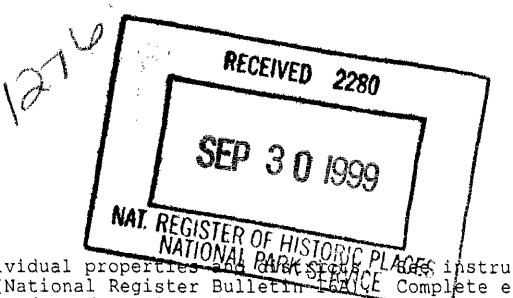
Oct. 1990

United States Department of the Interior
National Park Service

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 Wilmington Rail Viaduct

other names/site number Pennsylvania Railroad Viaduct; CRS # 5281.1 through .29

2. Location

street & number Amtrak's Northeast Corridor through Wilmington ☐ not for publication
city or town Wilmington ☐ vicinity
state Delaware code DE county New Castle code 003 zip code 19801

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this ☑ 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 ☑ meets ☐ does not meet the National Register Criteria. I recommend that this property be considered significant ☐ nationally ☐ statewide ☑ locally. (☐ See continuation sheet for additional comments.)

Signature of certifying official/Title — Date: September 29, 1999

Daniel R. Griffith, Delaware State Historic Preservation Officer
State or Federal agency and bureau

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

Signature of commenting or other official — Date

State or Federal agency and bureau

4. National Park Service Certification

I, hereby certify that this property is:

☑ entered in the National Register — Signature of the Keeper: Patrick Andrus — Date of Action: 11/10/99
☐ 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): _____

5. Classification

Ownership of Property
(Check as many boxes as apply)

- ☒ private
- ☐ public-local
- ☐ public-State
- ☒ public-Federal

Category of Property
(Check only one box)

- ☐ building(s)
- ☐ district
- ☐ site
- ☒ structure
- ☐ object

Number of Resources within Property
(Do not include previously listed resources in the count)

Contributing	Non-contributing	
0	0	buildings
0	0	sites
29	2	structures
0	0	objects
29	2	Total

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

N/A

Number of contributing resources listed in the National Register

1

6. Function or Use

Historic Functions (Enter categories from instructions)

TRANSPORTATION: rail-related

Current Functions (Enter categories from instructions)

TRANSPORTATION: rail-related

7. Description

Architectural Classification (Enter categories from instructions)

Other - viaduct of retaining walls, embankments arches and thru girder bridges

Materials (Enter categories from)

foundation
roof
walls
other brick, dressed sandstone, steel, earth

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.

__X__ **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)
Transportation

Period of Significance 1902-1949

Significant Dates 1902-1908
1928
1935

Significant Person N/A

Cultural Affiliation N/A

Architect/Builder William H. Brown, Chief Engineer, Philadelphia Division of the Pennsylvania Railroad

Narrative Statement of Significance (See 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
_x_ previously determined eligible by the National Register
____ designated a National Historic Landmark
____ recorded by Historic American Buildings Survey # _____
_x_ recorded by Historic American Engineering Record # DE 12B

Primary location of additional data

_x_ State Historic Preservation Office
____ Other State agency
____ Federal agency
____ Local government
____ University
____ Other

Name of repository: _____

Major Bibliographical References:

"Abolition of Grade Crossings on the Pennsylvania." The Railroad Gazette, vol 44, no. 3 (January 17, 1908), p. 101-102.

"Improvements on the Pennsylvania, Baltimore & Washington." The Railroad Gazette, vol 38, no. 17 (October 7, 1904), p. 416-417.

Seely, Bruce E.
1976 The Pennsylvania Railroad in Wilmington, Delaware: Improvements Made Between 1902-1908. Historic American Engineering Record (HAER DE 12A through 12F). National Park Service.

"Waterproofing Brick Arches." The Engineering Record, vol 52, no. 22 (November 25, 1905), p. 603.

Wilmington (Delaware) Department of Planning
1979 The Wilmington Viaduct.

"Wilmington Passenger Station." Railroad Age Gazette. Vol. 45, no. 8 (July 28, 1908), p. 589-590.

Maps Consulted

United States Railway Association Right-of-Way Track Maps, Philadelphia, Baltimore and Washington Railroad, June 20, 1918. Office of Valuation Engineer, Philadelphia, PA. Maps updated through 1967.

Franklin Survey Company, 1936, Property Atlas of City of Wilmington

Sanborn Insurance Company, 1979, Wilmington, Delaware.

10. Geographical Data

Acreage of Property 11 acres (approx)

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

	Zone	Easting	Northing		Zone	Easting	Northing
A	18	450899	4397410	C	18	453087	4398381
B	18	452140	4398744	D	18	454720	4399317

_____ See continuation sheet.

Verbal Boundary Description

Boundary Justification

See continuation sheet.

11. Form Prepared By

name/title Debra Campagnari Martin, Preservation Planner

organization City of Wilmington, date 1/99

street & number 800 N. French Street telephone 302-571-4402

city or town Wilmington state DE zip code 19801-3537

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 National Railroad Passenger Corporation (Amtrak)

street & number Mid-Atlantic Division, 30th St. Station, Main Concourse

telephone 215-349-2151

city or town Philadelphia, PA 19104-2817 state PA zip code 19104-2817

Physical Description

The Wilmington Rail Viaduct is an elevated structure of stone retaining walls, brick arches and steel undergrade bridges which traverses the City of Wilmington for approximately three miles along the main line of the former Pennsylvania Railroad. The construction of the viaduct was part of a program of the Pennsylvania Railroad to increase speed and safety on its main line by straightening out curves and eliminating at grade crossings in the major cities it passed through. The viaduct extends from just north of Vandever Street at the north to just beyond the intersection with the B&O Reading Railroad Line at the south, from milepost 25.4 to 28.3.

Retaining Walls

Most of the viaduct is composed of ashlar sandstone retaining walls on concrete foundations, with the excavated earth serving as wall fill. Four feet of ballast carried the tracks. At street intersections, the retaining walls were squared off to form abutments for plate through or deck girder bridges. In some sections of the northern part of the viaduct, only one stone retaining wall was used, and the opposite side constructed with earth and stone fill in a framework of timber cribbing.

Arch Sections

Two stretches of the viaduct are composed of brick arches that measure approximately two-thirds of a mile total length. The first series of 20 arches begans just north of the B&O Reading Railroad underpass and extended to the stone bridge abutments at Beech Street. The second series of 12 brick arches began just north of Beech Street and extended to just south of the Lower Linden Street undergrade bridge, which rests on stone abutments as well. These arches were originally conceived in stone but not built as planned due to a lack of available material.

The brick arch sections of the viaduct, which span soft ground determined unsuitable for the construction of retaining walls, have arches that span 41 feet and rise 8 feet, on a radius of 30.26 feet. The piers consist of concrete footing on 8 feet deep and 10 feet wide base of hard gravel, although, on occasion, rock was reached below the mud at depths less than 8 feet. Above this base, 8-foot wide rubble masonry was built to the level of the foundation offset. From there, the piers were built of quarry faced

sandstone, 6 feet wide and 4.5 feet high, to the skewback, or spring of the arch. The brick arch rings were 34 to 35 inches thick. Rubble was used for the fill. Great care was taken to insure moisture would not be allowed to degrade the brick arch rings. As reported in Engineering News in 1905, the extrados of the arch rings were covered with five layers of Hydrex felt and an asphalt compound. The felt and compound layers were brought up behind the spandrel walls and mortared under the coping at the top of the walls. The coping consists of two courses of dressed sandstone. The lower course is 16 inches deep and 36 inches wide, with a 6-inch overhang. The upper course is 18 inches deep and 27 inches wide. To level the roadbed, waste material was used as fill and broken stone ballast was added on top to support the tracks. At the north end of the viaduct, where the line turns to enter downtown Wilmington, the masonry piers were built in a wedge shape, fifteen inches wider on the outside than the inside of the curve, to eliminate the need to skew the arches.

