

ATTACHMENT B:
**Architectural Description, Photographs &
Documentation**

72 E. GLENARM STREET

Description

The Glenarm Power Plant is located on a 7-acre property at the southeast corner of East Glenarm Street and South Fair Oaks Avenue. The power plant building itself is situated toward the northwest corner of the property; adjacent to it, at the extreme northwest corner is a landscaped yard and fountain. The remainder of the property consists of large tanks, transformers, transmission lines, and associated unenclosed infrastructure. The power plant building that exists today was built as an addition to the now-demolished original power plant. The original power plant building, which was located on the south side of Glenarm Street at the terminus of South Raymond Avenue, and a 1924 addition, were demolished in the 1960's. The additions that comprise the existing building were constructed in 1928 and 1932. The fountain was built in 1938 as a mechanism to cool turbine unit number 8 and the building itself.

The 32,250-square-foot power plant building is rectangular in plan and monumental in scale, with two architecturally distinct wings on the eastern and western ends. The height of the building ranges from 30 feet to 70 feet. The three-story western end, constructed in 1932 and the portion most open to public view, is designed in the Moderne style. It is configured with two similar bays, both of which have a flat roof. The northern bay has a shorter parapet than the southern bay and has arched windows on the first floor as opposed to the southern bay, which has rectangular window openings. The remainder of the west elevation is symmetrical with fluted pilasters framing tripartite second and third floor window groupings. The entire western wing has a sculptural geometric frieze at the roofline.

The eastern wing, constructed in 1928 and designed in the Georgian Revival style, is two-stories in height. It has paired gambrel roof forms oriented toward the east which, based on historical photographs, were originally gabled roof forms. The north elevation of this wing (facing E. Glenarm Street) gives the appearance of having a flat roof. The impression is enhanced by the addition of an articulated cornice. This elevation is highly symmetrical with cast cement plaster pilasters separating ground-floor arched windows and second-floor round windows, all framed in cast cement plaster. Windows throughout the entire building are steel fixed or casement windows with divided lights.

Interior

Section 17.62.040 of the Pasadena Municipal Code states, "historic monument designation may include significant public or semi-public interior spaces and features." The application requests designation of significant interior spaces.

The interior spaces of the building are completely open from floor to ceiling. The turbine hall, which is the northernmost portion of the building, includes two deep mechanical wells, surrounded by wrought-iron railings with a classical fretwork design. The interior walls also have Gladding McBean ceramic tile wainscoting and bracketed metal lamps, as well as a built-in clock on the westernmost wall. The only remaining turbines, unit number 8 installed in 1932 and unit number 9 installed in 1949, are located in the western end of the turbine hall (the portion

constructed in 1932). The mechanical well beneath these turbines contains the condenser units associated with each turbine and the southern wall of the turbine hall has control panels and gauges. The boiler room, adjacent to and south of the turbine hall, contains the boilers, burners, feed pumps, steam valves and pressure and heat gauges for each of the turbine units (two boilers per unit).

The turbines, condensers, boilers and other infrastructure that were in the older eastern portion of the building have all been removed. Interior wall features (tile wainscoting, lamps, railing, crane) remain intact. Traversing the area between the eastern and western portions of the building is a rail spur that was originally used for delivery of heavy equipment to the facility and was connected to the main rail line (now the MTA Gold Line).

It is important to note that the remaining portions of the building, which were additions to the original power plant building, were designed to accommodate expansion of the facility. As the use of electric power became more prevalent in the city and the technology continued to change, each new addition needed to include sufficient space to contain future power-generating equipment. Although the last addition to the building itself was constructed in 1932, the period of significance of the property should extend to 1949 when the last turbine and its associated equipment was installed.

A similar facility, though larger in size, is the Seaholm Power Plant in Austin. Completed in 1950, and a late example of Streamline Moderne design, it is currently undergoing conversion to a residential use. Internationally the most celebrated power plants from the mid-twentieth century are the monumental Battersea Power Station in London (1929-1939, Giles Gilbert Scott, architect) and the Bankside Power Station in London (1947, Giles Gilbert Scott), now the Tate Modern.

Electric Fountain

The electric fountain, located immediately west of the existing building within the front yard area, was originally built for the purposes of cooling the facility and equipment (specifically, turbine unit number 8). The front yard area also has a series of walkways that radiate out from the fountain as well as a freestanding monument. The fountain was designed by the City's Power Department engineers and replaced a cooling tower that had been on the site since the original power plant was built in 1906.

The fountain is set within a circular basin and reflecting pool lined with yellow tiles (a portion of which have images of the City logo flanked by lightning bolts). The pool is surrounded by a low cast-stone wall with inscription, "Light Power Pasadena 1938" between two rows of wave crests in low relief. The fountain itself consists of a single-tier center tower framed metal and covered with nozzles and translucent-glass panels. Originally the jets of water were as high as 100 feet and had pulsating colors and displays. The fountain was turned off during

war-time blackouts during the Second World War and when it resumed operation the water spray was considerably lower in height¹.

