

MAYER • BROWN

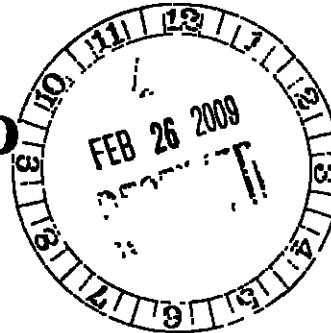
Mayer Brown LLP
1909 K Street, N W
Washington, D C 20006-1101

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Robert M. Jenkins III
Direct Tel (202) 263-3261
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FEE RECEIVED

FEB 26 2009



February 26, 2009

BY HAND DELIVERY

**SURFACE
TRANSPORTATION BOARD**

Anne K. Quinlan
Secretary
Surface Transportation Board
295 E Street, SW
Washington, DC 20423-0001

224608

FILED

FEB 26 2009

Re. Docket No AB 167 (Sub-No 1189X)
Consolidated Rail Corporation—Abandonment
Exemption -- in Hudson County, New Jersey

224609

**SURFACE
TRANSPORTATION BOARD**

Docket No AB 55 (Sub-No 686X)
CSX Transportation, Inc —Discontinuance
Exemption—in Hudson County, New Jersey

ENTERED
Office of Proceedings

FEB 26 2009

Docket No AB 290 (Sub-No 306X)
Norfolk Southern Railway Company—
Discontinuance Exemption—in Hudson
County, New Jersey

224610

Part of
Public Record

Dear Secretary Quinlan:

Enclosed for filing with the Board are the original and ten copies of combined Notices of Exemption for the above-described abandonment (Consolidated Rail Corporation) and discontinuance of service (CSX Transportation, Inc and Norfolk Southern Railway Company), which are submitted pursuant to 49 C.F.R. §1152.50. Three copies on compact disks are included as well. See 49 C.F.R. §1104.3(b)(1).

Conrail previously filed in this proceeding, on March 6, 2008, an Environmental and Historical Report, along with copies of letters to governmental agencies and officials and responses from those agencies, in accordance with 49 C.F.R. §§1105.7, 1105.8, and 1152.50(d)(1). Conrail is further filing with this combined Notices of Exemption a Supplemental Environmental and Historical Report, along with copies of agency correspondence Conrail has received since March 6, 2008.

Conrail is submitting a single check in the amount of \$11,100 to cover the filing fee (\$3,700 for each of these three Notices of Exemption).

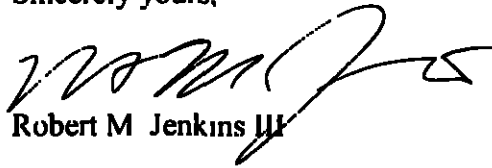
Mayer Brown LLP

Ann K. Quinlan
February 26, 2009
Page 2

Because Conrail has already submitted a filing fee in this case, Conrail is also filing the original and ten copies of a "Motion for Waiver and Refund of Filing Fee," pursuant to 49 C.F.R. §1002.2(c)(2).

Please date-stamp the enclosed extra copies of the pleadings and return them to our representative.

Sincerely yours,



Robert M. Jenkins III

RMJ/bs

Enclosures

ENTERED
Office of Proceedings

FEB 26 2009

Part of
Public Record

BEFORE THE
SURFACE TRANSPORTATION BOARD
WASHINGTON, DC 20423

FILED

FEB 26 2009

SURFACE
TRANSPORTATION BOARD

STB NO. AB 167 (SUB-NO. 1189X)

CONSOLIDATED RAIL CORPORATION – ABANDONMENT EXEMPTION – IN
HUDSON COUNTY, NEW JERSEY

STB NO. AB 55 (SUB-NO. 686X)

CSX TRANSPORTATION, INC. – DISCONTINUANCE EXEMPTION – IN HUDSON
COUNTY, NEW JERSEY

STB NO AB 290 (SUB-NO. 306X)

NORFOLK SOUTHERN RAILWAY COMPANY – DISCONTINUANCE
EXEMPTION – IN HUDSON COUNTY, NEW JERSEY

VERIFIED NOTICES OF EXEMPTION

FEB RECEIVED

FEB 26 2009

SURFACE
TRANSPORTATION BOARD

I Consolidated Rail Corporation ("Conrail") hereby files its Verified Notice of Exemption pursuant to 49 C.F.R. 1152.50 to abandon property, described below, that the Board has determined is part of a line of railroad subject to the Board's abandonment authority. CSX Transportation, Inc ("CSXT") and Norfolk Southern Railway Company ("NS") hereby file their Verified Notices of Exemption pursuant to 49 C.F.R. 1152.50 to discontinue service over the same property. A map showing the location of the property and more specifically describing the portion to be abandoned is attached hereto as Exhibit A.

Name. Harsimus Branch

Location City of Jersey City, Hudson County, New Jersey

Description of Track. Rail right-of-way running from CP Waldo (Milepost 0.00) in the City of Jersey City to a point east of Washington Street (Milepost 1.36), which traverses United States Postal Service Zip Codes 07302, 07306, and 07310. (According to the Board, the Milepost at CP Waldo is 2.54 and the Milepost at a point near Marin Boulevard is 1.30. The Board has not assigned a Milepost number to the point east of Washington Street. See *City of Jersey City, Rails to Trails Conservancy, Pennsylvania Railroad Harsimus Stem Embankment Coalition, and New Jersey State Assemblyman Louis M. Manzo—Pet. for Dec. Order*, STB Fin. Dkt. No. 34818 (served Aug. 8, 2007), slip op. at 1.)

Length of Track 1.36 miles±

2. Applicants certify that (a) no local or overhead traffic has moved over the property for at least two years, (b) any overhead traffic that has or could move over the property can be rerouted, and (c) no formal complaint filed by a user of rail service on the property (or a state or local government entity acting on behalf of such user) regarding cessation of service over the property either is pending before the Board or any United States District Court or has been decided in favor of a complainant within the last two years.

3. The proposed consummation date of the abandonment is April 17, 2009.

4. The exact names of the applicants are Consolidated Rail Corporation, CSX Transportation, Inc., and Norfolk Southern Railway Company ("Applicants").

5 Applicants are common carriers by railroad subject to Subtitle IV, Part A, of Title 49, United States Code, and are not a part of any other railroad system.

6. The relief Applicants seek is abandonment of and discontinuance of service over the above-described property that the Board has determined is part of a line of railroad

7 Applicants' representatives to whom correspondence relating to this matter should be addressed are John K. Enright, Associate General Counsel, Consolidated Rail Corporation, 1717 Arch Street, 32nd Floor, Philadelphia, PA 19103, Telephone (215) 209-5012, and Robert M Jenkins III, Mayer Brown LLP, 1909 K Street, NW, Washington, DC 20006, Telephone (202) 263-3261.

8 Possible public uses that have been suggested for the property include public park use, public trail use, and light rail use. The property east of Milepost 0.18 has previously been sold to various private and public development entities. See *City of Jersey City, Rails to Trails Conservancy, Pennsylvania Railroad Harsimus Stem Embankment Coalition, and New Jersey State Assemblyman Louis M. Manzo—Petition for Declaratory Order*, STB Fin. Dkt. No. 34818 (served August 9, 2007), slip op. at 4-5.

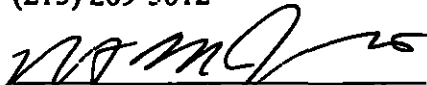
9. Applicants acknowledge that the Board must require provisions for protection of the interests of employees as a condition of any abandonment and that it may not in the exercise of its exemption authority relieve a rail carrier from an obligation to protect the interests of

employees. See 49 U.S.C. 10903(b)(2) and 10502(g), as amended. Applicants believe that the appropriate level of labor protection to be imposed is that contained in the conditions set forth in *Oregon Short Line Railroad Company – Abandonment – Goshen*, 360 I.C.C. 91 (1979).

10. On March 6, 2008, Applicants filed with the Board an Environmental and Historic Report in conformance with 49 C.F.R. 1105.7 and 1105.8. Attached as Exhibit B is a Supplemental Environmental and Historic Report providing additional environmental and historic preservation information with respect to possible indirect impacts arising from reuse of the property. (Conrail does not concede that such indirect impacts would be caused by the proposed undertaking within the meaning of either the National Environmental Policy Act or the National Historic Preservation Act.)

11. Counsel for Conrail certifies that Conrail has sent the letter required by 49 C.F.R. 1152.50(d)(1) to the agencies and entities specified (a copy of which is attached hereto as Exhibit C), that Conrail has served copies of the Supplemental Environmental and Historic Report on all of the agencies and entities specified in 49 C.F.R. 1105.7(b), 1105.8(c), pursuant to a letter conforming to the requirements of 49 C.F.R. 1105.11 (a copy of which is attached hereto as Exhibit D), and that Conrail has served the Notices of Exemption, including the Supplemental Environmental and Historic Report, on the parties on the service list in these proceedings. Counsel for Conrail also certifies that the requirements of 49 C.F.R. 1105.12 have been fulfilled by the publishing of a notice on February 24, 2009, in the *Star-Ledger*, a newspaper of general circulation in Hudson County, New Jersey. A copy of the text of this notice is attached hereto as Exhibit E.

John K. Enright
Associate General Counsel
CONSOLIDATED RAIL CORPORATION
1717 Arch Street, 32nd Floor
Philadelphia, PA 19103
(215) 209-5012

A handwritten signature in black ink, appearing to read "RMJ", is written over a horizontal line.

Robert M. Jenkins III
Kathryn Kusske Floyd
MAYER BROWN LLP
1909 K Street, NW
Washington, DC 20006
(202) 263-3261

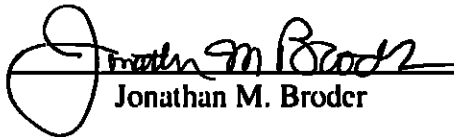
DATE: February 26, 2009

VERIFICATION

COMMONWEALTH OF PENNSYLVANIA

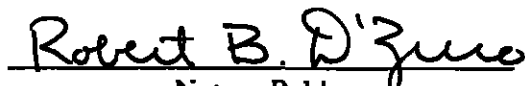
COUNTY OF PHILADELPHIA

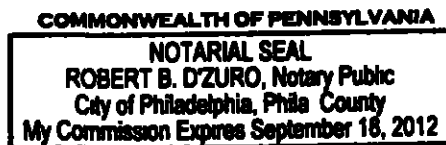
Jonathan M Broder, being duly sworn, makes oath and says that he is Vice President – General Counsel and Corporate Secretary of Consolidated Rail Corporation, that he has been authorized by proper corporate action of Consolidated Rail Corporation to verify and file with the Surface Transportation Board the foregoing Notices of Exemption, that he has general knowledge of the facts and matters relied upon in such Notices; and that all representations set forth therein are true and correct to the best of his knowledge, information and belief.


Jonathan M. Broder

Sworn To and subscribed Before Me This

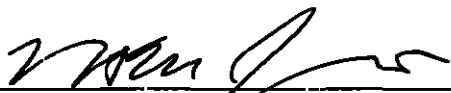
23rd Day of February, 2009


Notary Public



CERTIFICATE OF SERVICE

I hereby certify that on February 26, 2009, I caused a copy of the foregoing "Verified Notices of Exemption" to be served by first class mail (except where otherwise indicated) on those appearing on the attached Service List.


Robert M. Jenkins III

SERVICE LIST

**Charles H. Montagne (By Overnight Mail)
426 NW 162nd Street
Seattle, Washington 98177**

**Stephen D. Marks, Director
Hudson County Planning Division
Justice Brennan Court House
583 Newark Avenue
Jersey City, NJ 07306**

**Bradley M. Campbell, Commissioner
State Historic Preservation Office
NJ Department of Environmental Protection
401 East State Street
P.O. Box 404
Trenton, NJ 08625-0404**

**Mayor Jerramiah T. Healy
City Hall
280 Grove Street
Jersey City, NJ 07302**

**Michael D. Selender
Vice President
Jersey City Landmarks Conservancy
P.O. Box 68
Jersey City, NJ 07303-0068**

**Ron Emrich
Executive Director
Preservation New Jersey
30 S Warren Street
Trenton, NJ 08608**

**Valerio Luccio
Civic JC
P O Box 248
Jersey City, NJ 07303-0248**

**Eric Fleming
President
Harsimus Cove Association
P.O. Box 101
Jersey City, NJ 07302**

Jennifer Greely
President
Hamilton Park Neighborhood Association
22 West Hamilton Place
Jersey City, NJ 07302

Jill Edelman
President
Powerhouse Arts District Neighborhood Assoc.
140 Bay Street, Unit 6J
Jersey City, NJ 07302

Robert Crow
President
The Village Neighborhood Association
365 Second Street
Jersey City, NJ 07302

Dan Webber
Vice-President
Van Vorst Park Association
289 Varick Street
Jersey City, NJ 07302

Gretchen Scheiman
President
Historic Paulus Hook Association
121 Grand Street
Jersey City, NJ 07302

Robert Vivien
President
Newport Neighborhood Association
40 Newport Parkway #604
Jersey City, NJ 07310

Dolores P. Newman
NJ Committee for the East Coast Greenway
P.O. Box 10505
New Brunswick, NJ 08906

Gregory A. Remaud
Conservation Director
NY/NJ Baykeeper
52 West Front Street
Keyport, NJ 07735

Sam Pesin
President
Friends of Liberty State Park
75-135 Liberty Avenue
Jersey City, NJ 07306

Daniel D. Saunders
Deputy State Historic Preservation Officer
State Historic Preservation Office
NJ Department of Environmental Protection
P.O. Box 404
Trenton, NJ 08625-0404

**Fritz Kahn
1920 N Street, NW
8th Floor
Washington, DC 20036-1601**

**Daniel H. Frohwirth
Jersey City Landmarks Conservancy
30 Montgomery Street
Suite 820
Jersey City, NJ 07302**

EXHIBIT A

Begin Milepost 0.00

HARSIMUS BRANCH
LINE CODE 1420

End Milepost 1.36

LIBERTY
STATE PARK

JERSEY CITY, N. J. - N. Y.
N4037 5-W7400/7 5

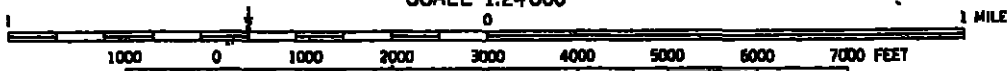
1967
PHOTOREVISED 1981
DMA 6165 II NZ-SERIES V822

ANTICIPATED LINE ABANDONMENT
HARSIMUS BRANCH

■■■■■ ANTICIPATED ABANDONMENT

EXHIBIT "A"
1 of 2

SCALE 1:24 000



Jersey City, New Jersey

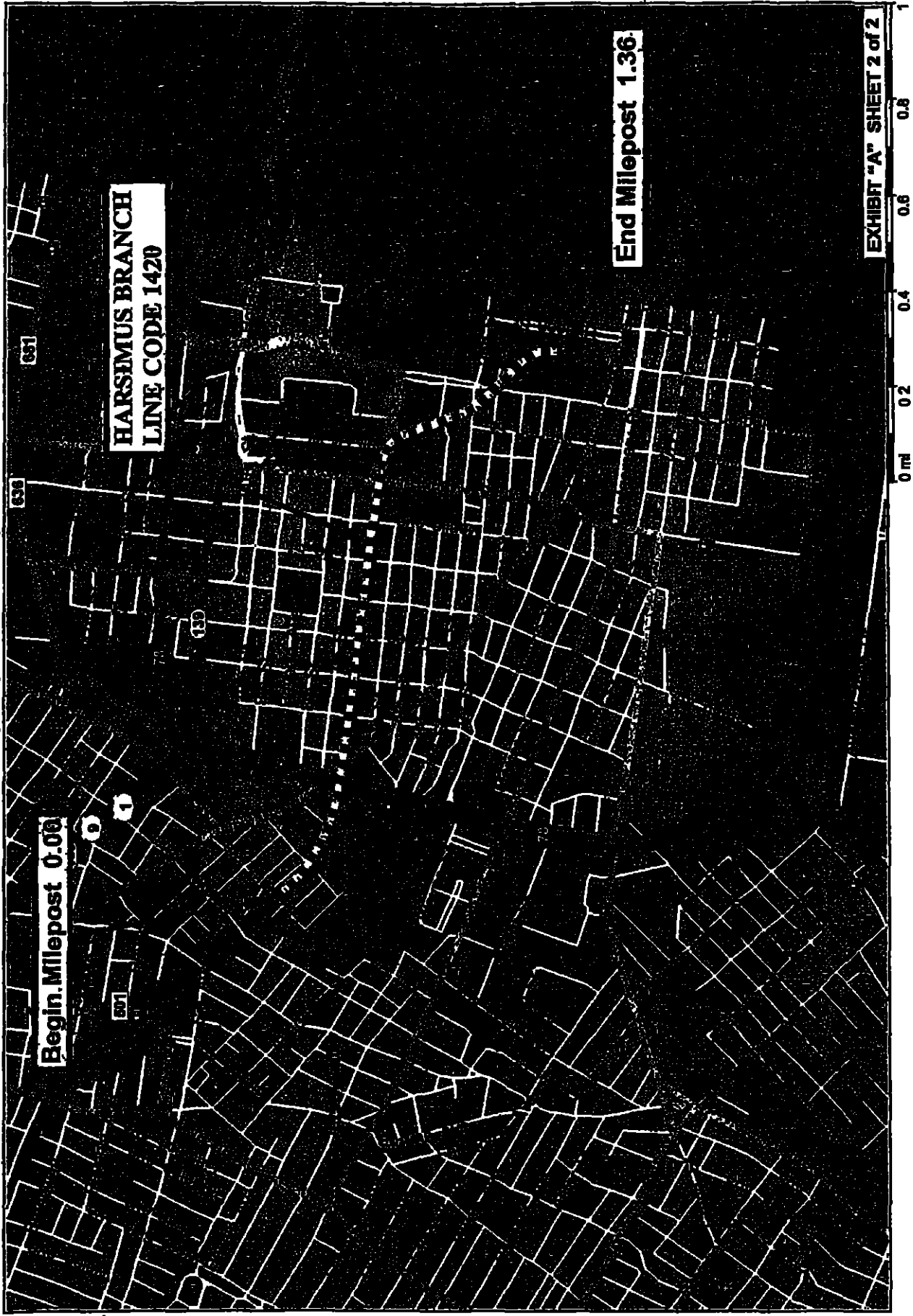


EXHIBIT B

**BEFORE THE
SURFACE TRANSPORTATION BOARD
WASHINGTON, DC 20423**

STB NO. AB 167 (SUB-NO. 1189X)

**CONSOLIDATED RAIL CORPORATION – ABANDONMENT EXEMPTION – IN
HUDSON COUNTY, NEW JERSEY**

STB NO. AB 55 (SUB-NO. 686X)

**CSX TRANSPORTATION, INC. – DISCONTINUANCE EXEMPTION – IN HUDSON
COUNTY, NEW JERSEY**

STB NO AB 290 (SUB-NO. 306X)

**NORFOLK SOUTHERN RAILWAY COMPANY – DISCONTINUANCE
EXEMPTION – IN HUDSON COUNTY, NEW JERSEY**

NOTICES OF EXEMPTION

SUPPLEMENTAL ENVIRONMENTAL AND HISTORIC REPORT

Consolidated Rail Corporation (“Conrail”) submits this Supplemental Environmental and Historic Report in accordance with 49 C.F.R. §§ 1105.7 and 1105.8.¹ Conrail previously submitted an Environmental and Historic Report in these proceedings on March 6, 2008. The March 6 Report focused on the direct effects of the abandonment itself. There are none, because the line the Board has determined is a line of railroad (“Harsimus Branch”) has been out of service for many years and all of the track and track structure have been removed.

¹ Conrail, CSX Transportation, Inc. (“CSXT”), and Norfolk Southern Railway Company (“NS”) have filed combined Verified Notices of Exemption for abandonment (Conrail) and discontinuance of service (CSXT and NS).

As required by 49 C.F.R. § 1105.7(c), Applicants consulted with all appropriate agencies in preparing the March 6 Report, and both that consultation and the March 6 Report itself generated comments from several parties about potential indirect effects of the abandonment.² In particular, some parties contended that the Environmental and Historic Report should address the indirect environmental and historic effects of potential reuse of part of the Harsimus Branch known as the Sixth Street Embankment. Also, questions were raised about whether the Hudson Street Industrial Track should have been included in the proceeding at all.

Applicants delayed filing their Notices of Exemption in order to address the concerns that had been raised. Applicants first determined that there was no need to seek abandonment of the Hudson Street Industrial Track in this proceeding. No party raised any issue concerning that track, which has been replaced by subsequent development, and which was always treated as spur track by Conrail.

Applicants next determined that there is serious doubt about how the Sixth Street Embankment may be reused. As set forth in more detail in the Area of Potential Effects ("APE") Report attached hereto as Appendix A, a number of potential uses have been proposed for the property, and active negotiations continue about the various possibilities. Two possibilities, however, appear more likely than others. One is that the Sixth Street Embankment will be acquired by the City and converted to a public park. The other is that the current owners of the various properties making up the Embankment will be permitted to develop those properties for

² Conrail received most of those comments after it had filed the March 6 Report. Pursuant to 49 C.F.R. § 1105.7(d), all of the correspondence that Conrail received from agencies that were contacted in preparing the March 6 Report that were not attached to the March 6 Report are attached hereto as Appendix C, along with pertinent Conrail responses. Many of the comments filed by other parties directly with the Board raised legal issues, which Conrail addressed in "Comments of Consolidated Rail Corporation on Issues Raised by Pre-Filing Correspondence," filed January 6, 2009.

residential housing. Conrail does not believe or concede that either of those reuse possibilities is reasonably foreseeable within the meaning of either the National Environmental Policy Act ("NEPA") or the National Historic Preservation Act ("NHPA"). Moreover, in light of the need for the current owners to obtain approval from the Jersey City Historic Preservation Commission for any demolition of the Embankments necessary for the construction of residential housing, and the need for the City to authorize condemnation and appropriate the necessary funds for the development of a park, Conrail does not believe or concede that the abandonment undertaking proposed here could properly be held the proximate cause, within the meaning of NEPA or the NHPA, of any impacts resulting from the City's park proposal or the current owners' residential housing proposal. Applicants determined nevertheless to address those proposals in the APE Report and in this Supplemental Environmental and Historic Report.

ENVIRONMENTAL

1. Proposed Action and Alternatives. As described in the March 6 Report, the proposed action is abandonment and discontinuance of part of a line of railroad known as the Harsimus Branch, running from Milepost 0.00 to Milepost 1.36 in the City of Jersey City, Hudson County, New Jersey. The STB in Decisions served August 9 and December 19, 2007, in Finance Docket No. 34818 (2007 Decisions), determined that the part of the Harsimus Branch running from Milepost 0.00 to Milepost 0.88 constituted a line of railroad requiring abandonment authority from the STB.³ The STB was not asked to determine, and did not

³ There was some confusion in the record in Finance Docket No. 34818 concerning the appropriate milepost numbers for the Harsimus Branch. Conrail has used milepost numbers that correspond by length and direction to the station and bridge numbers on the valuation maps (V-1 01, ST-1 and ST-2) for the Harsimus Branch. Originally, the Harsimus Branch ran from Milepost 0.00 at CP Waldo to Milepost 1.48 on the Hudson River. Before Conrail acquired the line, however, a large parcel next to the Hudson River had already been sold off for development. Thus, Conrail is seeking here to abandon only the property from Milepost 0.00 to

determine, that the remainder of the Harsimus Branch required abandonment authority, however, to avoid any debate about that issue, Conrail is seeking abandonment of all of Harsimus Branch property that Conrail was deemed that could be claimed to be a line of railroad.

There is no realistic alternative to abandonment. The right-of-way has not been used for rail service for many years, all of the track and track structure has long been removed, and there are no shippers currently or potentially interested in rail service.

This history of the Harsimus Branch and the current status of the realty underlying the right-of-way is set forth in the STB's 2007 Decisions and the attached APE Report. All traces of the track east of Milepost 0.88 (Marin Boulevard, a/k/a Henderson Street) have been eliminated by extensive development of the properties for retail, residential, and commercial projects. Thus, abandonment of the right-of-way will have no impact, environmental or otherwise, east of Milepost 0.88. Similarly, abandonment of the right-of-way will have no impact on the property that is still owned by Conrail, between Milepost 0.00 and Milepost 0.18, because Conrail has no current plans for that property. Abandonment of the right-of-way between Milepost 0.18 and 0.88 will have no direct impact on the property, but it will allow the property to be developed by the City of Jersey City, if the City follows through with its announced plans to condemn the *property for park or trail use and complies with state and local historic preservation requirements*. Alternatively, if the City does not condemn the property, it may be developed for residential housing by its current owners, assuming they are able to obtain the necessary development permits and approval from the Jersey City Historical Preservation Commission.

1.36 that Conrail was deemed. According to the Board, the Milepost at CP Waldo is 2.54 and the Milepost at a point near Marin Boulevard (which Conrail has designated as Milepost 0.88) is 1.30. The Board has not assigned a Milepost number to the point east of Washington Street that Conrail has designated as Milepost 1.36. See *City of Jersey City, Et al.—Pet for Dec. Order*, STB Fin. Dkt. No. 34818 (served Aug. 8, 2007), slip op. at 1.

2. Transportation System. As discussed in the March 6 Report, the abandonment of the unused right-of-way will have no impact on regional or local transportation systems or patterns. From the standpoint of possible indirect impact, if the City acquires the Embankment property for a park, there will be temporary dislocation of local traffic in connection with the construction of stairways, ramps, railings, bridges, and walkways for the park. If the City does not acquire the property for a park, and the current owners obtain the necessary permits and approvals to develop the property for residential housing, there will be temporary disruption of local traffic in connection with the preparation of the site and the construction of the housing. Any such temporary disruption would be subject to local traffic ordinances and construction permitting requirements. The construction of additional housing could marginally increase the amount of homeowners' automobile traffic in the area, but the number of additional residences is small in relation to the overall number of residences in the area, and the normal local planning and zoning process takes account of traffic impacts

The City and others contend that demolition of the Embankments could adversely affect transportation because the property would not be available for possible light rail use. But, for the reasons discussed in the APE Report, it is not reasonably foreseeable that the property would be used for public transit. Neither the City nor any transit agency has identified any funding or taken any concrete steps to implement such a plan.

