

Perspectives No. 13

DON'T FORGET THE SANBORN MAPS

Carefully and Artfully-Compiled Historic Plat Maps of America's Cities: 1867-1992

by Allen W. Hatheway

A column dedicated to the belief that mature engineering geologists, in addition to possessing a thorough knowledge of fundamental science, should have up-to-date perspectives on the application of their technology.

Any engineering geologist who has made use of Sanborn Insurance Maps is a believer in these first-rate historic plat maps of America's cities. Over the years of using the maps a number of questions have come to mind and I recently resolved to seek the answers. Here is what I have learned over the years and what I have recently found out about the maps.

As seen in the string of four associated figures, showing the time-changed layout of a gas works in the Midwest (established 1856, deactivated 96 years later, in 1952) the entire history of a suspected or known uncontrolled hazardous waste site (UHWS) can be effectively summarized in a collection of these drawings. The maps provide us with labels, locations, and outlines of various stand-alone components of industrial facilities, as well as some of the underground utilities servicing the plant site. How fortunate we are to have such fine records of the past nature of facilities that now occupy our efforts in environmental assessments and hazardous waste site remediation. For most cases in point, the standard of practice is now such that an effort should be made to secure an image of each edition or revision of the Sanborn maps depicting the subject site.

Fire insurance maps appear to have originated within the city of London, England, in response to a growing late-18th century need of insurance companies to visually assess the nature of construction, activity of occupant, and condition and situation of a property's surroundings. All of this information then, as now, is required in order to develop the cost of insurance coverage. British insurance companies early-on

solved the data-collection need by sending agents out to inspect and interview at the property. Later the companies began drawing their own plat maps of the neighborhoods in which they were offering coverage. At the time there was no affordable technology to print maps for sale to other insurance companies and, therefore, the companies all had to develop their own maps.

Eventually (about 1815), the technology of lithographic printing of maps and charts (using our old friend, Germany's Solenhofen Limestone) became affordable and companies sprang up that would underwrite the cost of map

compilation and to offer the same maps to all purchasers, for a fee. Fire insurance map companies also were formed in the United States, though little has been done to compile their products, except for those of one D. A. Sanborn, a land surveyor from Somerville, Mass.

Sanborn is believed to have become employed by the Aetna Fire Insurance Company in the 1850s or early 1860s, probably first in Boston, and later in New York City. It was in New York City that Sanborn founded, in 1867, his D. A. Sanborn National Insurance Diagram Bureau. His company flourished, moving south and west in its mapping

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and returning to each city at nominal ten to 15-year intervals to compile updates of the maps. By Sanborn's death in 1883, his company had progressed through the longitude of Iowa and Missouri. His surviving partners, on his death, chose to bring into the company William Perris and Henry Browne, and the company became the Sanborn Perris Map Company, Ltd., on the march west.

By 1910 the company had reached the west coast and in 1916 it absorbed the last remaining competitor, the Hexamer Company. By 1939 the company reached its peak number of cities mapped, over 12,000 according to the count of the present company and more than 13,000 U.S. towns and cities by count of *Fortune Magazine* (1937).

Geographers were alerted to the inherent value of Sanborn Maps by Robert B. Lamb in 1961. Engineering geologists working in larger, more eastern cities became aware of the maps in undertaking archival recovery of otherwise obliterated traces of buildings, foundations, streets, sewers, water mains, and infilled wharf areas, all associated with the urban renewal and mass transit projects that began to appear in the 1960s.

Anyone who has made use of Sanborn Maps is a convinced proponent of their use. As it turns out, the historians had hit on the value many years ago, probably in the 1930s with Depression-era Federal Works projects designed to feed starving artists, histori-

