the south by Ottawa Street, on the west by Grand Avenue and a modern, four-story parking deck, and on the north by an adjacent two story office building near Shiawassee Street. There is a small area of lawn between the building and the river (the former coal yard), and there are surface parking lots both to the north and the south of the building. The main tower of the building is rectangular in footprint and is 176 feet tall - the equivalent of sixteen stories - due to varying floor heights it has more or less nine interior floor levels plus a full basement and small sub-basement. The building steps back at the upper levels in typical Art Deco fashion. A six-story tall, L-shaped structure formerly containing the turbine rooms wraps around the south and west sides of the building and a one-story "screen room" addition is located on the southeast corner.

The building sits on a polished black granite water table. The walls are constructed of brick in graduated colors to represent the combustion of coal, moving from dark purple at the bottom of the building, to shades of red and orange, and finally to light-yellow at the top of the building. The walls have periodic bands of limestone, as well as limestone parapets and trim. The building has flat roofs hidden behind brick parapet walls. Each elevation has multi-story vertical bands of window openings separated by brick pilasters with limestone caps. The windows are multi-paned steel sash with inset operable sections mechanically operated by hand cranked wheels set adjacent to each vertical stack of windows.

The front (south) façade contains the main entry, which is not centered, but is near the west end of the building. It is deeply recessed with a corbeled ceiling and a set of granite stairs leading to a pair of pedestrian scale copper and stainless steel doors with inset panels that echo the shape of the windows. The doors have a glass transom with a metal grill in a sunburst pattern with lightning bolts used for the sunrays. The six-story L-shaped portion of the building is divided vertically into two sections. The lower, darker colored, one-story tall base, which is capped with limestone, has a horizontal emphasis with four regularly-spaced limestone bands punctuated by a window in each bay. The five stories above have a full height, stepped arch window in each bay with limestone trim at each shoulder of the arch. The taller, main tower of the building rises behind the shorter portion; it has a stepped profile and full-height windows in each of the three bays.

The east elevation, which faces the river and is more utilitarian in style, shows the east end of the L-shaped section of the building. It is two-bays wide and located behind a one-story screen room that extends out over the water intake from the river. The screen room walls and the end of the former turbine rooms behind match the front elevation in the detailing and windows. The main tower of the building is divided vertically into four sections, each stepping in from the wall planes below it. The bottom portion, which is six stories tall, has two-story tall windows in each bay at the bottom, and brick wall above capped by a limestone band. The next two sections are about three and one story tall, respectively, and contain full-height windows in each bay. The top section of the building is about three stories tall,

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Section 7 Page 2 Ottawa Street Station
Ingham County, Michigan

with windows in the bottom two-thirds and plain brick walls above that create the tall parapet that hid the original smokestacks.

The north elevation has narrow windows that run the entire height of the main tower of the building. The six-story tall portion of the building has a loading area at the north end of the former turbine rooms that is set back from the end of the building. The loading area continues the brick colors and limestone bands. There is a large overhead door at the first floor and two sliding metal and glass doors at the second and third floors. Two steel crane rails project from a wide opening above that is filled with a metal door.

The west elevation of the L-shaped structure is very similar to the corresponding component of the south elevation. The west elevation of the main tower is the same as the east elevation except that the lower sections of the windows in the main part of the building contain glass block. A large steel column and beam structure was added in 2001 to the west side of the building. It extends up and over the entire former west turbine room section of the building and supports large condensers. Related equipment fills the west side of the basement of the building.

The interior of the building is industrial in nature. The original lobby area retains remnants of its glazed block walls and red tile floor but has been subdivided with new partitions and suspended acoustical tile ceilings. At the south end of the building a decorative staircase with an Art Deco style metal handrail runs up from the lobby to the turbine room floor, then up one additional floor before becoming utilitarian in design. The former turbine rooms are open with glazed block walls, with some chevron details, and part of the trolley crane spans the room's width. The south turbine room retains some red tile flooring but the west room's has been replaced with a concrete floor. The east half of the tower section of the building, formerly containing the boilers, has exposed structure and brick walls. Some of the floors are concrete. There are many layers of metal grates, walkways, stairs and ladders that provided access to the boiler equipment that has since been removed. Much of the utilitarian spaces in the building have exposed structural steel. Additional steel was installed to brace the building when the boiler equipment was removed. The first seven floors of the west half of the tower have smaller spaces that were used for electrical monitoring equipment and offices. The seventh floor has a series of small offices divided by metal partitions. There are two existing elevators in the structure: a passenger elevator, no longer functional, at the south end, and a freight elevator, still in use, at the north end. Utilitarian stair towers are also located at the north and south ends. Some period decorative details remain such as Art Deco style elevator indicators and door hardware.

