

B-1032

Baltimore Gas & Electric Spring Gardens Station

Architectural Survey File

This is the architectural survey file for this MIHP record. The survey file is organized reverse-chronological (that is, with the latest material on top). It contains all MIHP inventory forms, National Register nomination forms, determinations of eligibility (DOE) forms, and accompanying documentation such as photographs and maps.

Users should be aware that additional undigitized material about this property may be found in on-site architectural reports, copies of HABS/HAER or other documentation, drawings, and the “vertical files” at the MHT Library in Crownsville. The vertical files may include newspaper clippings, field notes, draft versions of forms and architectural reports, photographs, maps, and drawings. Researchers who need a thorough understanding of this property should plan to visit the MHT Library as part of their research project; look at the MHT web site (mht.maryland.gov) for details about how to make an appointment.

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Last Updated: 03-10-2011

Baltimore Gas & Electric Spring Gardens Station
(B-1032)
Baltimore City, Md.
private, 1855

Statement of Significance

The Spring Gardens Station of the Baltimore Gas & Electric Company was the primary gas manufacturing plant for the city of Baltimore. It was built in 1855 to produce coal gas, and converted to water gas in 1886. The plant remained the primary source of gas in Baltimore until 1950, when natural gas was brought to the city by pipeline from Texas. Spring Gardens was converted to produce oil gas and was used to relieve peak demands and any interruptions in pipeline service. The station is still in use today.

Maryland Historical Trust

State Historic Sites Inventory Form

1. Name (indicate preferred name)

historic

and/or common Baltimore Gas & Electric Spring Gardens Station

2. Location

street & number Leadenhall Street

☐ not for publication

city, town Baltimore

☐ vicinity of

congressional district

state Maryland

county

3. Classification

Category	Ownership	Status	Present Use	
☐ district	☐ public	☒ occupied	☐ agriculture	☐ museum
☐ building(s)	☒ private	☐ unoccupied	☐ commercial	☐ park
☐ structure	☐ both	☐ work in progress	☐ educational	☐ private residence
☐ site	Public Acquisition	Accessible	☐ entertainment	☐ religious
☐ object	☐ in process	☐ yes: restricted	☐ government	☐ scientific
	☐ being considered	☐ yes: unrestricted	☐ industrial	☐ transportation
	☐ not applicable	☐ no	☐ military	☐ other:

4. Owner of Property (give names and mailing addresses of all owners)

name Baltimore Gas & Electric Company

street & number P.O. Box 1475

telephone no.: 234-5000

city, town Baltimore

state and zip code Maryland 21203

5. Location of Legal Description

courthouse, registry of deeds, etc. Baltimore City Courthouse

liber JFC 1486

street & number Fayette and Calvert Streets

folio 252

city, town Baltimore

state Maryland

6. Representation in Existing Historical Surveys

none

date

☐ federal ☐ state ☐ county ☐ local

depository for survey records

city, town

state

7. Description

Survey No. B-1032

Condition

☐ excellent
☐ good
☐ fair

☐ deteriorated
☐ ruins
☐ unexposed

Check one

☐ unaltered
☐ altered

Check one

☐ original site
☐ moved date of move _____

Prepare both a summary paragraph and a general description of the resource and its various elements as it exists today.

Several structures still remain from the first gas manufacturing installation on this site, providing a good record of the scale of gas-making operations in the mid-nineteenth century. Although none of the original machinery remains many of the structures remain virtually unaltered. Because of the ready availability of excellent coking coal in Baltimore, the Spring Gardens Plant continued to make gas well into the twentieth century.

The nucleus of the gas-making operation at Spring Garden was the large stone masonry structure which housed the retorts. Built in 1869, it was spurred by the post Civil War expansion of the city and a boom in the demand for gas. The Retort House is a high one-story building where semi-bituminous coal from the mines of Western Maryland and West Virginia was partially combusted to drive off the volatile gasses. This was performed in retorts, large furnances in which the air could be controlled to produce a minimum of burn and a maximum of gas. The building is ten bays long and three bays wide except for the western three bays which form an el, projected two additional bays south. Its roof has been drastically altered, the original now replaced by a flat roof.

A small group of buildings east of the Retort House formed an early complex composed of an office, a machine shop, and a valve house. The scale of these structures indicates a much smaller level of activity prior to about 1860. The most unusual of these is the small valve house. This octagonal brick structure sheltered the valve stems which protruded from the ground and which controlled the direction of gas flow from the producer retorts to the storage tanks and the street mains. Nearby was the small office structure consisting of a central mass and two flanking wings. A semi-circular arch surmounts its central doorway and transom light. All three bays of the facade are framed by heavy brick corbelling. Adjacent to the offices is a shop building which formerly housed the machine shop. This brick masonry building is a high one-story structure with a steep gable roof surmounted by two smoke monitors. On the interior, the machine shop is divided in half by a brick wall. The section adjacent to the offices housed the machinery while the eastern half housed a boiler and a small steam engine to power the shop. The roof of the shop is supported by a wooden truss. The original gas producer building to the south and the holders on the north have been demolished.