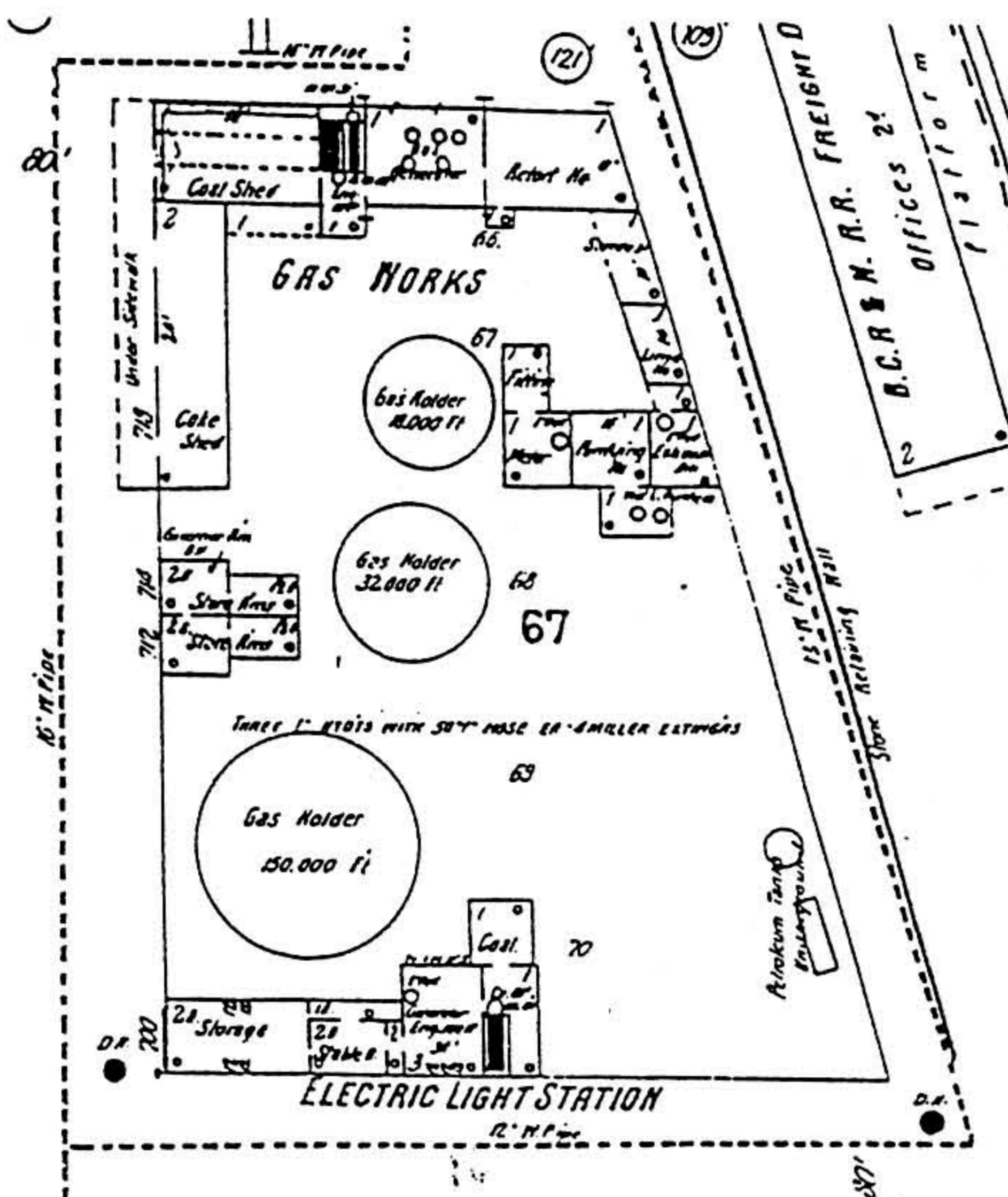