3. Land Use. The zoning for most of the parcels of land between Milepost 0.18 and 0.88 is consistent with either park use by the City or the type of residential housing planned for those parcels by their owners. One parcel (Block 446, Lot 18A, abutting the New Jersey Turnpike) must be rezoned for the type of housing/commercial building planned there, in the event the City does not condemn the property for park use. In addition, because the Sixth Street

Embankment has been designated an historic landmark, the current owners must obtain the approval of the City of Jersey City Historic Preservation Commission before they can demolish the embankment structures to prepare the site for residential construction

The Harsimus Branch is entirely contained within an urban area. By letter dated February 26, 2008, the Natural Resources Conservation Service of the U S Department of Agriculture confirmed that there is no prime farmland in the vicinity of the Harsimus Branch and, accordingly, the proposed undertaking will have no effect on any prime agricultural land.

Regarding the Coastal Zone Management Act, by letter dated March 4, 2008, the Office of Permit Coordination and Environmental Review of the New Jersey Department of Environmental Protection requested further information concerning the abandonment, particularly regarding how it would affect the Hudson River Waterfront Walkway and perpendicular access to the Walkway. Conrail responded by letter dated March 26, 2008, observing that the abandonment itself would not involve any type of activity and would have no effect on the Hudson River Waterfront Walkway or perpendicular access to the Walkway. Conrail also does not believe that either possible park use or possible residential housing use of the Embankment property will have any effect on land or water uses within the meaning of the Coastal Zone Management Act. Nevertheless, Conrail is re-notifying the New Jersey Department of Environmental Regulation to inquire whether it has any additional comments in light of this Supplemental Environmental and Historical Report.

Regarding alternative public uses, the City has indicated its interest in acquiring the Embankment property for a park. As noted in the March 6 Report, the City and others have also suggested that the property could be used as a corridor for light rail use or as part of the proposed "East Coast Greenway." As discussed in the APE report, the current owners have made

proposals to the City for combining such public uses with private development, contingent upon the City's cooperation regarding changes in zoning and permitting required for the private development. None of those proposals as yet has been accepted by the City.

4. Energy. As discussed in the March 6 Report, abandonment of the right-of-way would have no energy impacts, because the Harsimus Branch has long been out of service. From the standpoint of possible indirect impact, as discussed above, if the City were to construct a park or the current owners were to construct residential housing on the parcels between Milepost 0.18 and 0.88, there may be temporary disruptions of local traffic during some phases of construction, and some additional fuel use will be attributable to trucks and other equipment used during construction. No long-term indirect energy effects are foreseeable.

5. Air. As discussed in the March 6 Report, abandonment of the right-of-way would have neither negative nor positive impacts on air quality, because the Harsimus Branch has long been out of service.

From the standpoint of possible indirect impact, the City has suggested that construction of residential housing could have a temporary indirect impact on air quality, due to dust from construction activities. Any such impact, however, would be temporary. Moreover, it would be required to be mitigated pursuant to a Health and Safety Plan (N.J.A.C. 7:26E-1.9) under the oversight of the New Jersey Department of Environmental Protection ("NJDEP").

The type of dust involved here is not out of the ordinary for construction projects in Jersey City. As the City itself has pointed out, in November 1998, Dresdner Robin, an environmental consultant for the Jersey City Redevelopment Agency (the "JCRA"), prepared a report concerning the environmental condition of the Embankment Properties. A copy of the body of that report is attached hereto as Appendix B. It was prepared after all rail activity had

ceased on the Harsimus Branch and all track and track structure had been removed. At that time, the JCRA had plans to demolish the Embankments and to construct housing on the property as part of a redevelopment project.

As noted in its report, Dresdner Robin collected samples from soil borings in each embankment as part of a geotechnical and environmental investigation to determine the cost of demolition of the embankments and the options for reuse or disposal of the soil used to fill the embankments. Dresdner Robin states in the report that no volatile organic compounds, pesticides or PCBs were detected in the soil and that the semi-volatile organic compounds that were detected in excess of NJDEP cleanup standards are classified as nonhazardous waste. Dresdner concluded that the fill material could be recycled or disposed of at a landfill. Dresdner further concluded that the material could also be used at other city project sites as subsurface fill material with appropriate engineering controls and maintenance. This type of "historic fill" is present in many properties in Jersey City and elsewhere in Hudson County, and handling the material has become a routine component of Hudson County real estate development.

NJDEP permits historic fill to be excavated and disposed of, or to be left in place with appropriate engineering and institutional controls, in accordance with NJDEP's Technical Requirements for Site Remediation, N.J.A.C. 7:26E. As with the excavation of any contaminated material, the work is performed by licensed professionals under the oversight of NJDEP and in accordance with a Health and Safety Plan. A Health and Safety Plan (N.J.A.C. 7:26E-1.9) governs the proper handling and safety procedures, including dust control and, where deemed appropriate by NJDEP, air monitoring to ensure that acceptable air quality is maintained during the course of work. Disposal of the material is also overseen by NJDEP pursuant to New Jersey's solid waste law and its technical regulations.

6. Noise. As discussed in the March 6 Report, abandonment of the Harsimus Branch would have no direct noise or vibration effects. From the standpoint of possible indirect impact, there may be an increase in noise and vibration arising from construction activity if the City were to construct a park or the current owners of the Embankment parcels were to construct residential housing. Such effects would be temporary. Furthermore, the effects would be subject to the same controls under local ordinances as any other urban construction activity

7. Safety. As discussed in the March 6 Report, there would be no public health and safety impacts resulting from abandonment of the Harsimus Branch. From the standpoint of possible indirect impact, if the Embankment properties were partially or completely demolished, there could be temporary impacts, as discussed above, from dust from historic fill being excavated and transported from the site. A Health and Safety Plan, including dust control, would govern the proper handling and safety procedures, with oversight by NJDEP.

8. Biological Resources. As discussed in the March 6 Report, there would be no impact on endangered species, critical habitat, wildlife sanctuary or refuge, or national or state parks resulting from abandonment of the Harsimus Branch. By letter dated March 6, 2008, Wendy Walsh of the U S Fish and Wildlife Service ("FWS"), New Jersey Field Office, referred Conrail to an FWS website to determine whether any federally listed species are in the area. The FWS website currently shows not federally listed species in the area. By telephone call on February 18, 2009, with Ms. Walsh, Conrail confirmed that there are no federally listed species in the area.

9. Water. As discussed in the March 6 Report, there is no inconsistency between Conrail's abandonment of the Harsimus Branch and any applicable water quality standards, and no requirement for water-related permits. Conrail is also unaware of any indirect impact on

water quality or any water-related permit requirements that would result from reuse of the Embankment properties for a park or residential housing. Any construction activity between Milepost 0.18 and 0.88 would be over half a mile from the Hudson River, and there are no wetlands involved. Nevertheless, Applicants are re-notifying NJDEP, the U.S. Army Corps of Engineers, and the U.S. Environmental Protection Agency to determine whether they have any views in this regard. Conrail has already had correspondence with the U.S. Environmental Protection Agency about the lack of direct effects from the abandonment. In the event of a park or residential housing construction, as with any construction project involving soil excavation, provision would need to be made for silt control. The Health and Safety Plan for any such project would include such mitigation, with oversight by NJDEP.

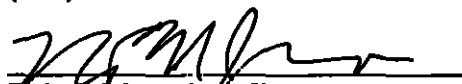
10. Mitigation. As discussed in the March 6 Report, there are no direct environmental effects resulting from the abandonment of the Harsimus Branch. Any possible indirect effects resulting from the demolition and construction involved in building a park or residential housing would be temporary. Furthermore, state and local environmental, construction, and traffic permitting requirements and plans would ameliorate any such effects.

HISTORIC

Conrail received a significant number of comments on its March 6 Report concerning historic preservation issues. Attached to this Supplemental Environmental and Historic Report as Appendix A is an APE Report prepared for Conrail by Richard Grubb & Associates, Inc., a New Jersey consulting firm that specializes in cultural resources investigations involving railroad undertakings. The Principal Investigators assigned to the project exceed the National Park Service's *Professional Qualifications Standards* for Historians, Architectural Historians, and Archaeologists. The APE Report provides considerable supplemental detail regarding every category of historic preservation information required by 49 C.F.R. § 1105.8(d)(1)-(8) and covered by the March 6 Report. It also responds to most of the historic preservation concerns expressed in the comments Conrail received.⁴

Respectfully submitted,

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Dated: February 26, 2009

⁴ Conrail responded to the legal issues raised by some commenters in its "Comments of Consolidated Rail Corporation on Issues Raised by Pre-Filing Correspondence," filed January 6, 2009.

COLOR PAGES INCLUDED

APPENDIX A

**AREA OF POTENTIAL EFFECTS REPORT
AND PROPOSED METHODOLOGY FOR
SECTION 106 CONSULTATION
CONRAIL HARSIMUS BRANCH ABANDONMENT
(STB DOCKET NO. AB167 (SUB NO. 1189X))
CITY OF JERSEY CITY
HUDSON COUNTY, NEW JERSEY
SEPTEMBER 2008**

**RICHARD GRUBB & ASSOCIATES, INC.
Cultural Resource Consultants**

**Area of Potential Effects Report
and Proposed Methodology for
Section 106 Consultation
Conrail Harsimus Branch Abandonment
(STB Docket No. AB 167 (Sub No. 1189X))
City of Jersey City, Hudson County
New Jersey**

September 2008

Principal Investigators

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INTRODUCTION

Consolidated Rail Corporation (Conrail), CSX Transportation, Inc. (CSXT), and Norfolk Southern Railway Company (NS) are requesting approval from the Surface Transportation Board (STB) to abandon and discontinue freight service on a railroad right-of-way known as the Harsimus Branch, Milepost 0.00+- to Milepost 1.36+-, in the City of Jersey City, Hudson County, New Jersey (Figure 1). The abandonment itself will have no direct impact on historic properties in the right-of-way or in the surrounding area. However, possible actions by third parties after the abandonment is approved may be regarded as reasonably foreseeable and potentially causing indirect changes to historic properties. This report has been prepared to delineate the Area of Potential Effects (APE) for a cultural resources investigation in compliance with Section 106 of the National Historic Preservation Act of 1966. The report also outlines a proposed methodology for conducting the investigation, recommends consulting and interested parties, and suggests a public participation plan to initiate Section 106 consultation among Conrail, the STB, the New Jersey Historic Preservation Office (HPO), and other consulting parties.

THE HARSIMUS BRANCH

In a decision issued August 9, 2007, in Docket No. 34818, the STB held that part of the Harsimus Branch running between Waldo Avenue and Marin Boulevard constituted a line of railroad requiring abandonment authorization. As described in the STB's decision, the Harsimus Branch ran from a main-line connection at Waldo Avenue into Harsimus Cove Yard on the Hudson River. (There was some debate in the decision about the applicable milepost numbers. For convenience, we use here milepost numbers for the right-of-way drawn from the historic Valuation Maps.) The City of Jersey City and others sought a declaratory order from the Board only for the part of the Harsimus Branch running between Waldo Avenue and Marin Boulevard, but the City claimed that the entire Harsimus Branch was a line of railroad requiring abandonment authorization. Accordingly, Conrail is seeking abandonment authority for all of the Harsimus Branch right-of-way that it ever owned.

The Harsimus Branch right-of-way extends through a highly developed, urban landscape characterized by passenger and freight rail lines, modern highway viaducts, contemporary single-story commercial and industrial buildings, warehouses, a cemetery, parking lots, public parks, athletic fields, attached and detached town homes, civic and religious buildings, and multi-story residential and business structures ranging in age from the mid-nineteenth century to the present day. The western end of the right-of-way begins at Milepost 0.00 inside the Bergen Cut, a 40-foot deep channel cut through a ridge of trap rock on the western side of Jersey City. The track (no longer

extant) originally descended along a gentle gradient to the edge of Bergen Hill where an under-grade viaduct (dismantled) and a series of stone-lined embankments carried the elevated line over the lower flats and streets down to the Jersey City waterfront.

The Harsimus Branch has been out of service since 1992. Bridges that once formed the viaduct and connecting links between the stone embankments were removed beginning in 1994. Only the viaduct abutments, piers, and embankment segments, located on the middle and western part of the right-of-way, remain standing. All other railroad-related resources such as bridges, culverts, stations, interlocking towers, signals, bulkheads, and other structures no longer survive.

Most of the property underlying the right-of-way has been sold for development. Conrail owns the fee interest only in the western part of the right-of-way, from Milepost 0.00 to 0.18. The fee interest in the middle part of the right-of-way between Milepost 0.18 and 0.88 is divided into eight parcels owned by eight limited liability companies (LLCs) controlled by SLH Properties (SLH). The fee interest in the easternmost part of the right-of-way between Milepost 0.88 and 1.36 is owned by several different entities. That part of the right-of-way has been completely transformed by modern urban renewal and development of retail, residential, and hotel properties. No trace of the right-of-way remains.

As a result of the STB's August 2007 decision, development of the eight parcels in the middle of the Harsimus Branch right-of-way cannot proceed until the STB authorizes abandonment of the right-of-way. Once abandonment is authorized, the Mayor of the City of Jersey City has announced his intention to seek acquisition of those parcels for public use under 49 U.S.C. 10905, under N.J.S.A. 48:12-125.1, or by eminent domain. In September 2004, the City adopted an ordinance authorizing acquisition of those parcels for park and trail use. If funding becomes available and the necessary transit agencies are interested, the Mayor has also expressed an interest in using part of the right of way for light transit.

SLH has submitted a number of proposals to the City that would permit the eight parcels to be developed and used for park, trail, and transit purposes, while maintaining the embankments largely intact. These alternatives are not based on current zoning requirements and require the agreement of the City and other agencies in order to be implemented. To date, however, the City has not accepted any of these proposals. Absent the City's agreement to one of these alternative proposals, or the City's acquisition of the properties by eminent domain or purchase, SLH has pursued development approvals that would allow economic development of the properties consistent with local land use requirements. The embankments and bridge piers on those eight parcels would be

demolished. On the westernmost parcel (Block 446, Lot 18A) abutting the New Jersey Turnpike, a four-story mixed-use building (upper three floors residential; ground floor commercial) would be constructed, consistent with zoning standards. Contextually sensitive three-story town homes would be built on six of the parcels (Block 247, Lot 50A; Block 280, Lots 50A & B-1, Block 317.5, Lot 50A; Block 354.1, Lot 50A; Block 389.1, Lot 50; Block 415, Lot 50). On the easternmost parcel (Block 212, Lot M) adjoining a baseball field and Bed, Bath, and Beyond retail store, a ten-story apartment building would be constructed. SLH has received a number of development approvals; however SLH has not received all of the permits that would be required to proceed with its plans once abandonment is authorized.

Given the significant uncertainties surrounding development of the eight middle parcels, it might well be concluded that no particular change in historical properties is reasonably foreseeable as an indirect consequence of the STB's approval of Conrail's abandonment of its right-of-way. Two potential indirect outcomes, however, are arguably sufficiently foreseeable to be considered in connection with the abandonment undertaking. (1) the City's plans to acquire and develop the parcels for park and trail use and (2) SLH's plans to develop the parcels for residential use. Accordingly, the limits of the APE for the Harsimus Branch investigation is being drawn to accommodate the possible indirect effects stemming from these two potential outcomes. No reasonably foreseeable change will occur to the first part of the right-of-way that is still owned by Conrail, because Conrail has no specific plans for disposition or development of that property, and the City has not claimed that it plans to acquire the property by condemnation or otherwise. Similarly, no reasonably foreseeable change will occur to the easternmost part of the right-of-way that has already been developed. Nevertheless, to ensure a broad scope for Section 106 purposes, the entirety of the right-of-way is proposed to be included in the APE.

AREA OF POTENTIAL EFFECTS

The APE is defined in 36 CFR 800.16(d) as follows:

The geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of the undertaking and may be different for different kinds of effects caused by the undertaking.

Included within the APE are those locations where an undertaking may result in disturbance of the ground, from which elements of the undertaking may be visible from public areas, and where the activity may result in changes in traffic patterns, land use, or public access. The APE for archaeology and architecture are different as a result of this definition.

APE-Archaeology

The APE-Archaeology includes the area that could be physically impacted by an undertaking. Specifically, the APE-Archaeology includes the potential limits of disturbance within the entire length and width of the right-of-way proposed for abandonment (Figure 2)

APE-Architecture

The APE-Architecture includes the entire area of the APE-Archaeology and the area in which the project may directly or indirectly cause changes in the character or use of historic properties (Figure 3). As a general matter, the APE-Architecture encompasses land adjacent to and in the immediate vicinity of the Harsimus Branch right-of-way. However, the potential visibility of a possible 110-foot apartment building, as permitted by local zoning, on the easternmost embankment parcel requires a broader APE in the vicinity of that building. Three techniques have been employed to delineate the APE-Architecture: electronic viewshed mapping; computer-generated building simulations; and field reconnaissance.

The western end of the APE-Architecture encompasses the parcel between Milepost 0.00 and 0.18 that is still owned by Conrail. It begins at the bottom of the 40-foot deep Bergen Cut, which is currently utilized by the Port Authority Trans Hudson (PATH) transit system. Resources located on the north rim of the Bergen Cut, immediately above the Harsimus Branch, are less than 50 years of age; resources located on the south rim are approximately 75 feet away from the Branch and are largely less than 50 years of age. Because above-ground resources on both rims of the Bergen Cut are located high above the Harsimus Branch, are largely less than 50 years of age, and are beyond the reach of direct or indirect effects from the proposed undertaking, the APE-Architecture has been confined to the area enclosed by the walls of the Bergen Cut. The remainder of the western end of the APE-Architecture follows the contours of the properties that are immediately adjacent to the right-of-way between Milepost 0.00 and 0.18 (see Figure 3).

The eastern end of the Harsimus Branch beyond Milepost 0.88 (Marin Boulevard) no longer exists, and the area has been largely developed with modern commercial and residential buildings. Because it adjoins the eligible Warehouse Historic District, the eastern end of the APE-Architecture takes in

a portion of the eligible Warehouse Historic District, as well as existing property boundaries immediately surrounding the location of the old right-of-way (see Figure 3).

As discussed above, one potential indirect effect of the undertaking that might be evaluated as reasonably foreseeable is that the City would acquire the eight parcels in the middle of the right-of-way for park and trail use. The Mayor's suggestion that the parcels might ultimately be developed for mass transit as well is too speculative to warrant consideration here, since no concrete steps have been undertaken in furtherance of that concept. If the City were to decide not to acquire those parcels, another indirect effect of the undertaking that might be viewed as reasonably foreseeable is that such parcels would be privately developed by SLH consistent with local zoning requirements.

The City's announced plans for park and trail use are expected to have limited physical impact on the embankments and limited visual effect on surrounding properties. Those plans include the construction of pedestrian bridges between the embankments, ramps and stairs leading up to the embankments, and fencing, plantings, and walkways on top of the embankments.

SLH's plans to demolish the embankments and remaining bridge piers on the eight parcels and replace them with residential housing would have a physical impact on the embankments and a limited visual effect on surrounding properties. The housing that would be built on most of the parcels would consist of contextually sensitive three-story townhouses along Sixth Street and one four-story brick mixed-use commercial and apartment building on the westernmost parcel fronting on Newark Avenue. Thus, the APE-Architecture for most of the middle section would encompass a one-half block deep buffer along Fifth and Sixth Streets and a slightly wider buffer around the proposed four-story building near Newark Avenue.

Zoning regulations for the easternmost block (Block 212) permit construction of a 110-foot high building, which would be visible over a broader area; accordingly, the APE-Architecture is expanded around that block to take into account possible visual effects within a one-half mile buffer zone. Computer generated modeling was primarily used to determine the extent of the visibility of a 110-foot high building (approximately ten stories). A conservative average height of three stories (33 feet) was used to simulate the rest of the buildings in the half-mile buffer zone. Digital elevation models were layered over aerial photographs. The areas in which buildings would obstruct views of the proposed ten-story building from all public spaces (streets, parks, surface parking lots) were filled with a dark blue crosshatch. The electronic viewshed map for the ten-story building appears in Figure 4. This computer-generated viewshed map was checked using computer-generated simulations of actual building heights created through Google Earth. The simulation allows for a

virtual model of the proposed building to be inserted into the database of existing building heights in Google Earth, then viewed from any point within the half-mile buffer zone. When compared against the viewshed map, the viewshed map was found to be accurate in regard to the elimination of sightlines due to the heights of interceding buildings. Figure 5 depicts a computer-generated “bird’s eye view” of the proposed building within the larger cityscape.

Both computer models were also checked in the field and found to accurately reflect conditions on the ground. Because the modeling and field checking indicate that a portion of the ten-story building may be visible from parts of Hamilton Park in the wintertime (when trees have lost their leaves), the APE-Architecture includes a discontinuous section embracing the whole of this public area. Photographs of the APE-Architecture are shown on Plates 1 through 103 and identified with numeric locators on Figures 7 through 7E in Appendix B.

PROPOSED CULTURAL RESOURCES INVESTIGATION METHODOLOGY

Conrail proposes to conduct a Cultural Resources Investigation through its contractor, Richard Grubb & Associates (RGA), in order to provide the STB with information needed for the agency to comply with Section 106 of the National Historic Preservation Act. RGA’s investigation will conform with all requirements of the HPO for such studies. The purpose of the Cultural Resources Investigation is to determine if significant historic and/or archaeological resources are contained within the APE and to assess National Register eligibility and effects of the abandonment. The investigation is anticipated to have three components: (1) background and historical research; (2) an architectural survey; and (3) an archeological survey. RGA will conduct a Phase 1A archeological survey and intensive-level architectural survey to identify all buildings, structures, and objects of local, state or national significance that appear to meet at least one of the National Register Criteria. All resources more than 50 years of age will be documented on the appropriate HPO survey forms. The Principal Investigators for this project exceed the National Park Service’s *Professional Qualifications Standards* for both Historians, Architectural Historians, and Archaeologists.

1. Background and Historical Research

The background and historical research will be performed at an early stage of the Cultural Resources Investigation. A search of existing literature and map sources will provide a comprehensive overview of the prehistoric and historic development of the local area and region. There is no shortage of information concerning the history of Jersey City and the Harsimus Branch. Specifically, the investigation will examine previous cultural resource reports conducted in the vicinity of the APE, as well as National Register Nominations; Historic American Buildings Surveys; Historic American

Engineering Records; HPO files; New Jersey State Museum site files; and local or county inventories of historic/cultural resources. Primary sources to be consulted include historic photographs, maps, atlases, plat plans, Sanborn fire insurance maps, city directories, and numerous available railroad records. Examples of such records include, but are not limited to: the New Jersey Secretary of State's Transportation Corporation Records; the 1910-1911 New Jersey Revaluation Field Notebooks, the 1916-1925 Interstate Commerce Commission Valuation Records; the New Jersey Public Utility Tax Bureau's Railroad Company Annual Reports and Plan Files; the Penn-Central Corporation's Predecessor Company Records; the Stevens Family Papers; and a multitude of newspapers, periodicals, and secondary works pertaining to railroads and the history of railroading in New Jersey.

Known Resources

Twelve properties in the APE-Architecture are presently eligible for or listed in the New Jersey and/or National Register of Historic Places (Figure 6). They include.

- Pennsylvania Railroad (New York to Philadelphia) Historic District (Multiple SHPO Opinions; eastern boundary undefined)
- New Jersey Railroad Bergen Cut Historic District (SHPO Opinion. 5/21/1999; eastern boundary undefined)
- Public School No. 5, 182-196 Mersedes St (SHPO Opinion: 2/28/1991)
- Pennsylvania Railroad Harsimus Branch Embankment (SR: 12/29/1999; DOE: 3/16/2000; COE: 6/9/1999)
- St. Anthony's Polish Roman Catholic Church and School Complex (SHPO Opinion: 4/13/1994)
- St Anthony of Padua Roman Catholic Church (SR: 12/24/2003; NR: 3/22/2004)
- Hamilton Park Historic District (SR: 4/27/1978; NR: 1/25/1979)
- Harsimus Cove Historic District (SR: 10/15/1987; NR: 12/9/1987)
- 88-92 Erie Street, Albaniel Dye & Chemical Co (SHPO Opinion 7/2/1980; DOE: 8/27/1980)
- Warehouse Historic District (SHPO Opinion. 2/28/1991)
- Hudson & Manhattan Railroad Powerhouse (COE: 10/7/1999; NR: 11/23/2001)
- Great Atlantic & Pacific Tea Company Warehouse (SR: 6/2/1978, NR: 6/2/1978; NHL ID No. 1504)

Summary descriptions of the important characteristics and historical significance of these properties are set forth in Appendix A.

2. Architectural Survey

The SR-listed Pennsylvania Railroad Harsimus Branch Embankment encompasses the six elevated parcels in the middle of the Harsimus Branch between Brunswick Street and Mann Boulevard (Milepost 0.36 to 0.88). RGA will conduct an architectural survey of the parts of the Harsimus Branch right-of-way located outside of the boundaries of the Embankment structure. The survey will evaluate National Register eligibility of the Harsimus Branch both individually and as a possible contributing resource to known historic districts, including the New Jersey Railroad Bergen Cut Historic District, and the Pennsylvania Railroad (New York to Philadelphia) Historic District.

