

Driving Park Avenue Bridge (Seneca Park Bridge)

Connects Driving Park Avenue
and Avenue E, spanning the
Genesee River Gorge just north
of the Lower Falls

Rochester
Monroe County
New York

HAER No. NY-150

HAER
NY
28-ROCH,
42-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
MID-ATLANTIC REGION NATIONAL PARK SERVICE
DEPARTMENT OF THE INTERIOR
PHILADELPHIA, PENNSYLVANIA 19106

HAER
NY,
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Driving Park Avenue Bridge (Seneca Park Bridge)

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Location: Connects Drive Park Avenue and Avenue E, spanning the Genesee River Gorge just north of the Lower Falls Rochester, Monroe County, New York

Date of Construction: 1889-1890

Present Owner: City of Rochester, City Hall, 30 Church Street

Present Use: Serves as a bridge crossing for light vehicles and pedestrians with a current load limit of eight tons. Due to structural deterioration, demolition is expected in the near future under PIN 4750.76 of the New York State Department of Transportation.

Significance: The Driving Park Avenue Bridge was constructed in two years, from 1889 to 1890, by the Rochester Bridge and Iron Works, based on design plans by Leffert L. Buck. The bridge is 717 feet long, spanning the 200-foot-deep Genesee River Gorge. The design employed spandrel bracing, a technique specifically used for traversing gorges. The Driving Park Avenue Bridge is considered to be the first spandrel-braced arch truss bridge built in the United States. It was constructed near the end of the iron bridge era when steel was beginning to come into use and was one of the last wrought-iron bridges constructed.

Project Information: Demolition of the Driving Park Avenue Bridge is scheduled in the near future due to deterioration, and in conjunction with project number 4750.76 proposed by the New York State Department of Transportation.

Mitigative

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Transmitted by: Jean P. Yearby, HAER, 1985

SITE AND BRIDGE DESCRIPTION

The Driving Park Avenue Bridge is situated 212 feet above the Genesee River. It runs west to east and connects Driving Park Avenue Bridge with Avenue E in North Rochester. The Genesee River flows north through the center of Rochester and empties into Lake Ontario to the north of the city.

Land use in the area is a mixture of public and commercial. Immediately north along the gorge is Seneca Park. To the southwest is a YMCA building and Maplewood Park lies to the northwest. A generating plant for the Rochester Gas and Electric company is located southeast and below the bridge, while the Hawkeye plant of Eastman Kodak is located to the northeast.

The Driving Park Avenue Bridge is a spandrel-braced arch truss bridge measuring 717 feet in length. There are two approach spans of lattice truss (each 93 feet long) on the west and one 103 foot approach span on the east, also of lattice truss type. The main arch span is 428 feet long and the arch rib rises vertically to approximately 68 feet at the center (The Union and Advertiser, November 29, 1890, p. 9). The total width of the bridge is 35 feet; the road deck is 20 feet wide and the structure has two 7.5 foot wide cantilevered sidewalks on either side.

Although the Driving Park Avenue Bridge was trouble-free for the first 48 years after its construction, it was closed in 1938 to replace the deck. It was repaired again in 1952, 1959 and 1965 and has been closed more frequently for repairs in the last twenty years. A brief summary of alterations follows.

- 1938: Original oak timber deck replaced with open steel grating.
- 1952: Abutment and structural repairs, new handrail, cleaning and painting.
- 1959: Steel repairs to chords, struts, and vertical bracing.
- 1965: Drainage improvements around footings, repairs to expansion plates at both ends of the bridge, repairs to sidewalk and railing
- 1970: Repairs to abutment, floor system, and bracing and truss members, draining improvements, cleaning and painting.
- 1976: Sidewalk repairs.
- 1979: Abutment and curb repairs, spot deck grating replacement, repairs to upper and lower lateral bracing, cleaning and oiling expansion joints.

The bridge is in a deteriorated condition. Many repairs have been made to reinforce and maintain the bridge, but substantial problems remain. Bracing members are in a severe state of deterioration, and the abutments are being undermined. Structural damage is apparently due to age and the corrosive effects of salt and water. The open grate steel deck also exhibits deterioration, although it has been repaired several times. The cantilevered sidewalks are also deteriorated and only partially open to pedestrians (N.Y.S.D.O.T. 1982).