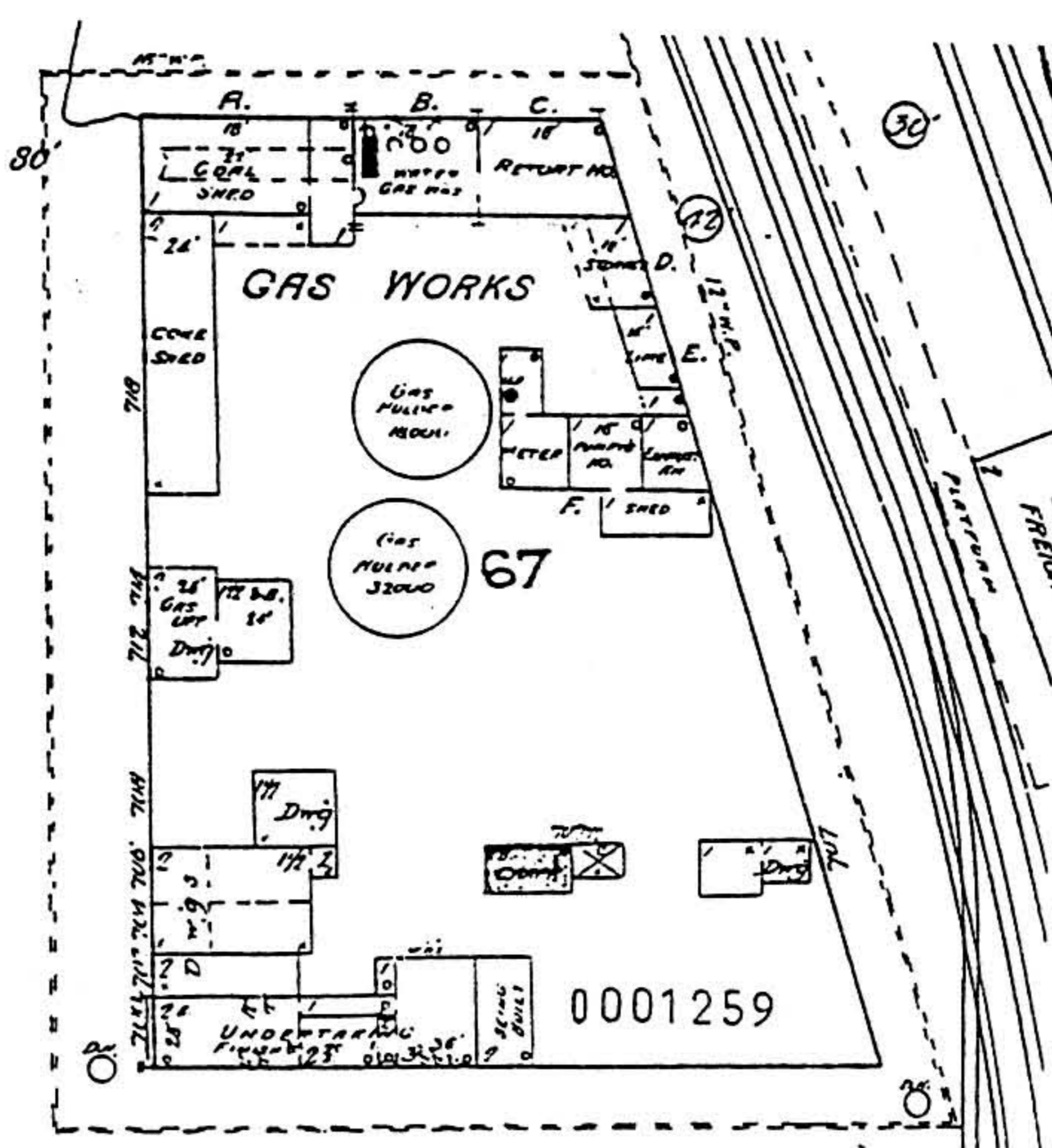