Electric fountains first became popular during the late-nineteenth century largely through the commissions of Frederick W. Darlington (1865-1947), an electrical engineer from Philadelphia. Darlington designed elaborate fountains for amusement parks and civic parks in the U.S. and elsewhere, including a 200-foot tall electric fountain for Crystal Palace in London and similar fountains in Chapultepec Park in Mexico City and Prospect Park in Brooklyn. He was also responsible for designing the Prismatic Electric Fountain (1908—not in operation) in Denver and the three electric fountains (1916) in Garfield Park in Indianapolis.² Electric fountains were featured at 1901 Pan-American Exposition in Buffalo, the 1933 World's Fair in Chicago, and the 1939 World's Fair in New York (notably the spectacular sound and light display of the Pool of Industry). The Glenarm Fountain is one of three electric fountains in the Los Angeles area. The other two are: Beverly Hills Electric Fountain, 1931, Santa Monica Boulevard, designed by Ralph Flewelling, and the Mulholland Memorial Fountain, 1940, Riverside Drive, Los Angeles (photo below).

Character-Defining Features (Interior and Exterior)

Major exterior character-defining features include the roof form, the decorative pilasters and frieze, window placement and material and exterior coating (which is currently undergoing restoration to remove texture coating that was added).

Character-defining interior features include: the monumental spatial relationships in the western turbine hall and boiler room; the visible equipment and infrastructure including control panels, burner fronts, feed pumps, steam valves and turbines; the floor-to-ceiling hallway between the boilers (including the free-floating master gauge in the hallway); the railings, wainscoting, bracketed lamps, wall clock and flooring in the turbine hall and the remaining rail spur. Those features that are of secondary importance include: the boilers themselves and associated pipes, the condensers in the equipment wells, and the easterly portion of the building from which all equipment has already been removed, with the exception of the original tile wainscoting and bracketed lamps.

Bennett & Haskell, Architects

J. Cyril Bennett (1891-1957) and Fitch Haskell (1924-2002) formed the firm of Bennett & Haskell in Pasadena in 1923. This collaboration, which lasted 11 years, produced designs for numerous commercial and institutional buildings throughout Pasadena, as well as a relatively small number of residential buildings. Examples of the firm's work include the Pasadena Masonic Temple, the First Trust Building, the Holliston Avenue Methodist Episcopal Church, the Raymond Theater, the Alexander Hamilton School, the Madison School and several new building facades on Colorado Boulevard after its widening in 1929.³

¹ "Water, Light to Provide Spectacle," Pasadena Star-News, December 23, 1938.

² Sources: <http://electricfountain.home.att.net/6-Darlington3.html> ; Maj. F. W. Darlington, Engineer, Inventor, New York Times, July 25, 1947.

³ Grimes, Teresa and Winder, Mary Jo: *Residential Period Revival Architecture and Development in Pasadena from 1915-1942*, 2004

72 E. Glenarm Street: Glenarm Power Plant



Aerial photo of site (2006)

72 E. Glenarm Street: Glenarm Power Plant



Aerial photo from 1930's



Aerial photo from 1950's

72 E. Glenarm Street: Glenarm Power Plant

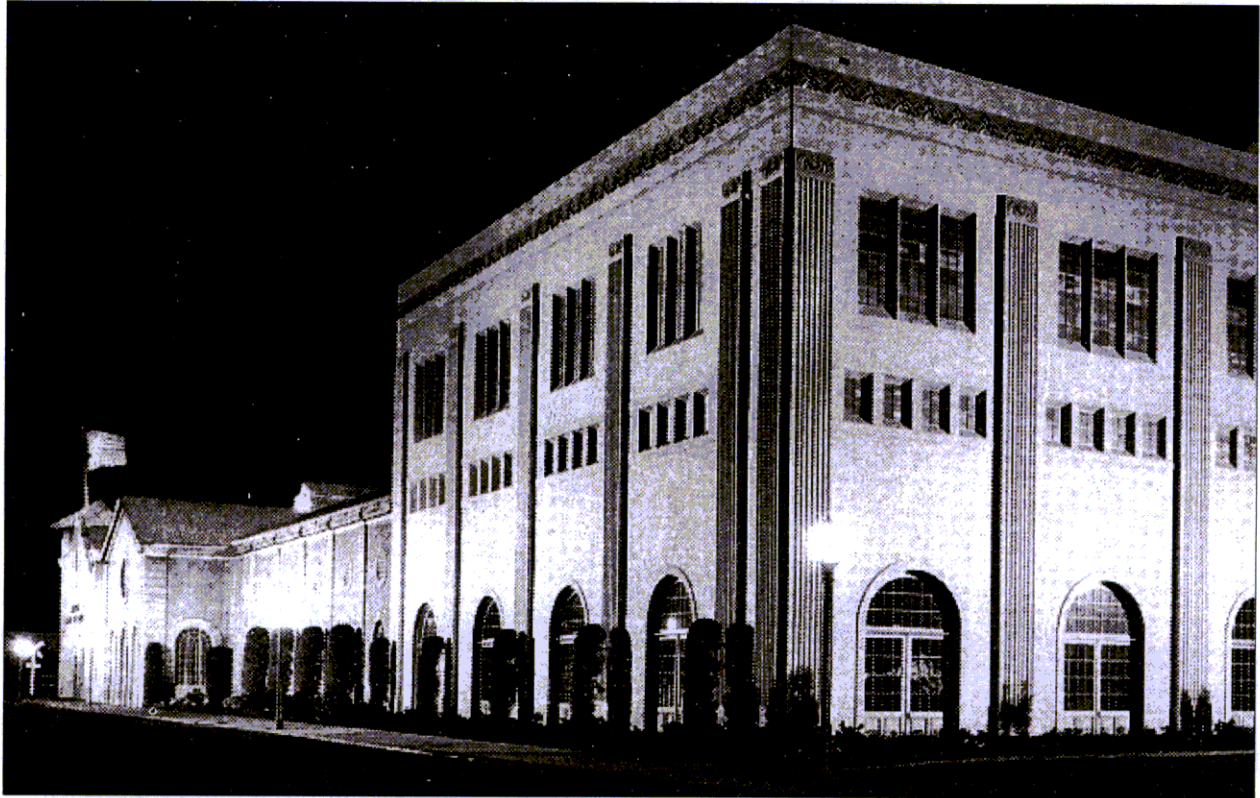


Aerial from east/rear (2005)