Several other structures dating from the late nineteenth century include the laboratory building and the present machine shop structures. The laboratory building is east of the old machine shop. Its function was to test the quality and purity of the gas as it passed

8. Significance

Survey No. B-1032

Period	Areas of Significance—Check and justify below			
☐ prehistoric	☐ archeology-prehistoric	☐ community planning	☐ landscape architecture	☐ religion
☐ 1400–1499	☐ archeology-historic	☐ conservation	☐ law	☐ science
☐ 1500–1599	☐ agriculture	☐ economics	☐ literature	☐ sculpture
☐ 1600–1699	☒ architecture	☐ education	☐ military	☐ social/
☐ 1700–1799	☐ art	☐ engineering	☐ music	☐ humanitarian
☒ 1800–1899	☐ commerce	☐ exploration/settlement	☐ philosophy	☐ theater
☐ 1900–	☐ communications	☒ industry	☐ politics/government	☐ transportation
		☐ invention		☐ other (specify)

Specific dates	1855	Builder/Architect
check: Applicable Criteria:	☐ A ☐ B ☐ C ☐ D	
and/or		
Applicable Exception:	☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G	
Level of Significance:	☐ national ☐ state ☐ local	

Prepare both a summary paragraph of significance and a general statement of history and support.

The Spring Gardens Station of the Baltimore Gas and Electric Company was the primary gas manufacturing plant for the city of Baltimore. It was built in 1855 to produce coal gas, and converted to produce water gas in 1886. The plant remained the primary source of gas in Baltimore until 1950, when natural gas was brought to the city by pipelines from Texas. Spring Gardens was converted to produce oil gas and was used to relieve peak loads and any interruptions in pipeline service. The station is still in use today.

The Gas Light Company of Baltimore was formed in 1817, making Baltimore the first city outside of England to be lit by gas. To meet the growing demand for gas and to prepare for future increases in demand, in 1855 the company purchased a 9¼ acre site at Spring Gardens to produce and store coal gas. The plant soon became the primary station for producing gas in Baltimore. The plant was converted to the production of water gas in 1886. In 1902, the company began to enrich the water gas by vaporizing oil in the gas. Also, in 1902 the plant was expanded to produce 10,000,000 cubic feet per day. It was expanded again in 1911 to produce 18,000,000 cubic feet per day and a 6,000,000 cubic foot storage tank was built. When Baltimore changed to natural gas piped in from Texas in 1950, the plant was converted once again to produce oil gas in order to relieve peak demands on the pipeline and to provide temporary service during interruptions in the pipeline supply. The Spring Gardens Station is still in use by the Baltimore Gas & Electric Company 128 years after its initial construction.

9. Major Bibliographical References

Survey No. B-1032

The Gas Distribution Department 1916

A History of Consolidated Gas Electric Light & Power Co. of Balto. 1950

10. Geographical Data

Acreage of nominated property _____

Quadrangle name _____

Quadrangle scale _____

UTM References do NOT complete UTM references

A

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Zone Easting Northing

B

--	--	--	--	--	--	--	--	--	--

Zone Easting Northing

C

--	--	--	--	--	--	--	--	--	--

D

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E

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F

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G

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H

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Verbal boundary description and justification

List all states and counties for properties overlapping state or county boundaries

state	code	county	code
-------	------	--------	------

state	code	county	code
-------	------	--------	------

11. Form Prepared By

name/title Kevin Dolan , intern Dennis Zembala, director

organization Baltimore Museum of Industry date 5/83

street & number 1415 Key Highway telephone 727-4808

city or town Baltimore state Maryland

The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to: Maryland Historical Trust
Shaw House
21 State Circle
Annapolis, Maryland 21401
(301) 269-2438

Spring Gardens
B-1032
Baltimore City

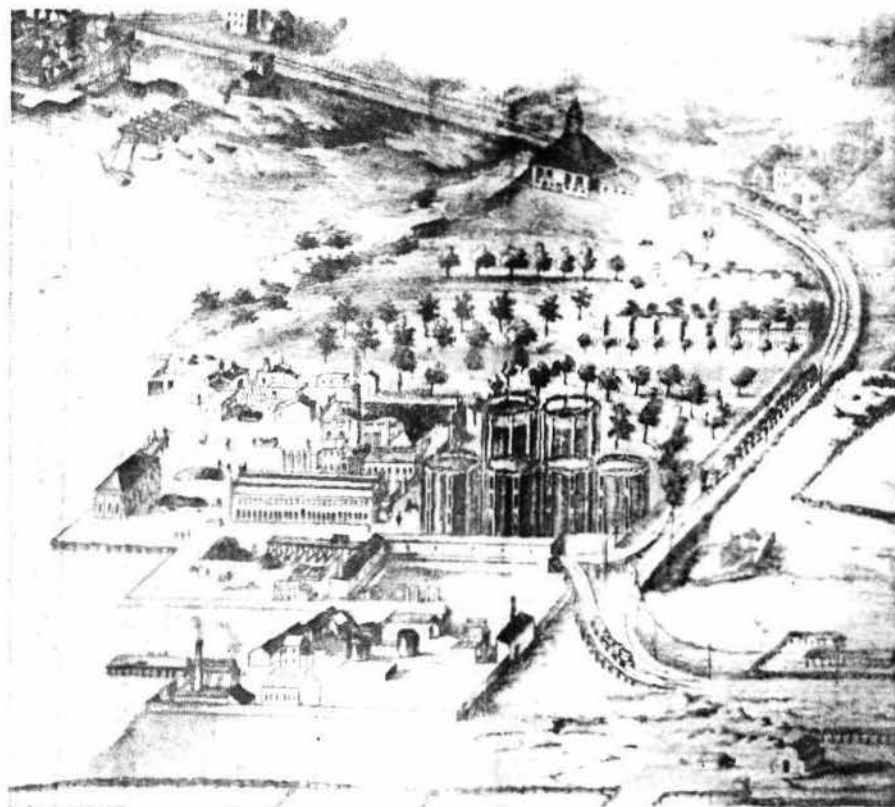
7. DESCRIPTION (con't.)