Fig. 3. 1900: The gas plant at 44 years of operation.

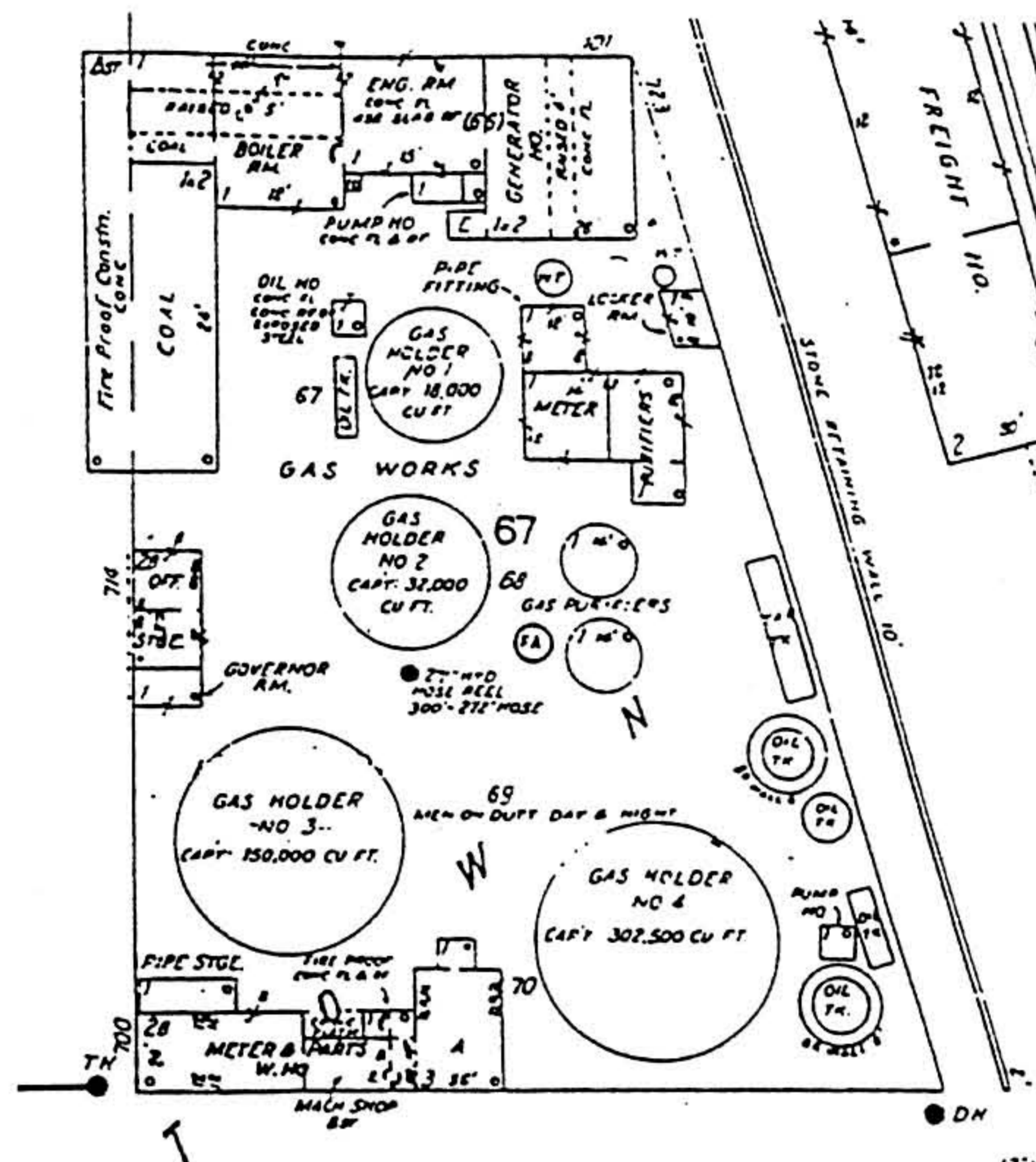