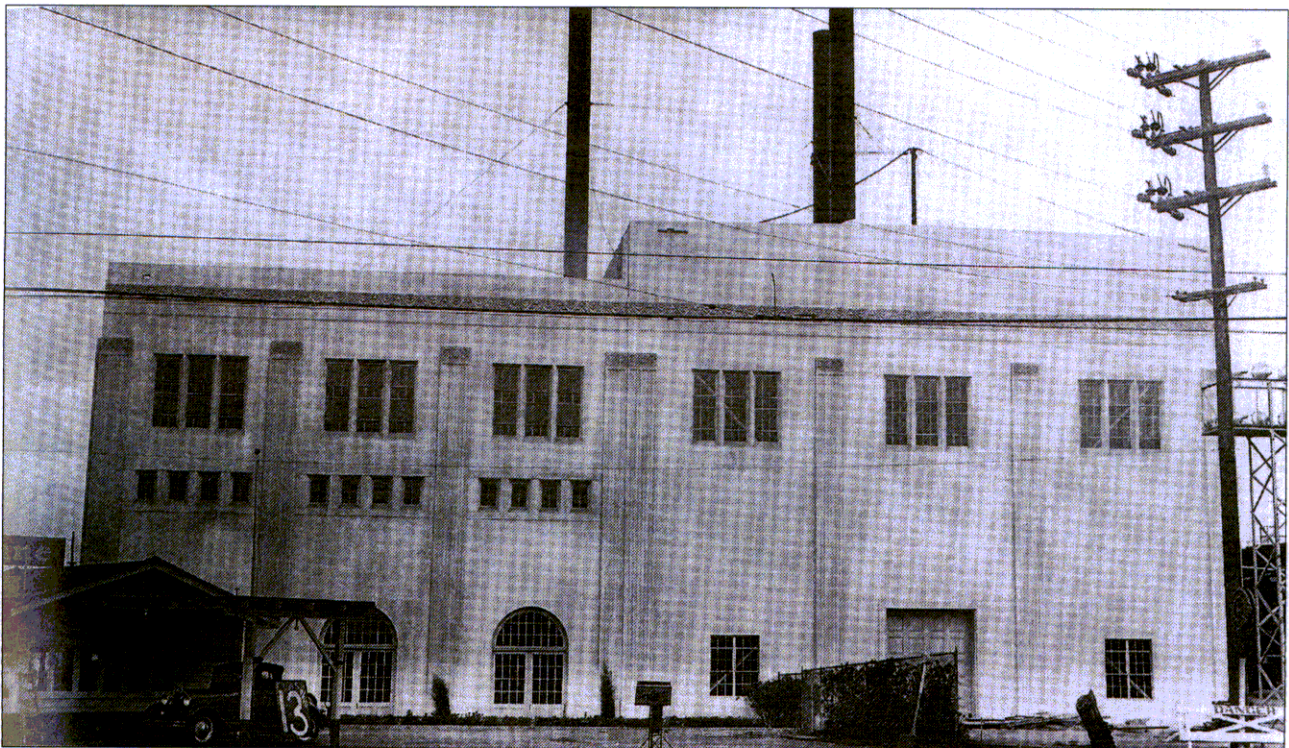


1906 Power Plant building (now demolished) on E. Glenarm Street at terminus of S. Raymond Ave.

72 E. Glenarm Street: Glenarm Power Plant



Original configuration of power plant with all additions



West elevation of power plant (late 1920's)