Undergrade Bridges & Other Openings

Undergrade bridges are those that carry the tracks above intersections with the street pattern. The undergrade bridges of the viaduct were steel through and deck girder type structures, resting on stone abutments, with steel columns on stone piers for support. Some of the columns were composed of lacing bars in a lattice pattern. Several of the bridges, including Market Street and Church Street, were equipped with sway bracing for added stability. Six undergrade bridges rest directly on stone abutments and have no other supporting structures. The viaduct from Lower Linden to Vandever Street is punctuated with several openings not spanned with steel: Structure 26, a skewed 11 course header brick arch at Shipley Run (sewer), 35 feet deep and containing 12 ribs; Structure 7, a stone segmental arch with keystone at 8th Street; Structure 5, a round stone arch with keystone at 11th and Railroad Streets; and, Structure 3, a 16-foot brick arch at Davis Street.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number 7 Page 3

Structure # / Milepost #		Structure Location	Description
1	25.45	Vandever Street. (1905)	Through girder, columns on concrete piers
2	25.58	14th Street (1903)	Deck girder, columns
3	25.64	Davis Street (1903)	Brick arch (16 feet)
4	25.73	12th Street (1903)	Through girder, columns on concrete piers
5	25.82	11th Street @ Railroad Street	Stone arch, round w/keystone (16')
6	25.97	Brandywine Creek (1904)	Deck girder, stone and concrete piers
7	26.07	8th Street (1905)	Stone arch bridge w/keystone (20')
8	26.11	7th Street (1903)	Through girder, columns on concrete piers
9	26.33	4th & Church Street (1905)	Through girder, columns on concrete piers
10	26.40	3rd Street (1905)	Through girder, columns on concrete-filled iron piers
11	26.60	Lombard Street (1907)	Through girder, columns on concrete piers
12	26.65	Front Street (1905)	Through girder, columns on concrete piers
13*	26.69	Poplar Street (1907)	Through girder, columns on concrete piers
14*	26.73	Walnut Street (1955)	Through girder, concrete-faced center pier
15	26.75	Walnut Street driveway (1907)	Deck girder w/piers
16	26.82	French Street (1906)	Deck girder and brick vaulted arches, columns
17	26.85	King Street (1906)	Through girder, columns
18	26.92	Market Street (1906)	Through girder, columns on concrete piers
19	26.95	Shipley Street (1906)	Through girder, columns on concrete piers
20	27.00	Orange Street (1906)	Through girder on stone abutments
21	27.02	Thorn St.[Ave. of the Arts] (1907)	Through girder on stone abutments
22	27.06	Tatnall Street (1907)	Through girder on stone abutments
23	27.10	West Street (1907)	Through girder on stone abutments
24	27.21	Justison Street (1906)	Through girder, columns
25	27.32	Madison Street (1905)	Through girder, columns on concrete piers

26	27.36	Shipley Run (1906)	Ribbed brick arch in stone retaining wall
27	27.42	Lower Linden Street (1905)	Steel girder on stone abutments
28	27.52	Viaduct Bridge (1905)	Brick arches
29	27.64	Beech Street (1905)	Through girder on stone abutments
30	27.72	Viaduct Bridge (1906)	Brick arches
31	27.85	B&O Reading R.R. (1906)	Through girder, central columns on stone pier

* denotes non-contributing elements

The Wilmington Rail Viaduct has experienced only two major changes since the original period of construction. The present Walnut Street undergrade bridge was added in 1955 when the Walnut Street bridge over the Christina River was constructed and the roadway widened. The original abutments and through girder bridge can be seen adjacent to the west of the newer construction. This opening afforded access to Water Street and the railroad office building behind the station before it was blocked by station utilities. The superstructure of the Poplar Street undergrade bridge was replaced and the substructure repaired by Amtrak in 1983. More minor changes have occurred in the form of landscaping in the downtown section, particularly on the north side.

Bridge over the Brandywine

In 1903, as part of the improvement program that created the viaduct, the existing bridge over the Brandywine required alteration to meet the new track height. Work began with the sinking of a caisson for the pivot pier in the winter of 1903, but a freshet swept it away. Replaced, it was successfully positioned and a Wakefield triple sheet piling was driven around the outside. The pier was 35 feet 4 inches in diameter, constructed of concrete with a coursed stone facing; the pivot itself was seated upon a granite block. Ice-breakers were built at either end to protect the pier from both river and tidal action. The two abutments and the second pier were built of ashlar set in cement. As on the pivot pier, granite was used for the bridge seats.

The new two span bridge was fabricated by the Phoenix Bridge Company of Phoenixville, Pennsylvania. The approach span from the south bank of the Brandywine River, was a 78-foot through girder bridge, running to the first pier. The main span was a 158-foot fish-belly girder swing bridge, which provided two 59-foot openings. The girders were 6 feet 3.5-inches deep at the shore ends and 10 feet 6 inches at the center pier. A girder runs under each rail of the three tracks. A 30-horsepower gasoline engine opened the bridge. The revolving base is formed by 24-inch diameter wheels rolling on a 16-foot 3 inch radius track.

The Corps of Engineers in 1903 considered the Brandywine a navigable stream and the railroad was required to have a watchman to run the bridge. A small shelter at track level housed the signal levers which controlled traffic at the bridge. A larger building housed the engine. The frame structures are not extant, and the bridge is in a permanently closed position in 1999. The bridge is in good repair and is on the electrified high speed line from New York to Washington.

Statement of Significance

The Wilmington Rail Viaduct is significant under National Register of Historic Places Criterion A for its association with the Pennsylvania Railroad's early 20th-century main line improvement project and the impact of the Pennsylvania Railroad on the City of Wilmington, and under Criterion C for its architectural importance to the city the largest transportation construction project ever undertaken to that time and its impact on the urban landscape. The early 20th-century improvements in Wilmington, which included new repair and construction shops (NR 1980), a swing bridge (included in this nomination), new passenger station (NR 1976) and office building (NR 1976), as well as the premier of electrification along these lines, moved Wilmington into a position of prominence as a Pennsylvania Railroad station city. This project was one of several along the main line to improve the efficiency and safety of the route by straightening out curves and eliminating at-grade crossings of the tracks. The importance of the electrification of the Pennsylvania Railroad's main line and the significance of the line are beyond the scope of this nomination. Although undoubtably this resource has historical significance under these broader contexts, this nomination focuses on the local significance of the Wilmington Rail Viaduct.

The physical structure of the viaduct created a visible barrier between the Christina River front and the rest of the downtown. Whereas the former tracks at grade provided the notion of a boundary, the solidity of the viaduct's stone retaining walls augmented the division between the heavy industrial area along the Christina River to the south and the more mixed use area north of Front Street. Today, with heavy industry gone from the Wilmington waterfront, the viaduct now defines the Christina Waterfront area of revitalization.

Historical Context

At the turn of the century, the Pennsylvania Railroad was one of the strongest and wealthiest companies in the country. This was a time of relative prosperity for all railroads, and the Pennsylvania was one of the most prosperous. The company had extended its control to adjoining lines and had expanded its area of operation. One of the earliest acquisitions

was the Philadelphia, Wilmington and Baltimore Railroad. In 1881, the Pennsylvania bought the railroad's stock for 14 million dollars, pushing the domain of the Pennsylvania southward through Delaware and Maryland.

However, the railroad's greatest expansion came with the new century. Joseph Daughen and Peter Binzen commented, "At the turn of the century, American railroading reached its zenith...It was in this period that the Pennsylvania, under A.J. Cassatt...made some of its most significant investments." These purchases included the Long Island Railroad in 1900; 45 percent of the Chesapeake and Ohio Railroad; and, portions of the Norfolk and Western, the Baltimore and Ohio and the Reading railroads. Altogether, the company purchased 110 million dollars in stock.

The railroad's growth was not confined to stock purchases; the company also initiated major internal renovations. In 1902, the Pennsylvania Railroad began renovating the main line east of Pittsburgh. It four-tracked or double-tracked long stretches, built new yards, eliminated grade crossings and generally improved the right-of-way. This process took three years and cost 67 million dollars. Tunneling operations to give the Pennsylvania access to New York City started in 1904. While erecting Pennsylvania Station, the company drove four tunnels under the East River and two under the Hudson River. These facilities opened in 1910 and cost 100 million dollars to construct.

The Pennsylvania undertook these improvements because of increasing traffic over the company's lines. From 1897 to 1902, freight tonnage increased 64 percent while net earnings rose 78 percent to 25 million dollars. The railroad required more trackage and could afford to make the necessary outlays. Importantly, this increase in traffic was not confined to the Main Line, so the Pennsylvania chose to improve the route of the Philadelphia, Wilmington and Baltimore (P, W & B) Railroad.