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CONTINUATION SHEET

Section 8 Page 1

Ottawa Street Station
Ingham County, Michigan

Significance

The Ottawa Street Station, completed in 1939 and located on the west bank of the Grand River in downtown Lansing is significant under national register criterion A for its role in Lansing's municipal-owned utility company, providing electricity and steam heat to downtown Lansing from 1939 until the late 1980s; and under criterion C for its Art Deco architecture and building form that innovatively disguised an electric and steam generation plant as an office building. The plant received national attention through profiles in several trade magazines at the time of its construction.

The area that is now downtown Lansing began to develop in 1847-48 when the state legislature directed the removal of the location of the state capitol from Detroit to the then unoccupied site that became Lansing. The state capitol commissioners laid out a city plat. The downtown area began to develop in the area between the square site set aside for the future capital building and the Grand River, with the central focal point being the intersection of two primary streets, the north-south-running Washington Avenue, and Michigan Avenue, which ran east toward the river from the capitol square. Washington Avenue became and has remained the downtown's main street. By the 1880s commercial development lined Washington for at least six blocks. Ground-floor street fronts offered stoves, furniture, clothing, groceries, and much more to city-dwellers and farm families. Upstairs offices housed real estate and insurance agents, milliners and doctors.

The city increased in population when the area became more accessible through railroad connections in the late 1860s and 1870s, and by 1890 there was a population of just over thirteen thousand people. Rapid industrial expansion in the early 1900s, credited primarily with the Olds Motor Works factory opening in 1901 and the growth of related industries, nearly doubled the 16,485 population in 1900 to 31,229 people in 1910. The pace of population growth continued, with 57,327 people living in Lansing by 1920.

Beginning in 1883 electricity was provided by a private entity, the Lansing Electric Light and Power Company, formed by the stockholders of the local gas company. Providing power only to arc lights at first, by 1885 a new generator was installed to light the first incandescent bulbs in the city. This early system had two disadvantages: if one light went out in a circuit, all of the lights went out, and electricity was not provided all night long.

The Board of Water and Light, which is responsible for the construction of the Ottawa Street Station, began in February, 1885, as the Water Board. That was established by the City of Lansing in response to the threat of fires and the need for a city water system. Its service began with two wells and a 154 foot high stand pipe that created water pressure for sixteen miles of water mains and 167 hydrants.

After studies showed that publically owned systems could provide electricity at lower cost, in 1891 the Michigan legislature passed a law to allow municipalities to own gas and electric systems. In 1892 the City of Lansing raised

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Section 8 Page 2 Ottawa Street Station
Ingham County, Michigan

\$60,000 in bonds to purchase the Lansing Electric Light and Power Company, with its the generating plant, 110 arc streetlights and 136 customers. In order to remove the operation from daily city politics, the city assigned the control of the electric utility to the water board, which was subsequently named the "Board of Water Works and Electric Lighting Commissioners."

As Lansing's population grew so did the board's generating capacity. By 1902 a new power station with four generators was located on Cedar Street near the water wells. By 1904 alternating current was provided, and there were 1200 customers and 168 arc lamps.

However, the board was not the only entity providing electricity for Lansing. Some manufacturers had their own power plants and in 1898 the city granted Alamanzo A. Piatt a fifteen-year franchise to supply steam heat and electricity for power, but not lighting. Piatt constructed a steam and electric generating plant on East Ottawa, the site of the present plant, and a hydroelectric generating plant across from Moores Park. The Michigan Power Company acquired Piatt's assets in 1906, and in 1908 replaced Piatt's plant with a new steam and electric generation plant on the site where the current Ottawa Street Station stands. They also re-built the Moores hydroelectric plant in 1907 after a 1904 flood. In 1907 the Michigan Power Company challenged the city's franchise agreement and the Michigan Supreme Court ruled against the city: private entities did not need franchises to sell electric power or steam heat service to any customer. The company then began competing with the board for electric customers. However, their victory was short lived. By 1918 the company was in receivership because of its rate war with the board. Because of a fear of a power shortage, the board issued bonds for \$1.1 million, assumed the Michigan Power Company's debts, and acquired their hydroelectric, electric, and steam generating facilities.