DESIGN ELEMENTS

Construction of the foundations for the bridge began in the first half of 1889. Earth and rock were removed from the edges of the river bank, and shale was removed to a depth of twenty feet. Tunnels were steam-drilled into the rock at four locations selected for the supports of the main arch span. Cut rock was laid in courses and cemented. Seven ton granite blocks were placed on top of these skew-back supports. During this phase of work, it was discovered that the arch span would have to be increased twelve feet in length. This delayed construction and prevented early completion of the bridge.

Recent repair work on the bridge has focused on draining improvements to control erosion around the foundations. Masonry abutments are located at either end of the bridge and have experienced erosion.

The construction of the falsework for the bridge required more time than the iron bridge itself. Over a million feet of timber were used and each section of wood was framed and shaped at the site from detail drawings. Because they were considered safer, iron bolts with washers and nuts were used to hold the frame together rather than iron spikes. The framework was built up 220 feet from the river to a few feet above the present bridge floor. A fourteen foot gauge track was laid on top of the falsework and a huge 'traveller' was built especially for construction of the bridge. The traveller was a steam-powered car with four derricks and was used to haul and lower the iron work for the bridge. Four to six of the twelve- to fourteen-ton iron rib sections could be lowered into place each day.

After the iron work was completed, the traveller was used to remove the timber falsework and did so in several days. Very few accidents occurred during construction and these were associated with the building of the falsework rather than the iron work. Working conditions were poor at times due to the location near the Lower Falls with its frequent heavy mist. Canvas awnings and rubber suits were used to protect the workers (The Union and Advertiser, November 29, 1890, p. 9).

The bridge is constructed of wrought iron and steel and is of open truss work. The main arch ribs are composed of rolled wrought iron parts riveted together into sections 30 feet long. The arch ribs are inclined toward each other and are 20 feet apart at the top of the arch, while at the support points they are 46 feet apart (The Union and Advertiser, January 29, 1890, p. 9). The bottom chords of the north and south arch rib are braced. The bridge has a three-hinged arch span to allow for expansion and contraction of the iron from temperature and load changes. These hinges are the only pin-connected joints in the structure. All other joints and connections are riveted.

The bridge has spandrel bracing which was designed for use over deep gorges. This consists of supporting the roadway by columns to the arch. Sixteen panels (framed by the columns) are present on this bridge and have diagonal lateral bracing and lateral struts. There is also bottom bracing for the north and south trusses and transverse bracing between the vertical posts for the east and west halves of the arch.

The approach spans are of lattice truss type. The two 93-foot western spans are connected with a rocking bent which is a transverse framework for strengthening the bridge. Expansion joints are present at both approaches to the bridge where the lattice trusses connect with the abutment.

Eight iron stringers underlie the roadway and one runs under each sidewalk. Three timber stringers are located under each sidewalk. Iron floor beams are present under the roadway.

The deck was originally built of oak timber with pine cantilevered walkways. This deck was replaced in 1938 by open steel grating. Since then, portions of the grating have been replaced as needed.

ARCHITECT/ENGINEER

The chief engineer of the Driving Park Avenue Bridge was Lefferts L. Buck. He was born in 1837 and died in 1909. Buck received a degree in civil engineering from Rensselaer Polytechnic Institute in 1868. His primary engineering emphasis was on the design and construction of bridges, and he is known as one of the great bridge-builders of his time.

Buck's greatest achievement in engineering was the Williamsburg Bridge in New York, significant for the length of its span.

He also built the Niagara Falls Bridge in 1895-1898, whose span of 840 feet made it the longest bridge of its kind in the nineteenth century (Condit 1960: 195). Buck's construction and observation of the Driving Park Avenue Bridge, previous to the construction of the Niagara Falls Bridge, allowed him to modify and improve on the hinged arched truss system.

By increasing the single hinge of Driving Park Avenue Bridge to two in the Niagara Falls Bridge, Buck gained the desired span length. This did not, however, stop the bridge from collapsing in 1938 when an ice jam in the Niagara River reached the level of the skewback supports and cut the arch at its hinges.

In addition to these bridges mentioned above, Buck also designed the Platt Street Bridge in Rochester.