into the street mains. Its brick masonry walls support a gabled roof with a ventilation cupola in the center, all carried on a light riveted metal truss. The machine shop complex is comprised of three structures, two of about the same date. These lie at right angles to each other and the one whose facade faces east has an elaborate parapet wall. This is a one and a half story building which housed the shop offices. Its roof is supported on an unusual light metal truss composed of all wrought iron rods. The second structure is a single story with a small shed addition on the west. This structure has a Fink tricomposite truss, c.1870, supporting the roof. Invented in Baltimore by Albert Fink in 1852, this is one of a handful of early examples of a type which later became a standard in metal. The top chord is timber, compression members of cast iron and tension members of wrought iron. The last building in this group is an unusual structure in that its roof is a heavy iron plate water tank. The western end of this structure is the former engine room for the machine shops. It is a high one story probably built to contain the steam engine and/or boiler which the roof tank served. The eastern half of this building is two stories supported on heavy, square cast iron columns with chamfered corners.

South of the machine shop complex is another early structure which was added to increase the gas-making capacity of the plant about 1885. This is a long one-story brick structure with Fink tricomposite trusses as well. The building is a high story with two windows in each bay, one at the lower level with a semi-circular arched top and a smaller square window above. Most of the openings have been bricked up.

Finally, the new valve house, built in 1916 make the beginning of the modern era at Spring Garden. This structure has a high gabled roof supported by a riveted, all-steel Fink truss. It shelters the valve stems of multiple giant gas mains leading to and from the nearby gas holders.

The gas holders themselves are still in use though built at the same time. These were built by the firm of Bartlett and Hayward, a Baltimore machine shop which helped pioneer the gas holder and other gas and electric utility equipment. The present holders represent the third generation of such structures. They are telescoping cylinders whose base section rests in a tank of water. As they fill with gas succeeding sections rise inside the base each sealed to the next by a ring of water.



1556 *An Early View of the Spring Gardens Gas Works*

the holder was torn down, but the buildings were used as headquarters for the Company's Street Department until 1905.

Although the Company had issued additional stock to cover part of the cost of the new plant on Spring Gardens, the annual dividend rate was increased to nine percent in 1856, and one year later it was raised to ten percent. The Company, however, shared its new-found prosperity with the consumers, for the price of gas was reduced ten percent. This gave a rate of \$2.70 per 1,000 cubic feet.

The indications of handsome profits earned by the Gas Company very naturally attracted widespread attention, and ambitious promoters, anxious to get into the business, were not wanting. In 1858 James Wheedon attempted to secure franchise rights. However, the City Council refused to grant him the necessary powers. Although the Council turned down this offer of competition, and was unwilling to erect a municipal plant, it appears to have been dissatisfied with the service rendered by the Company. In 1859 the municipality offered a plan de-

signed to be beneficial to be of the plan were as follows each year in laying mains. If, in the future, any other and City Council to use the had already laid its mains, the cost of all mains laid by

If the City at some future direction, it was agreed that the attachment (for other than the future pay \$18 for a sum of such deductions shall be the mains. According to the be made effective could be opened, the actual cost of refunds for attachments, s

The Company accepted embodied in an ordinance this meeting of the minds and the Company would, competition and, no doubt creased assurance.

Although the agreement almost to grant a monopoly when it provided for the a few months later that a persistent James C. Wheedon latitude a charter for the Wheedon's earlier failure does not seem to have in common with citizens else could be supplied more related, company than by a prejudice against monopoly when a competitor attempt

The Gas Light Company will enlarge its plants and extend its system. An amendment to its charter has been passed, which has increased from \$550,000 to \$1,000,000 the task of securing a charter for a new gas company. The legislative committee has also passed a resolution to

Thomas King, Consolidated of Baltimore, 1916-1950
(Balto. Md, 1950)

1. SITE I.D. NO

8-1032

HAER INVENTORY

Historic American Engineering Record
Department of the Interior, Washington, D.C. 20240

2. INDUSTRIAL CLASSIFICATION

Utilities / Manufacturing

3. PRIORITY

4. DANGER OF DEMOLITION?
(SPECIFY THREAT)☐ YES ☒ NO ☐ UNKNOWN

5. DATE

1855

6. GOVT SOURCE OF THREAT

OWNER

ADMIN

7. OWNER/ADMIN

Baltimore Gas & Electric Co.