The explosive growth both in industry and population in Lansing after World War I created a forty-percent annual increase in electricity demand. To meet this need the board constructed the Moores River Station on land donated by the Olds Motor Works. This plant was profiled in the June, 1923, issue of *Power* magazine and had an initial capability of generating twenty-five thousand kilowatts. Although the board thought the plant, termed one of the largest municipal electric power plants in the country,¹ would fulfill the city's electricity needs for numerous years, by 1930 the maximum number of generators had been installed and electricity demand was still growing.

In 1937-38, as Lansing was coming out of the Depression, the board undertook two major building projects. The Dye Water Conditioning Plant on South Cedar Street was undertaken as a WPA project and was enhanced with sculpture and murals fitting with its Streamline Moderne design. The second project was the Ottawa Street Station to generate steam and electricity for downtown.

¹ "Lansing's New Ottawa Street Station" *Power Plant Engineering*, October, 1939, 635.

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Section 8 Page 3 Ottawa Street Station
Ingham County, Michigan

Anticipating the need for additional electricity but realizing expansion of the Moores River Station wasn't feasible due to water supply, the Board purchased the North Lansing Dam and flour mill site in 1934 and a new dam and powerhouse were constructed. These created a pond to provide condenser water for the old and new Ottawa generating plants.

In 1937 the Board demolished the old Ottawa electric and steam generating plant and began constructing the first section of the current Ottawa Street Station. The new plant was the result of a collaboration between Burns and Roe, Inc., the New York-based engineering firm that designed the power plant proper, and the Bowd – Munson Company, architects, Lansing, who designed the building. The construction was carried out by two Lansing firms, H.G. Christman Company for the excavation and foundations, and Reniger Construction Company for the building. The new building, comprising approximately the south half of today's building, was completed in 1939.

The new plant's engineering and exterior design received strong praise in three power plant trade magazines in their October, 1939, issues. *Power Plant Engineering* stated, "Ottawa Street Station represents a milepost by which technical progress in the industry may well be measured."² *Power* magazine stated, "...the newest addition to Lansing's electric and steam supply combines extraordinary beauty of architecture with efficient and serviceable enjoyment."³ *Industrial Power* noted, "Of special interest is the impressive exterior appearance of this station. The brick structure is equivalent in height to a 12-story office building, and the coloring of the face brick is such to simulate the effect of burning coal. ... No stacks are visible from the street."⁴

The building immediately became Lansing's pre-eminent Art Deco landmark with its broad base, stepped arch windows and metal doors, the blocky tower form, and the graded-hue masonry. The building was designed both to fit in with Lansing's downtown buildings, including the nearby state capitol building, as well as accommodate the unique arrangement of generating equipment.

In addition to the building's architecture, the new Ottawa Street Station was important as a state-of-the-art power generation facility at the time of its construction. Ralph C. Roe and Allan Burns designed the Bremo Station in Virginia in 1931, when they were employed by the Electric Management and Engineering Company. Ralph Roe authored two articles on his innovations in the February, 1931 and December, 1931 issues of *Power Plant Engineering*. After forming Burns and Roe in 1932, Roe found a chance to improve on the earlier design in the new Ottawa Street Station. Ottawa was designed to couple high efficiency and maximum reliability with reasonable costs to construct and operate. The plant cost four million dollars to construct, which was paid for by electric sales alone.

² "Lansing's New Ottawa Street Station" *Power Plant Engineering*, October, 1939, 634.

³ "Ottawa Street, Lansing – Stackless Station of Tomorrow" *Power*, October, 1939, 56.

⁴ "Unique Features of Lansing's New Power Station" *Industrial Power*, October, 1939, 47.

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Even though Lansing had some of the lowest electric rates in Michigan, no bonds or other government dollars were used to construct the plant.