The individually eligible Public School No. 5, the listed St. Anthony of Padua Roman Catholic Church, the individually eligible St. Anthony's School Complex, the individually eligible building at 88-92 Erie Street (Albaniel Dye & Chemical Co. building), and portions of the listed Hamilton Park Historic District and the listed Harsimus Cove Historic District all fall within the APE-Architecture. They are good examples of well-established, well-documented, and well-preserved historic properties. As such, the public school, the church, the church school, the dye and chemical building, and those district buildings that fall within the APE-Architecture will not be resurveyed as part of this undertaking, but the potential effects of the City's park/trail plans and SLH's housing development plans on these buildings will be assessed. Also, because possible project impacts include the demolition of the stone embankments within the Harsimus Branch right-of-way and construction of residential housing between or near the Hamilton Park Historic District and the Harsimus Cove Historic District, this investigation will evaluate the eligibility of the Harsimus Branch right-of-way as a possible contributing resource to both districts and assess project effects on both districts. Three additional previously identified historic properties lie within the APE-Architecture at its easternmost end: the eligible Warehouse Historic District; the listed Hudson & Manhattan Railroad Powerhouse; and the listed Great Atlantic & Pacific Tea Company Warehouse. Project effects on these properties, if any, will be assessed.

The APE-Architecture includes a number of un-surveyed resources more than 50 years of age. They include commercial, retail, and industrial buildings; parks and monuments; numerous residential buildings; and railroad resources dating primarily from the late nineteenth- and mid-twentieth-centuries. Of particular note are an active freight line at the western end of the APE-Architecture historically associated with the New Jersey Junction Railroad (part of the New York Central system) and the National Docks & New Jersey Junction Connecting Railway Company (part of the Lehigh

Valley system); the Jersey City Cemetery on the corner of Waldo Avenue and Newark Avenue; the Mary Benson Memorial (1907) and the V.F.W. Monument (circa 1945) at Mary Benson Park; the Holy Rosary Roman Catholic Church and Parish House (1903) on Sixth Street; its affiliated school buildings (1938 & 1953) on Brunswick Street; the Fifth Ward Savings Bank (1925) on Manila Avenue (formerly Grove Street); the St. Anthony's School (1917) on Eighth Street; and several blocks of brick flats (circa 1890) on Manila Avenue (formerly Grove Street) and Mann Boulevard. These and other resources more than 50 years of age will be documented on appropriate HPO Survey Forms and evaluated for individual eligibility and as possible contributing resources to larger historic districts.

The New Jersey Turnpike, which crosses over the project area, is more than 50 years of age, but the HPO formally found it not eligible for listing in the New Jersey or National Registers in 2006.

3. Archaeology Survey

Due to the physical and historical complexities of this urban setting, RGA will conduct a Phase IA archaeological survey at this time. If the potential for significant archaeological resources are identified during the Phase IA survey, a Phase IB survey may be recommended.

The Phase IA archaeological survey will include a review of archaeological site files and previous cultural resources survey reports, and it will assess the potential for significant prehistoric and historic resources. The potential for prehistoric resources is expected to be low due to disturbances associated with previous land use in the project area. An assessment of potential for historic resources will be derived from a thorough review of atlases and maps and a site visit to observe existing conditions. An assessment will be made of impacts to archaeological resources that may potentially contribute to the Pennsylvania Railroad Harsimus Branch Embankment or any historic district in the vicinity. It is believed that the eastern end of the Embankment was constructed around timber trestle work that supported the original train operations over that portion of the Harsimus Branch. Accordingly historic archaeological potential is considered moderate to high.

For the archaeological survey, RGA will conduct a thorough pedestrian survey of the APE. Archaeology will assess the potential for significant archaeological resources and document disturbances that have impacted areas of archaeological sensitivity. Field observations will be recorded via field notes and digital photography. Known archaeological site locations, if any, and historic maps will be closely reviewed prior to the pedestrian survey. If the potential exists for significant cultural resources, further investigation, or Phase IB-level archaeological testing, will be required by the HPO to determine the presence or absence and preliminary extent of cultural

deposits, and whether those deposits may be considered potentially eligible for the National Register of Historic Places.

PROPOSED PUBLIC PARTICIPATION PLAN

Soliciting the views of the public and those groups/individuals with interests in historic preservation is a valued part of the Section 106 process and helps in the identification and evaluation of historic properties that might be affected by the proposed undertaking. Conrail's plans to abandon the Harsimus Branch have already attracted a great deal of public comment. This information will be collected and reviewed during the Cultural Resources Investigation. Copies of the draft Cultural Resources Report will be circulated to all Consulting Parties and local preservation groups/individuals with an identified interest in historic preservation for their review and comment. Responses to the report will be attached to the final documentation.

It is anticipated that community involvement through public forums or other venues will be coordinated by the STB, in consultation with the HPO and Conrail. Notification of time, place, and content of the meeting(s) will be sent to property owners, officials, and interested parties. Documentation of the notifications and responses to the public meetings will become part of the final Cultural Resources Report.

Recommended Consulting Parties

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Surface Transportation Board

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Recommended Interested Parties

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APPENDIX A—SUMMARY DESCRIPTIONS OF KNOWN HISTORIC PROPERTIES

Pennsylvania Railroad (New York to Philadelphia) Historic District

The Pennsylvania Railroad (PRR) [New York to Philadelphia] Historic District (PRRHD) is eligible under Criterion A for its association in the areas of transportation, engineering and commerce and under Criterion C for engineering features, including cuts, embankments, over-grade and under-grade bridges, culverts, stations, interlocking towers, and overhead catenary system. The district comprises several segments constructed at different times by different corporate entities with varying recommended periods of significance. The segment between Newark and Jersey City was originally built by the New Jersey Railroad (NJRR) between 1832 and 1838, folded into the United New Jersey Railroad and Canal Company (UNJRCC) in 1867, and leased to the PRR in 1871. On June 29, 2007, the HPO formally determined that the period of significance for the entire PRR (New York to Philadelphia) Historic District extends from 1863 to 1957. It also noted that the period of significance will increase annually, maintaining the 50-year cut-off date, until the historic district is no longer significant under Criteria A and C. The HPO letter did not differentiate between the Jersey City-to-Newark segment and other sections of the eligible rail corridor. The eastern boundary of the eligible rail corridor has not been formally identified.

New Jersey Railroad Bergen Cut Historic District

Six previously identified resources comprise the New Jersey Railroad Bergen Cut Historic District: the contributing Bergen Cut; the contributing elevated right-of-way between the Hackensack River and the area west of Tonnel Avenue; the contributing PATH Bridge over Wallis Avenue, the key contributing Wittpenn (NJ Route 7) Bridge over the Hackensack River; the key contributing Pennsylvania Railroad Harsimus Branch (now Conrail/CSX) Bridge over the Hackensack River, and the key contributing Pennsylvania Railroad (now PATH) Bridge over the Hackensack River. Built under the auspices of the NJRR and completed in 1838, the Bergen Cut was a significant engineering accomplishment for its time and provided the first and only practical rail route through the Bergen Hill until the completion of the Erie Tunnel in 1861. (The Bergen Cut should not be confused with the "Bergen Arches," also known as "Erie Cut," which was not constructed by the Erie Railroad in Jersey City until after the turn of the Twentieth Century.) The District is eligible for listing in the New Jersey and National Registers under Criteria A and C. Its period of significance begins in 1832, when the NJRR was incorporated, and ends in 1937. The district boundaries as currently defined extend from the westernmost limits of the approach spans of the key contributing Hackensack River lift bridges to the easternmost limits of the Bergen Cut, which has not been formally located. The approximate boundaries nearest to the APE are delineated on Figure 6.

Public School No. 5, 182-196 Marseles St

Constructed in 1915 following designs prepared by Jersey City architect John Rowland, the four-story brick and stone building is an intact and representative example of the monumental late-Classical Revival-style institutional buildings erected throughout the city during the early twentieth century. The SHPO Opinion of Eligibility does not identify the eligibility criteria or a period of significance. Based on the supporting documentation, Public School No. 5 is architecturally significant and meets Criterion C. The building has been additionally recommended eligible under Criterion C as part of a thematic historic district based on the work of John Rowland. Rowland was the architect for the Jersey City Board of Education from 1900 to 1945. The SHPO Opinion is silent on the issue of a thematic district. The resource boundary is delineated on Figure 6.

Pennsylvania Railroad Harsimus Branch Embankment

Constructed in the period 1901-1905, the Pennsylvania Railroad Harsimus Branch Embankment comprises six stone and earthen segments of the former elevated freight line and yard tracks first conceived by the UNJRRCC in the 1860s and completed by the PRR in the mid-1870s after its lease of the UNJRRCC. The elevated portions originally passed over timber trestlework. Later, iron deck trusses and finally deck plate girders were substituted for the trestle at its western end. Portions of the eastern end of the trestle were filled in and may have been encased within the retaining walls, that form the stone embankments that are present today. The embankment is listed on the New Jersey Register of Historic Places under Criterion A for its associations with transportation, community planning and development, and politics/government, and under Criterion B for its associations with James J. Ferris, superintending engineer. Its established period of significance extends from 1867 to 1949. The embankment structure consists of the surviving elevated portions of the Harsimus Branch extending along Sixth Street between Marin Boulevard and Brunswick Street. The boundaries of the structure are delineated on Figure 6.

St. Anthony's Polish Roman Catholic Church and School Complex

St. Anthony's Polish Roman Catholic Church (1890-94) and combined Parochial School and Convent (1899) are discontinuous contributing resources of the St. Anthony's Polish Roman Catholic Church and School Complex. The complex is eligible under Criterion C as an example of Victorian Gothic architecture. The resource boundaries are limited to the two lots currently occupied by the buildings and are delineated on Figure 6. The original HPO Opinion of Eligibility does not identify a period of significance for either resource (see below).

St Anthony of Padua Roman Catholic Church

The St Anthony of Padua Roman Catholic Church (see above), the oldest Polish church and parish in New Jersey, is individually listed on the New Jersey and National Registers under Criterion A for its associations with European Ethnic Heritage and the Polish community of Jersey City. The church is also listed under Criterion C in the areas of architecture and art as an example of both the Victorian Gothic and Byzantine-styles and for its surviving collection of ethnic art, stained glass windows, and mosaics. The period of significance extends from the building's construction in 1892 to the last major period of alterations in 1940. The property's boundary includes the lot on which it stands and is delineated on Figure 6. The Church is also a key contributing resource to the St. Anthony's Polish Roman Catholic Church and School Complex (see above).

Hamilton Park Historic District

The Hamilton Park Historic District gains its distinction from its intact collection of row houses and its mid- nineteenth century residential square. Some 518 buildings made up the original district when it was nominated to the New Jersey and National Registers in 1977; they consist largely of residential properties. A small number are mixed-use, commercial, and institutional in nature. The district features a wide range of architectural styles, including the Greek Revival, Gothic Revival, Romanesque Revival, and Renaissance Revival. Most are constructed in brick; a few are faced with brownstone. Many include decorative masonry details and iron work. The district is significant in the areas of architecture, landscape architecture, and religion. Although the original National Register Nomination does not identify the specific criteria under which the district was listed, it emphasizes the preservation and structural qualities of the resources and is therefore assumed to be eligible under Criterion C for embodying the distinctive characteristics of a type, period, and/or method of construction, and a significant and distinguishable entity. Based on dates referenced in the Nomination Form, the period of significance is assumed to extend from circa 1835 to circa 1875, when the majority of the buildings were constructed. In 1982 the Hamilton Park Historic District was extended northward with the inclusion of seven new buildings and four vacant lots. The boundaries of both the original district and the extension are delineated on Figure 6.

Harsimus Cove Historic District

The Harsimus Cove Historic District is an example of a middle- and working-class urban residential neighborhood created during the second half of the nineteenth century. Some 431 buildings make up the district and consist primarily of well-preserved Italianate-style brick town houses of three stories. A few wood frame buildings remain, and several churches and civic structures make up the rest of the district. Other represented styles include the Greek Revival, Gothic Revival, Romanesque Revival, Renaissance Revival, and Beaux Arts. The Harsimus Cove Historic District is significant

under Criterion A in the areas of Industry, Politics/Government, and Social Humanism, and under Criterion C in the area of architecture for its distinct and intact collection of buildings. The National Register Nomination identified the district's period of significance as extending from the mid-nineteenth century (circa 1850) to approximately 1926. The district boundaries are delineated on Figure 6.

88-92 Erie Street, Albaney Dye & Chemical Co

Built around 1906 by the firm of Herman Kreither & Hubbard to house the Albaney Dye & Chemical Co., the five-story Romanesque-style structure includes brick bearing walls and elaborate terra cotta decorative elements. It represents the only industrial building in what is otherwise a residential area. The property is eligible under Criterion C for architecture and is a key contributing resource to the Harsimus Cove Historic District. The resource boundaries comprise the building lot and are delineated on Figure 6. A formal period of significance has not been established for this historic property.

Warehouse Historic District

The Warehouse Historic District is an historically significant and virtually intact manufacturing and distribution center with ties to the development of Jersey City and the Port of New York. Its proximity to Harsimus Yard helped fuel the district's development, which is also linked to many early industries in Jersey City. Buildings are located along narrow streets and include examples of industrial architecture, including many of reinforced concrete and structural steel. The District is eligible for inclusion in the New Jersey and National Registers under Criteria A and C. District boundaries vary, depending on the map consulted. For the purposes of this investigation, the boundary has been drawn to encompass the largest mapped area and is delineated on Figure 6.

Hudson & Manhattan Railroad Powerhouse

Listed on the National Register of Historic Places under Criteria A, B, and C for its significance in architecture, engineering, and transportation history, and for its associations with William Gibbs McAdoo, the Hudson & Manhattan Railroad Powerhouse is a large-scale example of industrial Romanesque Revival architecture. The coal-fired powerhouse was a technological wonder of its day and the centerpiece for the first electrically powered trans-Hudson rapid transit rail system nicknamed the "Hudson Tubes." The Powerhouse is also a key contributing resource to the Warehouse Historic District. Its period of significance extends from 1906 to 1929, and its boundaries are delineated on Figure 6.

Great Atlantic & Pacific Tea Company Warehouse

Between 1900 and 1929, the nine-story, reinforced concrete structure formed part of a larger manufacturing and distribution center for the Great Atlantic & Pacific Tea Company (A&P). This historically important retail chain had its origins in the area and grew to become the nation's largest by the mid-twentieth century. The building retains a high level of integrity and is significant in the areas of commerce and architecture. It is also a key contributing resource to the Warehouse Historic District and a National Historic Landmark. Property boundaries are delineated on Figure 6.

APPENDIX B: FIGURES AND PLATES

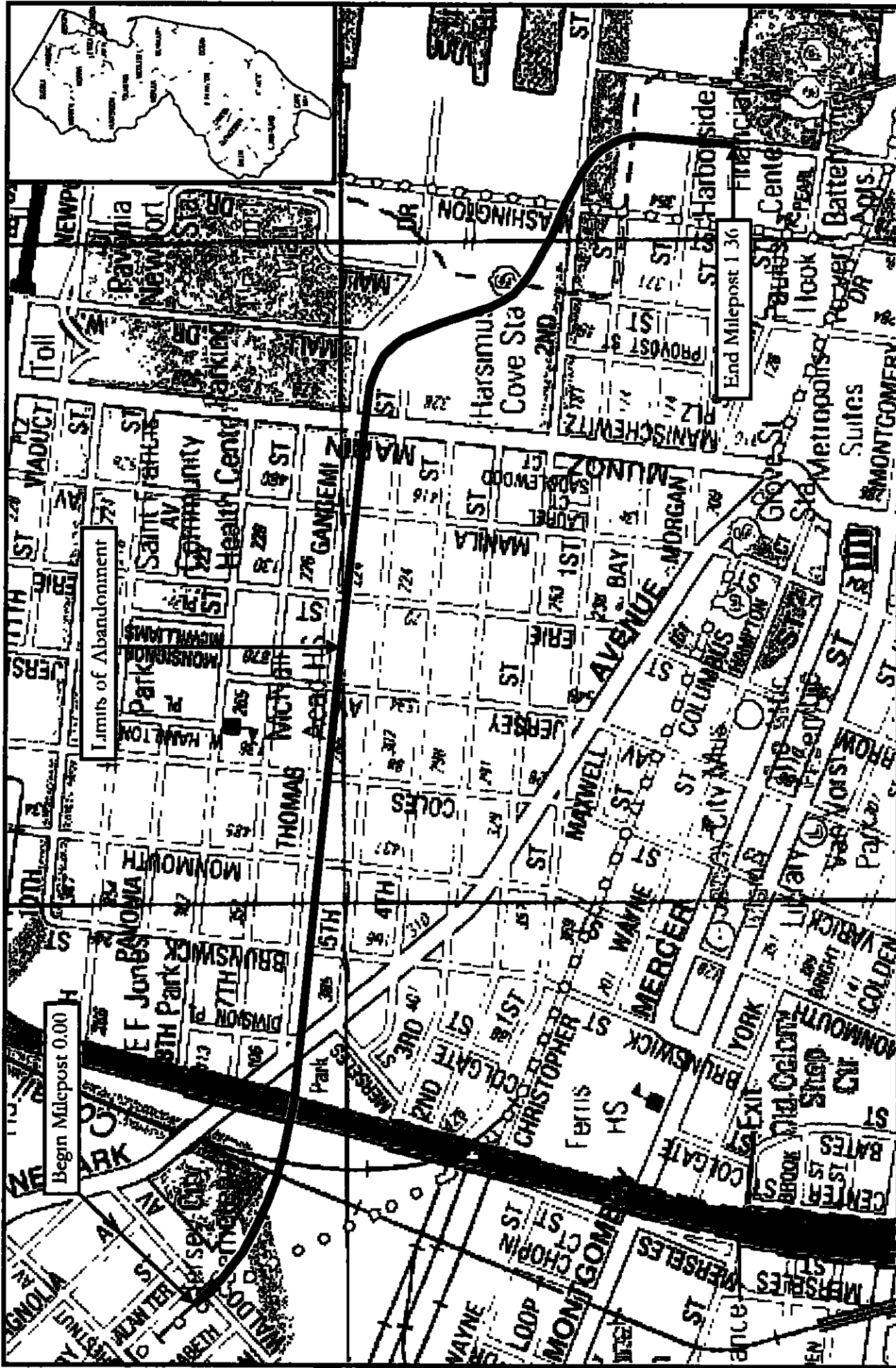
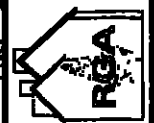


Figure 1:
Limits of Abandonment
(from 2004 Hagstrom Map Company, Inc., Street Map of Hudson County, New Jersey).



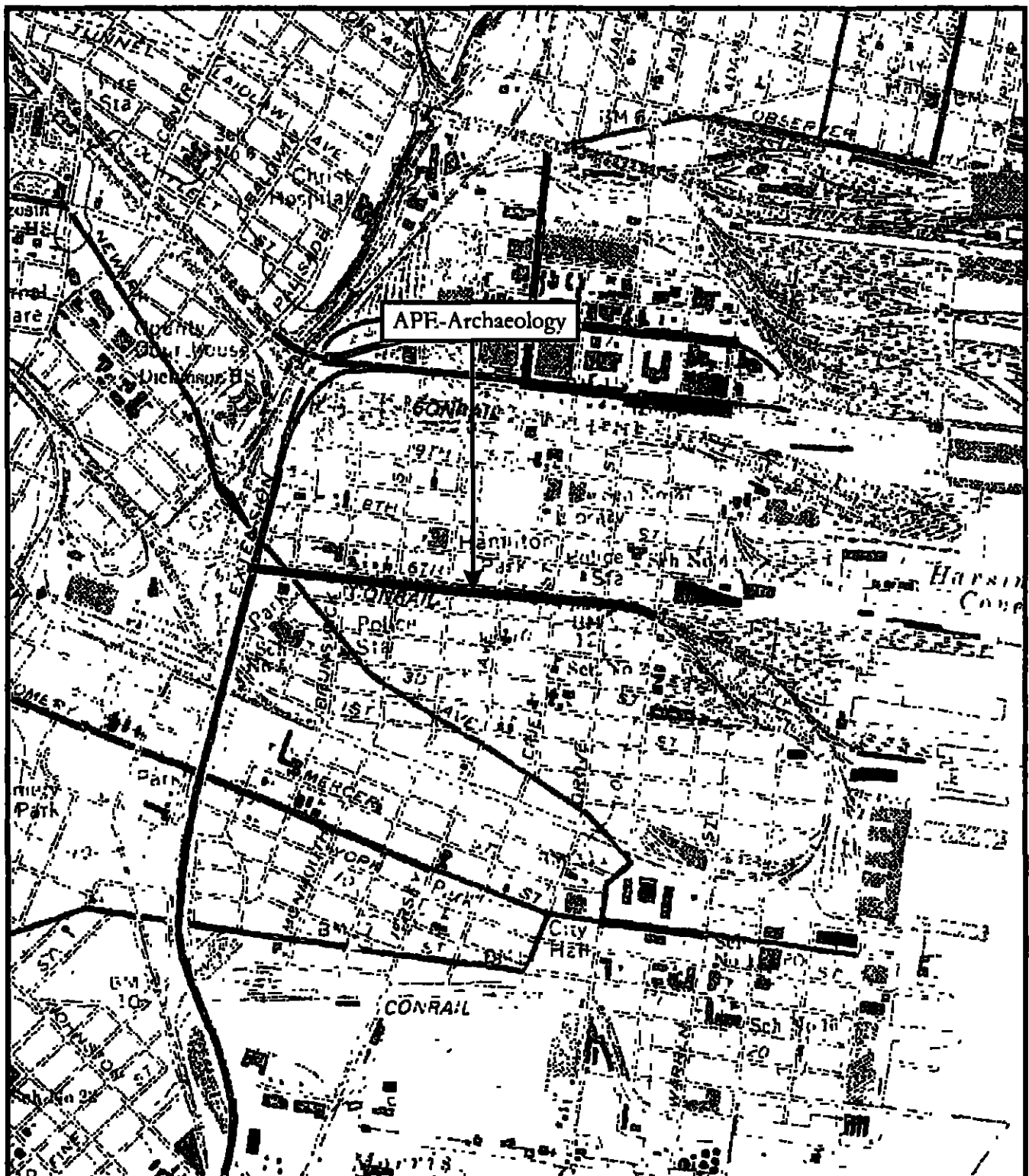


Figure 2:
 APE-Archaeology
 (from USGS 7.5' Quadrangle, Jersey City, NJ-NY 1967
 [photorevised 1987])

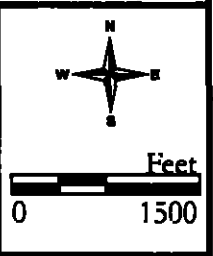




Figure 3:
APL Architecture (from GIS Parcel Data for Jersey City, Hudson County, Division of Planning)



This map was developed using Historic County
APL Computer Information System data.
The second period had not been certified in
the above information, and is not
yet authorized.

THIS MAP WAS DEVELOPED USING NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION GEOGRAPHIC INFORMATION SYSTEM DIGITAL DATA, BUT THIS SECONDARY PRODUCT HAS NOT BEEN VERIFIED BY NJDEP AND IS NOT STATE AUTHORIZED.



One-Half Mile Buffer



110' Bldg. at Block 212, Lot M



Public Space Areas where
Target Building Is Not Visible

0.25 0 0.25 Miles



Figure 4:
Computer generated
viewshed map within one-
half mile buffer around
proposed 10-story building.