8. NAME(S) OF STRUCTURE

Baltimore Gas & Electric Spring Gardens Station

9. OWNER'S ADDRESS

Box 1475

10. STATE
COUNTY

M D

COUNTY NAME

CITY/VICINITY

Baltimore

CONG
DIST

3

STATE
COUNTY

M D

COUNTY NAME

CITY/VICINITY

Baltimore

CONG
DIST

11. SITE ADDRESS (STREET & NO.)

Leadenhall Street

12. EXISTING
SURVEYS☐ NR☐ NHL☐ HABS☐ HAER-I☐ HAER☐ NPS☐ CLS☐ CONF☐ STATE☐ COUNTY☐ LOCAL☐ OTHER

13. SPECIAL FEATURES (DESCRIBE BELOW)

☐ INTERIOR INTACT☒ EXTERIOR INTACT☐ ENVIRONS INTACT

14. UTM ZONE

EASTING

NORTHING

SIGN

SCALE

☒ 1:24☐ 1:62.5QUAD
NAME☐ OTHER

UTM ZONE

EASTING

NORTHING

SIGN

SCALE

☐ 1:24☐ 1:62.5QUAD
NAME☐ OTHER

15. CONDITION

70 ☐ EXCELLENT71 ☒ GOOD72 ☐ FAIR73 ☐ DETERIORATED74 ☐ RUINS75 ☐ UNEXPOSED76 ☐ ALTERED82 ☐ DESTROYED85 ☐ DEMOLISHED

16. INVENTORIED BY

~~XXXXXXXXXX~~ Kevin Dolan, Dennis Zembala

AFFILIATION

Balto. Museum of Industry

DATE

5/83

17. DESCRIPTION AND BACKGROUND HISTORY, INCLUDING CONSTRUCTION DATE(S), HISTORICAL DATE(S), PHYSICAL DIMENSIONS,
MATERIALS, EXISTANT EQUIPMENT, AND IMPORTANT BUILDERS, ENGINEERS, ETC.

see attached

(CONT. OVER)

18. ORIGINAL USE

Gas producer plant

PRESENT USE

Utilities Station

ADAPTIVE USE

19. REFERENCES—HISTORICAL REFERENCES, PERSONAL CONTACTS, AND/OR OTHER

The Gas Distribution Department 1916

A History of Consolidated Gas Electric Light & Power Co. of ~~Marble~~ Baltimore 1950

(CONT. OVER)