BUILDER, CONTRACTOR, SUPPLIER

The contract for construction was awarded to the Rochester Bridge and Iron Works located in East Rochester, New York. The manufacturing complex occupied seven acres of land in 1894 and was known for "rapid and effective construction of bridges" (History and Commerce of Rochester 1894: 59). The company was founded in 1871 by Thomas Leighton and by 1885 was owned by John F. Alden a former employee. Alden graduated from Rensselaer Polytechnic Institute in 1872 with a degree in civil engineering. He constructed many bridges in the United States and Canada as well as large buildings, especially in New York and Chicago.

The Rochester Bridge and Iron Works was responsible for the design and preparation of plans for the falsework and scaffolding used to construct the bridge. It was also responsible for the safety of the scaffolding and the finished bridge until accepted by the chief engineer (L. Buck) (The Union and Advertiser, November 29, 1890, p. 9). The wrought iron used for the bridge was manufactured at the Rochester Bridge and Iron works. Alden, together with the assistants, A. M. Mosscrop and F. Pond, worked on the building of the bridge, and J. J. Blake was superintendent of erection for the company (*ibid.*).

The building of the foundation was subcontracted to Messrs. Chambers and Carey. The four skewback foundation supports were built, using stone from Chaumont Bay quarries (near Saint Vincent), Portland Cement, and were capped with seven-ton granite blocks from the Munson quarries in Massachusetts (The Union Advertiser, November 29, 1890, p. 9).

ROLE OF BRIDGE IN LOCAL AND REGIONAL TRANSPORTATION SYSTEMS

The Driving Park Avenue Bridge is located north of the Lower Falls of the Genesee River in an area known as Carthage in the early 1800s. The 1000-acre tract east of the Genesee River was purchased by Elisha B. Strong and a few friends from Canandaigua, New York, in 1816 (Barnes, 1974). They began selling lots in hopes of building a village to challenge Rochester, 2.5 miles to the south. One factor favorable to the projected development was the presence of the Ridge Road on the northern boundary of Carthage. This road was a stimulus to the settlement of western New York, since it was located along the broad smooth ridge of the Niagara Escarpment and was a natural

thoroughfare. A bridge had been built across the Genesee River in Rochester around 1811, and travellers and settlers along the Ridge Road had to go south to the bridge in order to cross the river.

Carthage developers hoped to divert traffic headed south and applied to the state legislature for a loan to build a toll bridge across the river just below the Lower Falls. Work on what is known as the Carthage Bridge began in 1818. Since the bridge was to be located 200 feet above the river, it was decided that pier supports were not feasible and that a single round arch of braced timbers would be built. The bridge weighed 200 tons and was built of pine timber fastened with iron bolts. It was completed in early 1819 and was a wonder in its time, considering the frontier character of the area in which it was built. There was a fatal flaw in its manufacture, however, which led to its collapse in 1820. The top of the arch was too light to withstand the inward pressures exerted by the sides of the bridge and half of the arch fell into the river (Barnes 1974: 9).

Two more bridges were built just south of the Lower Falls but were both washed out. During the 1800s, the Lower Falls was the location of a number of mills which relied on water power.

By 1823, the Erie Canal was completed to Rochester and this doomed the Carthaginians' hopes while ensuring continued growth in Rochester. Rochester was granted its first city charter in 1834 and Carthage was annexed to the city. The city's population grew rapidly and had reached 36,000 by 1850. In response to a growing recognition that more and better bridges were needed to connect the two halves of Rochester divided by the Genesee River, four bridges were built between 1850 and 1860. One of these was built at the Lower Falls at the same location as the Carthage Bridge,, and the old abutments were used in building what was called the Genesee Suspension Bridge (Hook 1923: 218). The bridge was built by William Kauffman and Josiah W. Bissell. Construction was begun in 1855, the bridge was opened in mid 1856, and then reopened and closed several times before its collapse in April of 1857 (Barnes 1974: 16-20)

No additional bridges were built at this location until the Driving Park Avenue Bridge was constructed by the city, again during the bridge building program to facilitate communication and access between residents on both sides of the river. The bridge was completed on December 1, 1890, at a cost of \$\$125,000 (Fisher 1933: 179). By this time, long-span bridges were common and better designed, as evidenced by the long life of this bridge.