Prepared for Richard Grubb and Associates, Inc

Building Location (NAD 83)
Lat
Long

VIEWSHED
Based on 110' Target Building

Block 212, Lot M
Jersey City, New Jersey

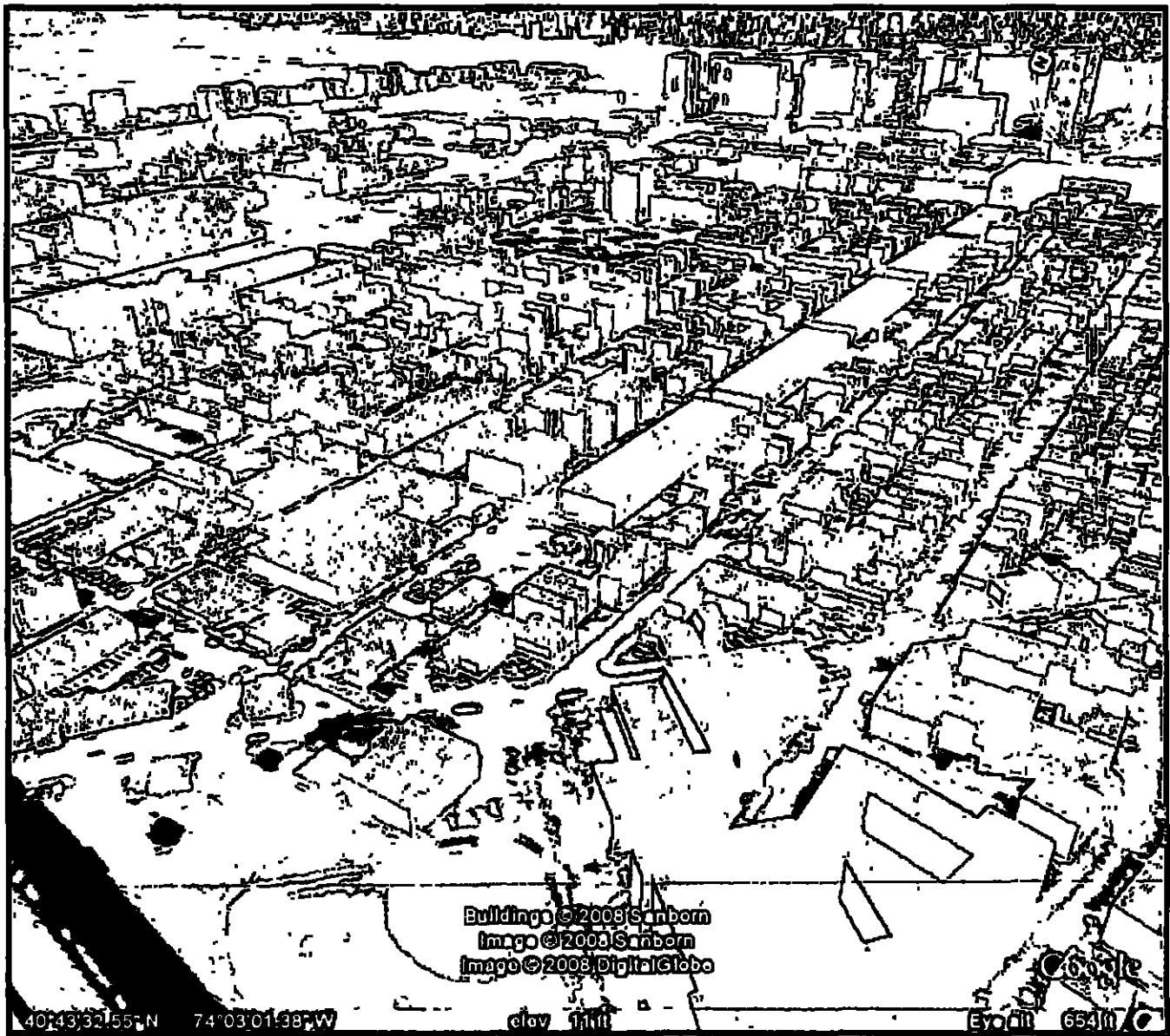
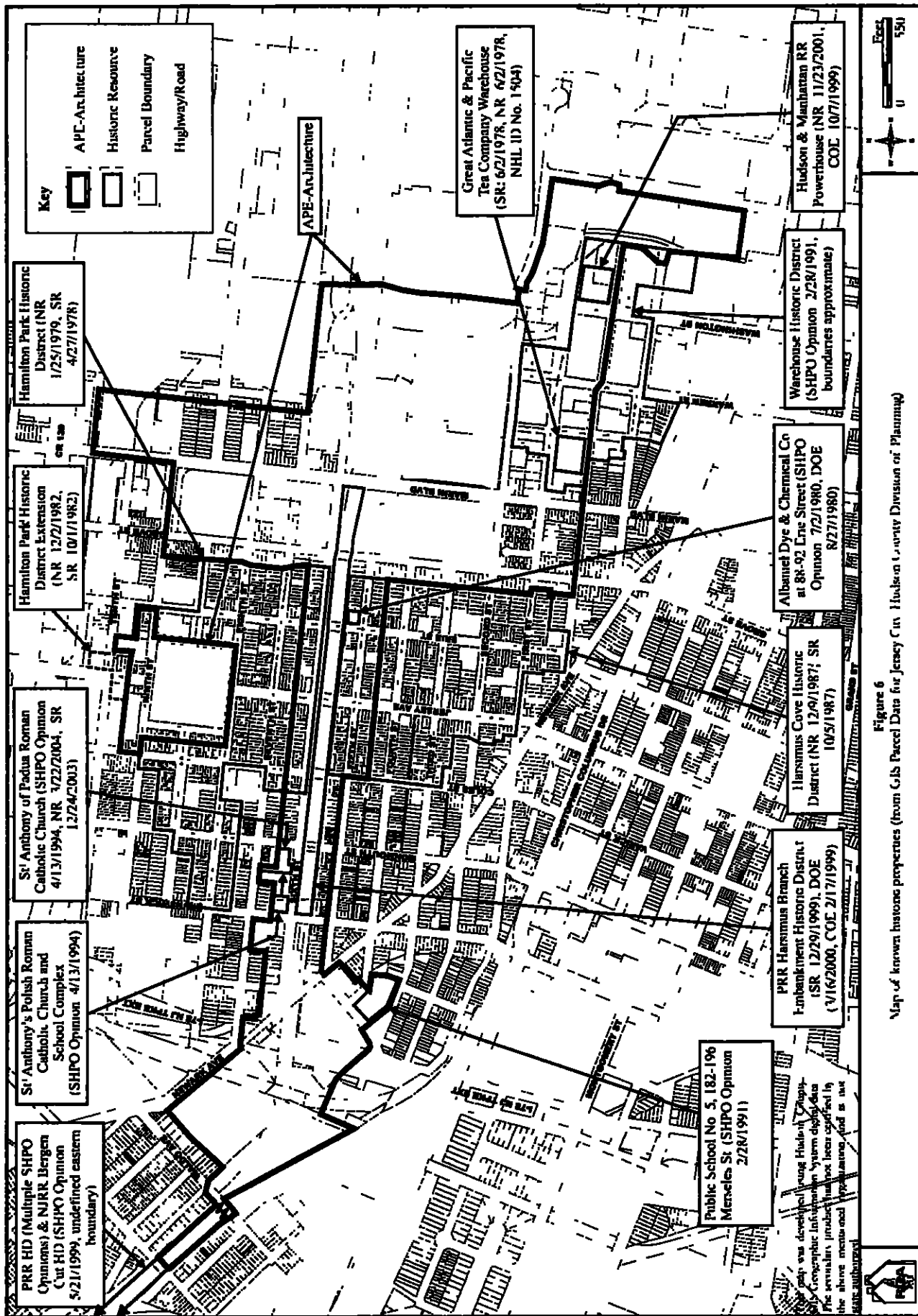


Figure 5:
Computer simulated birdseye view of Jersey City depicting possible 110-foot building (red) within the context of the larger cityscape. The computer program allows the building to be viewed from any point in Jersey City (From Google Earth).



Scaled to Actual
Building Heights



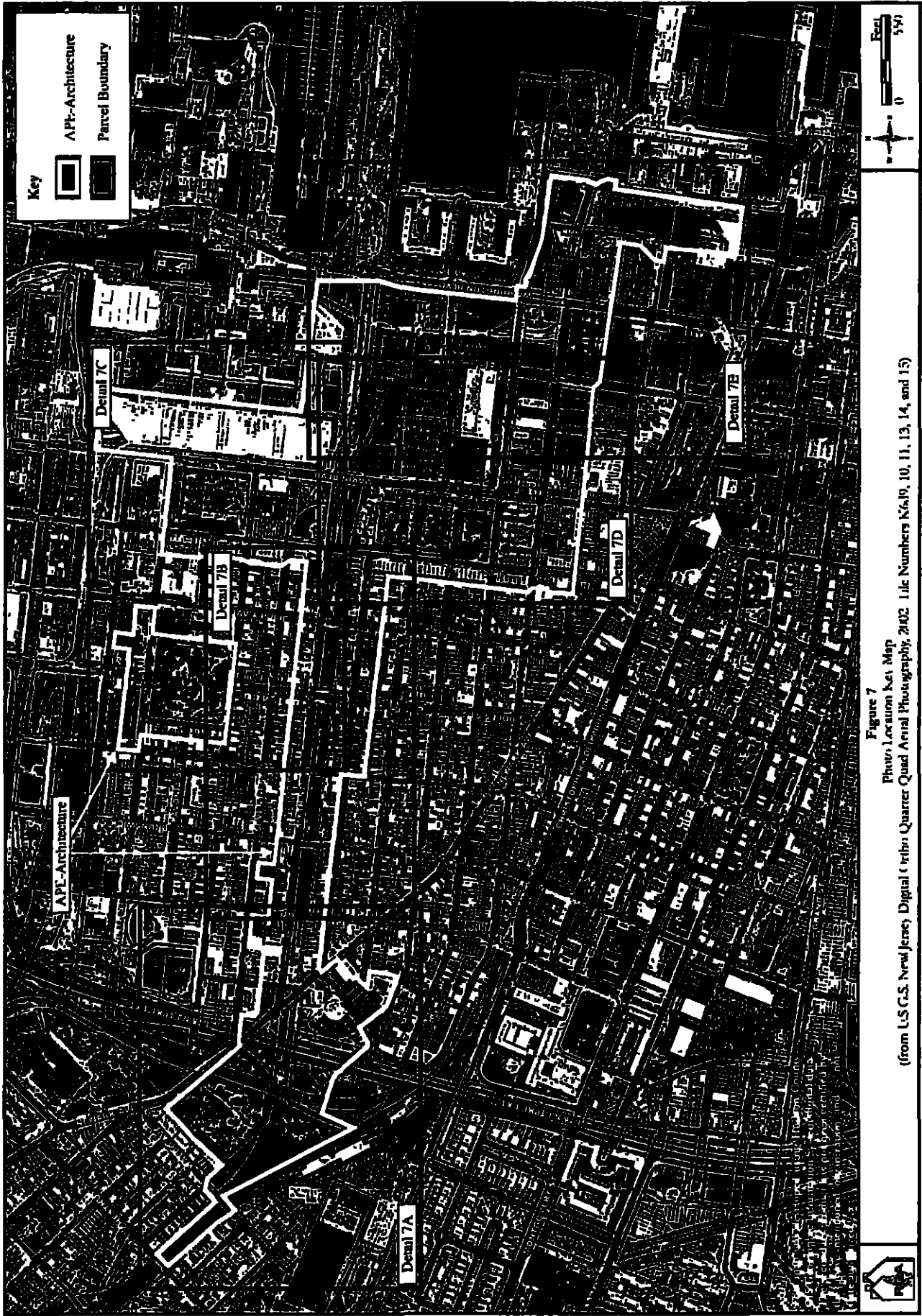


Figure 7

Photo Location Key Map

(from U.S.G.S. New Jersey Digital Cutho Quarter Quad Aerial Photography, 2012. File Numbers K640, 10, 11, 13, 14, and 15)

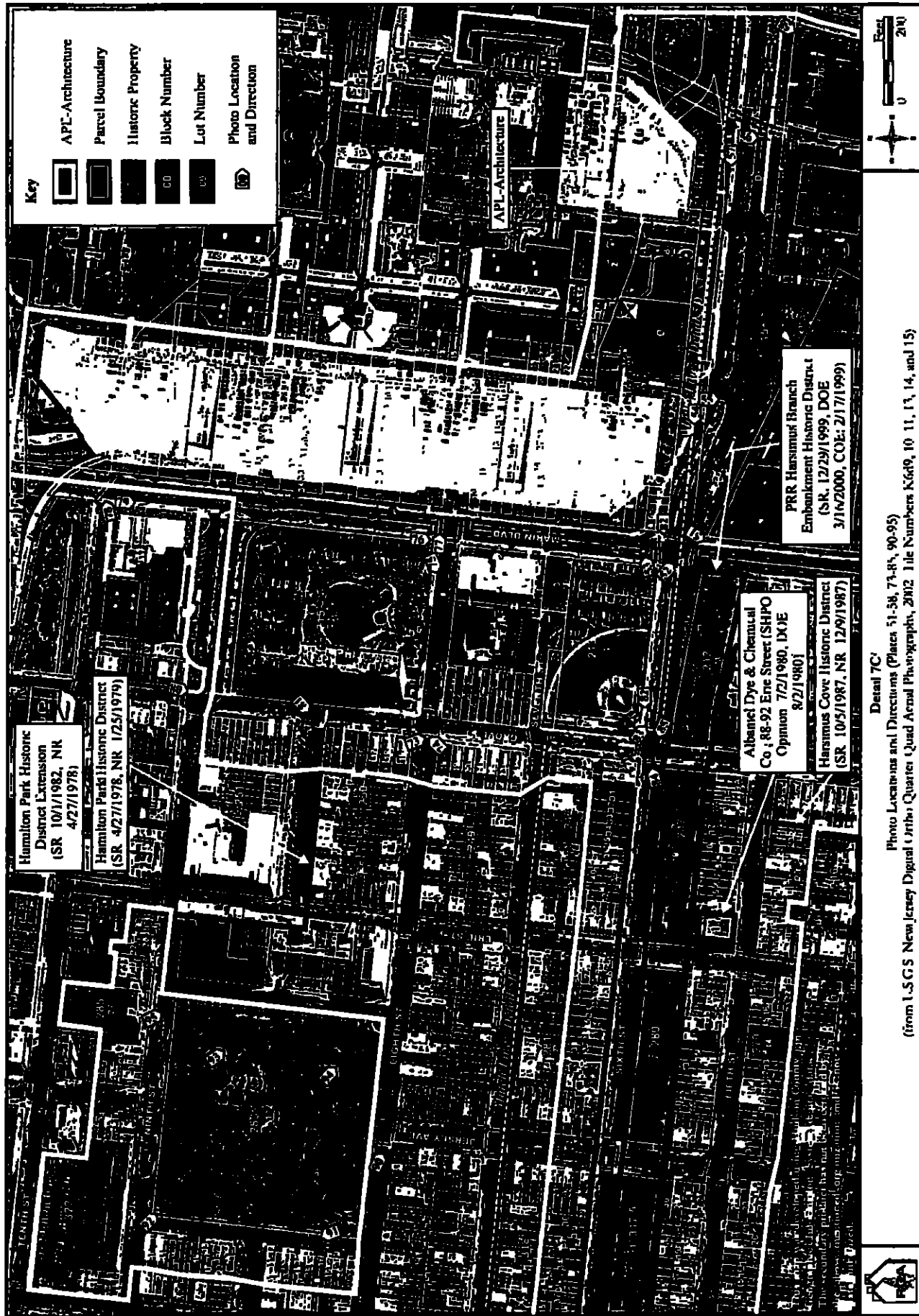


Detail 7A

Photo Locations and Directions (Plates 1 30193, 100-103)
 (from U.S.G.N. New Jersey Digital Ortho Quarter Quad Aerial Photographs, 2002. Tile Numbers 8689, 10, 11, 13, 14, and 15)











This map was created using Hudson County Geographic Information System digital data. The geographic data has not been certified by the state for use in land use planning and zoning. Use is authorized.



Detail 7E
Photo Locations and Directions (Plates 59-67,
from U.S.G.S. New Jersey Digital Ortho Quarter Quad Aerial Photographs, 2002 Tile Numbers K649,
10, 11, 13, 14, and 15)



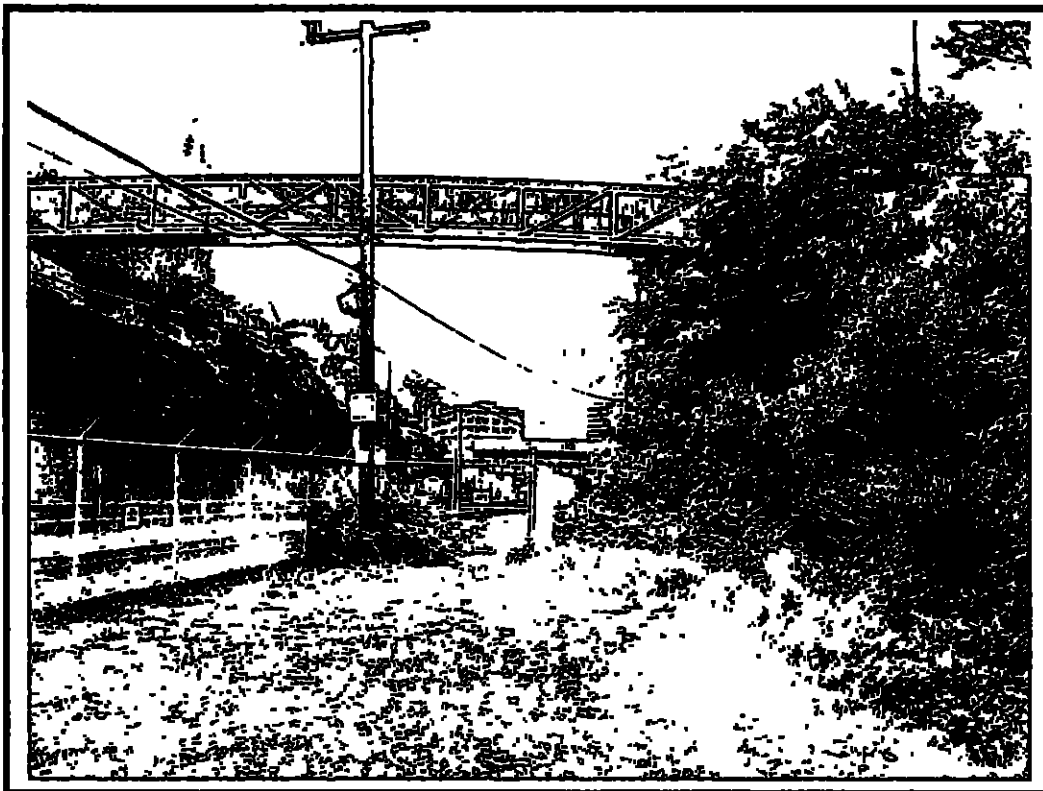


Plate:

1

Photo View:

West

Photographer:

Philip A

Hayden

Date:

May 20, 2008

Overview, Harsimus Branch right-of-way in vicinity of milepost 0.00, near its former connection with PRR main line. Circa 1945 Waldo Avenue footbridge appears overhead. Note exposed rock wall of Bergen Cut at left.



Plate:

2

Photo View:

East

Photographer:

Philip A

Hayden

Date:

May 20, 2008

Overview, Harsimus Branch right-of-way near the eastern end of the Bergen Cut. The Jersey City Cemetery is located to the left, the PATH tracks are located to the right.



Plate:
3

Photo View:
East

Photographer:
Philip A
Hayden

Date:
May 20, 2008

Overview, Harsimus Branch right-of-way near eastern edge of Bergen Hill. Note New Jersey Turnpike Extension viaduct behind trees at right. The single rail in center foreground is a remnant of the Penn-Central connecting tract.

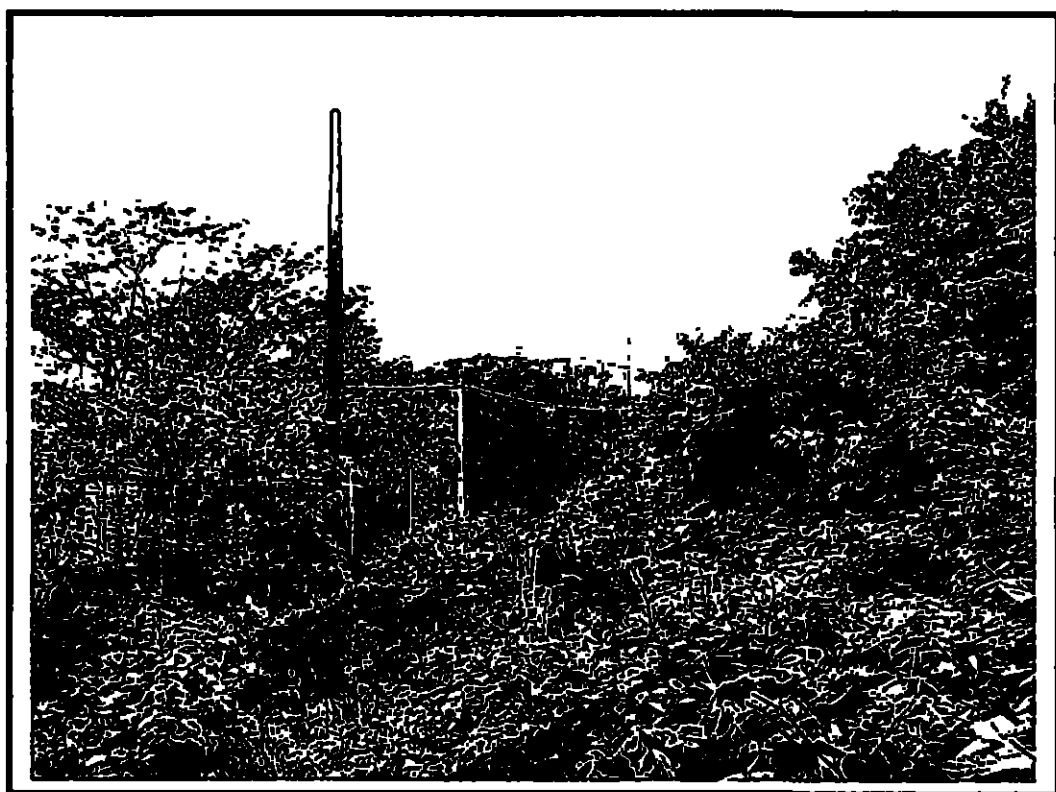


Plate:
4

Photo View:
Southwest

Photographer:
Philip A.
Hayden

Date:
May 20, 2008

Overview, Harsimus Branch right-of-way with modern PATH equipment cabinets visible behind trees at left and new housing on the south rim of the Bergen Cur, visible in center background.



Plate:
5

Photo View:
Northwest

Photographer:
Philip A
Hayden

Date:
May 20, 2008

Overview, north wall and rim of the Berger Cut near Milepost 000, depicting the approximate location of the former connection of the Harsimus Branch with the PRR main line. Note remains of overhead electrified catenary system

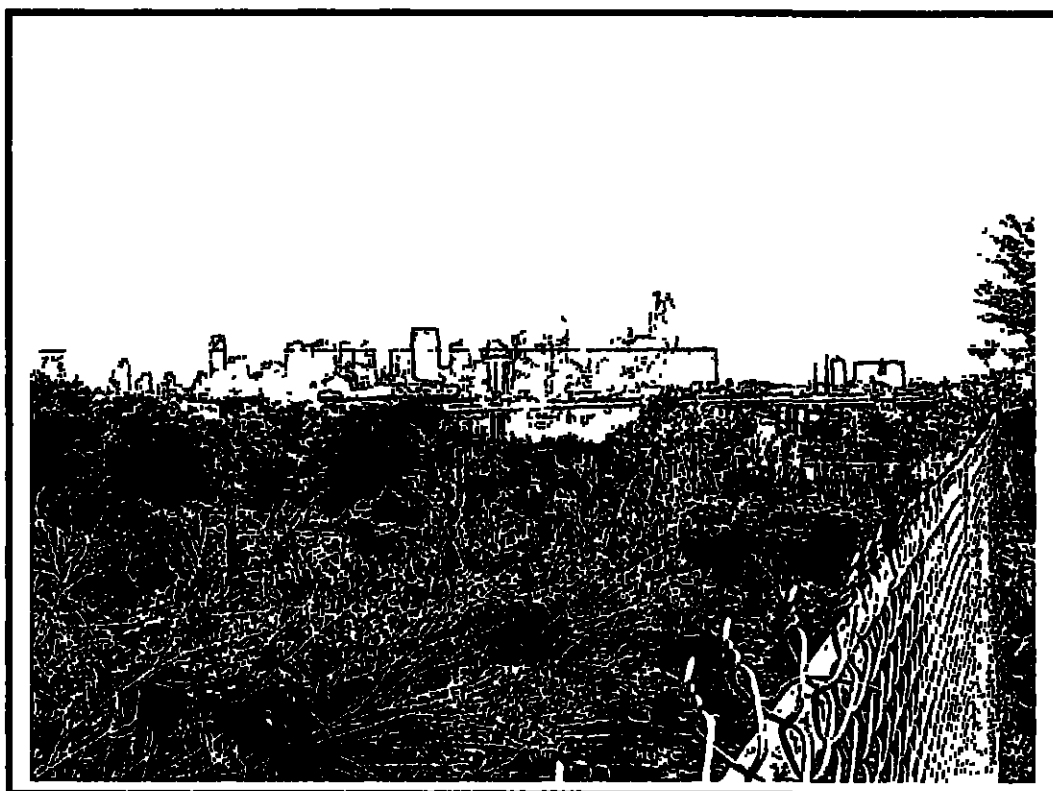


Plate:
6

Photo View:
East

Photographer:
Philip A
Hayden

Date:
May 20, 2008

Overview, eastern end of Bergen Cut from the south rim with the Jersey City and Manhattan skylines visible in distance. The Bergen Cut drops down 40 feet at left



Plate:
7

Photo View:
South

Photographer:
Philip A
Hayden

Date:
May 20, 2008

Overview, north approach to circa 1945 Waldo Avenue footbridge over the Bergen Cut
Buildings at right are circa 1960 residential units



Plate:
8

Photo View:
North

Photographer:
Philip A
Hayden

Date:
May 20, 2008

Overview, south approach to circa 1945 Waldo Avenue footbridge over the Bergen Cut

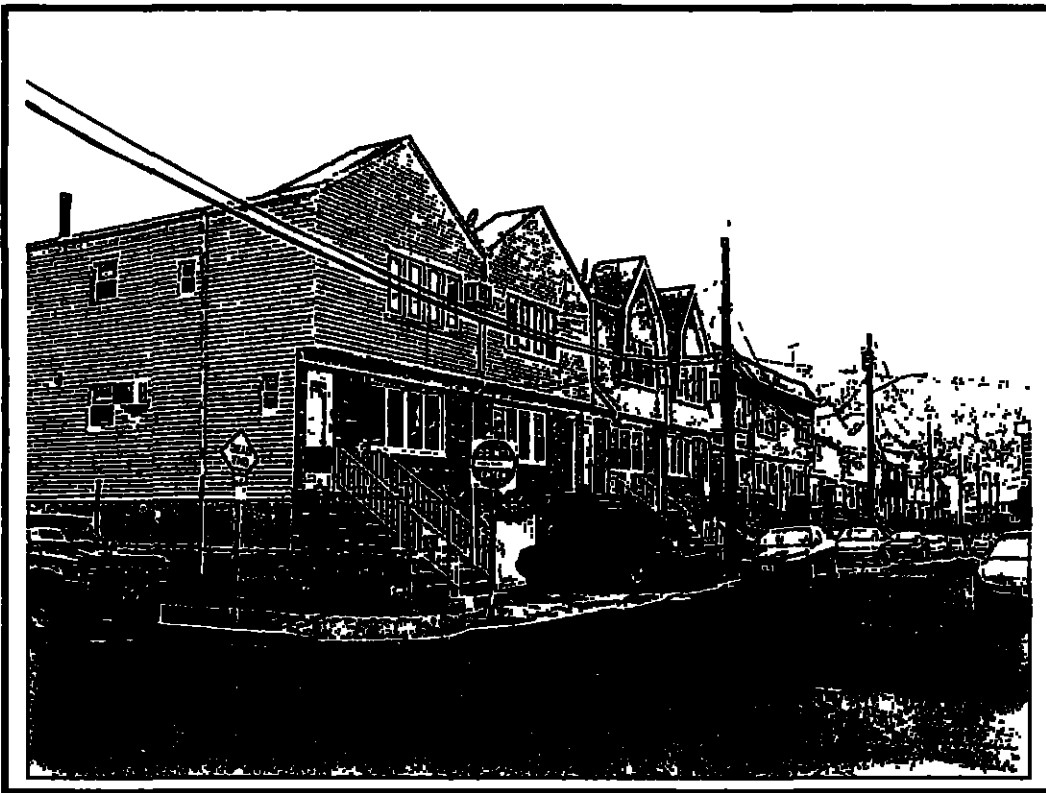


Plate:
9

Photo View:
Southwest

Photographer:
Philip A
Hayden

Date:
May 20, 2008

Overview, circa 1960s residential housing at the corner of Waldo Avenue and Alan Terrace. The rear yards of these buildings abut the north rim of the Bergen Cut.