72 E. Glenarm Street: Glenarm Power Plant

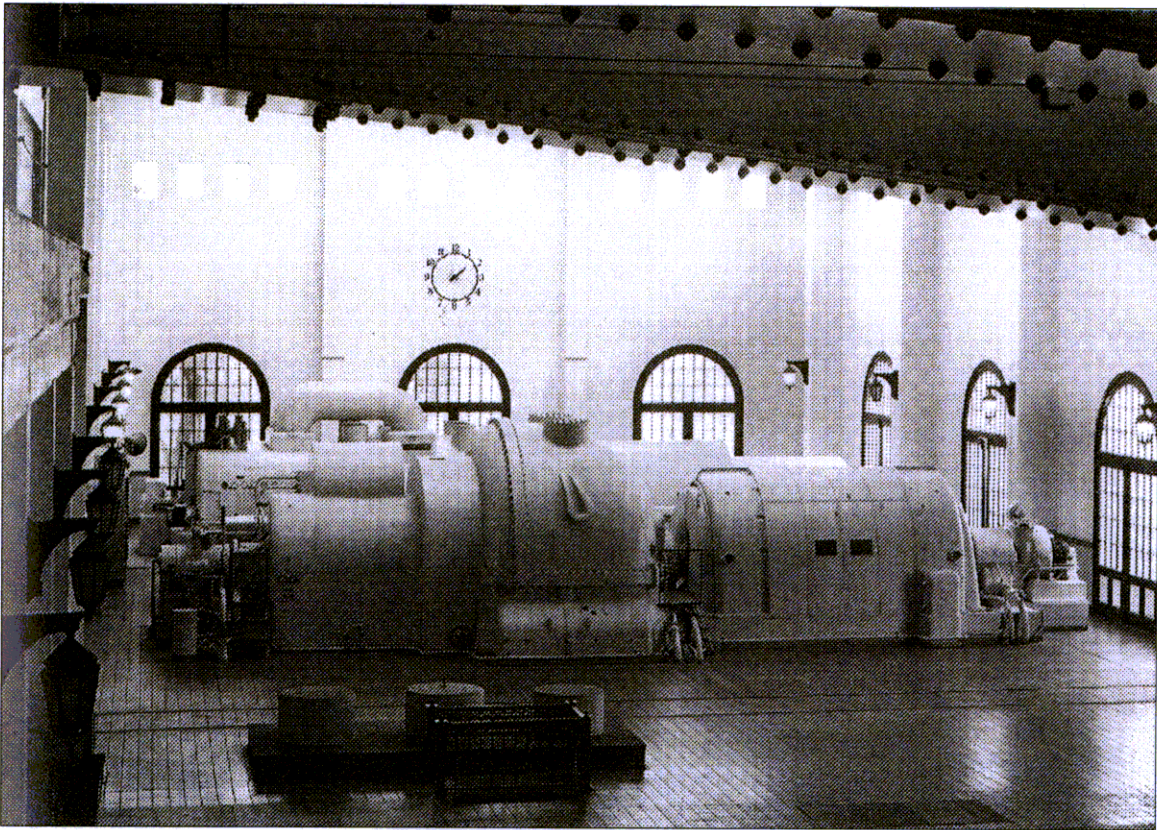


West elevation (date unknown)

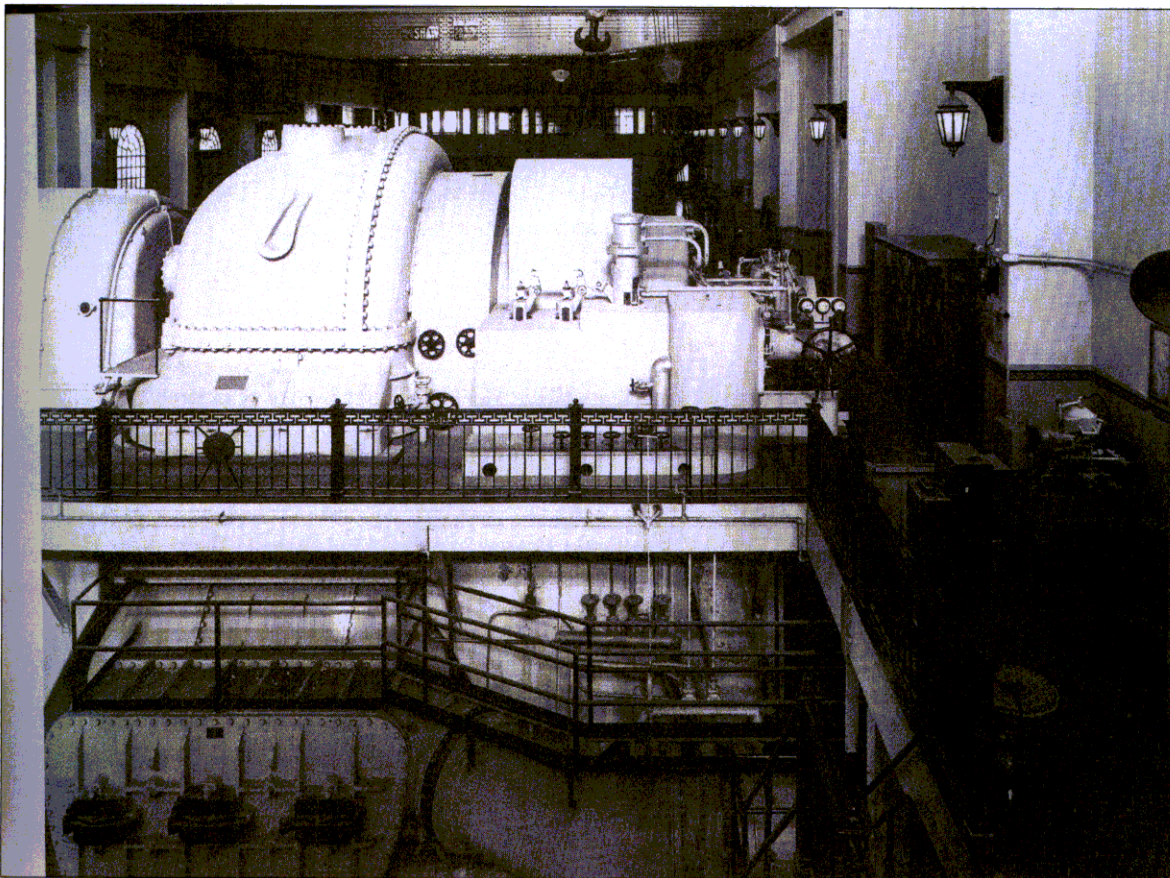


West elevation (current)