The bridge was built using spandrel bracing which is a technique designed especially for bridges over deep gorges. It is thought to be the first spandrel-braced arch truss bridge built in the United States. It was built at a time when steel was coming into use for bridge construction and is one of the last bridges made primarily of wrought iron.

At the time the bridge was built, many mills were located at the Lower Falls as they had been from the early days of settlement. The quickly flowing water was used for power in grist mills and other types of manufacturing. By the late 1800s, recreation facilities such as summer camps had been developed along the lake shore and at Irondequoit Bay. The Glen House was built in 1870 at the upper Genesee landing just north of the Lower Falls. This was the furthest inland boaters could travel from the lake towards Rochester. The Glen House was located just north of the bridge on the west side of the river and a stairway up to Maple Park was built in the early 1870s (McKelvey 1949: 177). Maple Park was an amusement park and was located at the northern end of the horsecar line. An elevator was built to carry people down to the Glen House in 1878. Soon thereafter, the Glen House was renovated and a new excursion steamer built to carry passengers down the river to the lake at Charlotte. As a result, the Lower Falls area was extensively travelled and the Driving Park Avenue Bridge improved access to recreation on the west side of the river.

Early views of the bridge from downstream show the Glen House with its elevator off to one side and the Lower Falls with the mills under the arch span. The bridge design was quite striking and served to enhance the visual effect of the area. Today, the Glen House is gone, as are the mills. Some foundations and assorted rubble are evident and the Rochester Gas and Electric Generating Station is located at the bottom of the gorge southeast of the bridge at one of the former mill sites. A road has been cut along the east bank of the river to provide access to the power plant. Despite all these changes, the bridge is still impressive and adds to the quality of the environment. It continues to have a great visual impact and emphasizes the depth (over 200 feet) and narrowness of the gorge at this location.

SOURCES OF INFORMATION

A. Original Architectural Drawings:

The original architectural drawings for the Driving Park Avenue Bridge date to 1889-1890 and are available at the Municipal Archives of the City of Rochester. The drawings and early photographs are housed in the Engineering and Photograph Collections of the Archives on Andrew Street in the city of Rochester. The collection also houses later drawings of the bridge produced in association with repair and replacement work done on the bridge in the 1900s. This includes floor beam, stringer and grating drawings from 1939-1939, when the original wood deck was replaced as well as drawings for repairs done in the 1950s - 1970s. The list of original drawings for the Driving Park Avenue Bridge follows:

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<u>Date</u>	<u>Format</u>	<u>Type</u>	<u>Description</u>
n.d.	Blueprint	Full Bridge	Diagram of Elevations - includes details of arch span, approach spans, center hinge, skewback supports, and railing.
1889	Linen	Full Bridge	Diagram of Elevations.
1889	Linen	Arch span	Plan No. 24 (Rochester Bridge and Iron Works) - Marking diagram for arch span - plan of bracing between bottom chords for north and south rib.
1889	Linen	Arch Span	Plan No. 24 - Dimension Diagram - plan of bottom bracing for north and south truss.
1889	Linen	Arch Span	Dimension Diagram - Transverse bracing between vertical posts for east and west halves of arch.
1889	Linen	Arch Span	Plan No. 24 - West half of arch.
1889	Linen	Arch Span	Plan No. 24 - East half of arch.
1889	Linen	Arch Span	Plan No. 24 - Transverse bracing of arch span.
1889	Linen	Arch Span	Plan No. 24 - Details of pedestal for arch span.
n.d.	Linen	Arch Span	Plan No. 24 - Eye Bars connecting pedestals.
1889	Linen	Arch Span	Plan No. 24 - Diagonal Lateral Braces and Lateral Struts for panels. Includes eight sheets in total with two panels per sheet as follows: #1 and 16, #2 and 15, #3 and 14, #4 and 13, #5 and 12, #6 and 11, #7 and 10, #8 and 9 (This last drawing is dated 1890).
1890	Linen	Arch Span	Plan No. 24 - Crown panels of arch span.