The first step in upgrading the P, W & B was to consolidate it with the Baltimore and Potomac Railroad. The merger produced the Philadelphia, Baltimore and Washington Railroad which, after the merger, controlled the entire route to Washington. To improve this route the new company began the rebuilding of the line through the National Capital, the construction of a new passenger station in that city, the renewal of the bridge over the

Potomac River and the elevation of tracks through Wilmington and Chester. This statement in the 1901 annual report formally announced a major construction project which lasted for over seven years. Although Wilmington received small notice in the announcement, the city's rail lines were due for large-scale alterations.

The company made its intentions known to the public in February 1901. The elevation of the tracks through the city was part of a larger scheme of improvements for the Wilmington vicinity, namely, the Edgemoor Cut-off around Wilmington was to be double-tracked; the Claymont Curve north of the city was to be straightened; the tracks through the city were proposed to be elevated; a new station was to be built; and, the company's shops were to be moved to the northern part of the city. The first cost estimate was no less than two million dollars.

In 1901 the company bought property along the right-of-way through Wilmington, and it worked to get its viaduct plans approved by municipal authorities. In August the railroad petitioned Wilmington's Street and Sewer Department for changes in the streets crossed by the viaduct, and in December the City formally accepted the plan. Although little construction work was undertaken in 1901, by the end of the year the way was cleared for major renovations.

Before much work could begin in the elevation of the right-of-way, provision had to be made for replacing the 1854 repair shops, located on the Christina waterfront off French and Water Streets, because the planned path of the elevated tracks cut through the original shop location. Erection of the new shops began in 1903 at Todd's Cut, two miles north of the Brandywine River crossing, where they remain in 1999.

Work began on other parts of the viaduct while the new shops were under construction. The Pennsylvania Railroad's engineering department in Philadelphia, under chief engineer William H. Brown, turned out all the plans for the elevated tracks. The appearance of the causeway was similar to other works of Brown, who embarked on a major stone masonry building program for the Pennsylvania Railroad beginning in 1887. David Plowden, author of Bridges, has commented that this use of stone represented a revival of that material, for which the railroads were responsible. Plowden

noted:

> The Eastern trunk lines, particularly the Pennsylvania and New York Central, whose empires were established, preferred to pay more for a stone bridge than to risk experimenting with the new metal steel... With money to spend, the massive stonework structures they now produced were among the safest, strongest yet... Furthermore, it was more than likely that their directors, moguls like Morgan and Vanderbilt, wishing to bestow a degree of monumentality to their empires, felt that stone bridges were best suited to glorify their achievements (in Seely 1976).

The Pennsylvania Railroad launched the most ambitious program of stone construction, creating some of the largest stone bridges ever built, at Trenton and New Brunswick, New Jersey, and at Coatesville and Shock's Mill, Pennsylvania. In 1902 it opened the largest stone arch railway bridge in the world, the Rockville Bridge over the Susquehanna River near Harrisburg. The Pennsylvania's decision to use stone on the Wilmington Viaduct places the elevated in the mainstream of the engineering work the railroad carried out from 1887 to 1910.

The primary motivation for elevating the tracks through Wilmington also was typical of the railroad's engineering efforts. For one thing, the viaduct offered a straighter alignment, a constant goal of any railroad. But more importantly, the elevated eliminated a number of at-grade crossings. This was a system-wide crusade for the Pennsylvania Railroad, designed to reduce accidents at crossings and increase speed. Besides elevating the tracks through Wilmington, the company was constructing viaducts through Chester, Pittsburgh and Philadelphia, Pennsylvania, through New Brunswick, Newark, and Rahway, New Jersey, and New York City.

Wilmington Rail Viaduct Construction

The railroad's proposals submitted to the City in 1901 called for the new structure to follow the approximate path of the old right-of-way, with minor straightening. Initially, the railroad intended to erect an iron structure resembling bridgework over the stretches where the old and new tracks met, to prevent any disruption of service to manufacturing

establishments in the city. Elsewhere, the plan called for an earth fill between stone walls, 12 to 14 feet high, to carry two tracks. Streets were to be crossed by iron bridges, requiring few alterations to city roads. Overall, the viaduct was to be almost four miles long.

There were a few alterations in the plans. The bridgework was never built, since work proceeded without interrupting traffic. The retaining walls were not suitable for the whole length, and a series of brick arch structures were introduced to span marshy ground.

In the spring of 1902, the first construction work on the viaduct began downtown from Market to King Street. Work moved to Shipley and on southward toward the old freight yards, then back to French Street and north toward the Brandywine River. During the same time, work began south of Shellpot Creek to the new shop site and moved south towards the Brandywine River.

The viaduct was the largest part of the Wilmington improvements and took the longest time to build. In October 1903 there were 1200 people working on the elevated section alone. Originally, plans called for the completion of the work by mid-1905 and, for the most part, it was. However, some shortcuts were taken to get it completed. On the retaining wall north of the Brandywine, after the first wall was ready, a heavy trestlework and planking was erected so that the thousands of carloads of fill could be dumped in even though the second wall was not built. It was not until 1908 that the work on the viaduct was complete.

Electrification

The new Wilmington Shops at Todds Cut quickly became the repair center for the entire east coast corridor of the Pennsylvania Railroad. Since their erection the shops handled a steadily increasing quantity of electrical repairs, leading to additional responsibilities as the Pennsylvania Railroad upgraded their technology in the 1920s and 1930s. In 1928 the Wilmington viaduct was part of the first electrified segment of the Pennsylvania Railroad main line, which carried a single phase catenary from Philadelphia to Wilmington. Tests on the GG-1 locomotive were carried out in Claymont, just north of Wilmington shops in 1933 and, in 1935, the

Pennsylvania Railroad opened the new electrified northeast corridor between New York and Washington. At this time Wilmington was the main repair and maintenance headquarters for all electric locomotives.

The Wilmington viaduct has served its original purpose continuously since its completion in 1908, despite the waxing and waning popularity of rail transportation. The structure has undergone few changes in the last 90 years, and none which challenge its overall historical integrity. The elements of its structure, from the graceful braces of the undergrade bridges to the rolling arch spans, are both aesthetically pleasing and highly utilitarian. The imposing structure of the viaduct is as important a landscape element to the City as are the two rivers, despite its man-made origins.

Comprehensive Planning

State Plan Link

Zone:	Urban
Time Period:	1880-1940+/-: Urbanization and Early Suburbanization
Theme:	Transportation and Communication
Property Type:	Railroad
Subtypes:	Viaduct, Bridges