72 E. Glenarm Street: Glenarm Power Plant



Turbine Unit #8 (from east - 1932)



Turbine Unit #8 from west (1932)

72 E. Glenarm Street: Glenarm Power Plant

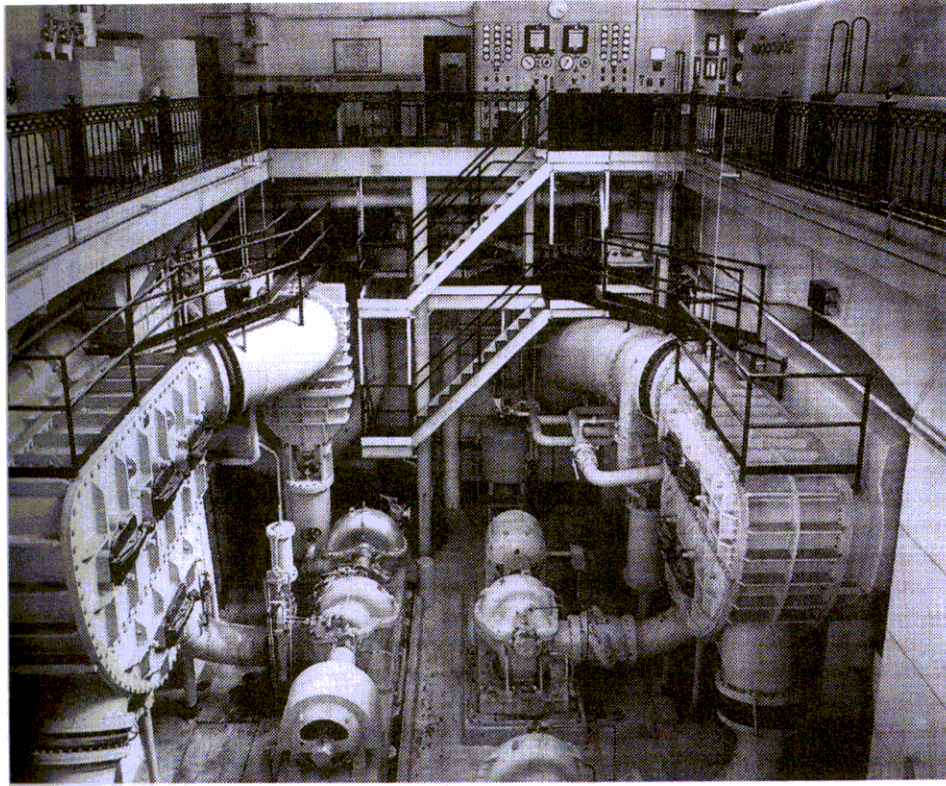


Turbine Unit 9 (current), clock and railing



Turbine Unit 8 (current)

72 E. Glenarm Street: Glenarm Power Plant

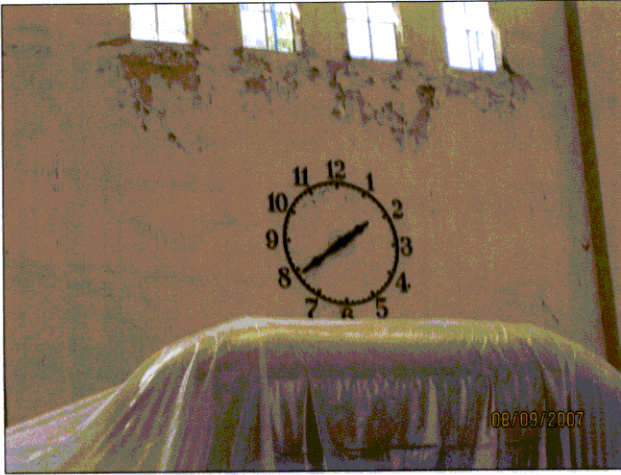


Mechanical well/condenser units from north (early 1950's)

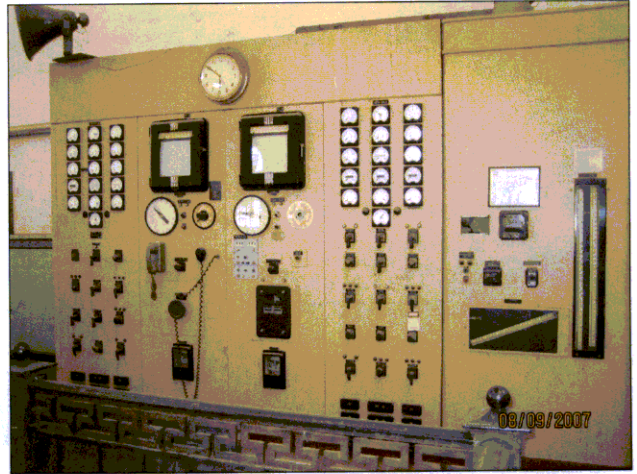


Mechanical well/condenser units (current)