<u>Date</u>	<u>Format</u>	<u>Type</u>	<u>Description</u>
1890	Linen	Arch Span	Center Panel Chord Sections - includes changes made by Alden and Mossdrop.
n.d.	Linen	Arch Span	Plan No. 24 - Floor beams and Stringers for arch span.
1890	Linen	Arch Span	Plan No. 24 - Diagram Plan showing marking of floor beams and stringers.
1889	Linen	Approaches	Plan No. 24 - Rocking bent for approach spans.
1889	Linen	Approaches	Plan No. 24 - Two deck lattice spans.
1889	Linen	Approaches	Plan No. 24 - One deck lattice span (103').
n.d.	Blueprint	Approaches	Plan No. 24 - Floor beams and stringers for 103 foot span.
n.d.	Linen	Miscellaneous	Traveller used in erection.
1890	Linen	Miscellaneous	Plan No. 24 - Diagram for hand railing.

B. Early Views:

Collections of early photographs of the Lower Falls area and the Driving Park Avenue Bridge are available in the Engineering and Photograph Collections at the Municipal Archives of the City of Rochester. These are housed at the Records Center at 414 Andrews Street, Rochester, New York. Additional collections were located at the Rochester Public Library at South Avenue and Court Street in the Local History Division. These photographs came from a number of sources including the Rochester Historical Society Collection and the Gannett Newspaper files discards. They are located in files labelled Driving Park Avenue Bridge, Bridges, and Genesee River Lower Falls. The majority of photographs are poorly documented as to date and photographer and estimates of their age must be inferred based on features of the bridge and the surrounding buildings. Several photographs taken before the bridge was built were also located. In addition, microfilm copies of early Rochester daily newspapers contained some bridge photos. These are located at the Rochester Public Library. No negatives were available for any of these early views. A selected list of early photographs follows:

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- ca. 1889-1890 View of construction of Driving Park Avenue Bridge looking south towards Lower Falls. Shows falsework and traveller crane as well as partially completed bridge. (Location: Municipal Archives #358P - 1927 copy of original)
- October 1892 Driving Park Avenue, Bridge #1. Looking east-southeast from top of gorge. (Municipal Archives).
- October 1892 Driving Park Avenue, Bridge #3. Looking south-southeast from the top of the gorge to the north of bridge. (Municipal Archives).
- circa 1892 Driving Park Avenue Bridge. (The Union and Advertiser, October 29, 1892, p. 12. Microfilm at Rochester Public Library.)
- circa 1893 Driving Park Avenue Bridge looking south towards Lower Falls and mills. Photo by Simon V. Haus. (The Union and Advertiser, September 2, 1893, p. 9. Microfilm at Rochester Public Library.)
- circa 1894 Winter views of Driving Park Avenue Bridge. (The Union and Advertiser, February 24, 1894, p. 15.)
- February 1929 Driving Park Avenue Bridge showing steel construction. (Municipal Archives, 8 photos, #3611 1-5).
- August 1929 Driving Park Avenue Bridge showing workmen repairing deck. (Municipal Archives, 7 photos, #3616).
- August 1929 Driving Park Avenue Bridge showing workmen repairing deck. (Municipal Archives, 5 photos, #3617 1-2).
- circa 1936 Driving Park Avenue Bridge, Lower Falls and Glen Huse. (Municipal Archives, #5115).
- 1900-1950 Photos of the Lower Falls and Driving Park Avenue Bridge exist from this time period but are poorly documented. (Available at Rochester Public Library Local History Division).
- n.d. Historic photograph of Driving Park Avenue Bridge with brief description. (Municipal Archives; 1983 negative and photographic copy of this photograph included with documentation).

C. Interviews:

Mr. Joseph W. Barnes, historian for the city of Rochester, was interviewed regarding the Driving Park Avenue Bridge. He provided general historical information as well as his article "Bridging the Lower Falls."

Mrs. Elizabeth Holahan, President of the Rochester Historical Society, provided useful information on available sources on the bridge.

Mr. Tim O'Connell, Department of Environmental Services, and Mr. John Noble, coordinator of Records Management for the city of Rochester, provided access to the restricted Engineering and Photograph Collection of the City Archives. Mr. O'Connell provided useful information on the general history of the area and suggested additional sources to consult.

D. Bibliography:

1. Primary and unpublished sources:

a. Drawings and photographs:

Engineering and Photograph Collection, Municipal Archives, City of Rochester. Housed at Records Management Center at 414 Andrew Street, Rochester, New York. All original bridge drawings and a collection of historic photographs were available here. The Engineering and Photograph Collection has restricted access but may be open on request with specific justification.