The Ottawa Street Station was constructed with numerous automatic controls that were new in the industry. Automatic adjustments to the pre-measurements of the coal and air fed into the furnace were an improvement to the manual adjustments previously needed. The total automatic operation of the plant running under normal operation was another innovation. The operator only had to monitor the system from the central control room instead of making adjustments out in the plant. Other unique and new features noted in the "Lansing's New Ottawa Street Station" in the October, 1939 issue of *Power Plant Engineering* included: "1) Six point extraction. Where there is nothing fundamentally new in 6 point extraction, it is, to our knowledge, the first time so many extraction stages have been used. 2) Automatic, pre-measurement of fuel and air to the furnaces. 3) Use of water-to-water heat exchangers in feed-water system for by-passing heat around feed pump. 4) Three stages of deaeration between hot well and boiler. 5) Re-melting fly ash from the precipitators in the furnace. Although this has been done before, the arrangement is sufficiently unusual to deserve comment. 6) Use of separate blowers to supply air to the pulverizer bearings. This is only a detail, yet it emphasizes the attention to detail that makes the entire difference between a well designed plant and one that is merely assembled. 7) Automatic temperature control of the primary air to the furnaces."⁵

The innovative arrangement and types of equipment required a tall building and allowed for numerous windows and very short smokestacks that were then hidden by the parapet wall. Exhaust gasses were cleaned before leaving the stacks, all contributing to the building fitting into downtown Lansing. Cleanliness extended into the plant interior: all of the coal operations were sealed off from the rest of the plant. This was the first time that pulverized coal was used in the Board of Water and Light system and three hundred tons were burned a day at the plant.

The interior of the plant originally contained water treatment facilities for the boiler water, two boilers, two turbines (one to generate electricity, one for the steam heat system), coal bunker, coal pulverizer, and all of the related equipment. The red-tiled turbine room floor was L-shaped along the west and south sides of the building. Another unique feature of the building when it was constructed was the ability for a large section of the north wall of the turbine room to be opened allowing overhead cranes to pick-up and move equipment in and out of the building from railcars.

With the completion of the Ottawa Street Station, it and the Moores River Station provided electricity to seventy square miles which included Lansing, East Lansing and the surrounding townships. Knowing that as population continued to increase the demand for electricity would increase, Ottawa Street was designed so its capacity could be tripled from the initial twenty-five thousand kilowatts. This need occurred in 1941, shortly after the plant opened. Another twenty-five thousand kilowatt generator was ordered, but because of World War II the generator was not

⁵ "Lansing's New Ottawa Street Station" *Power Plant Engineering*, October, 1939, 638.

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Section 8 Page 5 Ottawa Street Station
Ingham County, Michigan

delivered until 1948. An addition to the building that doubled its length was built in 1949. It added five bays to the north end of the building. The addition exactly matches the original building; it is very difficult to tell the two sections apart. Additional boilers and generators were added again in 1950 to bring the total to five, each leading to its own smokestack hidden behind the parapet wall. In 1954 it was decided that the hidden stacks were not sufficient in certain weather conditions and a single tall stack connected to all five short stacks was added to the top of the building.

The demand for electricity continued to increase. Since Ottawa was running at capacity, beginning in 1952 the Board of Water and Light began updating the generating, transmission and distribution equipment at Moores River Station, which was renamed Eckert Station. By 1971 Eckert Station could generate 370,000 kilowatts of power for the city and Ottawa became a standby system. Because new population growth was taking place in the suburbs rather than within the city, the Board of Water and Light constructed the Erickson Station which opened in 1973 in Delta Township. For this plant the Board of Water and Light again used the latest technology available, using a ninety-nine percent efficient precipitator and a closed cycle cooling system and tower as a matter of good environmental practice. The Board of Water and Light had first used precipitators at Ottawa Street to prevent soot from polluting downtown Lansing.

In 1984 the Board of Water and Light retrofitted Eckert Station to generate steam heat from the electric generators and ran new distribution lines to serve downtown Lansing. Initially just used as a back-up for Ottawa Street Station, Eckert eventually replaced Ottawa for steam generation. As the equipment became outdated at Ottawa it was taken off-line totally in 1992, and since that time all of the equipment, including the added smokestack, has been removed. In 2001 a portion of the building was renovated to house chiller equipment to provide chilled water for air conditioning downtown buildings. At that time a steel frame to support large condensers was constructed over the west half of the building where the turbines were previously located.