72 E. Glenarm Street: Glenarm Power Plant



Turbine Hall clock detail



Turbine Hall control panel detail



Turbine Hall control panel detail



Turbine Hall tile detail



Easterly portion of Turbine hall



Turbine Hall tile and lamps

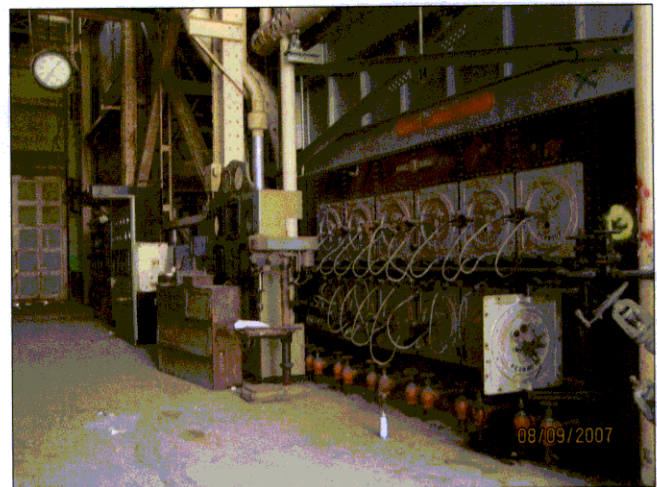
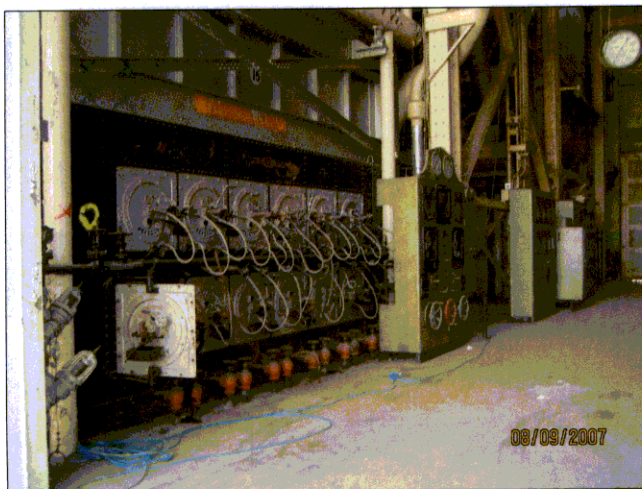
72 E. Glenarm Street: Glenarm Power Plant



Boiler Room hallway (east end – now empty)

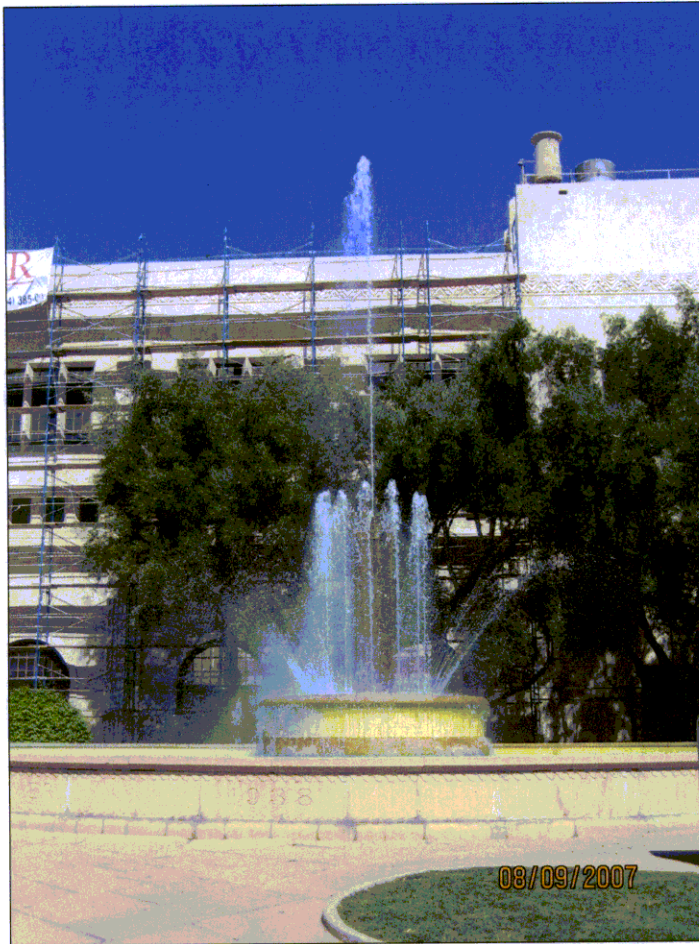


Boiler Room hallway (west end - current)



Boiler Room hallway/burner fronts

72 E. Glenarm Street: Glenarm Power Plant



Fountain



Close-up of fountain



Fountain perimeter wall detail



Fountain tile detail

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code 2S2

Page 1 of 5

Other Listings _____
Review Code _____ Reviewer Christy J. McAvoy Date _____

P1. Resource Identifier: GLENARM POWER PLANT

P2. Location: a. County Los Angeles and (Address and/or UTM Coordinates. Attach Location Map as required.)

b. Address 72 E GLENARM

City Pasadena

Zip _____

c. UTM: USGS Quad _____ (7.5'/15') Date _____; Zone _____, _____ mE/ _____ mN

d. Other Location Data (e.g., parcel #, legal description, directions to resources, additional UTM's, etc., when appropriate):

P3. Description Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries):