Photographic Collection, Rochester Public Library, Local History Division. South Avenue and Court Street, Rochester, New York.

b. Newspapers:

The Democrat and Chronicle. Rochester Daily Newspaper, Rochester, New York. Contains articles from 1951-1982 discussing bridge closings and repairs. Specific issues are: November 10, 1951; November 24, 1951; November 18, 1952; May 28, 1965; July 21, 1965; March 9, 1968; January 20, 1970; November 19, 1977; August 15, 1979; December 28, 1982

The Times Union. Rochester Daily Newspaper, Rochester, New York. Articles on bridge closings and repairs from 1951-1982. Specific issues are: October 25, 1951; November 9, 1951; November 14, 1951; May 28, 1965; May 29, 1965; July 21, 1965; March 18, 1967; March 8, 1968; November 8, 1968; November 15, 1968; May 14, 1970; June 27, 1970; November 18, 1977; March 3, 1979; August 24, 1982.

The Union and Advertiser. Rochester Daily Newspaper, Rochester, New York. Entries on the Driving Park Avenue Bridge were found in the following issues: June 22, 1889, p. 2; November 17, 1890, p. 8; November 29, 1890, p. 9; December 1, 1890, p. 6; December 2, 1890, p. 6; October 29, 1892, p. 12; September 2, 1893, p. 9; November 14, 1893, p. 6; February 24, 1894, p. 15; September 8, 1894, p. 14. Articles primarily dealing with bridge construction and opening were reviewed on microfilm at the Rochester Public Library.

2. Secondary and published sources:

Angle, James M., "Early Genesee River Bridges in Rochester," The Rochester Historical Society Publication Fund Series, Volume 8 (1919): 225-241. Presents history of Rochester bridges in the early and mid 1800s with brief entries on the bridges built at the Lower Falls.

Barnes, Joseph W., "Bridging the Lower Falls," Rochester History 36 (January 1974): 1-24. Contains information on the history of bridges built over the Lower Falls in the 1800s and sets them in the historical context.

City of Rochester Illustrated. Descriptive, Historical and Statistical Review. Rochester, New York: The Post Express Printing Co., 1890. Advertisement for Rochester Bridge and Iron Works on page 51.

Condit, Carl W., American Building Art, The Nineteenth Century, New York: Oxford University Press, 1960. History of structural forms and techniques in the United States. Discusses evolution of bridge types from the wooden bridge truss to the concrete arch bridge.

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Dictionary of American Biography, 1958 ed., s.v. "Buck, Leffert Lefferts."

Dictionary of American Biography, 1964 ed., s.v. "Alden, John Ferris."

Fisher, Edwin A., "Engineering and Public Works in the City of Rochester," Rochester Historical Society Publication Fund Series, Volume 12 (1933): 179. Basic facts on the Driving Park Avenue Bridge including descriptive details.

History and Commerce of Rochester. New York: A. F. Parsons Publishing Company, 1894. Contains historical information on the Rochester Bridge and Iron Works, page 59.

Hooker, Susan Huntington, "The Rise and Fall of Carthage," The Rochester Historical Society Publication Fund Series, Volume II (1923): 205-232. Presents history of Carthage from 1809 to 1850.

Horner's Rochester City Guide and Encyclopedia of Useful Knowledge, Rochester, New York: W. T. Horner, A.M., 1874. Contains brief information on Leighton Bridge and Iron Works, the predecessor of the Rochester Bridge and Iron Works.

The Industries of the City of Rochester, Rochester, New York: The Elstner Publishing Co., 1888. Contains historical information on the Rochester Bridge Works, page 214.

McKelvey, Blake, Rochester the Flower City, 1855-1890, Cambridge, Massachusetts: Harvard University Press, 1949. General history of Rochester from the mid to late 1800s.

New York State Department of Transportation, Preliminary Case Report on Driving Park Avenue Bridge, 1982. Contains information on the bridge, need for a new one, and possible alternatives.

O'Reilly, Henry, Settlement in the West. Sketches of Rochester with Incidental Notices of Western New York, Rochester: William Alling, 1838. Early history of Rochester and vicinity.

Peck, William F., History of Rochester and Monroe County, Syracuse, New York: D. Mason and Company, 1884. Contains information on John Alden on page 619.