20. URBAN AREA 50,000
POP. OR MORE?☒ YES ☐ NO

21. NPS REGION

22. PUBLIC ACCESSIBILITY

☒ YES LIMITED☐ YES UNLIMITED☐ NO☐ UNKNOWN23. EDITOR
INDEXER

24. LOCATED IN AN HISTORIC DISTRICT?

☐ YES☒ NO

NAME

DISTRICT I.D. NO

W. CLEMENT

988

989

W. Chapman

COAL YARD

990

991

W. FORT

Condemned

999

1000

1001

W. RANDALL

CONSOLIDATED

1010

GAS

C. O.

W. HEATH

Consolidated Gas Company

1018

1019

S. SHARP

LEADENHALL

W. BARNEY

BALTIMORE
COAL-TAR MANUFACTURING
COMPANY

1026

Consolidated Gas Company

1027

CHEMICAL & PHOSPHATE WORKS
Stinglitz & Company

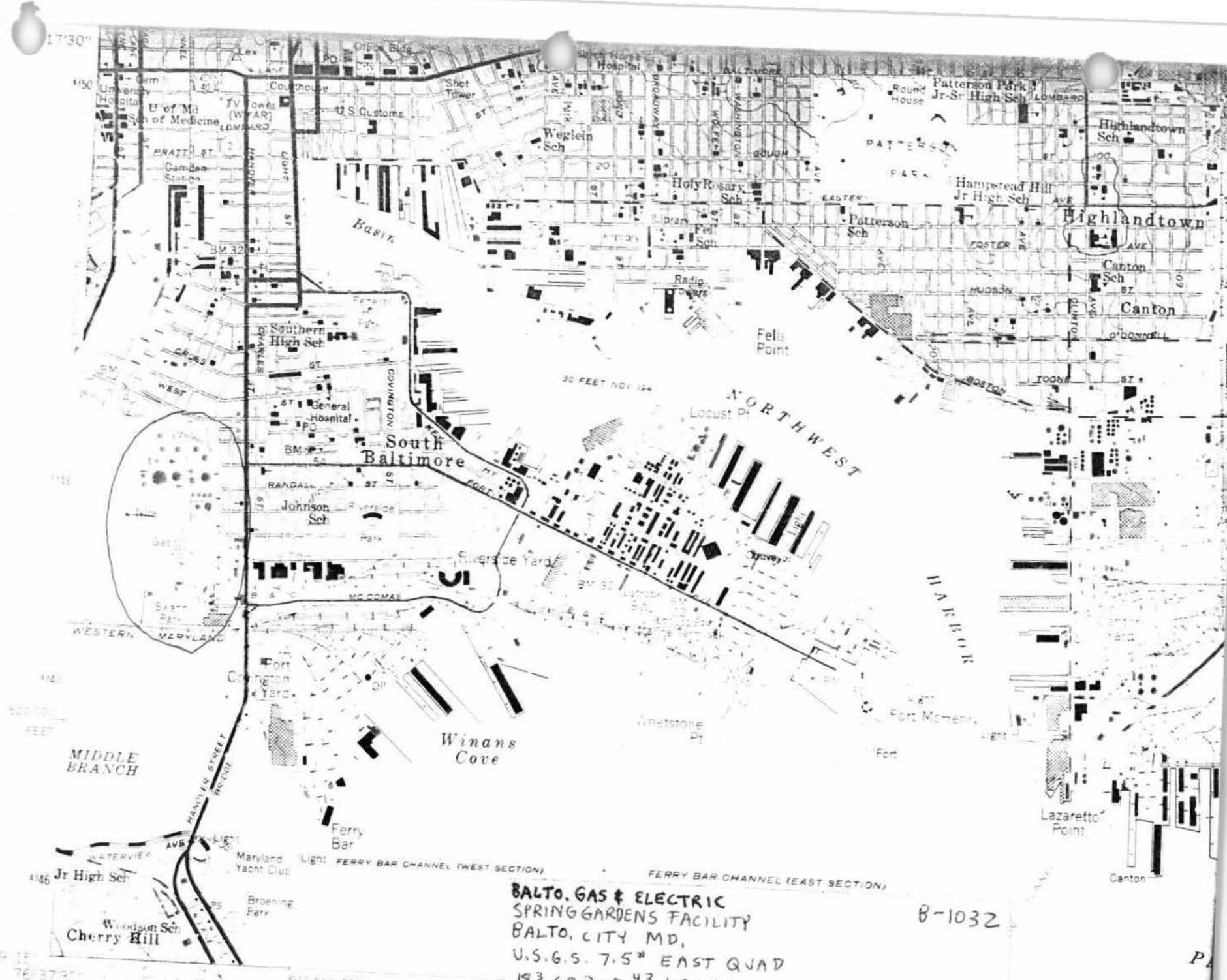
W. WELLS

RACE

B-1032

BALTIMORE GAS & ELECTRIC
SPRING GARDENS FACILITY
Baltimore City, Md.

1896 Bromley Atlas



BALTO. GAS & ELECTRIC
SPRING GARDENS FACILITY
BALTO. CITY MD.
U.S.G.S. 7.5" EAST QUAD
18° 60' 31.0" 43° 48' 16.0"

B-1032

Mapped by the Army Map Service
Edited and published by the Geological Survey
Controlled by USGS, USN, and USMC

CURTIS BAY
5662 II NE
SCALE 1:240



B-1032

ing Gardens STATION
r Liebhold Balt. City MD
machine shop, 5/83
Looking south

B-1032

Spring Gardens Station
Baltimore City, MD
Peter Liebhold, 5/83
old Machine Shop,
Looking south



B-1032

Spring Gardens Station

Peter Liebhold Baltimore, MD 5/83

Old machine shop, looking south-west



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SPRING GARDENS STATION

Peter Liebhold Balt. City, MD 5/63

OLD machine shop, south + west facades



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Spring Gardens Station

Peter Liebhold Balr. City, MD 5/83

Old Machine Shop, looking north-east

B-1032

Spring Gardens Station

Baltimore City, MD

Peter Liebhold, 5/83

Old Machine Shop, looking northeast



SPRING GARDENS STATION

Peter Liebhold Balt. City, MD

OLD MACHINE SHOP 5/83 (Roof truss
detail)

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16 GARDENS STATION

Liebhold Bal. City, MD

MACHINE SHOP

5/83 (Detail -
Roof truss)