Bowd – Munson Company

Bowd and Munson was a partnership formed in 1929 between Edwyn A. Bowd and Orlie Munson. Bowd (1865-1940) was perhaps the most prolific designer of public and institutional buildings in southern Michigan outside of the Detroit metropolitan region in the early twentieth century. Bowd was born in Cheltenham, England, and moved to Detroit in 1882 after graduating from Orset College in Dover. He began his career designing churches with fellow Englishman, Gordon W. Lloyd, an early and important Detroit architect, but after several years moved to Saginaw for a brief period before moving to Lansing in 1888. In Lansing he worked with William Appleyard, who designed some of the early buildings at the Michigan School for the Blind. After a year Bowd started his own firm.

Bowd designed many churches, institutional, and corporate and municipal structures throughout southern Michigan during his fifty-year career, and he was especially popular in Lansing. His style evolved from Richardsonian

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Romanesque to Neoclassical by the early twentieth century. He employed the similar use of red brick on light-colored, dressed stone ashlar foundations in both styles of design.

The Lansing post office and the First Baptist Church were two of Bowd's first major commissions in Lansing, both completed in 1894 in the Romanesque style. In 1896 Bowd designed the Lansing City Hall, a monumental, stone Richardsonian Romanesque building that has to be considered one of his most important projects. In 1900 his design for the Pilgrim Congregational Church was completed.

By the early twentieth century Bowd was receiving important commissions from throughout southern Michigan, including the Ingham, Montcalm, and Wexford county courthouses and the Hillsdale City Hall (1911-13) – all large Neoclassical buildings constructed in the 1900-1915 period – as well as the Ionia Armory (1908-09) and Ionia County Farm (1907). Bowd's work at the Michigan School for the Blind from 1912 through 1924 was part of an extensive amount of work his firm did for the State of Michigan beginning with the Industrial School for Boys administration building in Lansing and State of Michigan Building at the 1904 St. Louis exposition. His institutional work for the state – including the Engineering (1907) and Agricultural (1909) buildings and Wells Hall dormitory (1907) at Michigan Agricultural College (now Michigan State University) in East Lansing, buildings at the Michigan School for the Deaf in Flint (1913) – constitute some of his most important work. The team's style of design evolved into the Art Deco and Moderne styles and included the Federal Building (1932-34) and Knapp's Department Store Building (1937-39) both in downtown Lansing. Bowd was active in the firm until his sudden death in 1940.

Orlie J. Munson (1892-1957) continued the Bowd-Munson Company after Edwin Bowd's death eventually changing the name of the firm to O.J. Munson Associates. Munson is credited with designing the first residence hall at Michigan Technological University, Douglass Houghton Hall. He continued Bowd's relationship with Michigan State University, designing the Auditorium (1940), Jenison Field House (1940), Berkey Hall (1947), Agricultural Engineering Building (1948), and Anthony Hall (1955). In 1957 he designed a major expansion to Spartan Stadium, adding the upper decks to the east and west sides for an additional 16,000 seats.

Burns and Roe, Inc.

The firm of Burns and Roe was formed in 1932 by Allan E. Burns, Ralph C. Roe, C.E. Lakin, and J.P. Mailer, who had all worked together for the Electric Management and Engineering Company. Lakin and Mailer left the new company within five months, and Allan Burns left in 1935. Keeping the Burns and Roe name, Ralph Roe continued the company with only two employees.

Ralph C. Roe (1890-1971) was born in Marcellus, New York and was interested in mathematics and science, looking to Thomas Edison for early inspiration which developed into an interest in the design and construction of modern

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Ingham County, Michigan

electric generating facilities. He was a pioneer in the field of pulverized coal combustion, and was best known for his developmental work in the area of modern, high pressure, high temperature, high efficiency steam power plants that were reliable. He shared his developments by authoring numerous articles in trade magazines, including: "Simplicity and Controls are Keynotes of Post-War Plant," *Electrical World*, January 5, 1946; "Standardized Power Plant Simplifies and Saves," *Electrical World*, February 12, 1949; and "Gas Turbine with Pressurized Boiler Gains 1000 Btu vs. Steam Alone," *Electrical World*, November 20, 1950. Roe held almost fifty patents that related to the desalting of water, improvements in power plant design and air conditioning, liquid regenerative air heaters, and direct contact heating cycle for improved station thermodynamic performance.⁶