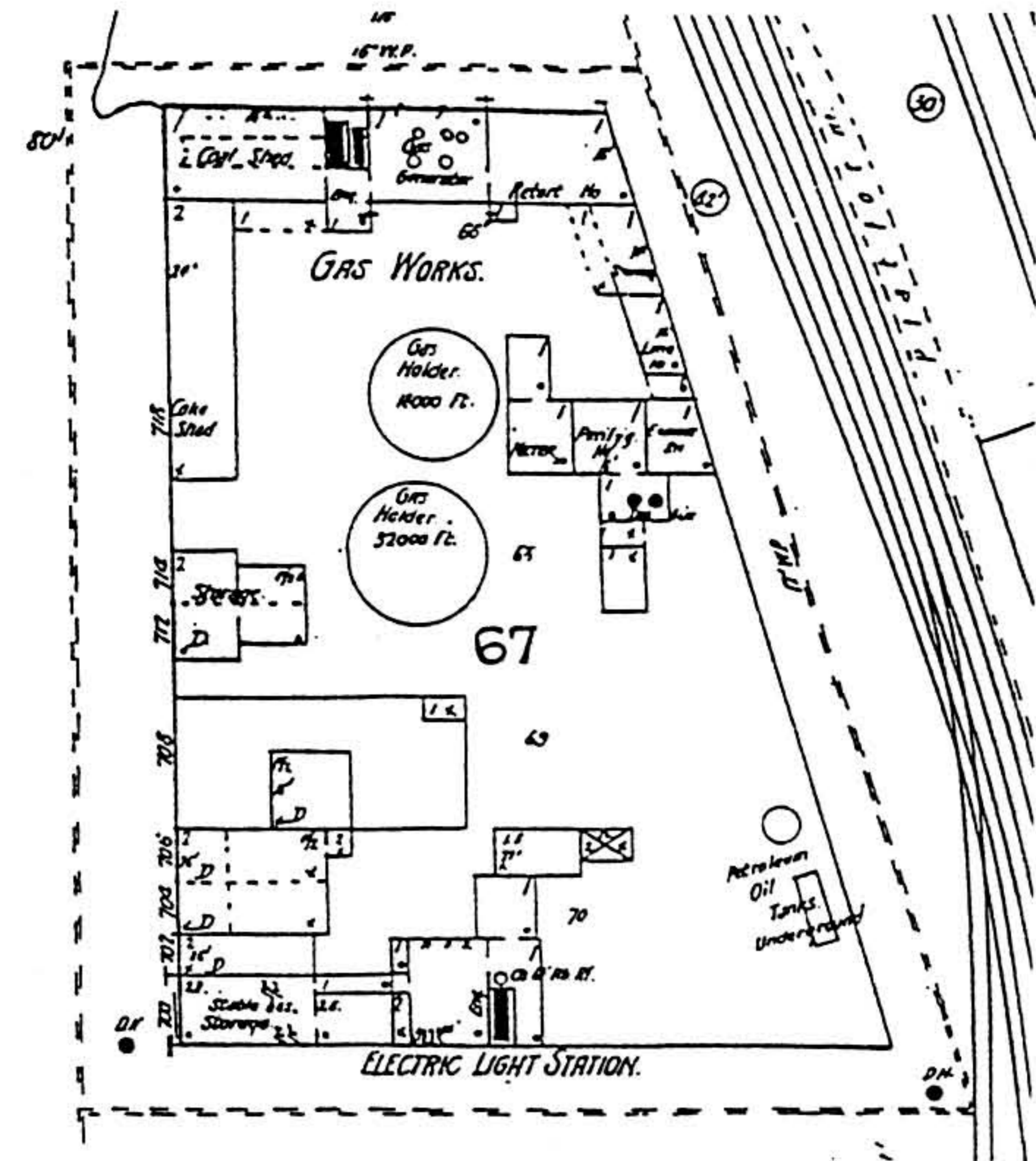
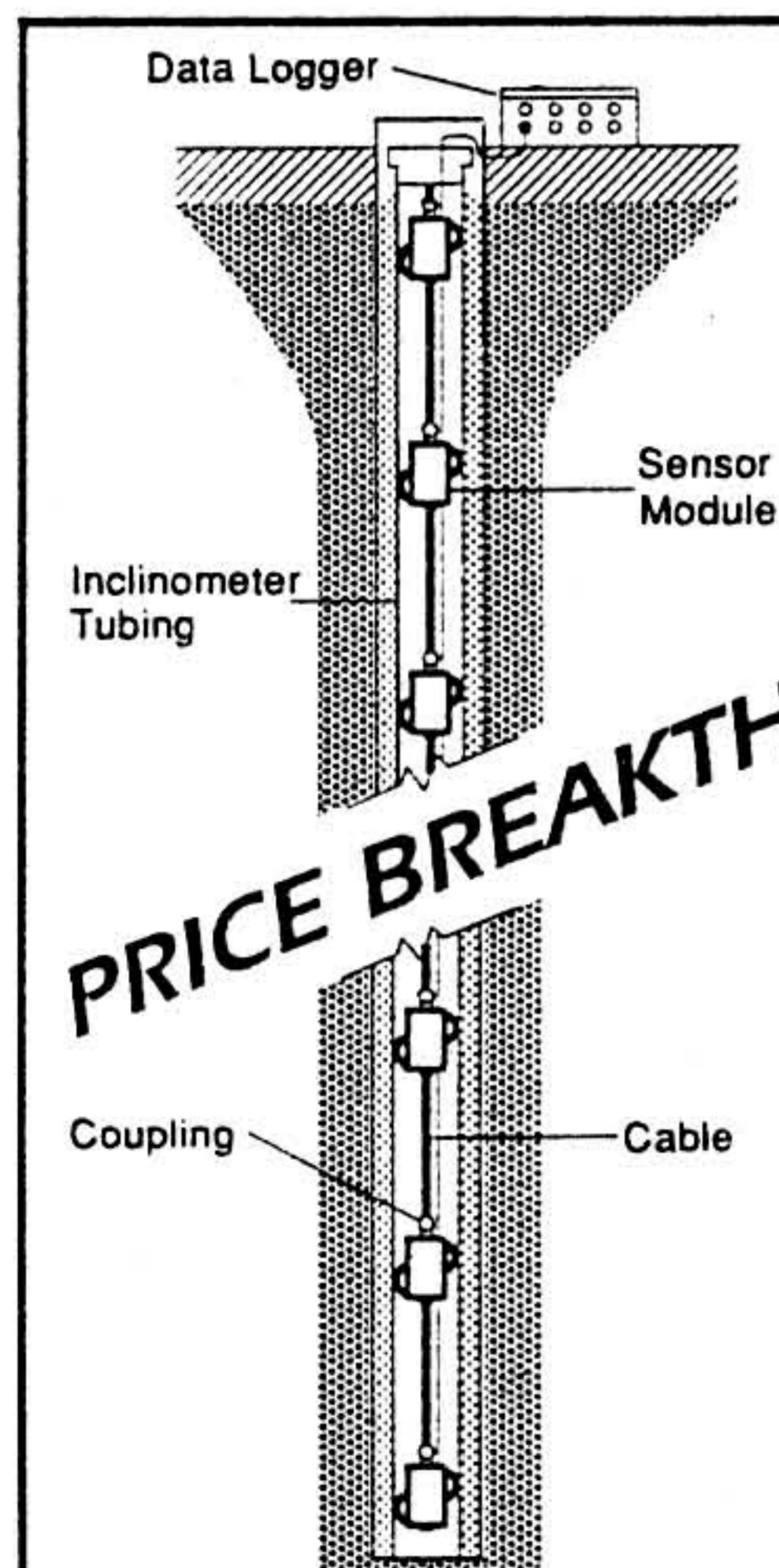