Rectangular in plan, this industrial building is constructed of unreinforced masonry and finished in stucco. It is comprised of a three-story Moderne style wing to the north, and a two-story French Neo Classical style wing to the south. The front facade of the primary northern wing, which has a flat roof, is divided into two similar bays. Regularly spaced pilasters and tripartite second and third floor fenestration are symmetrically arranged on the facade. This implied symmetry is broken, however, by differing features such as arched openings on the first floor of the eastern bay and the high parapet of the western bay. A grassy plaza with a large circular fountain at its center provides a formal path of travel to main entry doors in the eastern bay. A frieze of geometric ornament wraps the north wing directly below its parapet line. Several Dutch gabled roofs shelter (See continuation sheet)

P4. Resources Present: Building Structure Object Site District Element of District

P6. Date Constructed/Age:

Prehistoric Historic Both

1928 & 1932

P7. Owner and Address:

City of Pasadena

P8. Recorded by (Name, affiliation

and address): Christy J. McAvoy

Historic Resources Group

1728 N. Whitley Ave

Los Angeles, CA 90028

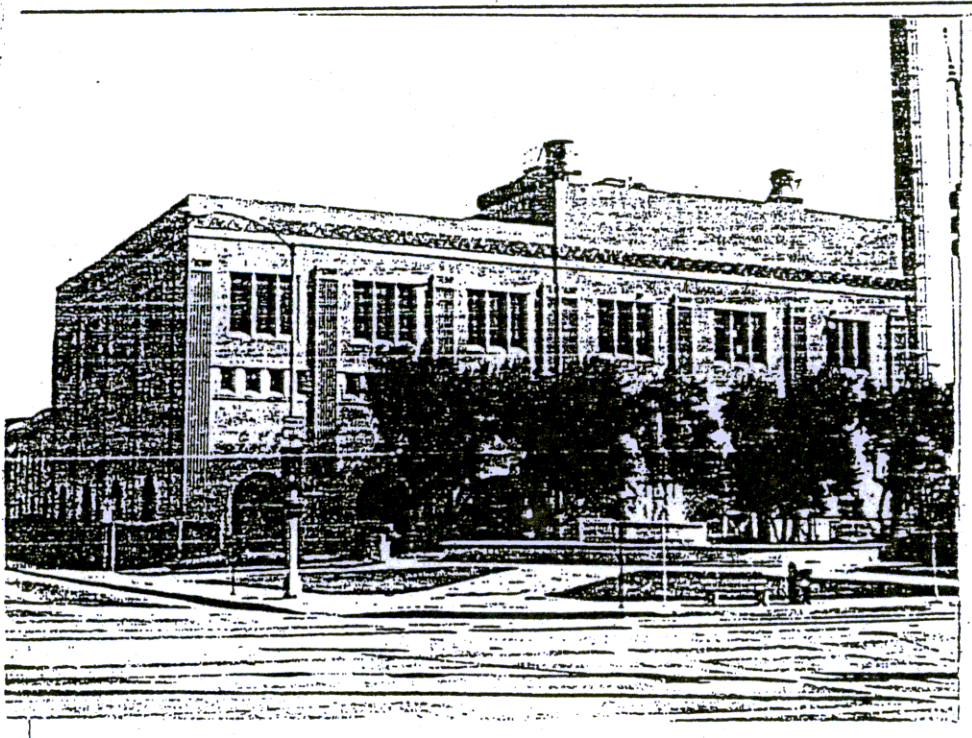
P9. Date Recorded: 10/9/95

P10. Type of Survey:

Intensive Other

Reconnaissance

Describe: Survey of earthquake damaged properties for purposes of Section 106 Review.



P11. Report Citation (Provide full citation or enter "none.):

1994 Northridge Earthquake Project Review

Attachments: NONE Map Sheet Continuation Sheet Building, Structure, and Object Record
 District Record Linear Resource Record Other (List): _____

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____

Continuation Update

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Resource Identifier: GLENARM POWER PLANT

(Continued from Primary Record, P3 Description)

the one-story southern wing. Its main facade is divided into bays by pilasters formed by multiple ashlar block masonry elements. Smaller ashlar blocks frame evenly spaced arched first floor and oriel second floor openings. Windows on all facades of the building are typically multilight metal casements.

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 3 of 5

- Resource Identifier: GLENARM POWER PLANT
- B2. Historic Name: Glenarm Steam Plant
- B3. Common Name: Glenarm Power Plant
- B4. Address: 72 E GLENARM
City: Pasadena County: Los Angeles Zip: _____
- B5. Zoning: _____ B6. Threats: Earthquake damage
- B7. Architectural Style: Moderne and French Neo Classical
- B8. Alterations and Date(s): 1950 Addition built on southwest corner of plant.

- B9. Moved? No Yes Unknown Date: _____ Original Location: _____
- B10. Related Features: 1938 Water Cooling Fountain designed by Harold H. Lewis

- B11. Architect: Unknown Bennett + Haskell b-permit Builder: Unknown

- B12. Historic Attributes (List attributes and codes):
HP09 Public Utility Building

- B13. Significance: Theme Community Development and Utilities Area Pasadena
Period of Significance _____ Property Type Power Plant Applicable Criteria A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope
Also address integrity.)

The Glenarm Power Plant is eligible for the National Register under Criterion A for its role in the growth of the City of Pasadena. As Pasadena grew, so did its need for electricity, and the Glenarm Power Plant, first erected in 1907 and expanded nine times until 1950, reflects the growing importance of this technology to the City.