Boundary Justification

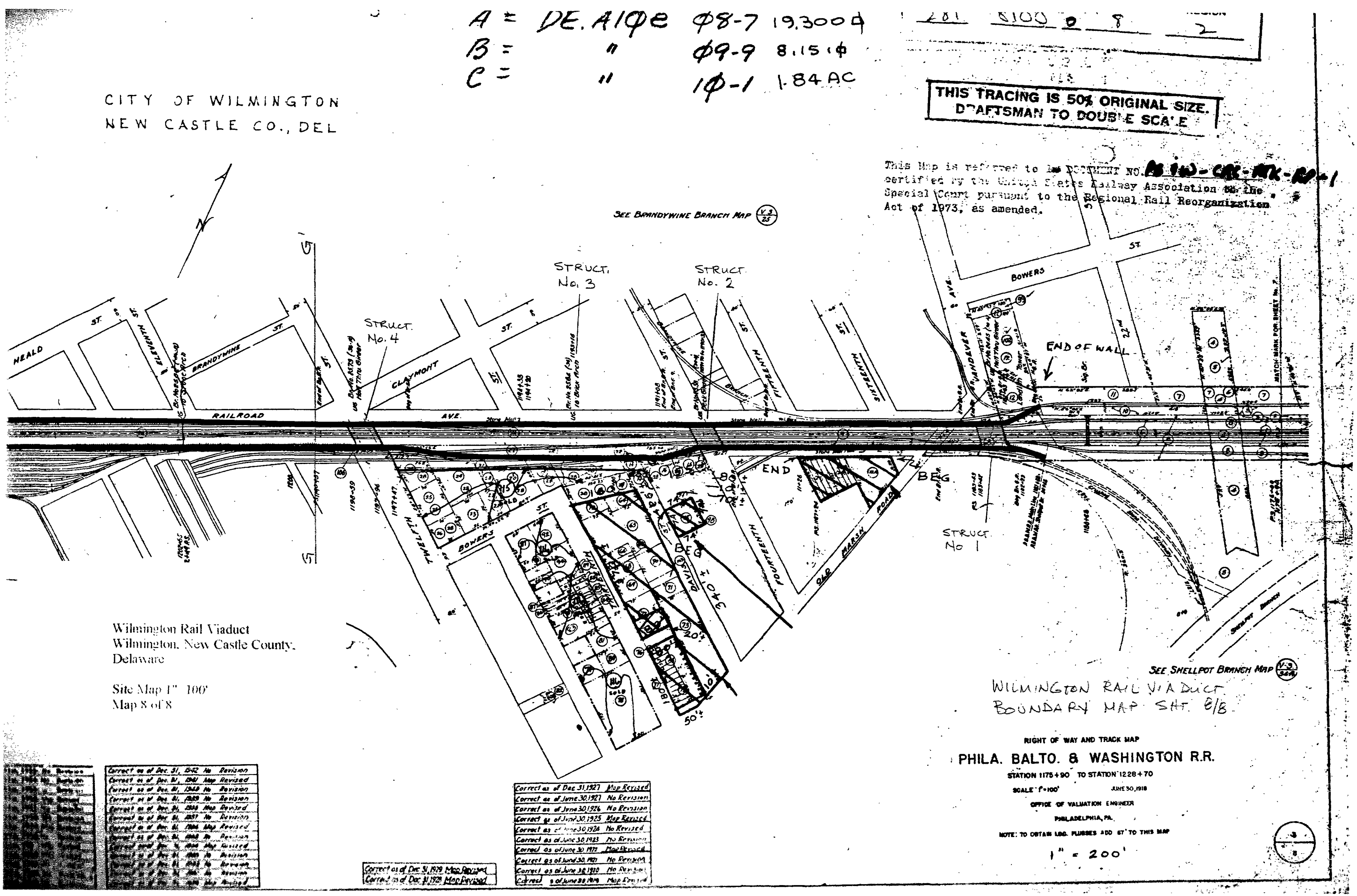
The boundary of the Wilmington Rail Viaduct is limited to the elevated right-of-way of the former Pennsylvania Railroad through Wilmington, Delaware, milepost number 25.4 through 28.3. Included in the boundary are all the structures that make up the elevated system, including retaining walls, earthen embankments, arches, steel undergrade bridges and the Brandywine River bridge.

Boundary Description

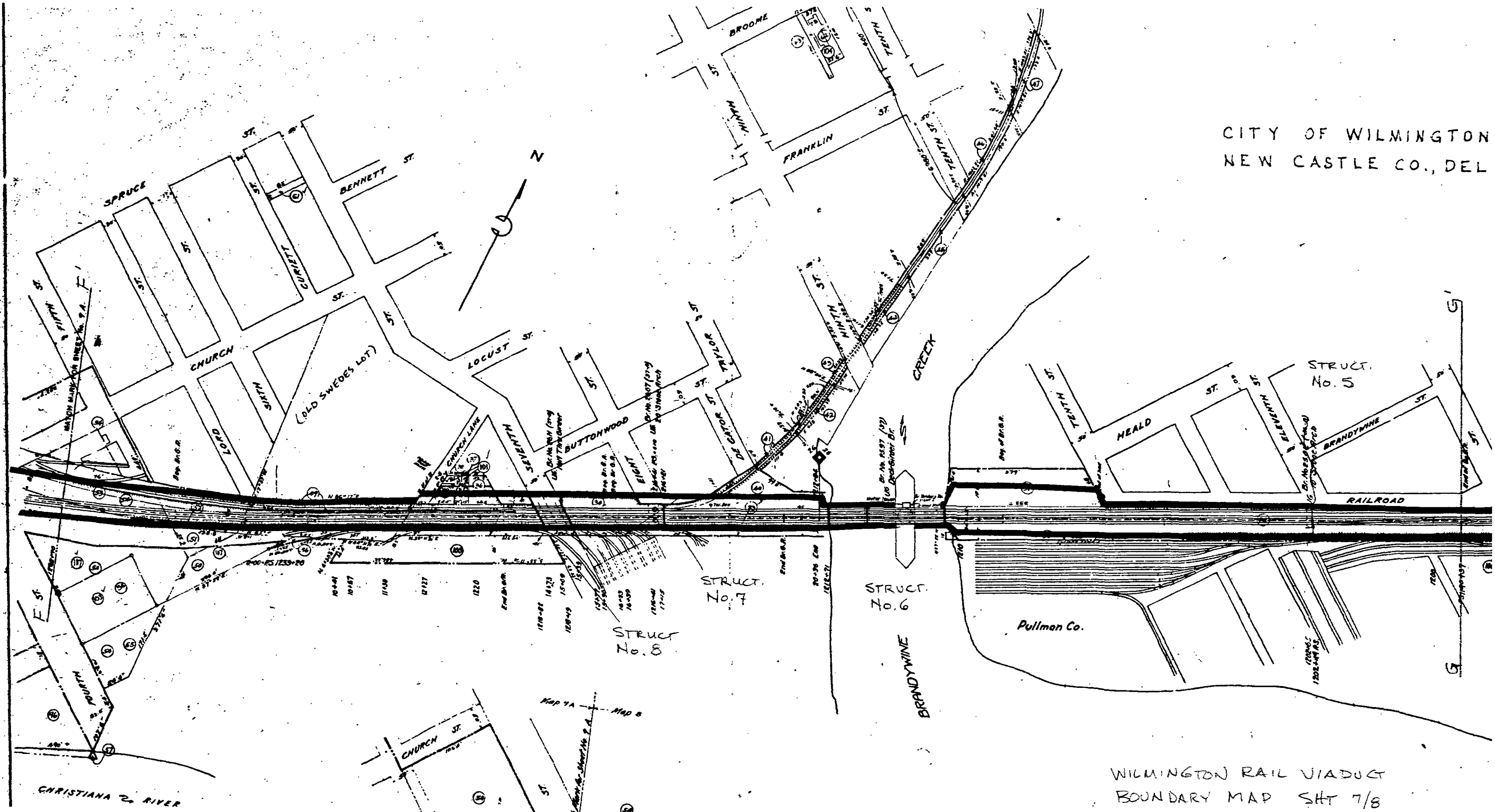
The boundary of the Wilmington Rail Viaduct is discribed as follows: From mile marker 25.4 to the bridge abutment at Brandywine Creek, the boundary is limited to the footprint of the stone retaining wall, the toe of slope of the earthen embankment and the superstructure and substructure of the undergrade bridges. At mile marker 25.7, the Brandywine River Bridge, the boundary includes the superstructure and substructure of the bridge. From the Brandywine River Bridge to mile marker 26.6 (at Lombard Street), the boundary is limited to the footprint of the stone retaining wall, the toe of slope of the earthen embankment and the superstructure and substructure of the undergrade bridges. From Lombard Street to mile marker 27.42 (at Lower Linden Street), the boundary is limited to the footprint of the stone retaining walls and the superstructure and substructure of the undergrade bridges. Note that the concrete retaining walls added to the north side of the viaduct between Shipley and King Streets after 1936 fall outside of the boundary as defined on the accompanying map entitled "Wilmington Rail Viaduct Resource Boundary Map." These additions serve a landscaping purpose and are not an essential part of the viaduct. From Lower Linden Street to mile marker 27.72 the boundary is limited to the footprints of the brick arch section and the stone bridge abutments, as well as the superstructure of the undergrade bridge. From mile marker 27.72 to mile marker 28.3, the boundary is limited to the footprint of the stone retaining walls and to the superstructure and substructure of the undergrade bridge.