Although Roe never attended college he was awarded an Honorary Doctorate of Engineering by Stevens Institute of Technology in 1959. He was a registered professional engineer in New York, New Jersey, Michigan, Tennessee, and Maryland. In 1969 he won the George Westinghouse Medal for Eminent Achievement and Distinguished Service in the Power Field of Mechanical Engineering.⁷

The firm's website credits the commission from the Lansing Board of Water and Light to design the Ottawa Street Station as a turning point in the success of the firm. Roe is credited with the idea of hiding the smokestacks behind the façade of the building. By the end of the 1930s Burns and Roe had forty-two employees and had designed plants for Consolidated Edison and turbines for Jacob E. Decker and Sons.

The company continued to grow and was known for their designs in steam electric power generation. By 1948 they had a staff of 300 and designed turbine and hydroelectric plants as well. They designed Pratt and Whitney's Aircraft Engine Testing Laboratories and Sikorsky Aircraft's Helicopter Test Project. Burns and Roe then expanded into defense work, nuclear power plants and construction. The firm exists today with Ralph's grandson, Keith Roe, leading the company.⁸

⁶ "Biography of Ralph Coats Roe," University of Memphis website, <http://www.me.memphis.edu.menews/RoeAward.html>, (accessed June 9, 2008).

⁷ *Ibid.*

⁸ "A Legacy of People Building Success," Burns and Roe Company website, www.burnsandroe.com/about_legacy/htm (accessed February 26, 2008)

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Verbal Boundary Description

Commencing at a point on the north side of Ottawa Street sixty-eight (68) feet east from the northeast corner of Ottawa and Grand Streets; running thence north parallel with the east line of Grand Street two hundred fifty-eight and five sixths ($258 \frac{5}{6}$) feet; thence east parallel with the north line of Ottawa Street to the banks of the Grand River; thence southerly along the banks of the Grand River to the north line of Ottawa Street; thence west along the north line of Ottawa Street to the place of the beginning. Being situated in the City of Lansing, County of Ingham, State of Michigan.

Boundary Justification

The boundaries are the portion of the parcel originally conveyed to the City of Lansing from the Michigan Heat and Power Company and that are historically associated with the Ottawa Street Station. The remainder of the parcels currently owned by the Board of Water and Light were used for miscellaneous operations that were not associated with the power plant.

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Photographs

All photographs were taken by Kristine M. Kidorf. The photographs were printed using Hewlett-Packard Vivera Inks (95 tri-color cartridge) on HP Premium Plus Photo Paper (high gloss).

1. South and east elevations looking northwest, March 19, 2008.
MI_Ingham_Ottawa01.TIF
2. East elevation looking west, March 19, 2008.
MI_Ingham_Ottawa02.TIF
3. North and east elevations looking south from Shiawassee Street, March 19, 2008.
MI_Ingham_Ottawa03.TIF
4. North and west elevation looking southeast, March 19, 2008.
MI_Ingham_Ottawa04.TIF
5. Building entry stairs, south elevation, looking north, March 19, 2008.
MI_Ingham_Ottawa05.TIF
6. Remaining portion of original lobby looking southwest, March 19, 2008.
MI_Ingham_Ottawa06.TIF
7. Portion of staircase from turbine room down to lobby looking north, March 19, 2008.
MI_Ingham_Ottawa07.TIF
8. Main turbine room looking south, March 19, 2008.
MI_Ingham_Ottawa08.TIF
9. Auxiliary turbine room looking east, March 19, 2008.
MI_Ingham_Ottawa09.TIF
10. Boiler house top level, looking south and down to lower levels, March 19, 2008.
MI_Ingham_Ottawa10.TIF



BOARD OF WATER AND LIGHT





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Red Bull



STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WATER SUPPLY DIVISION

NO PARKING
EXCEPT FOR
AUTHORIZED
PERSONNEL
ONLY





THIS DOOR WILL REMAIN
CLOSED AND
LOCKED
AT ALL TIMES EXCEPT
FOR EMERGENCY - 911 ONLY
EXCEPT AS NOTED
ON THIS SIGN

Control panel with digital display and buttons.

Control panel with a green display and various buttons.

LANSING BOARD OF WATER AND LIGHT
Diagram showing technical drawings of water and light fixtures.

KNAACK
Fire safe with a handle and lock.









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