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Spring Gardens Station

Peter Liebhold, 5/83

Baltimore City, MD

Old Machine Shop

Detail - Roof TRUSS

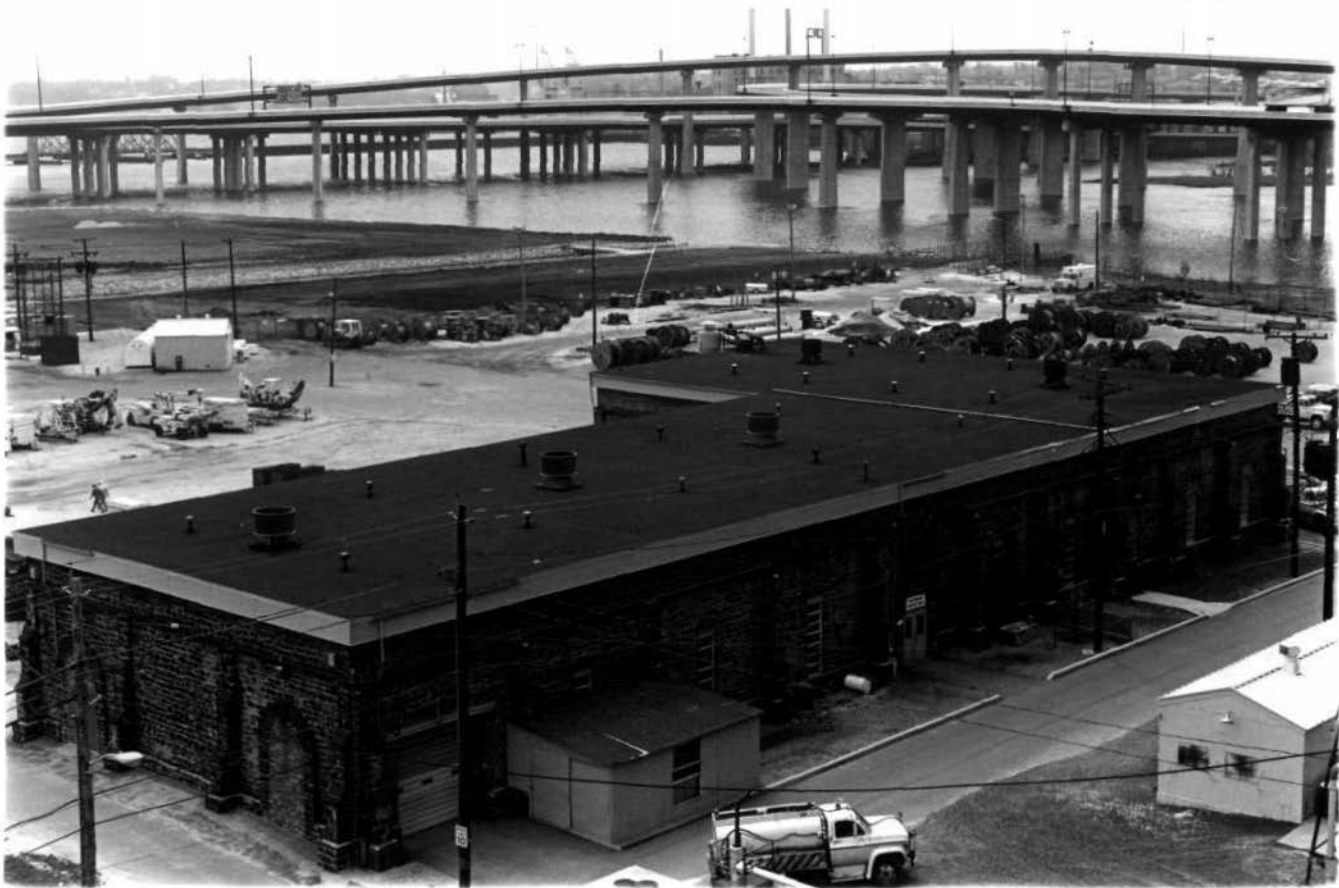


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SPRING GARDENS STATION

Peter Liebhold Balt. City MD. 5/83

Early coal gas plant, looking south-west



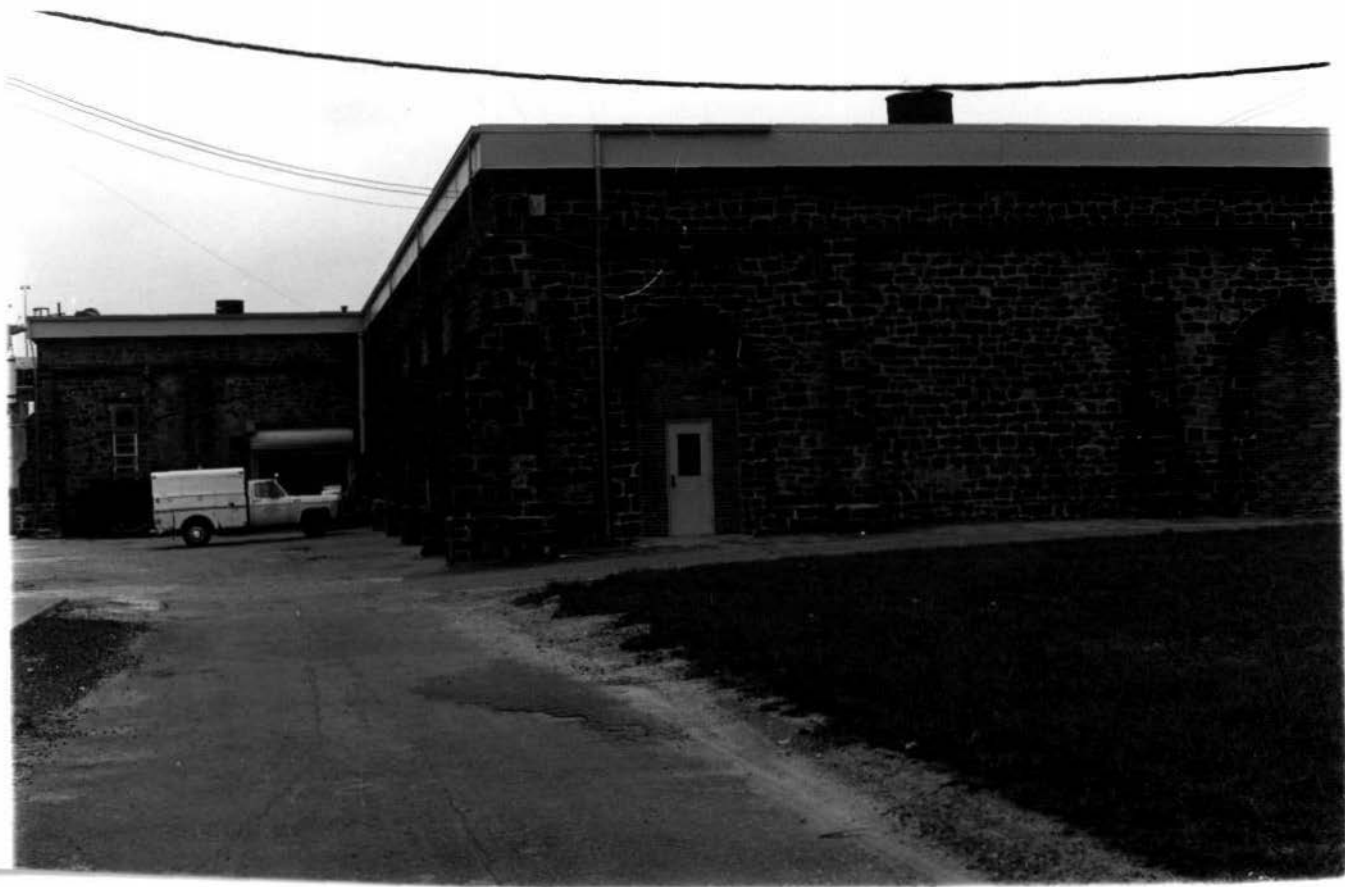
B-1032

Spring Gardens STATION

Peter Liebhold BALT. CITY, MD

5/83

OLD GAS GENERATING Building, looking south-west



SPRING GARDENS STATION
Peter Liebhold BALR. City, MD
OLD GAS GENERATING Building. 5/83
looking north-west