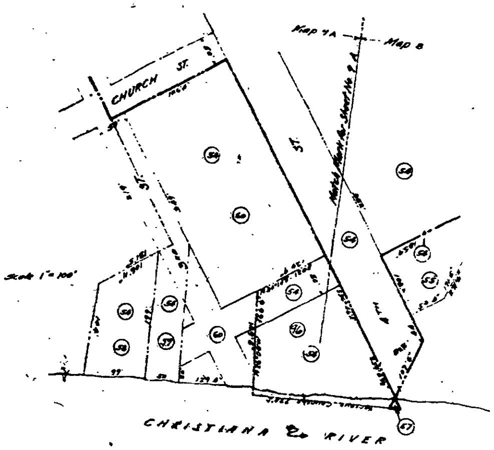
Description of the Intersection with the Wilmington Train Station

The Wilmington Rail Viaduct passes through the Wilmington Train Station complex (NR 1976). The boundaries of the train station complex, as accepted, include the station building sections north and south of the viaduct, the viaduct and platform sections from French Street on the east to King Street on the west (one block total), and the Pennsylvania Railroad Office Building directly south of the train station.


A = DE.A1ØE Ø8-7 19.300Ø
B = " Ø9-9 8.15 1Ø
C = " 1Ø-1 1.84 AC
CITY OF WILMINGTON
NEW CASTLE CO., DEL
THIS TRACING IS 50% ORIGINAL SIZE.
DRAFTSMAN TO DOUBLE SCALE
This Map is referred to in DOCUMENT NO. certified by the United States Railway Association to the Special Court pursuant to the Regional Rail Reorganization Act of 1973, as amended.
SEE BRANDYWINE BRANCH MAP
STRUCT. No. 4
STRUCT. No. 3
STRUCT. No. 2
STRUCT. No 1
END OF WALL
END
BEG
HEALD
ELEVENTH ST.
BRANDYWINE ST.
RAILROAD AVE.
CLAYMONT ST.
TWELFTH
BOWERS ST.
DAVIS ST.
FOURTEENTH
FIFTEENTH ST.
SIXTEENTH ST.
OLD MARSH ROAD
VANDEVER AVE.
BOWERS ST.
22nd ST.
340' ±
50' ±
Wilmington Rail Viaduct
Wilmington, New Castle County, Delaware
Site Map 1" 100'
Map 8 of 8
SEE SHELLPOT BRANCH MAP
WILMINGTON RAIL VIADUCT
BOUNDARY MAP SHT 8/8
RIGHT OF WAY AND TRACK MAP
PHILA. BALTO. & WASHINGTON R.R.
STATION 1175+90 TO STATION 1228+70
SCALE 1"=100' JUNE 30, 1918
OFFICE OF VALUATION ENGINEER
PHILADELPHIA, PA.
1" = 200'
Correct as of Dec 31, 1979 Map Revised
Correct as of Dec 31, 1978 Map Revised
Correct as of Dec 31, 1927 Map Revised
Correct as of June 30, 1927 No Revision
Correct as of June 30, 1926 No Revision
Correct as of June 30, 1925 Map Revised
Correct as of June 30, 1924 No Revised
Correct as of June 30, 1923 No Revision
Correct as of June 30, 1922 Map Revised
Correct as of June 30, 1921 No Revision
Correct as of June 30, 1920 No Revision
Correct as of June 30, 1919 Map Revised

CITY OF WILMINGTON
NEW CASTLE CO., DEL





WILMINGTON RAIL VIADUCT
BOUNDARY MAP SHT 7/8

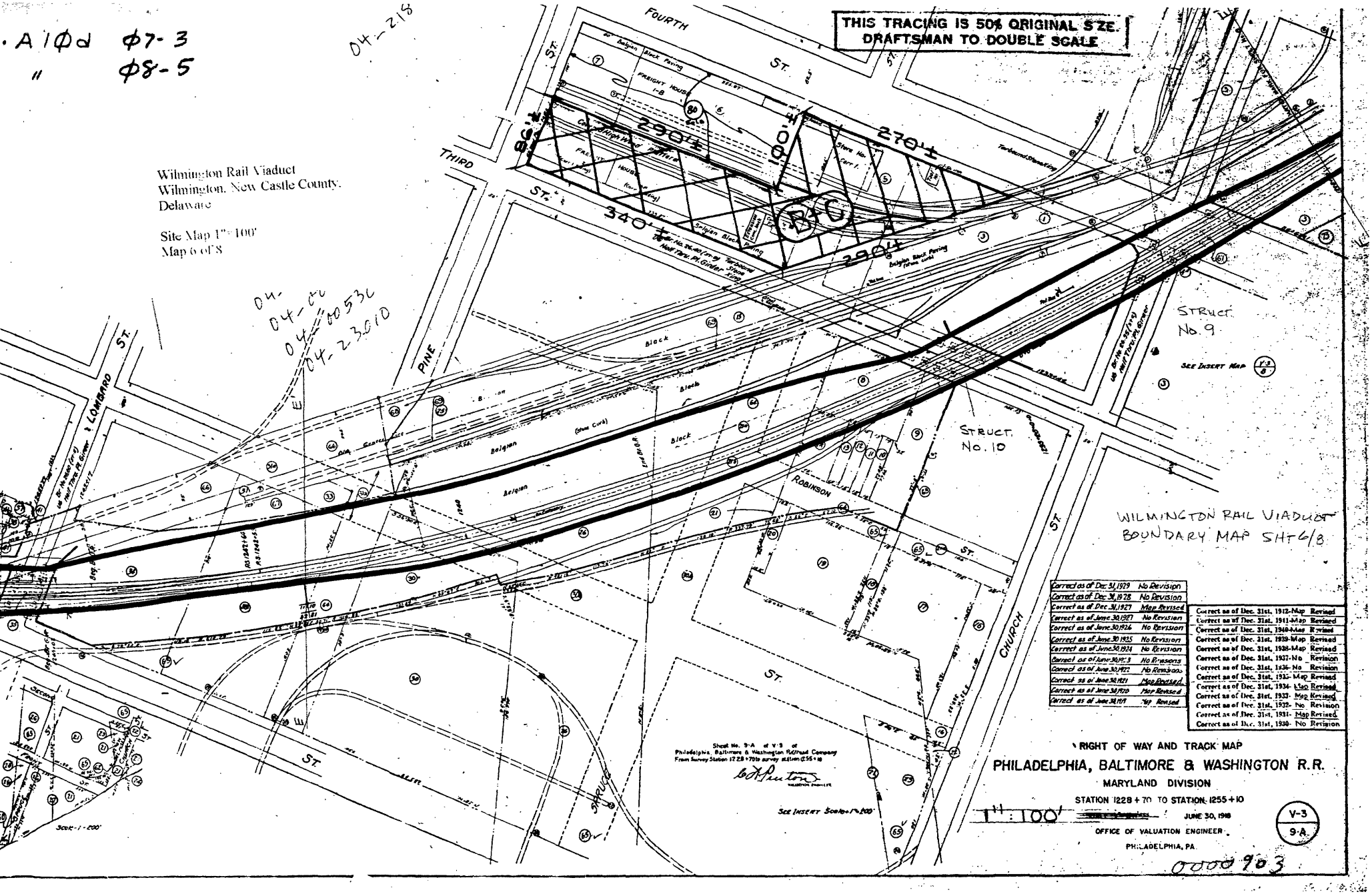
Wilmington Rail Viaduct
Wilmington, New Castle County,
Delaware

Site Map 1" = 100'
Map 7 of 8

[illegible] as of Dec. 31	Revised: Yes	Revised: No
[illegible]		
[illegible]		
[illegible]		
[illegible]		
[illegible]	✓	
[illegible]		✓
[illegible]	✓	
[illegible]	✓	
[illegible]		✓
[illegible]	✓	
[illegible]		✓

Correct as of Dec. 31st, 1955- No Revision
Correct as of Dec. 31st, 1954- No Revision
Correct as of Dec. 31st, 1953- [illegible] Revision
Correct as of Dec. 31st, 1952- Map Revised
Correct as of Dec. 31st, 1951- No Revision
Correct as of Dec. 31st, 1950- No Revision
Correct as of Dec. 31st, 1949- Map Revised
Correct as of Dec. 31st, 1948- No Revision
Correct as of Dec. 31st, 194[illegible] - Map Revised
Correct as of Dec. 31st, 1946- Map Revised
Correct as of Dec. 31st, 1945- No Revision