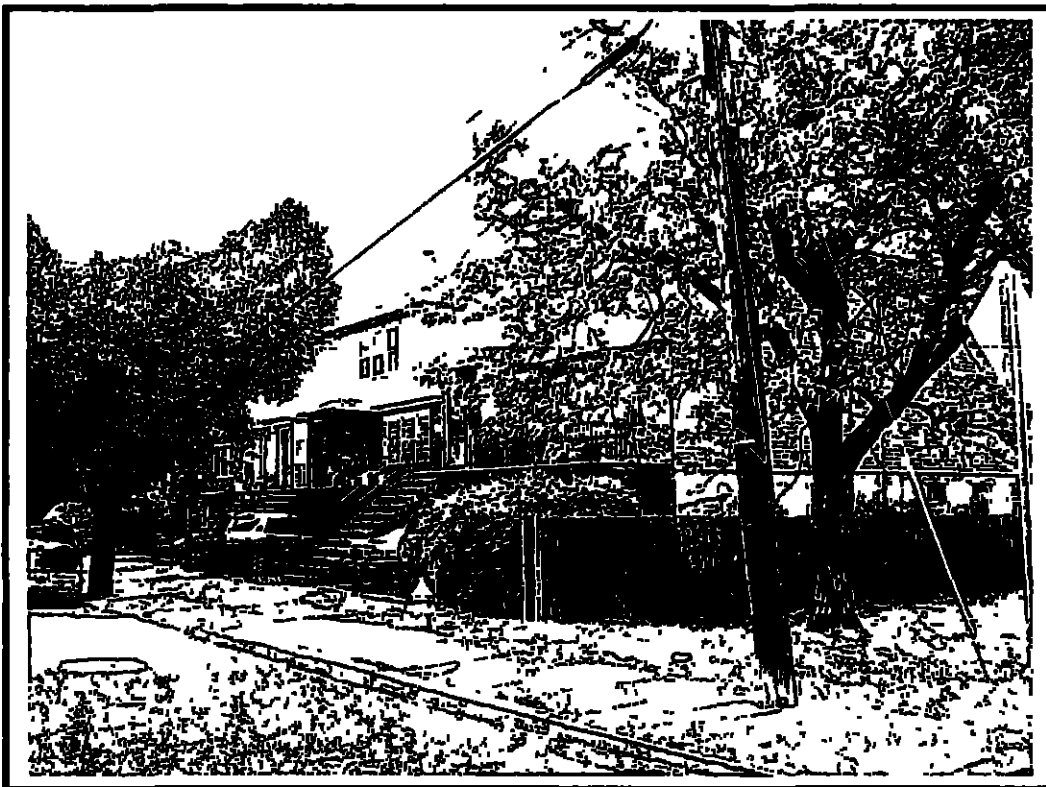


Plate:
10

Photo View:
Northeast

Photographer:
Philip A
Hayden

Date:
May 20, 2008

Overview, circa 1960s residential housing on Waldo Avenue near the north rim of the Bergen Cut

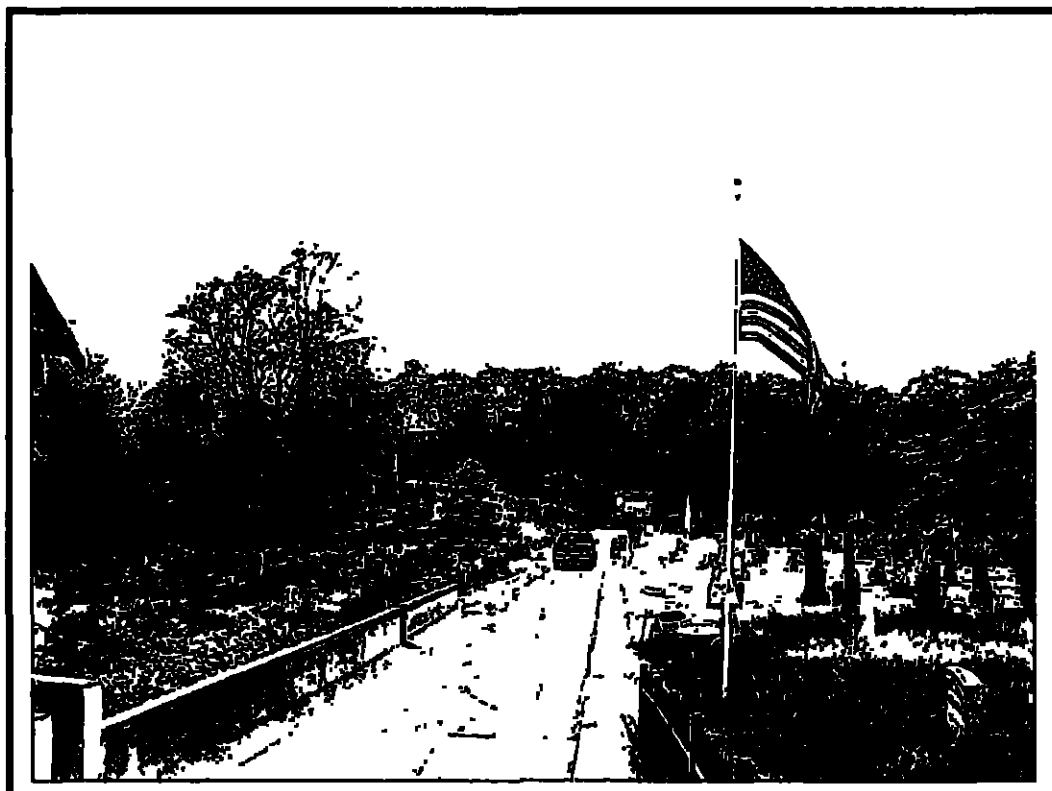


Plate:
13

Photo View:
South

Photographer:
Philip A
Hayden

Date:
May 20, 2008

Overview, Jersey City Cemetery from Newark Avenue Gate The tree line in the distance marks the edge of the Harsimus Branch right-of-way



Plate:
14

Photo View:
North

Photographer:
Philip A
Hayden

Date:
May 20, 2008

Overview, Jersey City Cemetery from the south boundary line near the Harsimus Branch right-of-way, looking toward the Newark Avenue gatehouse (built 1916) (center, background)

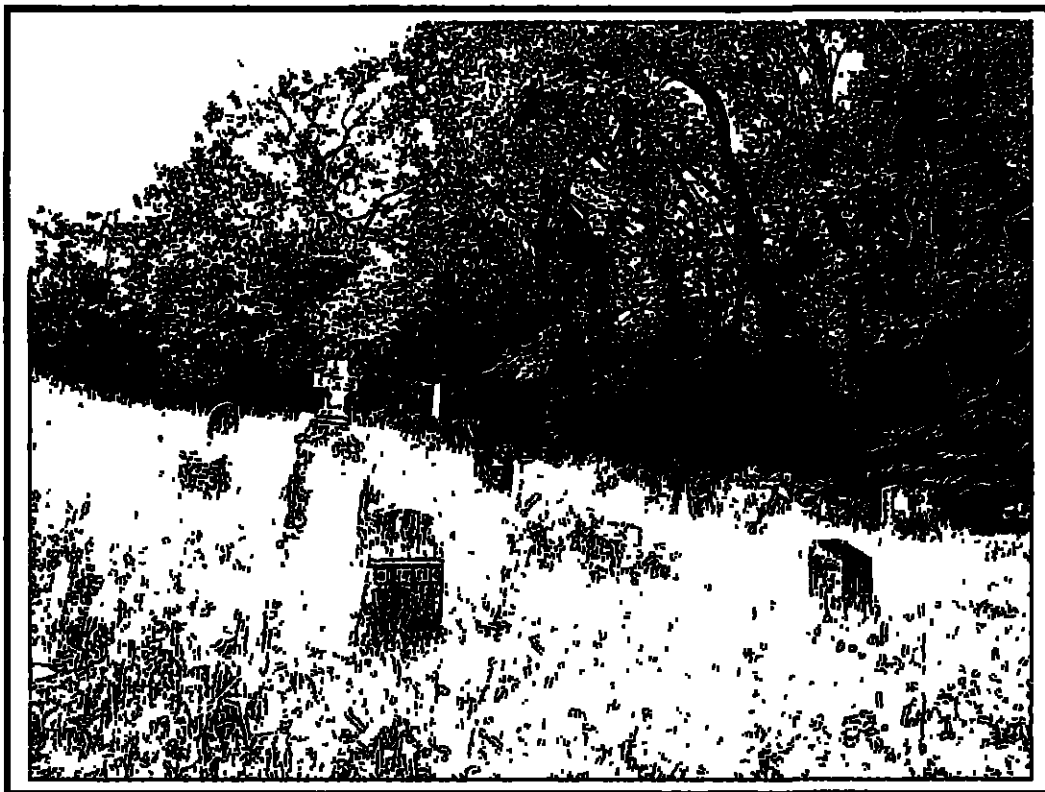


Plate:
15

Photo View:
Southeast

Photographer:
Philip A.
Hayden

Date:
May 20, 2008

Overview, Jersey City Cemetery with tree line marking the edge of the Harsimus Branch right-of-way. Established in 1831, the Jersey City Cemetery contains stones dating between the last decades of the nineteenth century to the present day.



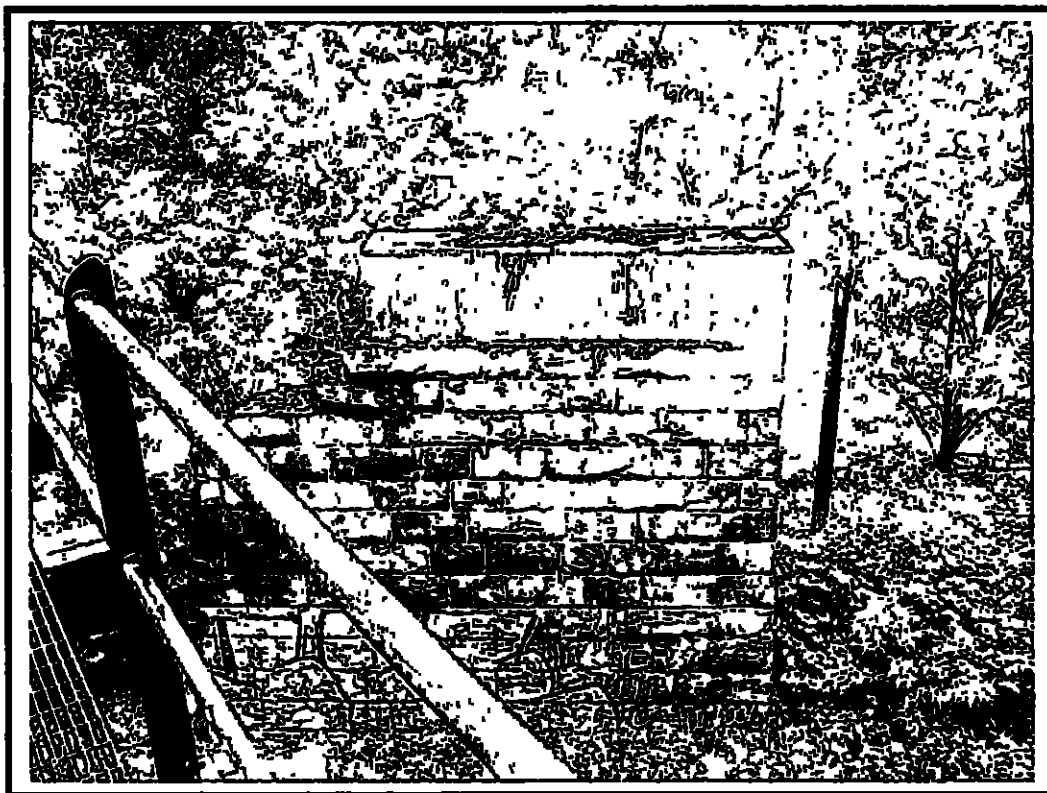
Plate:
16

Photo View:
West

Photographer:
Philip A.
Hayden

Date:
May 20, 2008

Overview, Jersey City Cemetery. The Harsimus Branch right-of-way is located behind the trees at left. The buildings visible in the upper right are the rear elevations of early twentieth-century flats fronting Waldo Avenue.



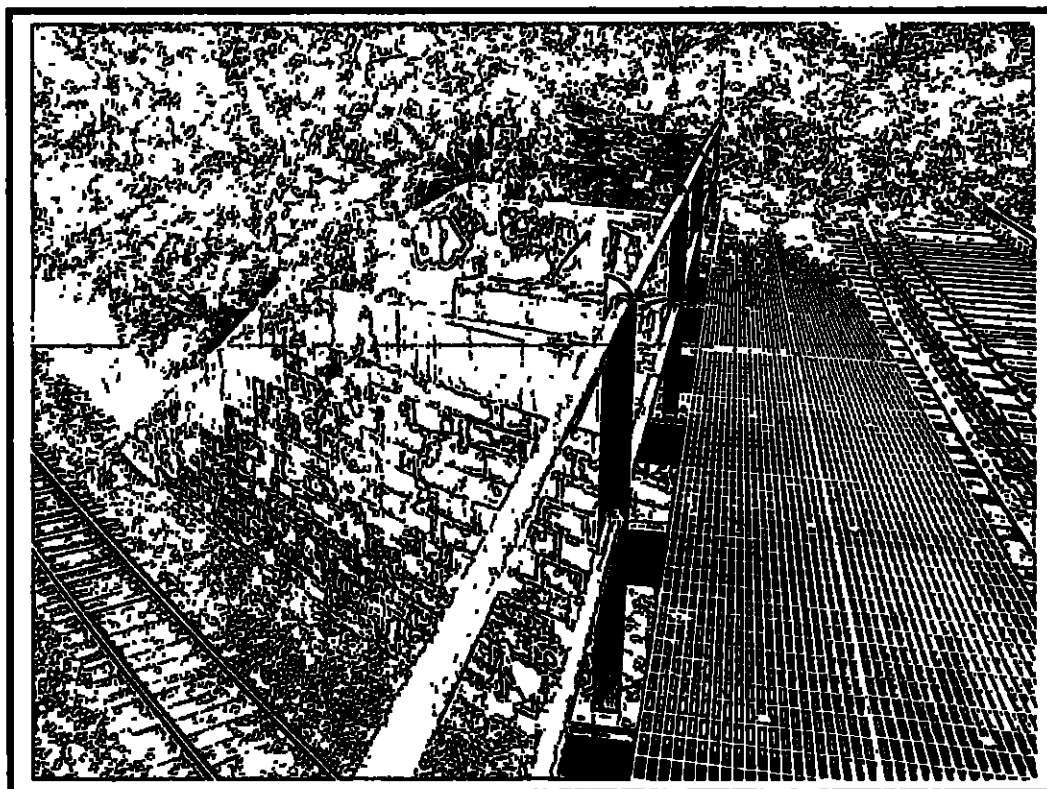
View of first Harsimus Branch pier from the eastern edge of the Bergen Hill. The pier marks the beginning of the elevated western viaduct, which carried the Branch toward the Jersey City waterfront. The circa 1968 Penn-Central connecting viaduct appears in left foreground

Plate:
17

Photo View:
East

Photographer:
Philip A.
Hayden

Date:
May 20, 2008



View of Harsimus Branch viaduct abutment at the edge of Bergen Hill. The circa 1968 Penn-Central viaduct appears at right. An active Conrail freight line—historically part of National Junction—passes below

Plate:
18

Photo View:
Southwest

Photographer:
Philip A.
Hayden

Date:
May 20, 2008

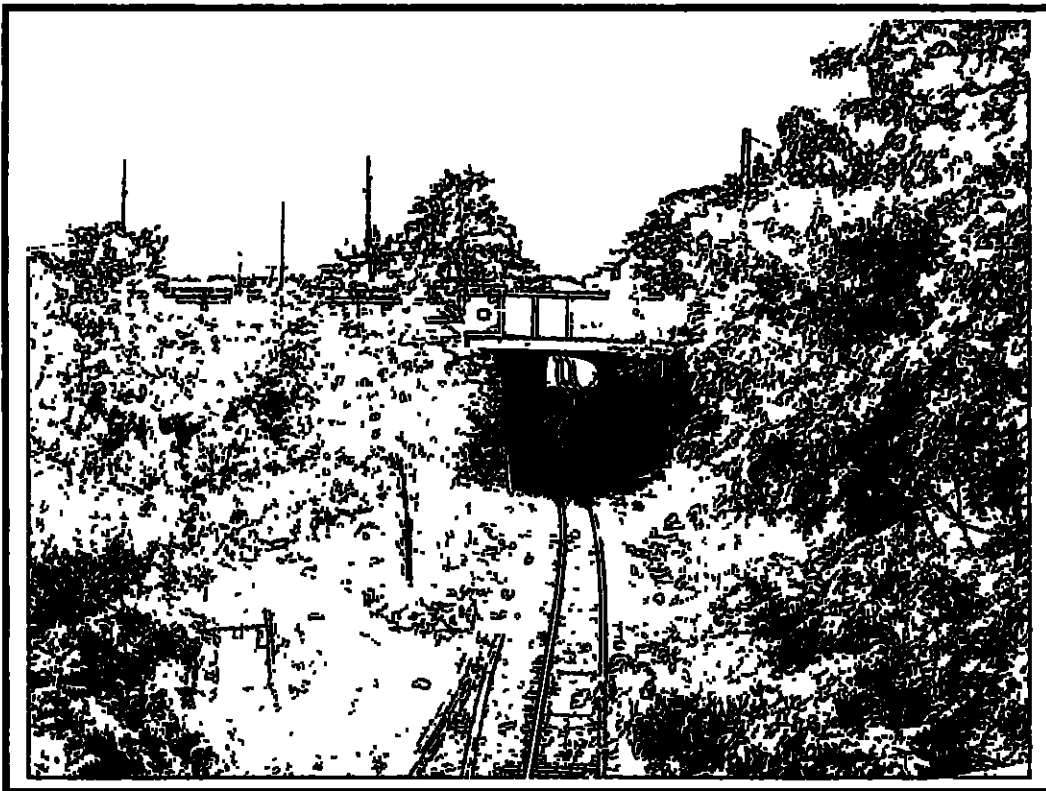


Plate:
19

Photo View:
South

Photographer:
Philip A.
Hayden

Date:
May 20, 2008

Overview of railroad resources in the vicinity of the Harsimus Branch right-of-way, near the western end of the APE. The active Conrail freight line passes through National Junction and Waldo Tunnel, beneath the former PRR main line, the Hudson & Manhattan Railroad (PATH) tracks, and Waldo Yard.



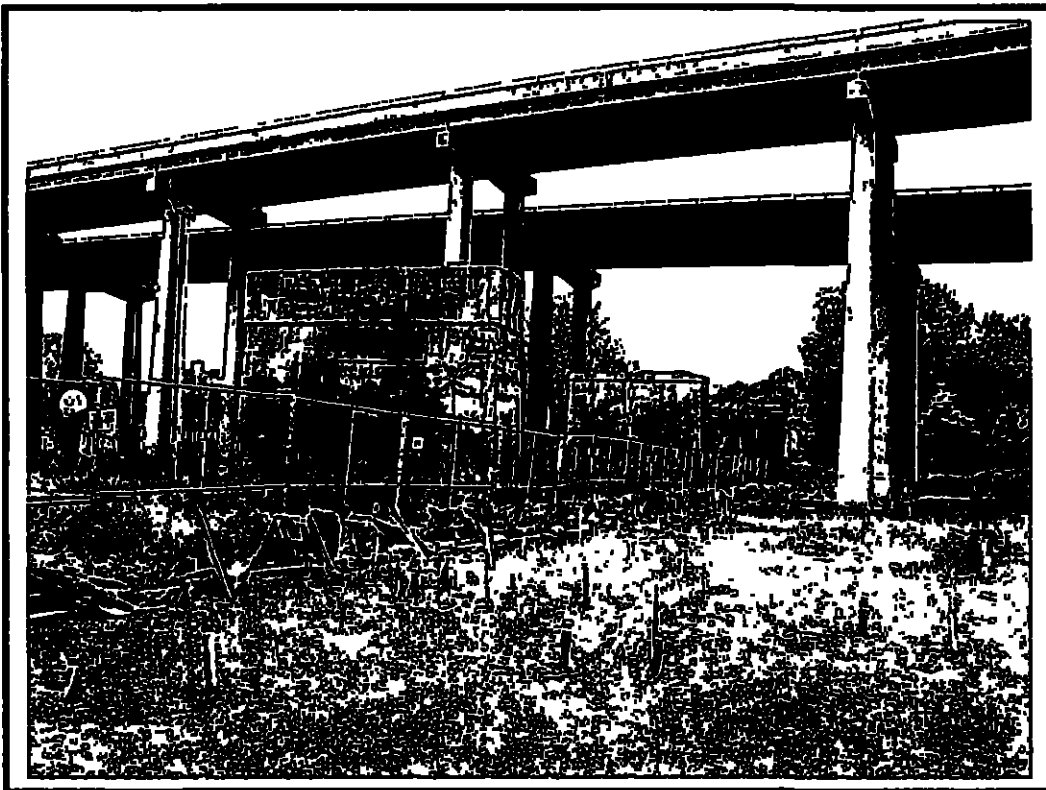
Plate:
20

Photo View:
North

Photographer:
Philip A.
Hayden

Date:
May 20, 2008

Overview from the Harsimus Branch right-of-way looking down on the active Conrail freight line. The Penn-Central connecting viaduct appears in lower right corner, the modern Newark Avenue bridge crosses the track in the distance.



Overview, Harsimus Branch right-of-way depicting a portion of Block 446, Lot 18A with stone and concrete piers. The piers supported the former viaduct, which has been dismantled. One proposal calls for constructing a 4-story building on this lot.

Plate:
21

Photo View:
Southwest

Photographer:
Philip A
Hayden

Date:
May 20, 2008



Section of Mary Benson Park, depicting 1907 Mary Benson memorial (left) and circa 1945 VFW monument (right). The 1965 Jersey City Fire Department building appears in the background.

Plate:
22

Photo View:
South

Photographer:
Philip A
Hayden

Date:
May 20, 2008



Overview, viaduct piers of Harsimus Branch right-of-way (Block 446), depicting eligible Public School No. 5 in background (left) Note the New Jersey Turnpike Extension at right

Plate:
23

Photo View:
South

Photographer:
Philip A
Hayden

Date:
July 14, 2008



Detail, eligible Public School No. 5 (A.K.A. Dr. Michael Conu School) The facade fronts on Mary Benson Park

Plate:
24

Photo View:
South

Photographer:
Philip A
Hayden

Date:
July 14, 2008



Plate:
25

Photo View:
East

Photographer:
Philip A
Hayden

Date:
July 14, 2008

Detail, rear wing of the eligible Public School No. 5 (A.K.A Dr Michael Conti School), from the corner of Merseles Street and Fourth Street.