The City of Pasadena was one of the first to develop its own electric plant. In 1904, the City contracted with the Edison Company for electricity for street lighting, but, unhappy with the quality of the service, Pasadena residents approved a bond issue and built the Glenarm Steam Plant in 1907. The Mission Revival style facility provided enough electricity that the City was able to terminate its contract with Edison and, in 1909, extend the utility to serve residential and commercial customers.

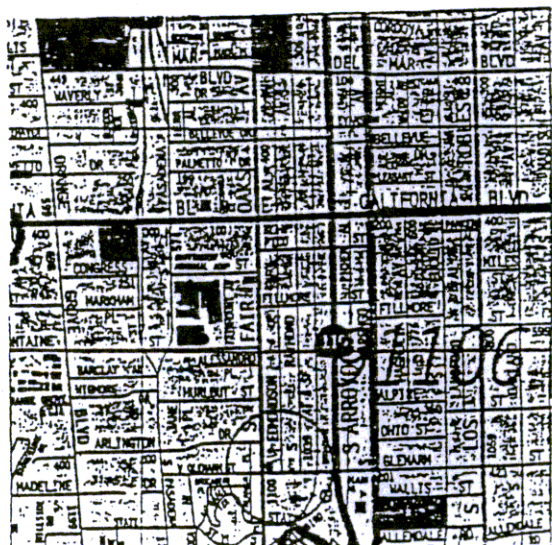
Although Pasadena's electricity rates were originally lower than Edison's, a rate war broke out between the competing utilities. Edison began offering lower rates to Pasadena customers, raising the rates in other areas to offset their losses. In response, Pasadena also dropped their rates, and customers began transferring to whichever utility (See continuation sheet)

- B14. References:
Annual Report of the Pasadena Municipal Light and Power Department, "50 Years of Service: 1906 - 1956."

(See continuation sheet)

- B15. Evaluator: Christy J. McAvoy
Date of Evaluation: 10/9/95

(Sketch Map with north arrow required.) N↑



(This space reserved for official comments)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____

Continuation Update

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Resource Identifier: GLENARM POWER PLANT

(Continued from Building, Structure and Object Record, B13 Significance)

had the least expensive rate. Some Pasadena residents had service from both utilities and used switches to shut off whichever service was more expensive at the time. However, many customers retained loyalty to their municipal service even in the face of higher rates.

Although many Edison executives and stockholders lived in Pasadena, their attempts at political influence were unsuccessful, and in 1914 former Pasadena City Attorney, Senator William J. Carr introduced a bill into the California legislature that made it illegal for Edison to charge discriminatory rates among cities. Unable to maintain their artificially low rates, in 1920 Edison sold its Pasadena business to the Pasadena Municipal Light and Power Department.

The Power Department continued to expand the capacity of Pasadena's utilities during this period and beyond. The City purchased Edison's facilities in Pasadena when it bought out the private utility. Electric service became important in the growth of industry, requiring systems to be run during the daytime as well as the night. The Pasadena Municipal Light and Power Department installed five generators between 1907 and 1920 to meet the needs of the City. In 1924, an addition was built onto the western facade of the original Glenarm Steam Plant to house another Generating Unit. In 1928, a steam turbine generator was added, requiring yet another addition on the western facade of the plant. This is the oldest section of the building still extant today.

The Pasadena Municipal Light and Power Department was responsible for some innovation during the period between the two world wars. In 1929, the Rose Bowl stadium was among the first stadiums to have lights installed to make night football possible. In 1938, a decorative fountain was built at the northwest corner of the Glenarm Power Plant site. The water circulating through this fountain was used to provide cooling water for the plant. Although not now used for this purpose, the Department plans its reactivation to help cool the air-conditioning for the current Dispatch Center across the street.

In 1932 yet another addition was built to house the eighth generating unit. Up until this date, the demand for electricity had continued to grow as the City grew, but from 1932 to 1936, growth halted due to the Depression, although consumption never dropped. The Department continued its expansion and construction during this period, allowing people unemployed due to the Depression to work two weeks at a time to pay off their light bills and to earn income for food and housing. This allowed the utility to meet the resurgence of demand that accompanied the changeover to a war-time economy.

The end of World War II predicated another growth spurt in Pasadena, leading to higher demand for electricity. In 1950, the ninth and last generator was added to the Glenarm Power Plant, with an addition built to house this generator on the south of the 1932 section. The 1907 and 1924 portions of the building were demolished sometime after 1960, leaving only the 1928, 1932 and 1950 additions.

The history of the Glenarm Power Plant building reflects the growing importance of electricity after the turn of the century, both to the City of Pasadena and elsewhere. Although the earliest sections of the building are no longer extant, the portion of the structure that remains indicates the importance of the utility in the City and evokes its period of growth and expansion.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____

Continuation Update

Page 5 of 5

Resource Identifier: GLENARM POWER PLANT

(Continued from Building, Structure and Object Report, B14 References)

Cartmell, A.W. "Thumbnail Historical Sketch of the Pasadena Municipal Light & Power Department" from a Pasadena Light and Power Department brochure dated 1960.

Scheid, Ann. Pasadena: Crown of the Valley (Pasadena: Windsor Publications, Inc.), 1986.