Fig. 4. 1950: The gas plant at 94 years of operation and some two years before its shutdown.

ans and others with data collecting and writing skills. The Library of Congress had consequently amassed a huge col-

lection of at least 288,093 individual Sanborn map sheets, and 432 entire atlases of some cities, when it began



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vice still revises the layouts of about 30 cities, each year, a fact that is generally not known. Most of Sanborn's output was drastically curtailed as a result of a 1945 report by the National Board of Fire Underwriters, in which the insurance companies complained about the cost of maintaining the maps and that too much of this cost was connected with maintenance of residential-area coverage. Consequently, the Sanborn effort has retracted over the past 46 years. Yet it is comforting to me to know that the Sanborn folks are still around and that they are making the million map sheets accessible and affordable for our environmental remediation project work!

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the process of photo-recording between 1955 and 1978. These microform and microfiche copies have been widely distributed to State archives and university libraries, where they may today be drawn out and used as simply as scanning and printing on universal viewing machines.

It is a hit-or-miss task of collecting if most archival collections of Sanborn Maps are found and accounted for. Today, in running down a lead from UMR undergrad Aaron Rezendez and his summer employer David Van Dyke of Dames & Moore, the last bit of information fell into place. The Sanborn Maps and Information Service, the successor to the insurance map empire is in place at 629 Fifth Avenue, Pelham, New York and the knowledgeable voice of this map history is Mr. Al Davis. According to Mr. Davis (personal communication, 27 August 1992) any city or town can be searched for a \$35 fee, to be included, if authority is given at time of order, in an \$85 blanket charge to not only locate *all* of the individual Sanborn Map sheets that were ever produced for the locale, but to have them printed out (maximum of ten) and shipped to you. The reproductions are "blowbacks" from microfiche and are just slightly smaller in scale than the originals (which were at 1:600 and 1:1200 scale) and will require scale adjustment in making measurements from them. The blanket cost rises to \$105 if the search is made, the applicant is notified, and the maps are ordered later (meaning that there is labor involved in re-accessing the microfiche for printing). There is a price adjustment if the number of map sheets containing the site exceed ten (which is the usual maximum number of sheets, the first coverage and nine revisions).

Mr. Davis notes that the Sanborn collection numbers about one million separate map sheets. That is 3.47 times more map sheets than the Library of Congress has released for general access to the nation's libraries.

For consultants operating more or less exclusively in select areas, the firm of Chadwyck-Healy, Inc., Teaneck, N. J. (800-752-0515), offers microfilm copies of Sanborn Maps. I am not currently aware of the depth of their coverage.

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