Correct as of Dec. 31, 1942 No Revision
Correct as of Dec. 31, 1941 Map Revised
Correct as of Dec. 31, [illegible] No Revision
Correct as of Dec. 31, 1939 No Revision
Correct as of Dec. 31, 1938 Map Revised
Correct as of Dec. 31, 1937 No Revision
Correct as of Dec. 31, 1936 Map Revised
Correct as of Dec. 31, 1935 No Revision
Correct as of Dec. 31, 1934 Map Revised
Correct as of Dec. 31, 1933 No Revision
Correct as of Dec. 31, 1932 No Revision



A1Φd Φ7-3
" Φ8-5

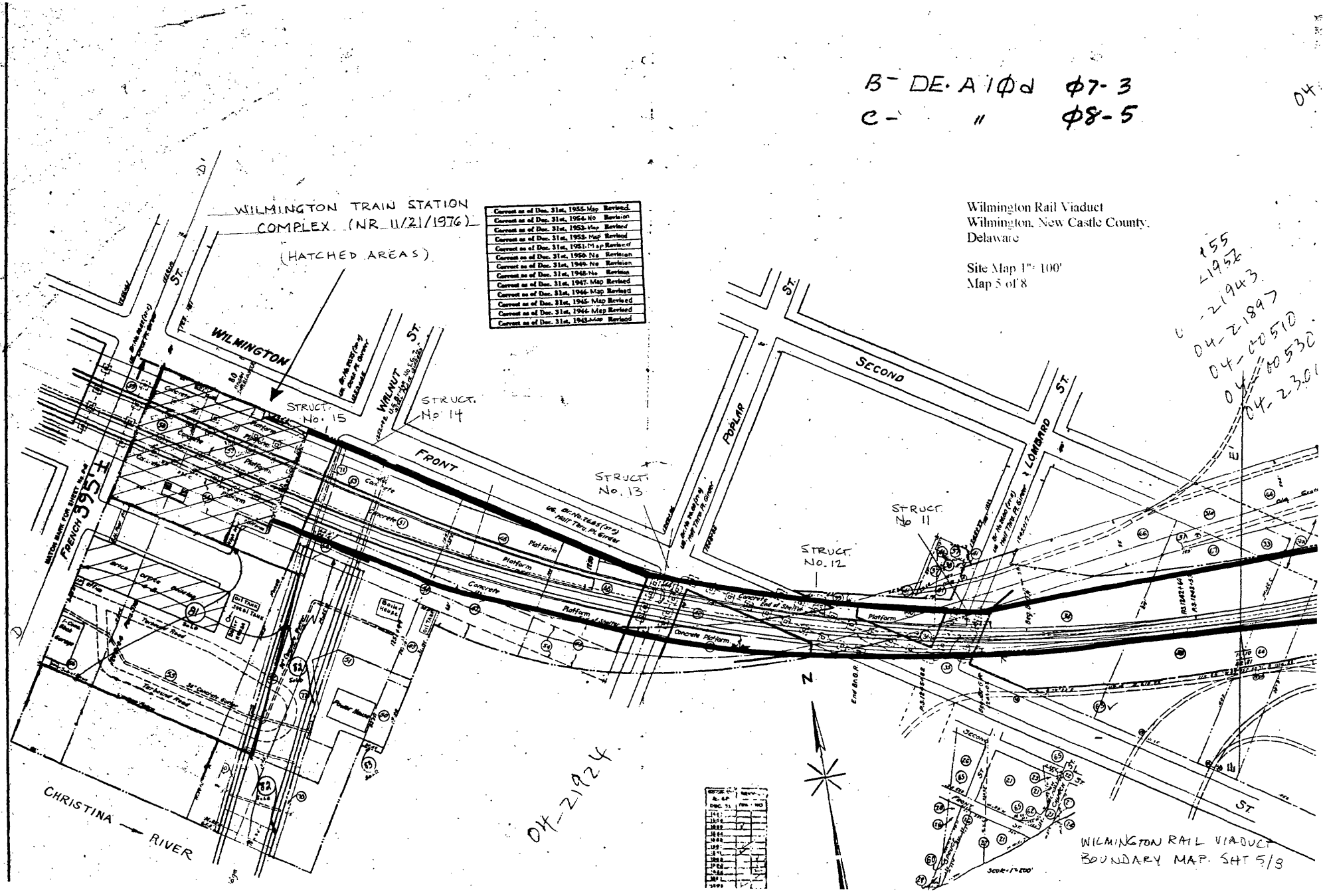
04-215

04-
04-00536
04-23010

0000903

B- DE. A 1Φd Φ7-3
C- " Φ8-5

04

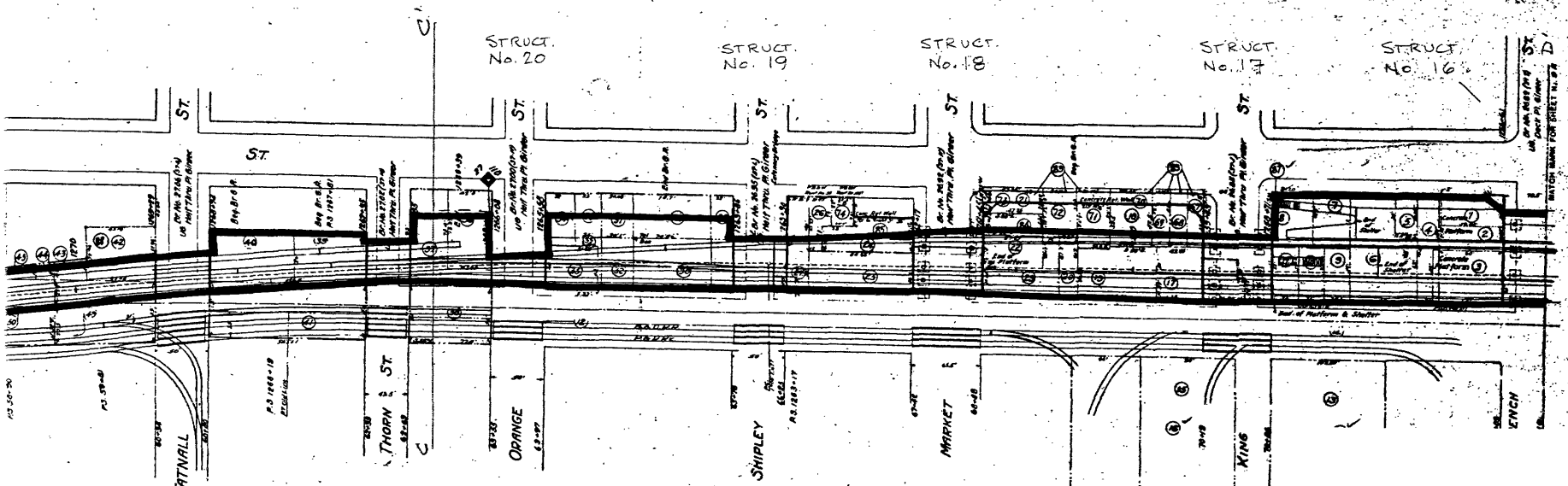


EW CASTLE

A = DEAlΦd 11-1

THIS TRACING IS 50% ORIGINAL SIZE.
DRAFTSMAN TO DOUBLE SCALE

This Map is referred to in DOCUMENT NO. PBSW-CRC-ATK-RPY certified by the United States Railway Association to the Special Court Pursuant to the Regional Rail Reorganization Act of 1973, as amended.