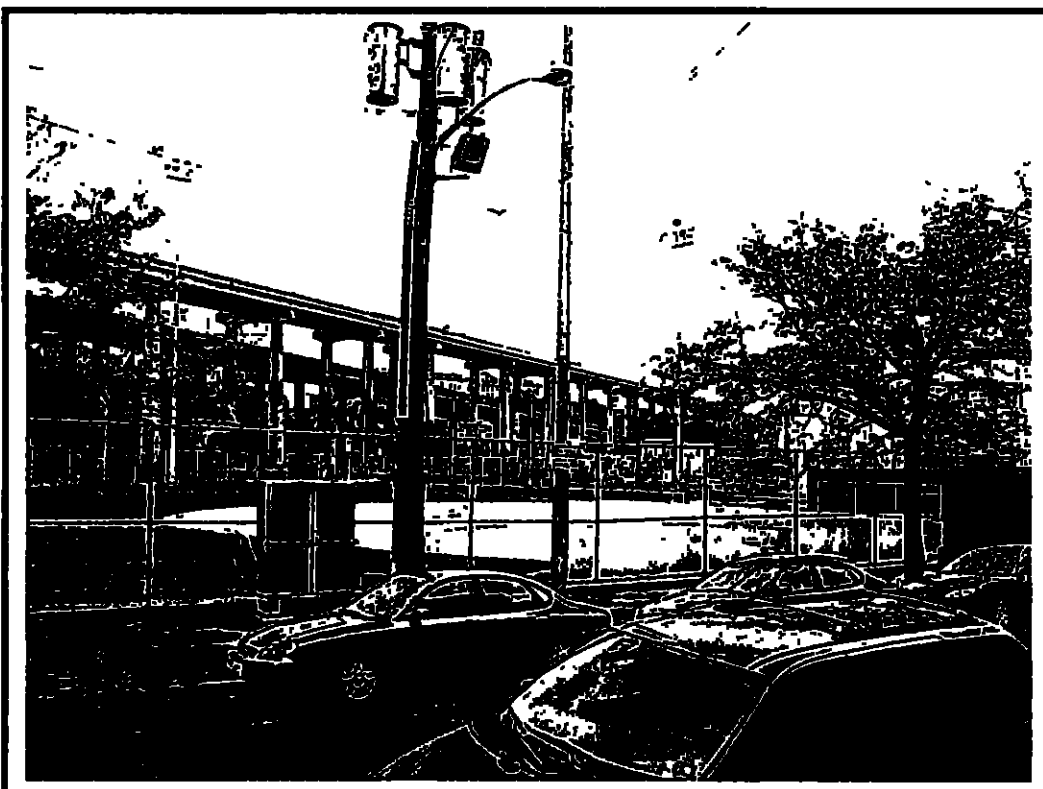


Plate:
26

Photo View:
North

Photographer:
Philip A
Hayden

Date:
July 14, 2008

Overview of Mary Benson Park from the front steps of the eligible Public School No. 5 (A.K.A. Dr Michael Conti School) depicting the viaduct piers on the Harsimus Branch on Block 446 in background Note New Jersey Turnpike Extension in distance



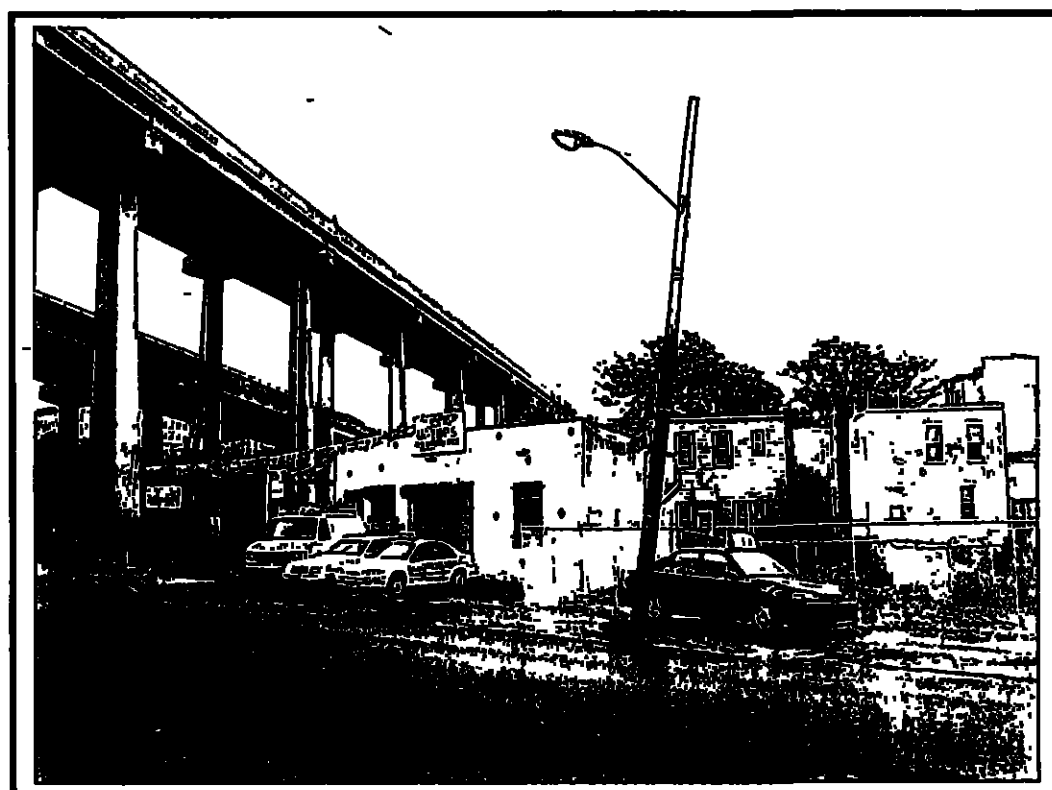
Overview of intersection of Newark Avenue (foreground) and Sixth Street. Note vacant lot at far left and stone viaduct pier and center, right.

Plate:
27

Photo View:
East

Photographer:
Philip A
Hayden

Date:
May 28, 2008



Commercial properties and vacant land on the north side of Newark Avenue, adjacent to the New Jersey Turnpike Extension

Plate:
28

Photo View:
North

Photographer:
Philip A
Hayden

Date:
May 20, 2008



Plate:
29

Photo View:
East

Photographer:
Philip A.
Hayden

Date:
May 20, 2008

Overview, intersection of Newark Avenue and Division Street, depicting a stone and concrete viaduct pier and the west boundary of Block 415, Lot 50. The commercial businesses appear to be less than 50 years of age.



Plate:
30

Photo View:
Northeast

Photographer:
Philip A.
Hayden

Date:
May 20, 2008

Overview, intersection of Newark Avenue and Fifth Street. The block contains a mix of early- to mid twentieth-century commercial and residential structures and modern, contextually sensitive town houses (foreground).



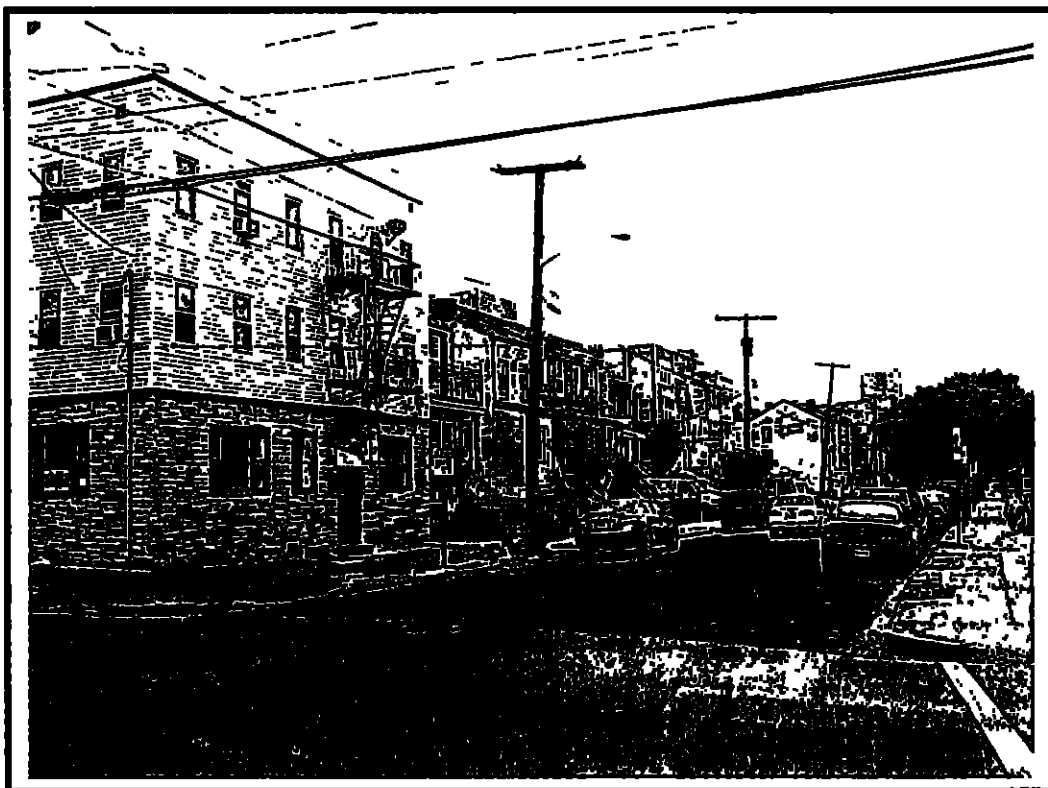
Overview, intersection of Fifth Street and Brunswick Street with western edge of the SR-listed Harsimus Street Embankment Historic District at center left

Plate:
31

Photo View:
Northeast

Photographer:
Philip A
Hayden

Date:
May 20, 2008



Overview of Fifth Street from the intersection of Brunswick Street. Buildings include a mix of late nineteenth- to mid twentieth-century commercial and residential structures

Plate:
32

Photo View:
Northeast

Photographer:
Philip A
Hayden

Date:
May 20, 2008



Plate:
33

Photo View:
North

Photographer:
Philip A
Hayden

Date:
May 20, 2008

Detail of typical residential properties on Fifth Street, between Brunswick Street and Monmouth Street, depicting an alley way with the top of the SR-listed Harsimus Branch embankment visible in the center background. With few exceptions, the stone embankment structures are not visible from the public way along Fifth Street.



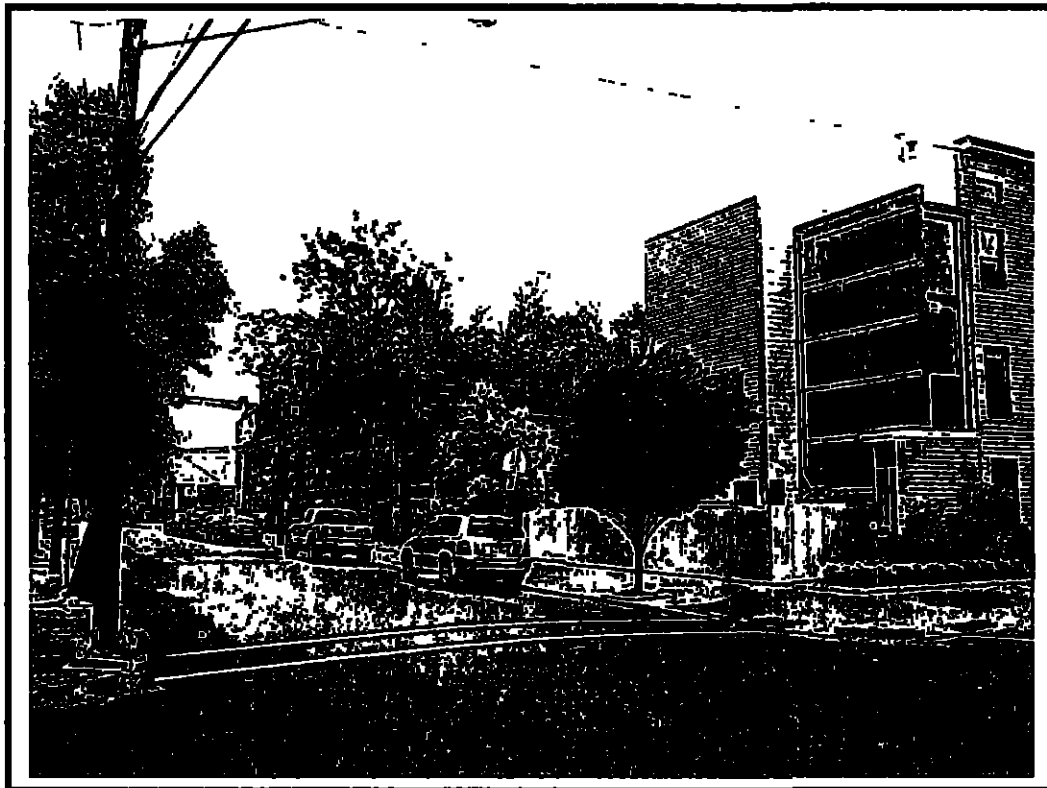
Plate:
34

Photo View:
North-west

Photographer:
Philip A
Hayden

Date:
May 20, 2008

Overview, Intersection of Fifth Street and Monmouth Street with SR-listed Harsimus Branch Embankment visible at right and the spire of the SR and NR-listed St. Anthony of Padua Roman Catholic Church visible in background at far right.



View down Monmouth Street from the intersection of Fifth Street, depicting the SR-listed Harsimus Branch Embankment at center left. All former railroad bridges have been removed.

Plate:
35

Photo View:
Northeast

Photographer:
Philip A.
Hayden

Date:
May 20, 2008



View down Fifth Street from the intersection of Monmouth Street, looking toward Coles Street. Buildings in this block consist of a mix of contemporary structures (far left) and late nineteenth-century residences (center).

Plate:
36

Photo View:
Northeast

Photographer:
Philip A.
Hayden

Date:
May 20, 2008



Plate:
37

Photo View:
Northwest

Photographer:
Philip A.
Hayden

Date:
March 22, 2005

Overview, intersection of Fifth Street and Coles Street, depicting the SR-listed Harsimus Branch Embankment at center right. The west boundary of the SR and NR-listed Harsimus Cove Historic District runs down the center of Coles Street.



Plate:
38

Photo View:
Northeast

Photographer:
Philip A.
Hayden

Date:
May 20, 2008

Overview, intersection of Fifth Street and Coles Street, depicting residential properties forming the western boundary of the SR and NR-listed Harsimus Cove Historic District. Note the SR-listed Harsimus Branch Embankment at left.

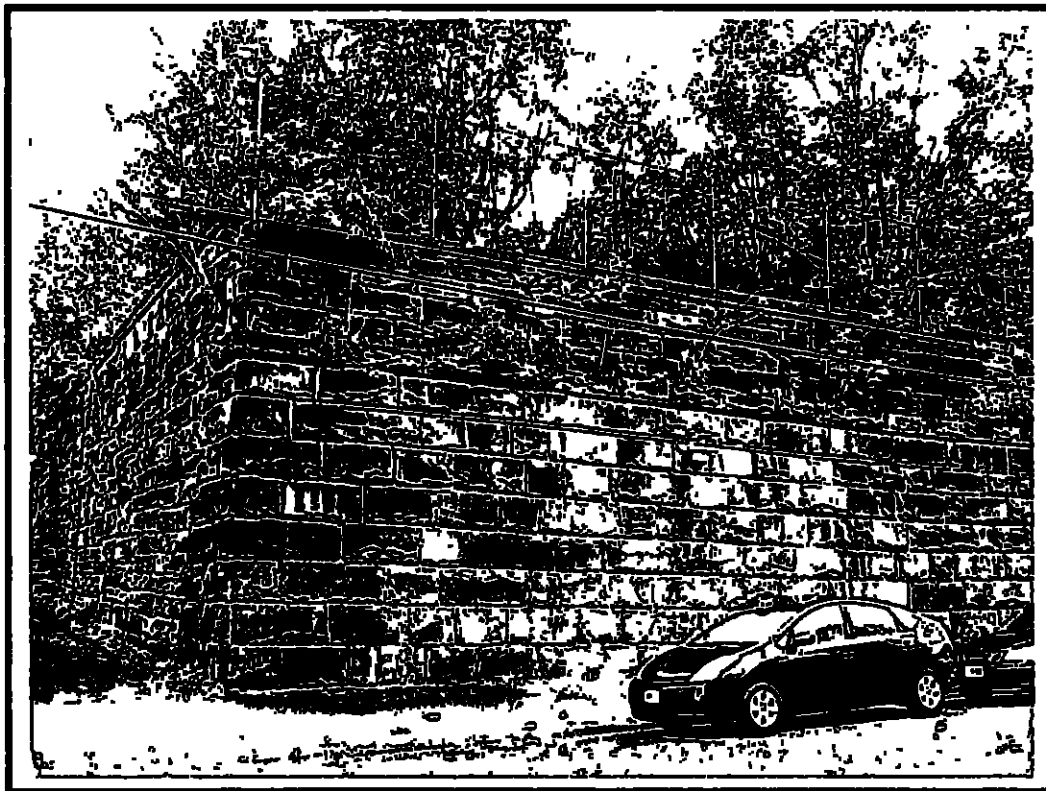


Plate:
39

Photo View:
Northwest

Photographer:
Philip A
Hayden

Date:
May 20, 2008

Typical detail, stone abutments and retaining walls forming the SR-listed Harsimus Branch Embankment at Coles Street. Note the difference in stone types between the abutments and the retaining walls. An alley at left extends behind residences along Fifth Street.



Plate:
40

Photo View:
Northwest

Photographer:
Philip A
Hayden

Date:
May 20, 2008

Typical detail, stone abutment and retaining walls at Coles Street and Sixth Street. Note the city-owned strip of grass extending along the Embankment. The four-story brick townhomes at right mark the western boundary of the SR and NR-listed Hamilton Park Historic District. The District's southern boundary extends down Sixth Street.



Plate:

41

Photo View:

Northwest

Photographer:

Philip A

Hayden

Date:

May 20, 2008

Overview, intersection of Fifth Street and Jersey Avenue, depicting buildings inside the SR and NR-listed Harsimus Cove Historic District. The SR-listed Harsimus Branch Embankment is visible at right. Note the decreased height of the stone abutments, caused by the descending grade to the waterfront.



Plate:

42

Photo View:

Northeast

Photographer:

Philip A.

Hayden

Date:

May 20, 2008

View of Jersey Avenue from the intersection of Fifth Street, depicting buildings inside the SR and NR-listed Harsimus Cove Historic District. The SR-listed Harsimus Branch Embankment is visible in the background at left.



Detail of alley between residential buildings on Fifth Street, between Jersey Avenue and Erie Street, inside the SR and NR-listed Harsimus Cove Historic District. Note the SR-listed Harsimus Branch Embankment visible between buildings in distance. Generally, the Embankment is not visible from Fifth Street.

Plate:
43

Photo View:
North

Photographer:
Philip A
Hayden

Date:
May 20, 2008



Overview, intersection of Fifth Street and Erie Street, depicting typical buildings located inside the SR and NR-listed Harsimus Cove Historic District. The SR-listed Harsimus Branch Embankment is visible in the background at right

Plate:
44

Photo View:
Northwest

Photographer:
Philip A
Hayden

Date:
May 20, 2008

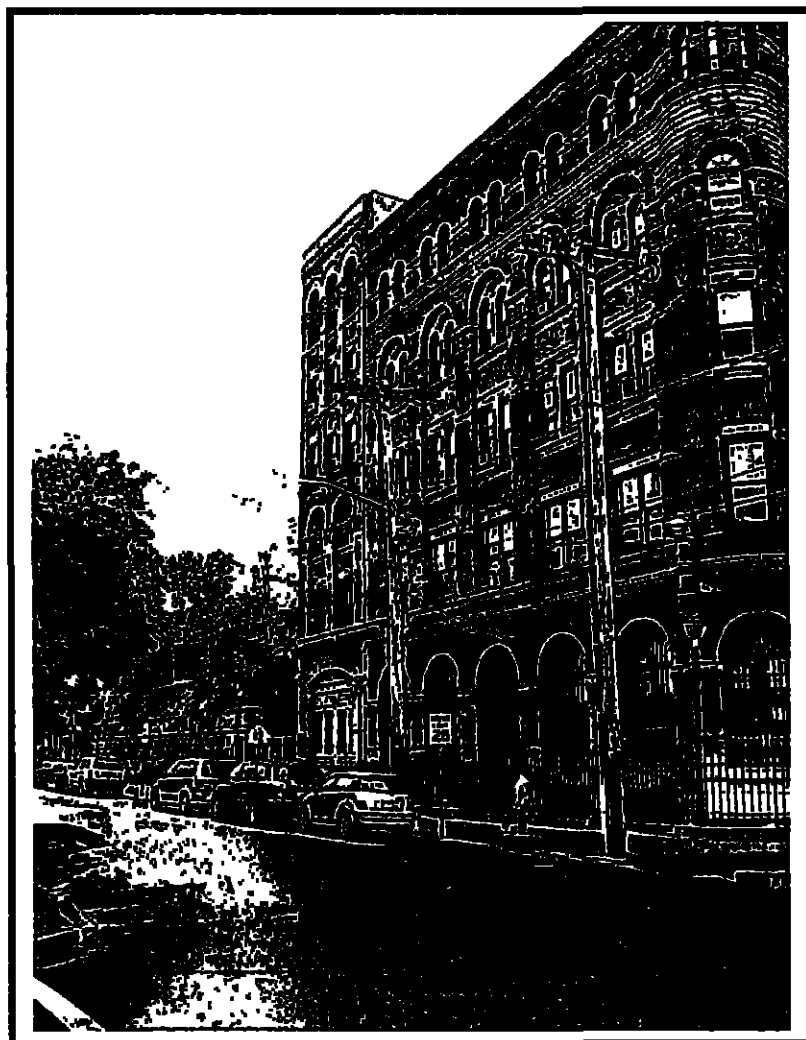


Plate:
45

Photo View:
Northeast

Photographer:
Philip A.
Hayden

Date:
May 20, 2008

Detail, west façade of the individually eligible building at 88-92 Erie Street (Albaniel Dye & Chemical Co.) The building is also a key contributing resource to the SR and NR-listed Harsimus Cove Historic District. Note the SR-listed Harsimus Branch Embankment visible in the background at left.



Plate:
46

Photo View:
Northeast

Photographer:
Philip A
Hayden

Date:
May 20, 2008

View looking down Fifth Street toward Manila Avenue (formerly Grove Street) from the intersection of Erie Street, depicting the south façade of the individually eligible building at 88-92 Erie Street and other buildings inside the SR and NR-listed Harsimus Cove Historic District

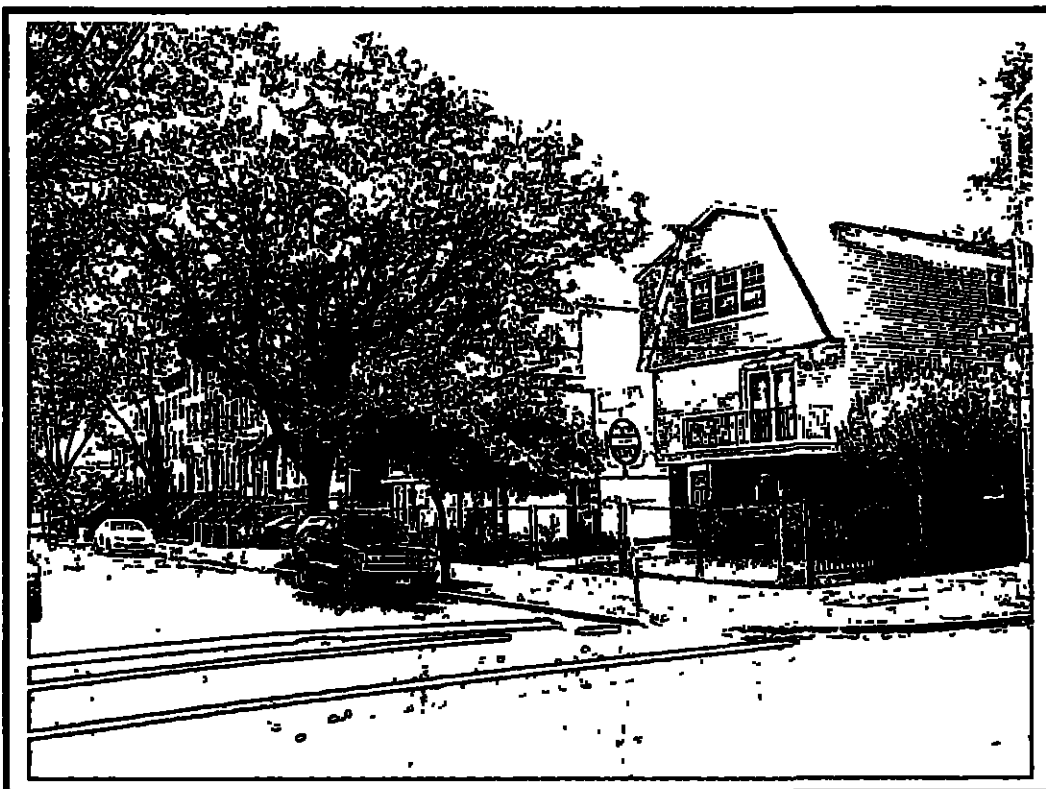


Plate:
47

Photo View:
Northwest

Photographer:
Philip A
Hayden

Date:
May 20, 2008

View looking up Fifth Street from the intersection of Manila Avenue (formerly Grove Street) The eastern boundary of the SR and NR-listed Harsimus Cove Historic District runs along the near side of the three-story brick town homes at center left The three dwellings in the foreground are modern and lie outside the District



Plate:
48

Photo View:
Northeast

Photographer:
Philip A
Hayden

Date:
May 20, 2008

Overview, Manila Avenue (formerly Grove Street) from the intersection of Fifth Street, depicting modern residential housing. The SR-listed Harsimus Branch Embankment is visible in the background at left.



Plate:
49

Photo View:
East

Photographer:
Philip A
Hayden

Date:
May 20, 2008

View of portion of SR-listed Harsimus Branch Embankment on Block 212 from Manila Avenue (formerly Grove Street). Note modern housing at right.