E. Likely Sources Not Yet Investigated:

Davis, Bill, 56 Lakeshire, Rochester, New York. Individual knowledgeable in local history.

The Landmark Society of Western New York, 130 Spring Street, Rochester, New York.

Record of American Society of Civil Engineers, for further information on the bridge.

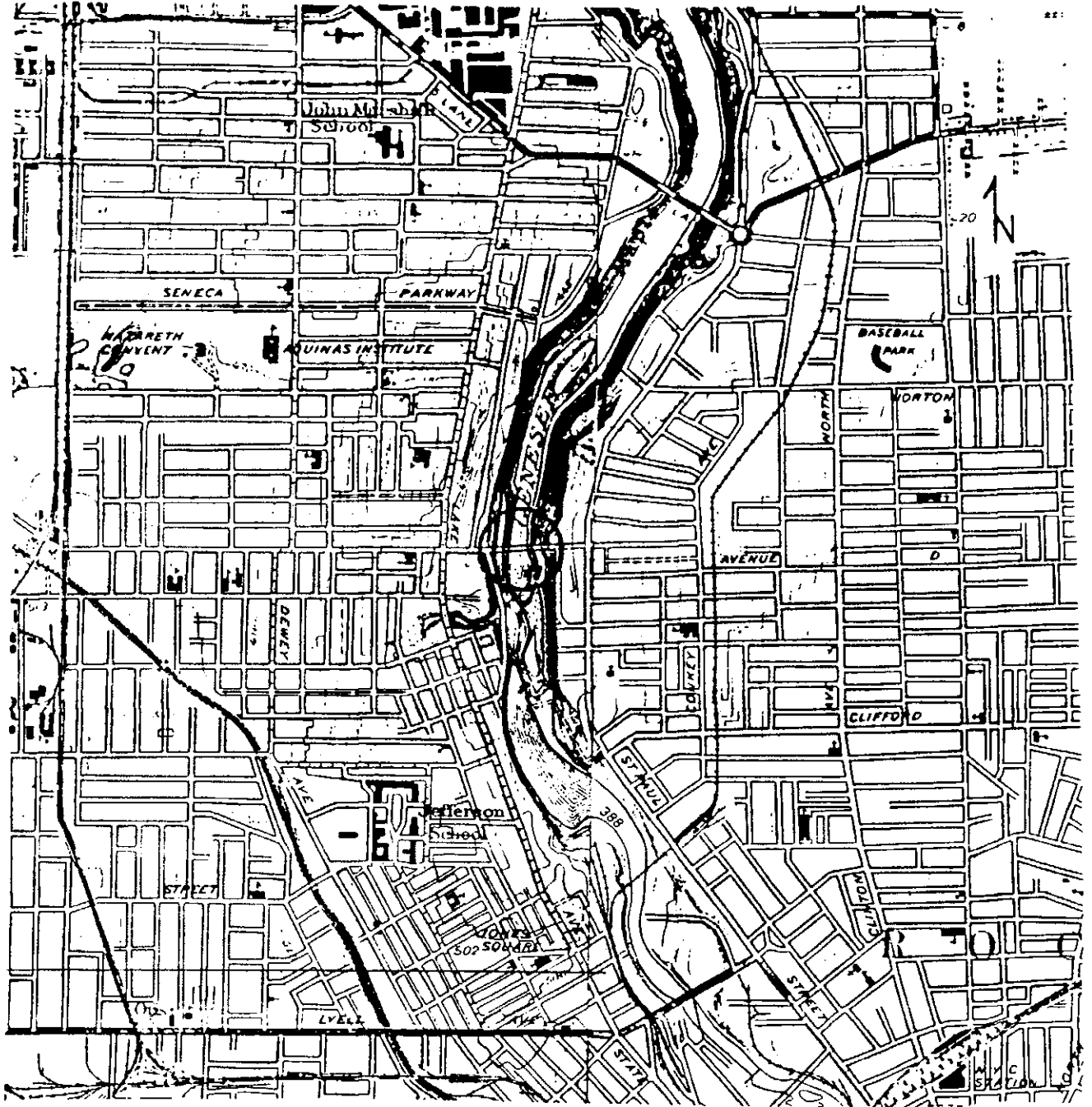
University of Rochester Library, Rare Books and Special Collections, River Campus, Rochester, New York.