CORRECT AS OF DEC 31	REVISED YES	REVISED NO
1967		
1966		
1965		
1964		
1963		
1962		
1961		
1960		
1959		
1958		
1957		
1956		

Correct as of Dec. 31st, 1955- No Revision	Correct as of Dec. 31st, 1942-No Revision	Correct as of Dec 31, 1929 Map Revised
Correct as of Dec. 31st, 1954- No Revision	Correct as of Dec. 31st, 1941-Map Revised	Correct as of Dec 31, 1928 Map Revised
Correct as of Dec. 31st, 1953- No Revision	Correct as of Dec. 31st, 1940-No Revision	Correct as of Dec 31 1927 Map Revised
Correct as of Dec. 31st, 1952- Map Revised	Correct as of Dec. 31st, 1939-No Revision	Correct as of June 30 1927 No Revision
Correct as of Dec. 31st, 1951- No Revision	Correct as of Dec. 31st, 1938-No Revision	Correct as of June 30 1926 No Revision
Correct as of Dec. 31st, 1950- No Revision	Correct as of Dec. 31st, 1937-No Revision	Correct as of June 30 1925 No Revision
Correct as of Dec. 31st, 1949- No Revision	Correct as of Dec. 31st, 1936- Map Revised	Correct as of June 30 1924 No Revision
Correct as of Dec. 31st, 1948- No Revision	Correct as of Dec. 31st, 1935- Map Revised	Correct as of June 30/1923 No Revisions
Correct as of Dec. 31st, 1947- Map Revised	Correct as of Dec. 31st, 1934- No Revision	Correct as of June 30/1922 Not Revised
Correct as of Dec. 31st, 1946- Map Revised	Correct as of Dec. 31st, 1933- No Revision	Correct as of June 30/1921 No Revisions
Correct as of Dec. 31st, 1945- Map Revised	Correct as of Dec. 31st, 1932- Map Revised	Correct as of June 30/1920 Map Revised
Correct as of Dec. 31st, 1944- Map Revised	Correct as of Dec. 31st, 1931- No Revision	Correct as of June 30/1919 No Revisions
Correct as of Dec. 31st, 1943-No Revision	Correct as of Dec. 31st, 1930- No Revision	

Sheet No. 8-8 of V-3 of
Philadelphia, Baltimore & Washington Railroad Company.
From survey station 1255+10 to survey station 1261+50.

Wilmington Rail Viaduct
Wilmington, New Castle County,
Delaware

Site Map 1"= 100'
Map 4 of 8

P. B. & W. R. R. MARYLAND DIV.

RIGHT OF WAY AND TRACK MAP

PHILA. BALTO. & WASHINGTON R. R.

STATION 1255+10 TO STATION 1261+50

1"= 100'

SCALE 1" = 50' JUNE 30, 1918

OFFICE OF VALUATION ENGINEER
PHILADELPHIA, PA.

NOTE.- TO OBTAIN I.C.C. PLUSES ADD 87 FEET TO PLUSES ON THIS MAP.

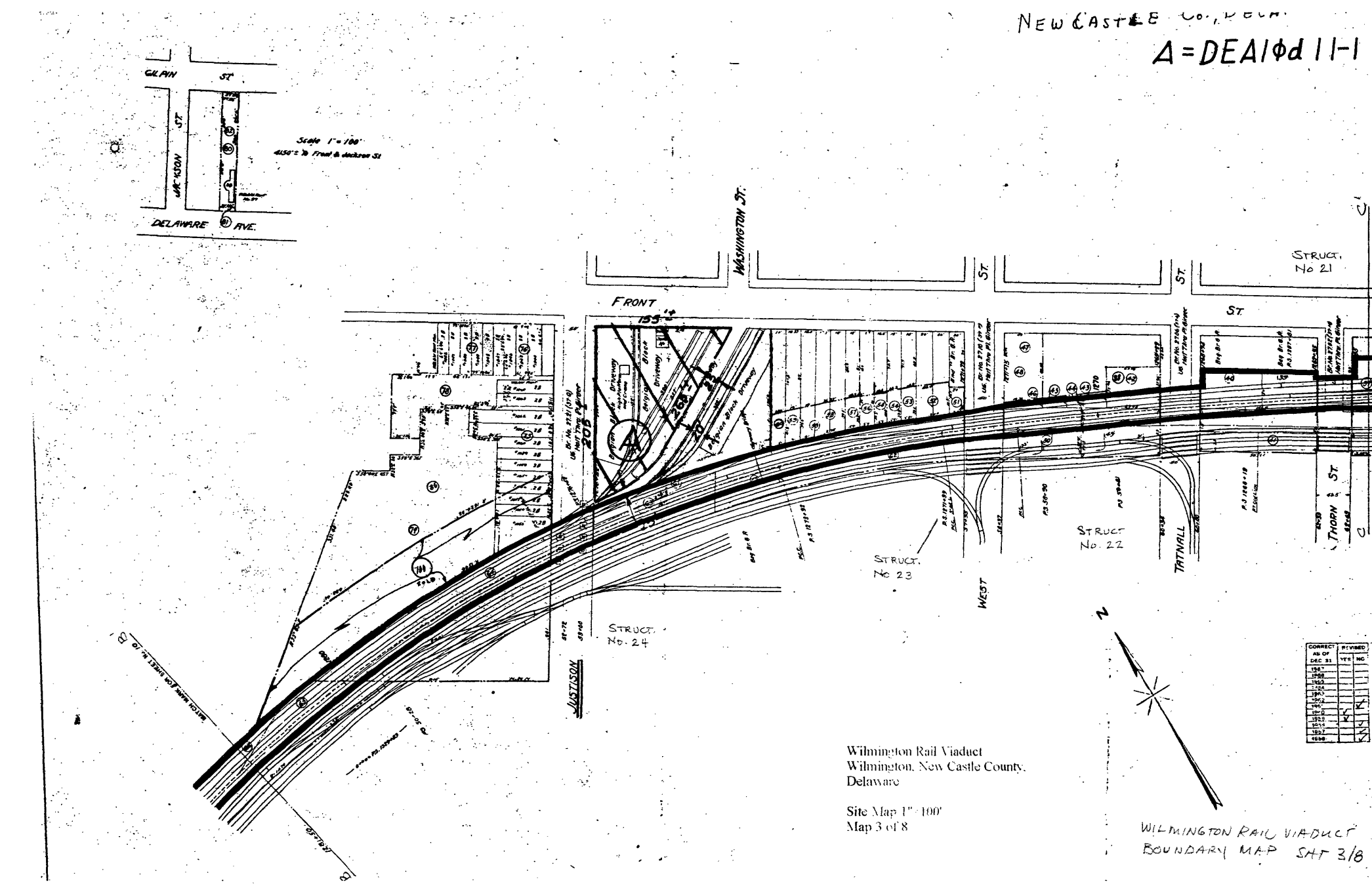
V-3
98

1960

WILMINGTON RAIL VIADUCT
BOUNDARY MAP SHT 4/8

NEW CASTLE CO., DEL.

A=DEA\Φd 11-1



Wilmington Rail Viaduct
Wilmington, New Castle County,
Delaware

Site Map 1" = 100'
Map 3 of 8

WILMINGTON RAIL VIADUCT
BOUNDARY MAP SHT 3/8

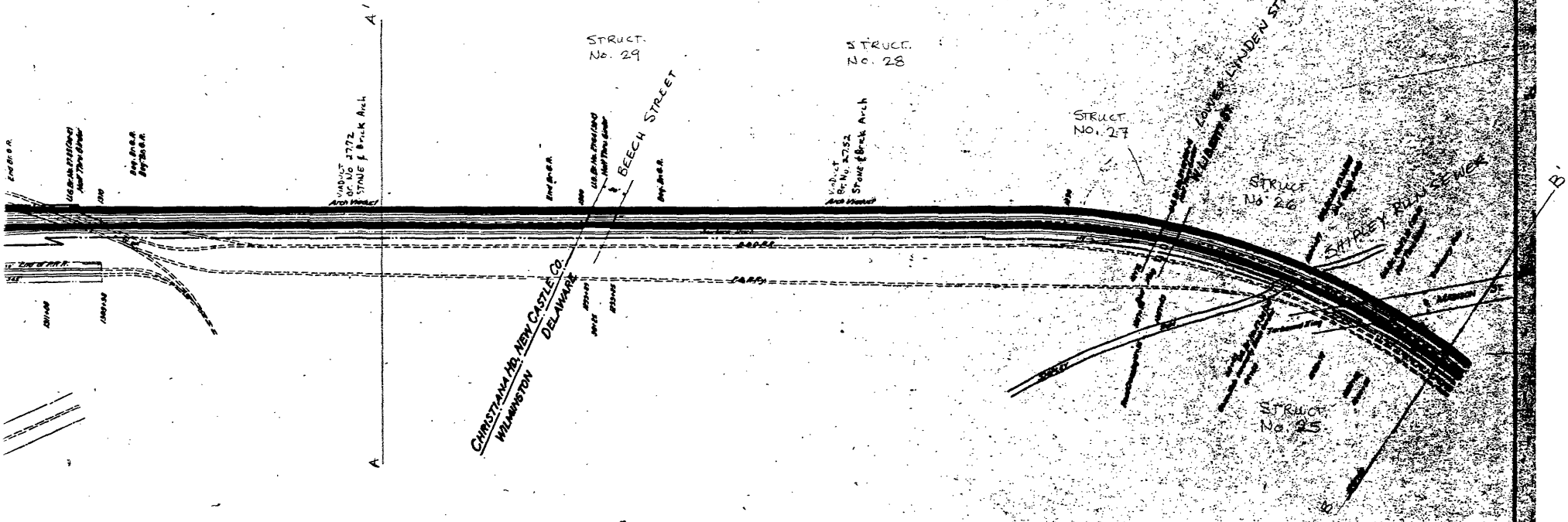
This Map is referred to in DOCUMENT NO. PBOW-CRC-AP-2 filed by the United States Railway Association to the Special Court pursuant to the Regional Rail Reorganization Act of 1973, as amended.