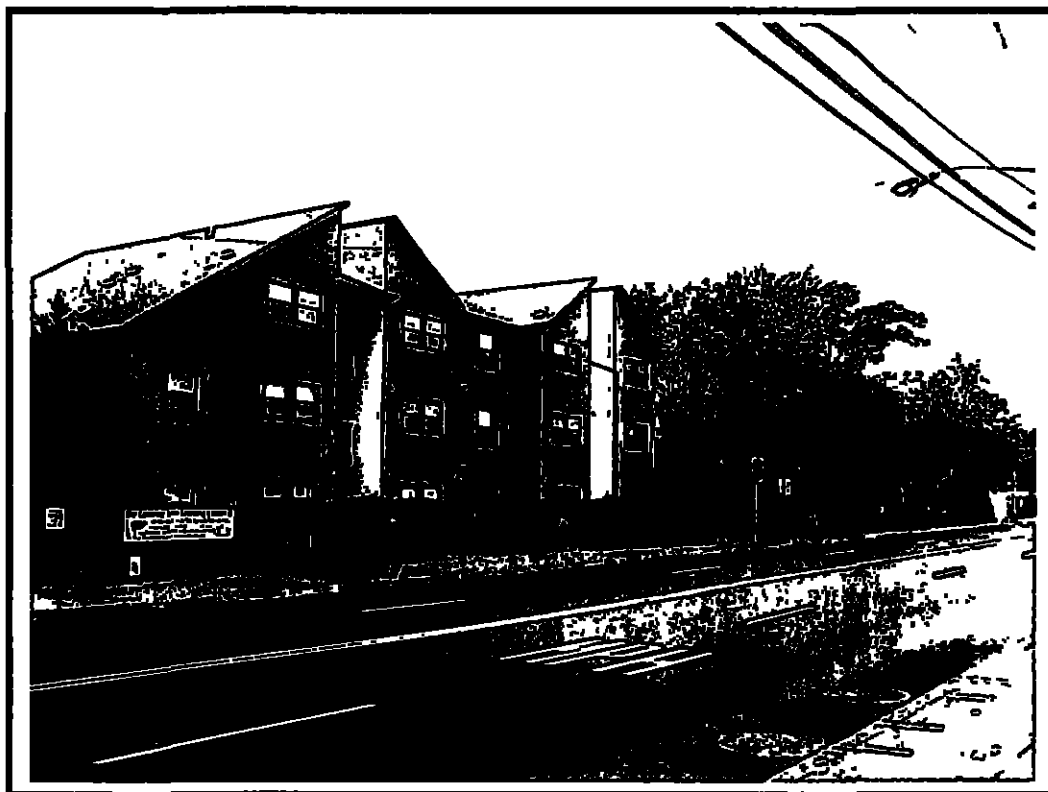


Plate:
50

Photo View:
Northeast

Photographer:
Philip A
Hayden

Date:
May 20, 2008

Overview, Mann Boulevard, depicting modern housing at left and the eastern boundary of the SR-listed Harsimus Branch Embankment in the background at right

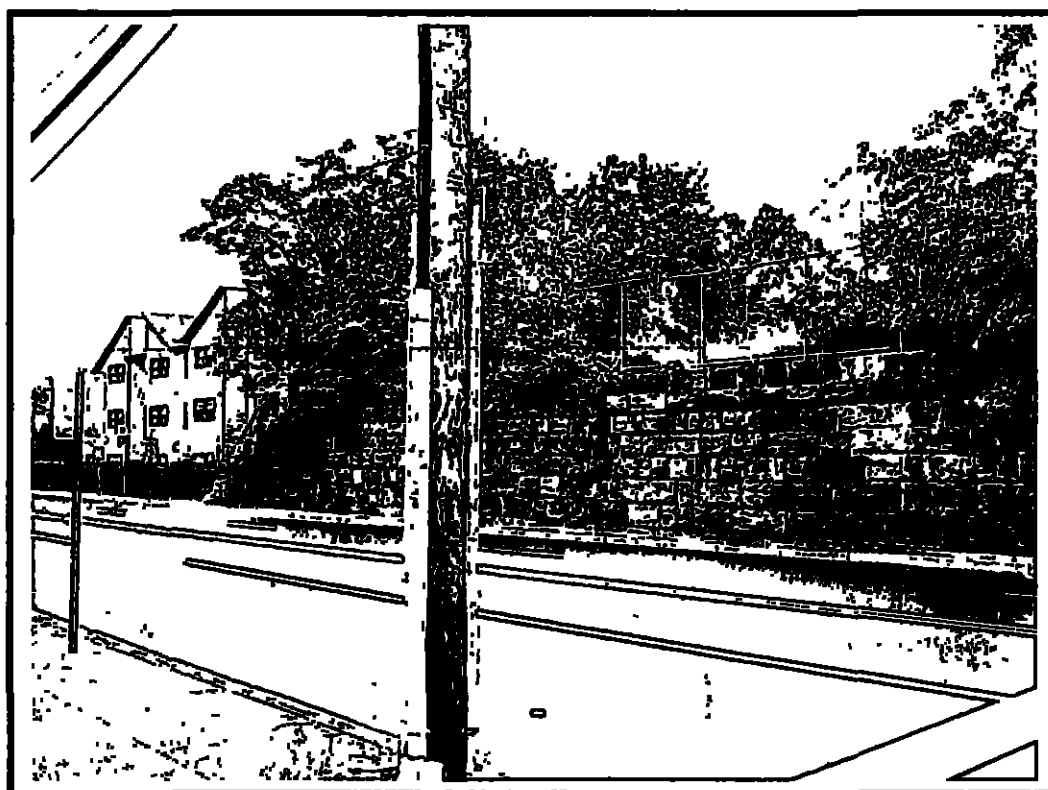


Plate:
51

Photo View:
Southwest

Photographer:
Philip A
Hayden

Date:
May 20, 2008

View of the eastern boundary of the SR-listed Harsimus Branch Embankment at Mann Boulevard. Note the diminished height of the stone abutments



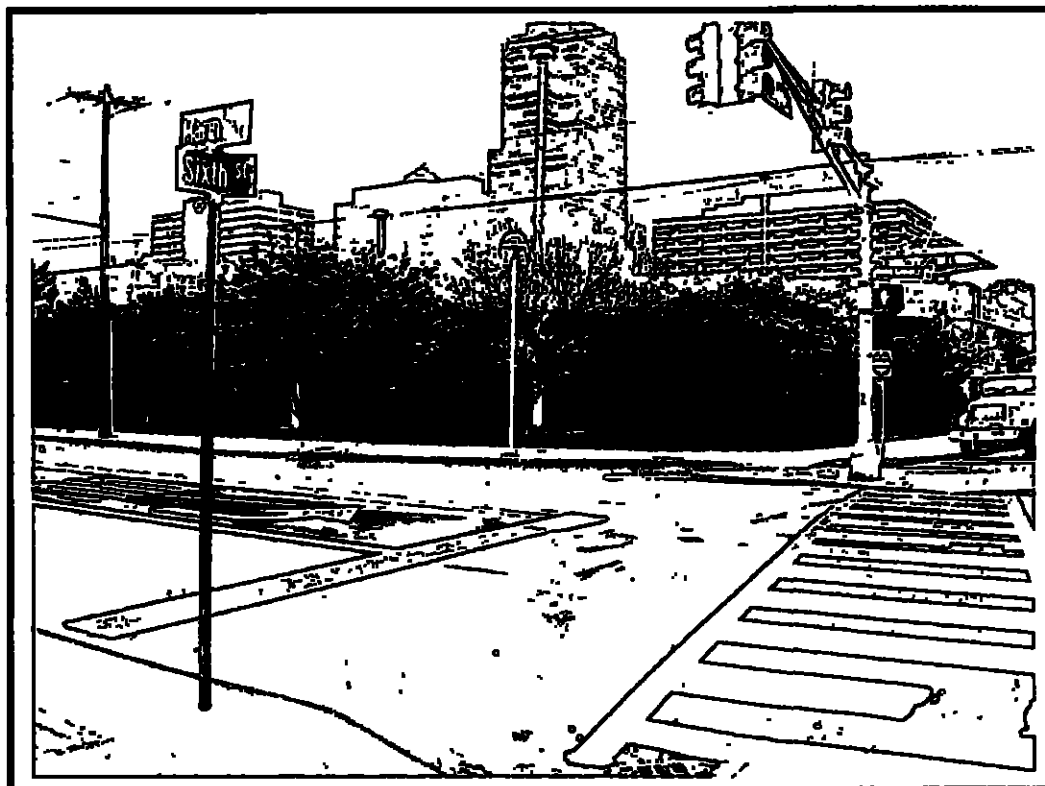
Overview, intersection of Sixth Street and Marin Boulevard, depicting a modern Bed, Bath and Beyond retail store and high-rise towers on the site of the former Harsimus Cove Freight Yards and the Harsimus Branch right-of-way

Plate:
52

Photo View:
Southeast

Photographer:
Glenn R
Modica

Date:
May 16, 2008



Overview, intersection of Marin Boulevard and Sixth Street, depicting the Newport Mall parking garage (foreground) and high-rise towers (background) that characterize the eastern end of the APE-Architecture

Plate:
53

Photo View:
Northeast

Photographer:
Glenn R
Modica

Date:
May 16, 2008



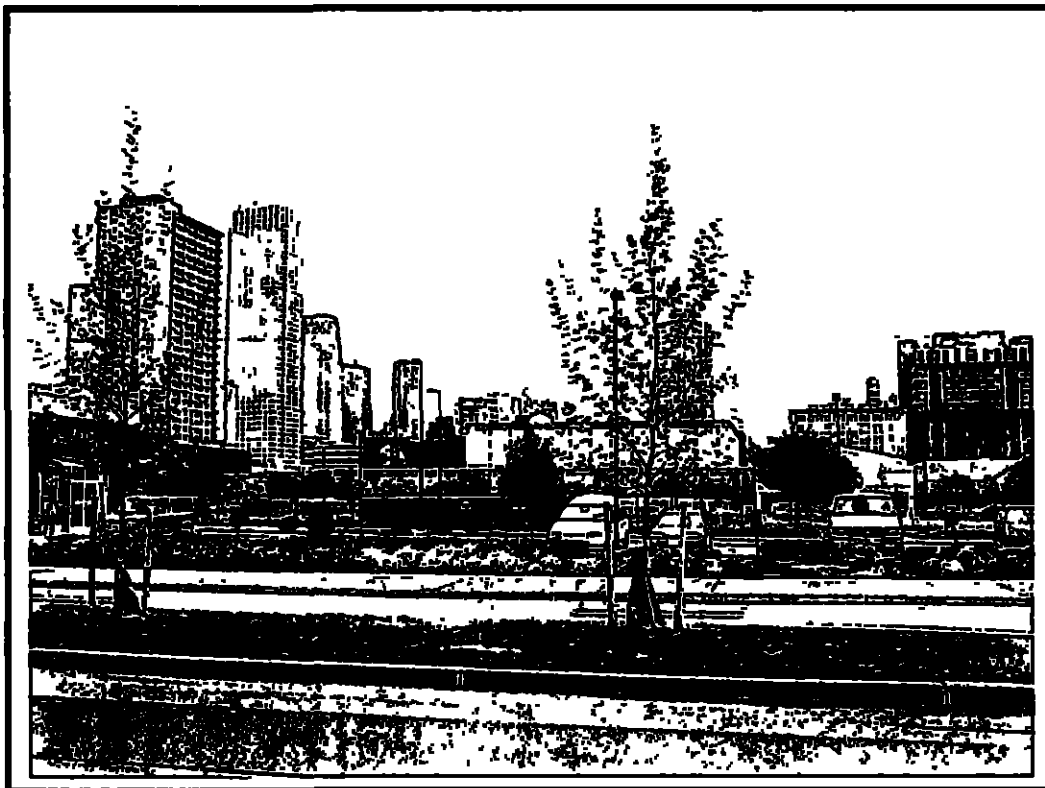
Overview of former Harsimus Yard from the intersection of Ganbemi Drive and Mall Drive, depicting the Bed, Bath, and Beyond retail store (left) and Harsimus Embankment (background center) Sixth Street recedes into the distance at center, right

Plate:
54

Photo View:
West

Photographer:
Philip A
Hayden

Date:
July 14, 2008



Overview of former Harsimus Yard from the intersection of Ganbemi Drive and Mall Drive, depicting modern retail stores and a parking lot The eligible Warehouse Historic District is visible in background

Plate:
55

Photo View:
South

Photographer:
Philip A
Hayden

Date:
July 14, 2008

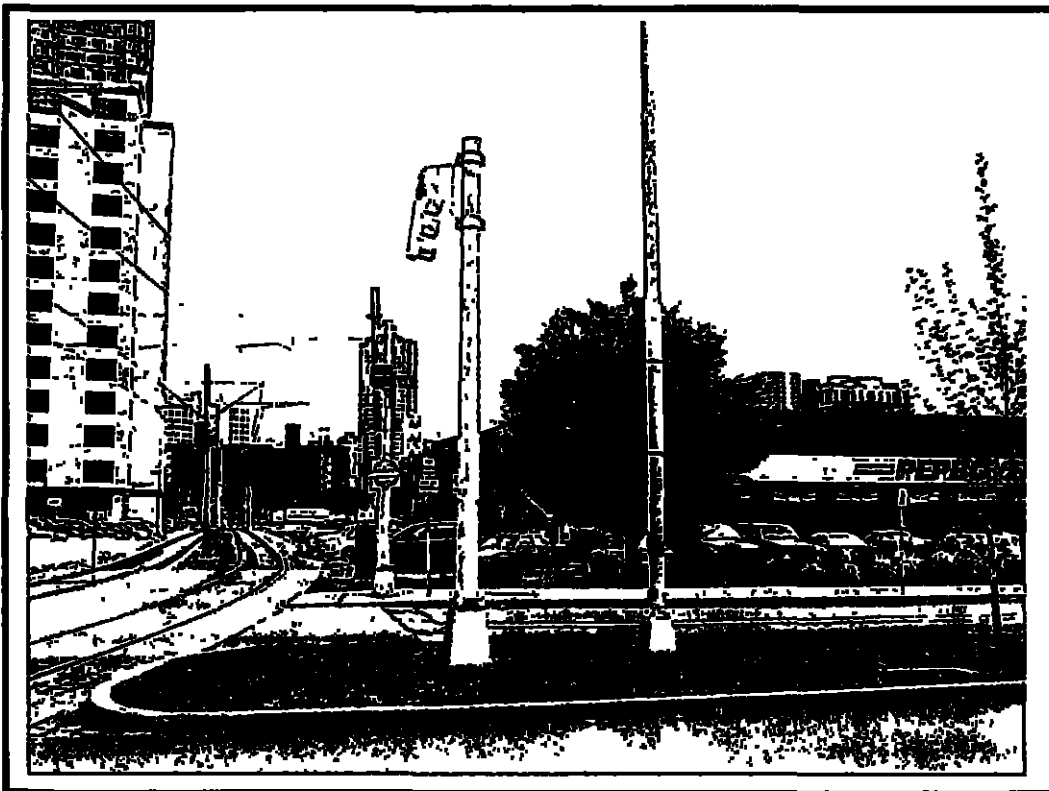


Plate:
56

Photo View:
South

Photographer:
Philip A
Hayden

Date:
July 14, 2008

Overview, former Harsimus Yard from near the intersection of Ganbemi Drive and Washington Boulevard, depicting modern retail stores (right) and high rise hotels and residential towers (left) NJ Transit Light Rail line appears at left The eligible Warehouse Historic District is visible in distance



Plate:
57

Photo View:
West

Photographer:
Philip A.
Hayden

Date:
July 14, 2008

Overview, former Harsimus Yard from the near the intersection of Ganbemi Drive and Washington Boulevard, depicting modern retails stores and parking lot at left



Overview, former Harsimus Yard from the intersection of Ganbemi Drive and Washington Boulevard, depicting modern hotel and residential high rises along Washington Boulevard

Plate:
58

Photo View:
South

Photographer:
Philip A
Hayden

Date:
July 14, 2008



Overview, former Harsimus Yard from the intersection of Metro Plaza Drive and Washington Boulevard, depicting the entrance into the modern retail store parking lot

Plate:
59

Photo View:
West

Photographer:
Philip A.
Hayden

Date:
July 14, 2008



Overview, former Harsimus Yard from near the intersection of Metro Plaza Drive and Washington Boulevard, depicting the parking lot for modern retail shops. The NJ Transit Light Rail line crosses in foreground.

Plate:
60

Photo View:
West

Photographer:
Philip A
Hayden

Date:
July 14, 2008



Overview, former Harsimus Yard from near the intersection of Metro Plaza Drive and Washington Boulevard, depicting modern retail stores at right. The NJ Transit Light Rail line (Harsimus Cove station appears at left). The eligible Warehouse Historic District appears in background.

Plate:
61

Photo View:
Southwest

Photographer:
Philip A
Hayden

Date:
July 14, 2008



Plate:
62

Photo View:
Northwest

Photographer:
Philip A
Hayden

Date:
July 14, 2008

Overview, former Harsimus Yard from the intersection of Second Street and Washington Boulevard, depicting modern streets and buildings on the site of the former Harsimus Branch right-of-way.



Plate:
63

Photo View:
Southeast

Photographer:
Philip A
Hayden

Date:
July 14, 2008

Overview, former Harsimus Yard from the intersection of Second Street and Washington Boulevard, depicting vacant lots and modern high rises on sections of the former yard and the modern extension of Green Street running diagonally from left foreground to center background along the former Harsimus Branch right-of-way. The NR-listed H&MRR Powerhouse appears at right.



Plate:
64

Photo View:
Northwest

Photographer:
Philip A
Hayden

Date:
July 14, 2008

Overview, former Harsimus Yard from the intersection of the Green Street and Bay Street, depicting the NR-listed H&MRR Powerhouse at left and the extension of Green Street along the former Harsimus Branch right-of-way (right). The modern high rises in the background occupy portions of the former yard.



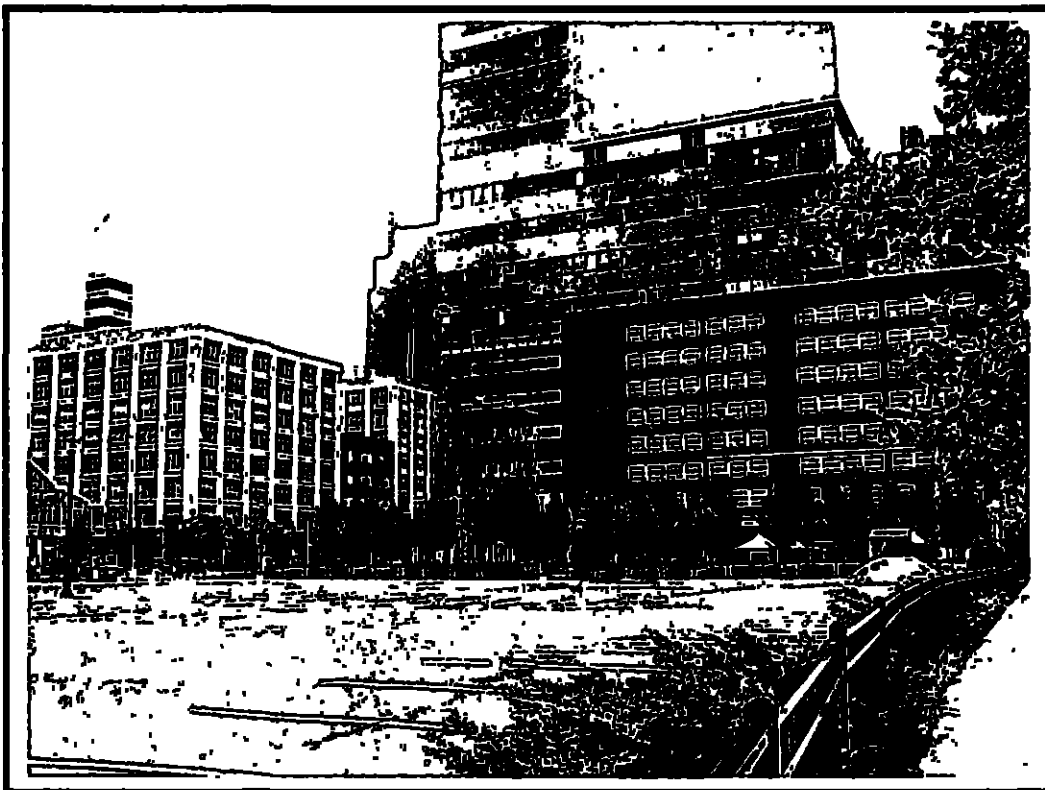
Plate:
65

Photo View:
West

Photographer:
Philip A
Hayden

Date:
July 14, 2008

Overview of Bay Street from the intersection of Green Street, depicting the NR listed H&MRR Powerhouse (right) and the eligible Warehouse Historic District (background). The building at left is modern.



Overview, former Harsimus Yard and Harsimus Branch right-of-way from the intersection of Green Street and Bay Street, depicting a parking lot and modern retail and residential construction

Plate:
66

Photo View:
South

Photographer:
Philip A
Hayden

Date:
July 14, 2008



Overview of parking lots and modern retail and residential construction from the intersection of Green Street and Morgan Street, approximately at the location of Milepost 136 of the former Harsimus Branch right-of-way

Plate:
67

Photo View:
Northwest

Photographer:
Philip A
Hayden

Date:
July 14, 2008



Plate:
68

Photo View:
North

Photographer:
Philip A
Hayden

Date:
July 14, 2008

Overview, eligible Warehouse Historic District from the intersection of Morgan Street and Provost Street. The SR and NR-listed Great A & P Tea Company Warehouse appears in center background.

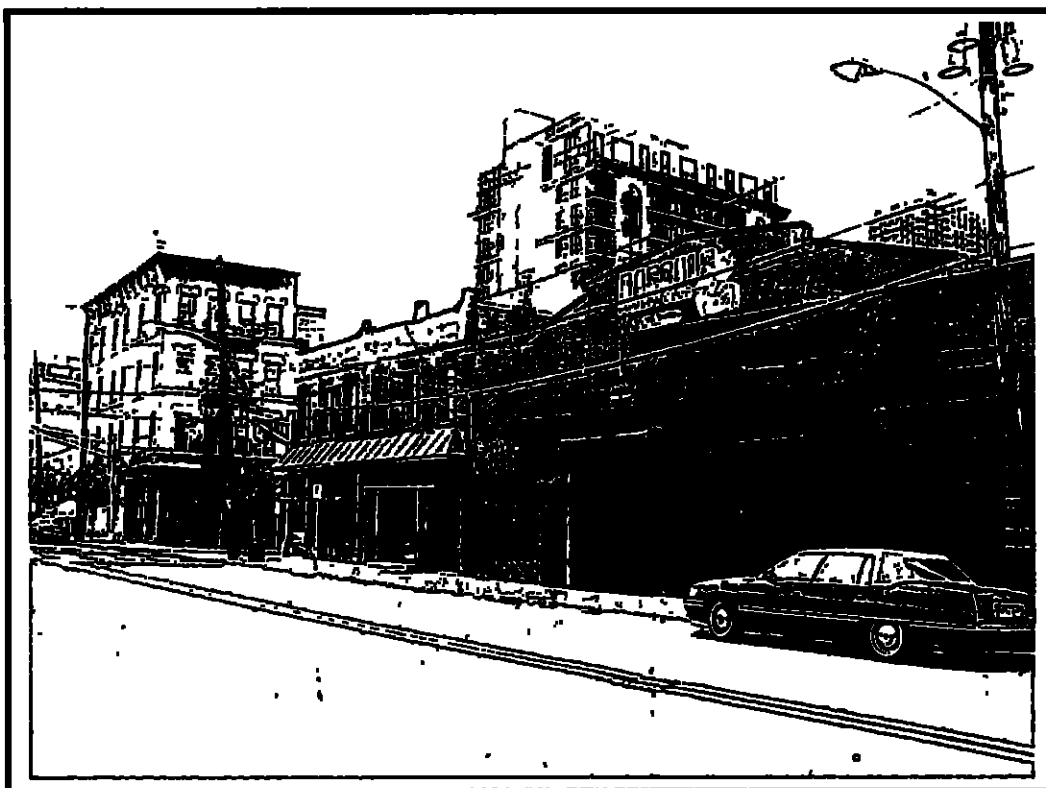


Plate:
69

Photo View:
Northeast

Photographer:
Philip A
Hayden

Date:
July 14, 2008

Overview, east side of Marin Boulevard from the intersection of Bay Street depicting small grouping of late nineteenth- and early twentieth-century buildings within the viewshed.



Overview, Manila Avenue (formerly Grove Street) from the intersection of Bay Street. Note circa 1890s brick flats on right and modern 11-story apartment building in background center.

Plate:
70

Photo View:
North

Photographer:
Philip A
Hayden

Date:
July 14, 2008



Overview, Manila Avenue (formerly Grove Street) from the intersection of First Street, depicting block of late nineteenth- and early twentieth-century buildings.

Plate:
71

Photo View:
Southwest

Photographer:
Philip A
Hayden

Date:
July 14, 2008



Plate:
72

Photo View:
North

Photographer:
Philip A
Hayden

Date:
July 14, 2008

Detail, 11-story building at the corner of Manila Avenue (formerly Grove Street) and Second Street. Modern town homes line both sides of the street.



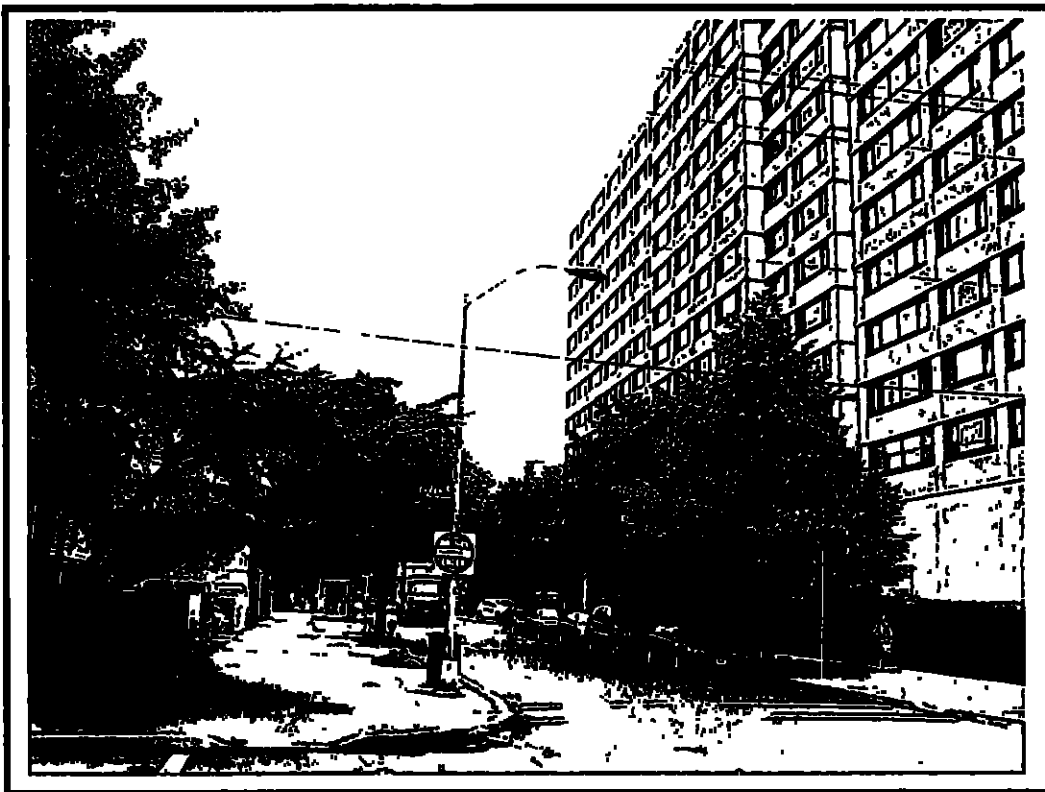
Plate:
73

Photo View:
South

Photographer:
Philip A
Hayden

Date:
July 14, 2008

Overview, Manila Avenue from the intersection of Light Street, depicting modern town homes (right) and a parking lot (left). Note 11-story building visible in center background.