Graphic Documentation for Driving Park Avenue Bridge

Copy of U.S.G.S. map with location and U.T.M. coordinates

Generalized truss diagram of structure - from New York State Department of Transportation, Preliminary Case Report on the Driving Park Avenue Bridge, (PIN 4750.76), figure 3.

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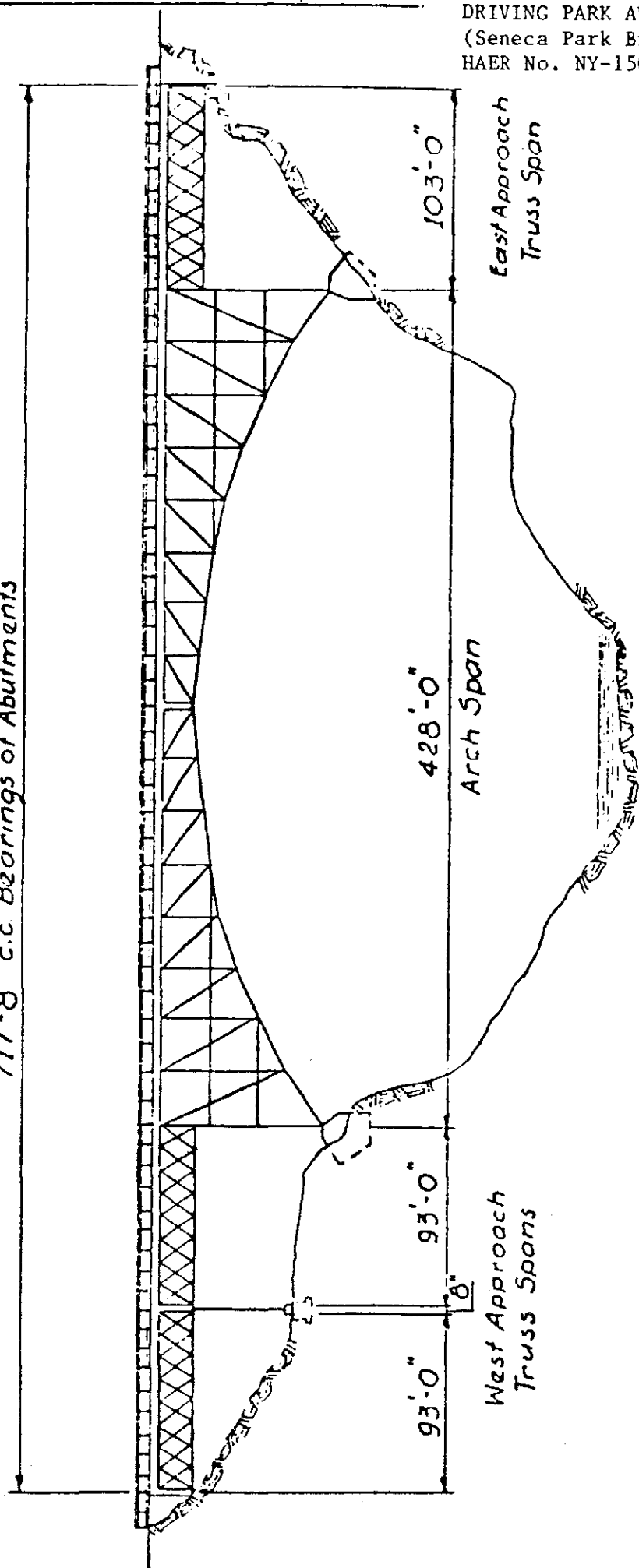
Driving Park Avenue Bridge

U.T.M. reference:

18.286380.4784050.

from U.S.G.S., 7.5 minute quadrangles:
Rochester West, New York, 1952.
Rochester East, New York, 1952.
(scale 1:24000)

717'-8" c.c. Bearings of Abutments



ELEVATION

Scale: 1" = 80'-0"

CITY OF ROCHESTER, N.Y.

DRIVING PARK AVENUE BRIDGE

Generalized Truss Diagram of
Driving Park Avenue Bridge

from New York State Department of
Transportation, Preliminary Case
Report (PIN 4750.76), figure 3.