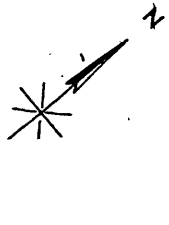
PROPERTY IDENTIFICATION MAP MAP 25

SIGNATURE	DATE	SIGNATURE	DATE	MAP NO.
				1291

Parcel PBC-1201

PROPERTY EXCLUDED FROM CONVEYANCE





Correct as of Dec. 31st, 1958- No Revision	Correct as of Dec. 31st, 1942-Map Revised	Correct as of Dec 31, 1929 Map Revised
Correct as of Dec. 31st, 1954- No Revision	Correct as of Dec. 31st, 1941-Map Revised	Correct as of Dec 31, 1928 Map Revised
Correct as of Dec. 31st, 1953- No Revision	Correct as of Dec. 31st, 1940-Map Revised	Correct as of Dec 31, 1927 Map Revised
Correct as of Dec. 31st, 1952- No Revision	Correct as of Dec. 31st, 1939-No Revision	Correct as of June 30, 1926 No Revisions
Correct as of Dec. 31st, 1951- No Revision	Correct as of Dec. 31st, 1938-No Revision	Correct as of June 30, 1926 No Revisions
Correct as of Dec. 31st, 1950- No Revision	Correct as of Dec. 31st, 1937-No Revision	Correct as of June 30, 1925 No Revisions
Correct as of Dec. 31st, 1949- No Revision	Correct as of Dec. 31st, 1936-No Revision	Correct as of June 30, 1924 No Revisions
Correct as of Dec. 31st, 1948- No Revision	Correct as of Dec. 31st, 1935-Map Revised	Correct as of June 30, 1923 Map Revised
Correct as of Dec. 31st, 1947- Map Revised	Correct as of Dec. 31st, 1934-Map Revised	Correct as of June 30, 1922 No Revisions
Correct as of Dec. 31st, 1946- No Revision	Correct as of Dec. 31st, 1933-Map Revised	Correct as of June 30, 1921 No Revisions
Correct as of Dec. 31st, 1945- No Revision	Correct as of Dec. 31st, 1932-Map Revised	Correct as of June 30, 1920 No Revisions
Correct as of Dec. 31st, 1944-Map Revised	Correct as of Dec. 31st, 1931-No Revision	Correct as of June 30, 1919 No Revisions
Correct as of Dec. 31st, 1943-No Revision	Correct as of Dec. 31st, 1930-Map Revised	Correct as of June 30, 1918 No Revisions

Wilmington Rail Viaduct
Wilmington, New Castle County,
Delaware

Site Map 1" = 100'
Map 2 of 8

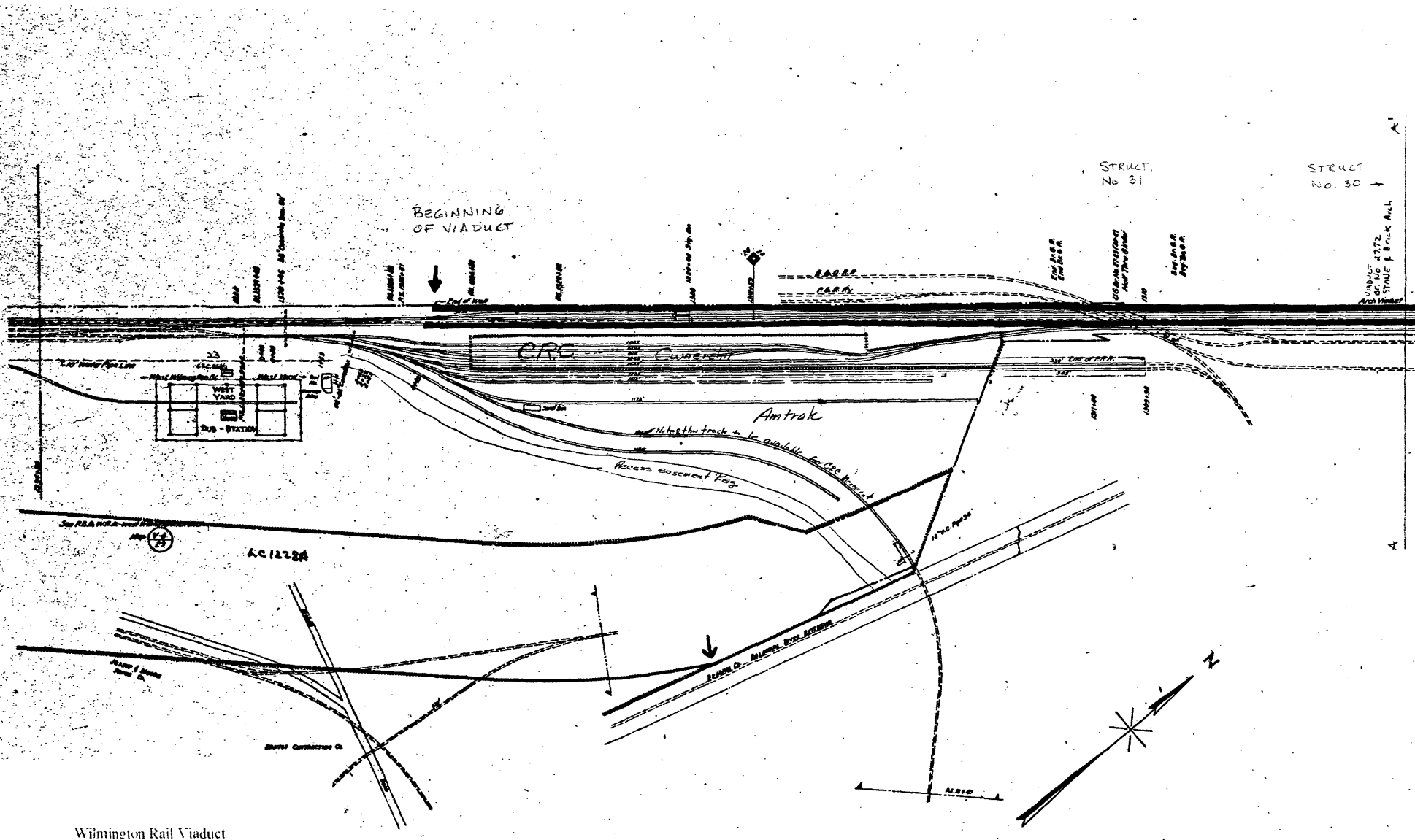
WILMINGTON RAIL VIADUCT
BOUNDARY MAP SHT 2/8

USRA Lateral Cutline Tracked

RIGHT OF WAY AND TRACK MAP
PHILA. BALTO. & WASHINGTON R.R.
STATION 1334+30 TO STATION 2814+50
SCALE 1"=100' JUNE 25, 1918
OFFICE OF VALUATION ENGINEER
PHILADELPHIA PA

This Map has been reduced.

1" = 200'



Wilmington Rail Viaduct
Wilmington, New Castle County,
Delaware

Site Map 1"= 100'
Map 1 of 8

WILMINGTON RAIL VIADUCT
BOUNDARY MAP SHT.1/8