B-1032
Spring Gardens Station
Baltimore City, MD
Peter Liebhold, 5/83
old Gas Generating Building
Looking northwest

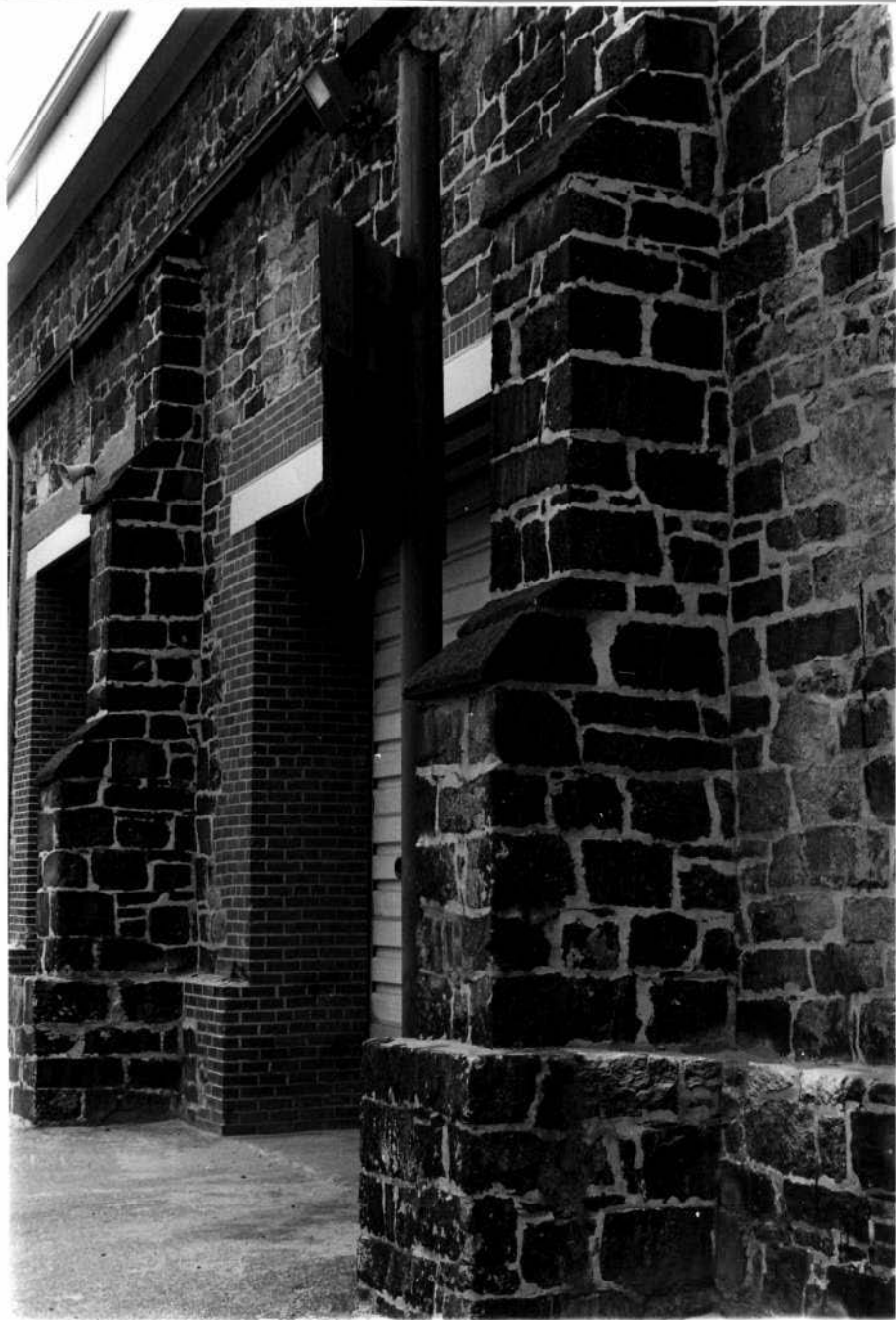


B-1032

Spring Gardens Station

Peter Liebhold Balt. City MD 5/83

Old Gas Generating Building, looking north-east



B-1032

Spring Gardens Station

Baltimore City, MD

Peter Liebhold, 5/83

Old gas generating building.

buttress detail, south facade

B-1032

Spring Gardens Station
P. Liebhold Baltimore City MD
Gas Generating Building
Detail, South facade 5/83



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Spring Gardens Station

Peter Liebold Balt. City, MD (Detail -
Corner Stone)

Old Gas Generating Building 5783

North-east corner



B-1032

SPRING GARDENS STATION
PETER Liebhold BALT. CITY, MD 5/83
VALVE HOUSE (NEW), South facade



B-1032

Spring Gardens STATION

Peter Liebhold BAL. CITY, MD
5/83

VALVE HOUSE (NEW), looking east

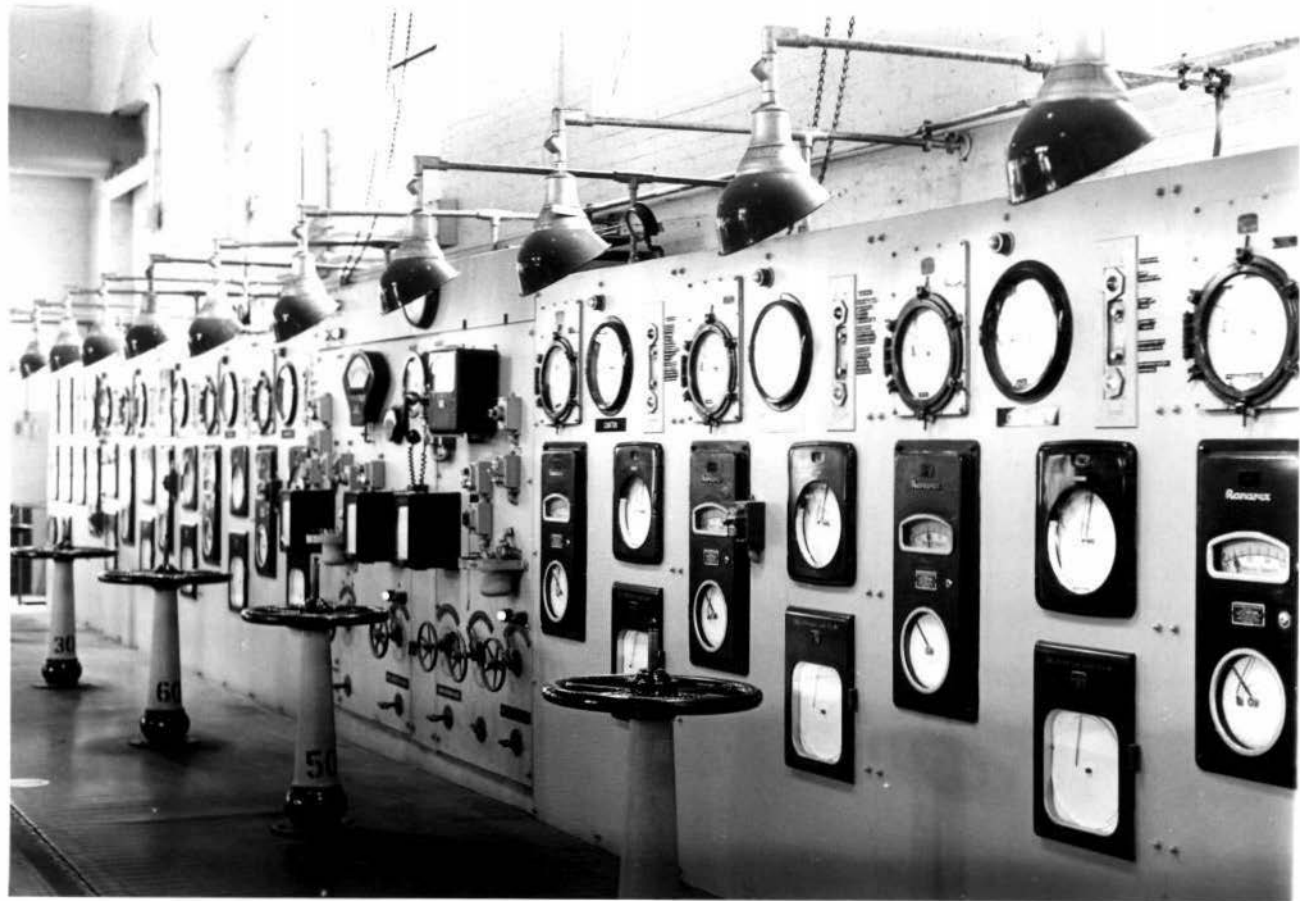


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Spring Gardens Station

Peter Liebhold Baltimore MD

Valve House (NEW) 5/83 Roof + truss system



B-1032

Spring Gardens STATION

Peter Lich hold BALT. City MD

VALVE House (NEW) 5/93

Control Board
detail



B-1032

ing Gardens Station
er Liebhold BALT. CITY, MD 5/83

VALVE House & LABORATORY Building, ^{looking} S.E.

B-1032

Spring Gardens Station

Baltimore City, MD

Peter Liebhold, 5/83

Old Valve House & Laboratory Building,

Looking southeast



B-1032

Spring Gardens Station

Peter Liebhold Balto. City, MD

Old Valve House & Laboratory Building 5/83

Looking South - east



B-1032

SPRING GARDENS STATION

PETER LIEBHOLD BALR. CITY, MD

5/83

OLD VAIVE HOUSE, looking east



B-1032

Spring Garden Station

Peter Liebhold Baltimore, MD

Old Valve House ceiling 5/83



B-1032

Spring Gardens Station

Peter Liebhold Balt. City MD 5/83

Laboratory Building, looking south-west



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Spring Gardens Station
Peter Liebhold BALT. City MD
Laboratory Building 5/83 (detail - roof
support system)

B-1032

Spring Gardens Station

Baltimore City, MD

Peter Liebhold, 5/83

Laboratory Building

Detail - roof support system



THE
BARTLETT HAYWARD CO.
BALTIMORE, MD.
ERECTED-1919

B-1032

Spring Gardens Station
Peter Liebhold BALT. CITY MD
Gas holder (maker's plate) 5/83



B-1032

6 GARDENS STATION
Liebhold BALT. CITY MD
Holden 5/83 (Detail)

This Side Up ↓

B-1032
Spring Gardens Station
Baltimore City, MD
Peter Liebhold, 5/83
Gas holder, detail