Overview, Manila Avenue (formerly Grove Street) from the intersection of Eighth Street, depicting modern 14-story apartment building

Plate:
74

Photo View:
North

Photographer:
Philip A
Hayden

Date:
July 14, 2008



Detail, St. Anthony's School (built 1917) on Eighth Street between Manila Avenue (formerly Grove Street) and Mann Boulevard. The school is surrounded by parking lots, play grounds, and modern buildings

Plate:
75

Photo View:
Southwest

Photographer:
Philip A
Hayden

Date:
July 14, 2008



Plate:
76

Photo View:
South

Photographer:
Philip A
Hayden

Date:
July 14, 2008

Overview, Marin Boulevard from the intersection of Eighth Street. The easternmost block of the Harsimus Embankment is located beneath the trees in the center background. The parking garage for the Newport Mall extends along Marin Boulevard at far left.



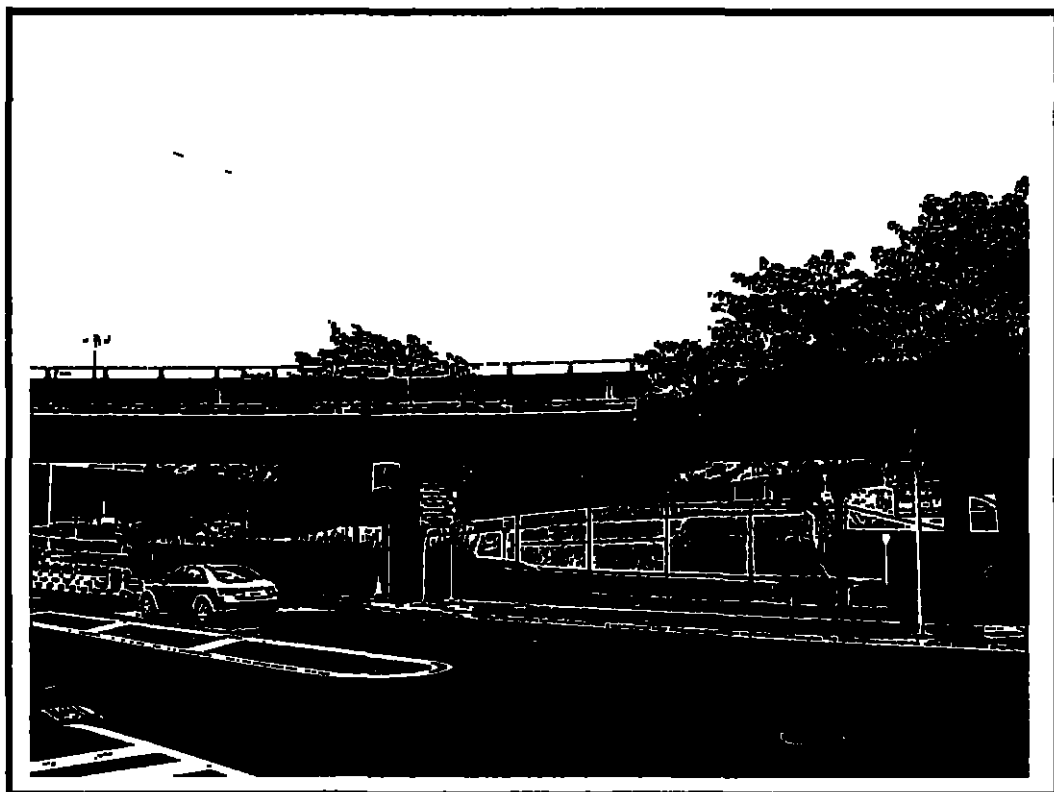
Plate:
77

Photo View:
South

Photographer:
Philip A
Hayden

Date:
July 14, 2008

Detail, entrance to Newport Mall parking garage from the intersection of Marin Boulevard and Eighth Street. The parking deck extends the length of Marin Boulevard between Sixth Street and Tenth Street.



Overview, entrance and exist ramps to Newport Mall parking garage from the intersection of Marin Boulevard (foreground) and Tenth Street

Plate:
78

Photo View:
Northeast

Photographer:
Philip A
Hayden

Date:
July 14, 2008



Overview, Marin Boulevard from the intersection of Tenth Street The parking garage for the Newport Mall extends along Marin Boulevard at far left

Plate:
79

Photo View:
South

Photographer:
Philip A
Hayden

Date:
July 14, 2008



Overview, Manila Avenue (formerly Grove Street) from the intersection of Ninth Street, depicting modern construction on both sides of the street

Plate:
80

Photo View:
South

Photographer:
Philip A
Hayden

Date:
July 14, 2008



Detail, former Fifth Ward Savings Bank (built 1925) at the intersection of Manila Avenue (formerly Grove Street) and Eighth Street

Plate:
81

Photo View:
Southwest

Photographer:
Philip A
Hayden

Date:
July 14, 2008



Plate:
82

Photo View:
West

Photographer:
Philip A.
Hayden

Date:
May 20, 2008

View looking up Sixth Street from Marin Boulevard toward Manila Avenue (formerly Grove Street) Note stepped terminus to SR-listed Harsimus Branch Embankment, visible at left



Plate:
83

Photo View:
Southeast

Photographer:
Philip A.
Hayden

Date:
May 20, 2008

View down Sixth Street from the intersection of Manila Avenue (formerly Grove Street), depicting the SR-listed Harsimus Branch Embankment

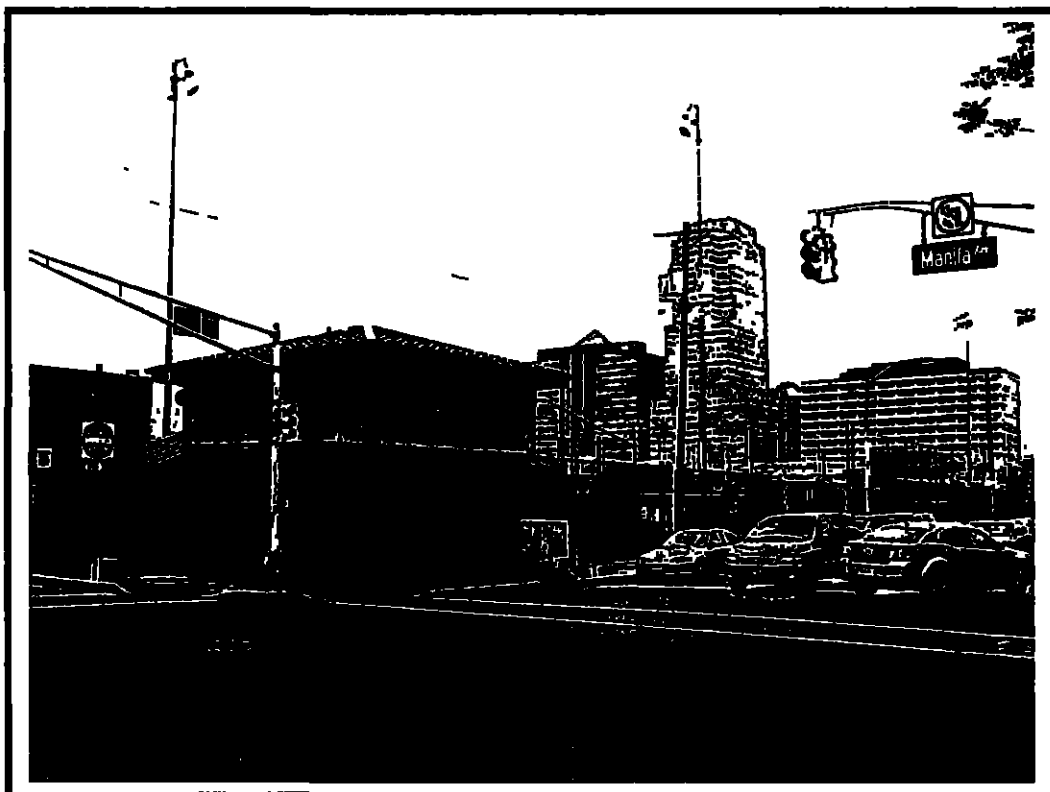


Plate:
84

Photo View:
Northeast

Photographer:
Philip A.
Hayden

Date:
May 20, 2008

View of modern Roberto Clemente Baseball Field at the intersection of Sixth Street and Manila Avenue (formerly Grove Street).



Plate:
85

Photo View:
Northwest

Photographer:
Philip A.
Hayden

Date:
May 20, 2008

View looking up Sixth Street from the intersection of Manila Avenue (formerly Grove Street) toward Eric Street. The block of four-story brick town homes marks the southeast corner of the SR and NR-listed Hamilton Park Historic District. The two frame buildings in the right foreground are located outside the district boundary.



Plate:
86

Photo View:
North

Photographer:
Glenn R
Modica

Date:
May 16, 2008

View looking up Erie Street near the intersection of Sixth Street, depicting the SR-listed Harsimus Branch Embankments (left and right) and the SR and NR-listed Hamilton Park Historic District (background)

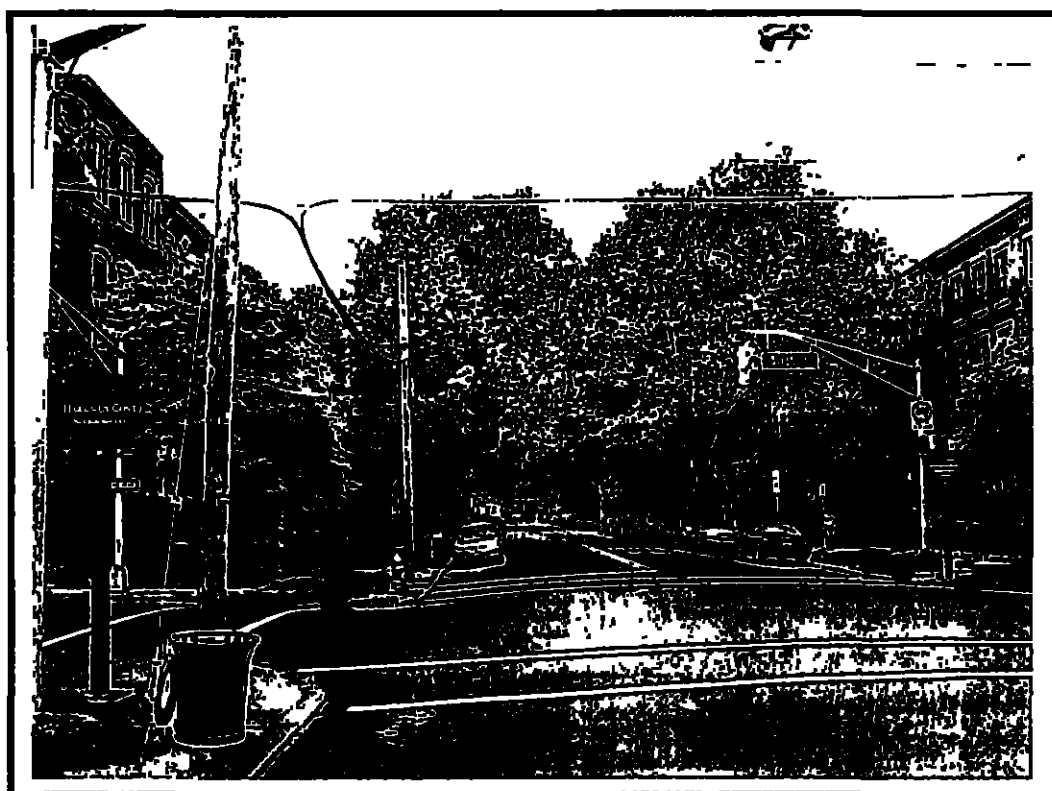


Plate:
87

Photo View:
North

Photographer:
Philip A
Hayden

Date:
Mayh 20, 2008

View from the vicinity of the Harsimus Branch right-of-way looking up Jersey Avenue from Sixth Street toward Hamilton Park, depicting the SR and NR-listed Hamilton Park Historic District.



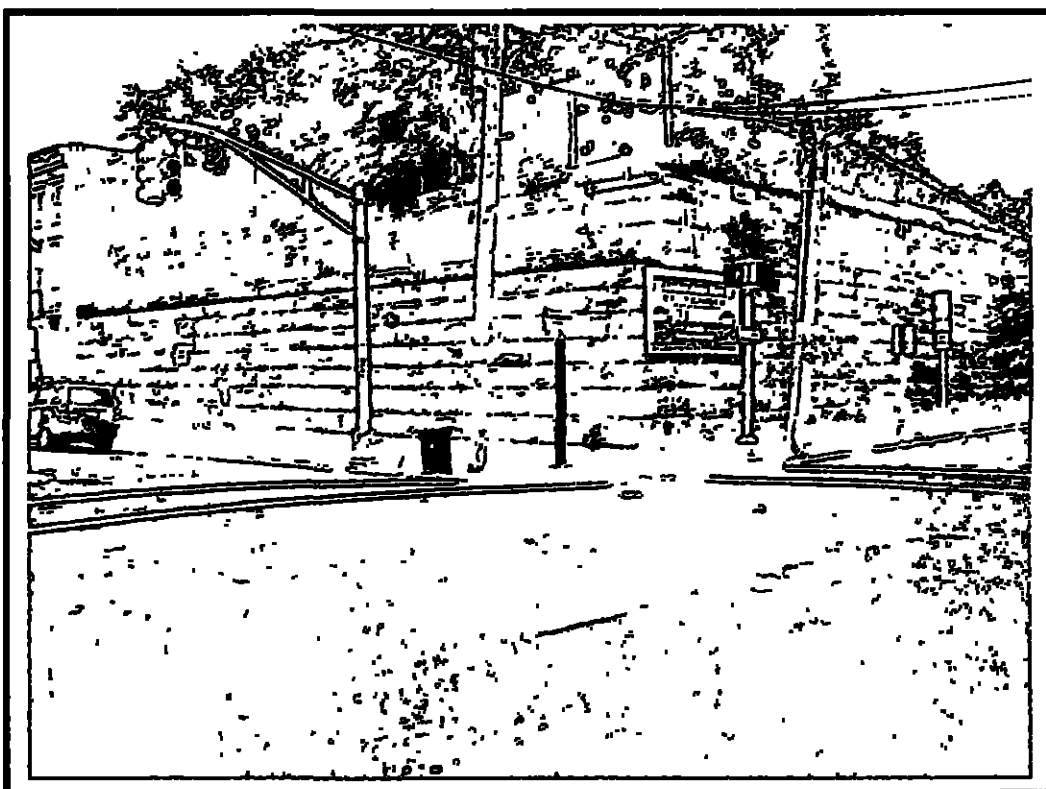
View looking down Jersey Avenue from Sixth Street toward Fifth Street, depicting the SR-listed Harsimus Branch Embankment in foreground (left and right) and the SR and NR-listed Harsimus Cove Historic District in the background

Plate:
88

Photo View:
South

Photographer:
Philip A
Hayden

Date:
May 20, 2008



Typical detail, stone abutments and retaining walls of SR-listed Harsimus Branch Embankment at the corner of Jersey Avenue and Sixth Street

Plate:
89

Photo View:
Southwest

Photographer:
Glenn R
Modica

Date:
May 16, 2008



Plate:
90

Photo View:
Southeast

Photographer:
Philip A.
Hayden

Date:
July 14, 2008

Overview, Eighth Street from the intersection of Jersey Avenue looking toward location of possible 10-story building. Hamilton Park is located at far left



Plate:
91

Photo View:
North

Photographer:
Philip A.
Hayden

Date:
July 14, 2008

Overview, West Hamilton Place from the intersection of Eighth Street, depicting typical late nineteenth-century town houses fronting on Hamilton Park (visible at right)



Plate:
92

Photo View:
Southeast

Photographer:
Philip A
Hayden

Date:
July 14, 2008

Overview, Hamilton Park from the intersection of West Hamilton Place and Ninth Street
Mature deciduous trees screen much of the skyline during part of the year



Plate:
93

Photo View:
Southeast

Photographer:
Philip A
Hayden

Date:
July 14, 2008

Overview, Hamilton Park looking toward the location of the possible 10-story building
Note modern 12-story building under construction on the east side of Hamilton Park,
visible at left



Plate:

94

Photo View:

Southeast

Photographer:

Philip A.

Hayden

Date:

July 14, 2008

Overview, Hamilton Park looking toward the intersection of McWilliams Street and Eighth Street and the site of the possible 10-story building in the background



Plate:

95

Photo View:

South

Photographer:

Philip A.

Hayden

Date:

July 14, 2008

Overview, McWilliams Place from the intersection of Ninth Street, depicting Hamilton Square development under construction along the east side of Hamilton Park inside the listed Hamilton Park Historic District. The large building is 12 stories tall.

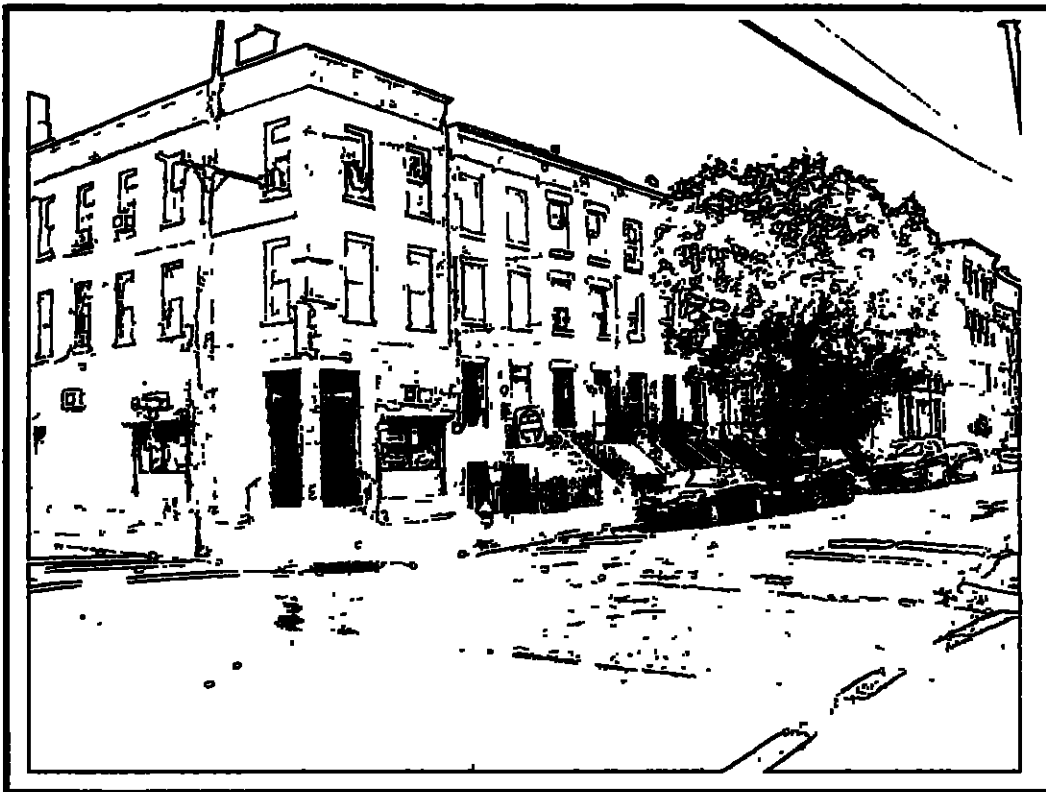


Plate:

96

Photo View:

Northeast

Photographer:

Glenn R

Modica

Date:

May 16, 2008

Overview, intersection of Sixth Street and Coles Street depicting typical residential and commercial buildings inside the SR and NR-listed Hamilton Park Historic District. The SR-listed Harsimus Branch Embankment is located just beyond the picture frame at right.

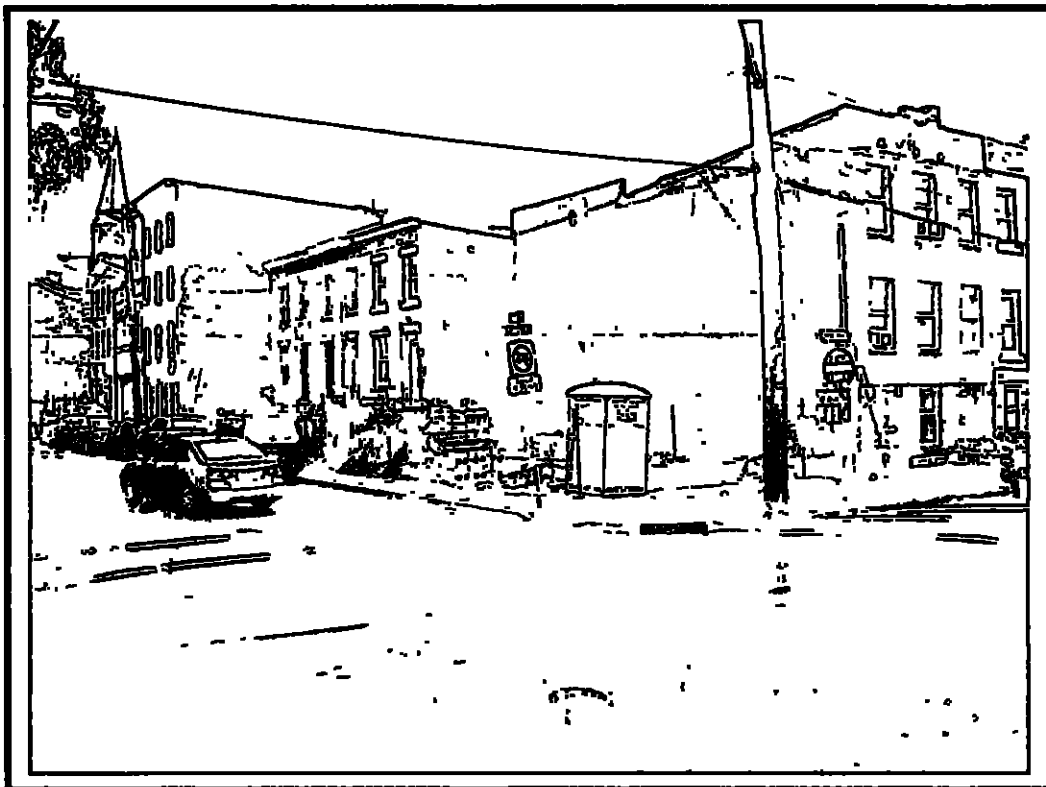


Plate:

97

Photo View:

Northwest

Photographer:

Glenn R

Modica

Date:

May 20, 2008

Overview, intersection of Sixth Street and Coles Street. The block of two-story brick rown homes at left marks the southwest corner of the Hamilton Park Historic District. The four-story brick residence is outside the District boundary.



Plate:
98

Photo View:
North

Photographer:
Glenn R
Modica

Date:
May 16, 2008

Overview of Monmouth Street depicting the SR-listed Harsimus Branch Embankments in the foreground (left and right) and the SR and NR-listed St. Anthony of Padua Roman Catholic Church in the background



Plate:
99

Photo View:
Northeast

Photographer:
Philip A
Havden

Date:
May 20, 2008

Overview of the unevaluated Holy Rosary Roman Catholic Church and Parish House (1903) on Sixth Street between Brunswick Street and Monmouth Street



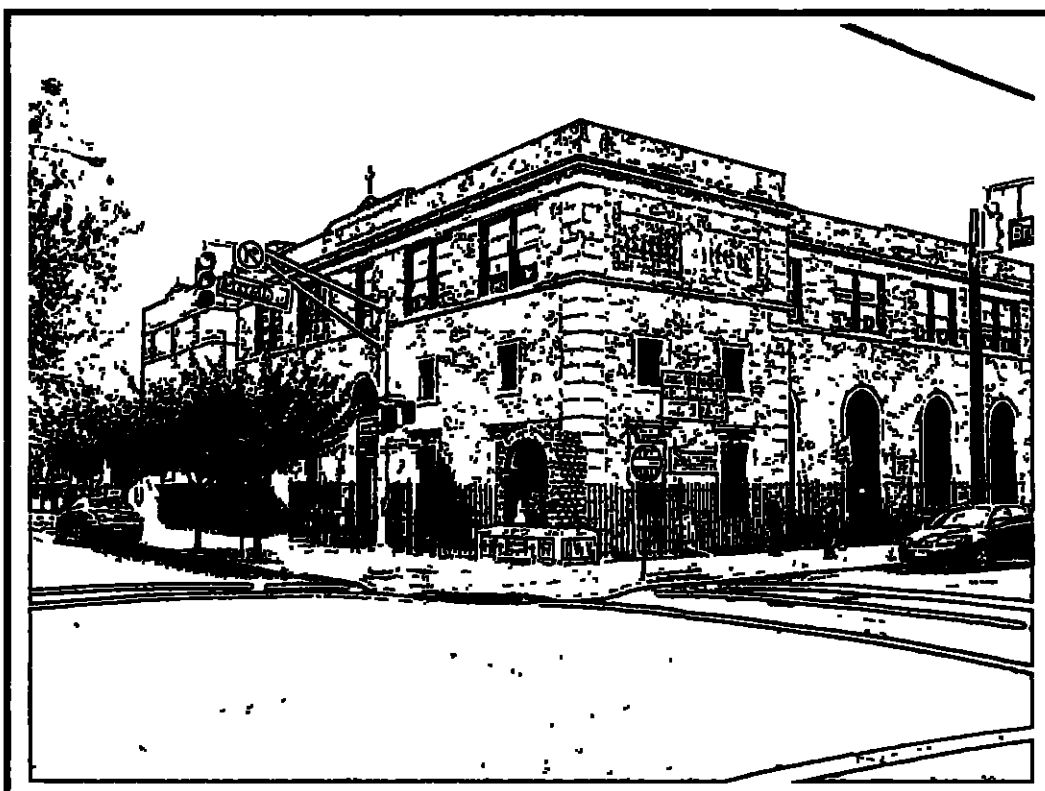
Detail view of a 1953 unidentified building (foreground) and 1938 school building (background) on Brunswick Street. Both are affiliated with the Holy Rosary Roman Catholic Church on Sixth Street

Plate:
100

Photo View:
Northeast

Photographer:
Philip A
Hayden

Date:
May 20, 2008



Detail of 1938 school building from the intersection of Brunswick Street and Seventh Street

Plate:
101

Photo View:
Southwest

Photographer:
Philip A.
Hayden

Date:
May 20, 2008

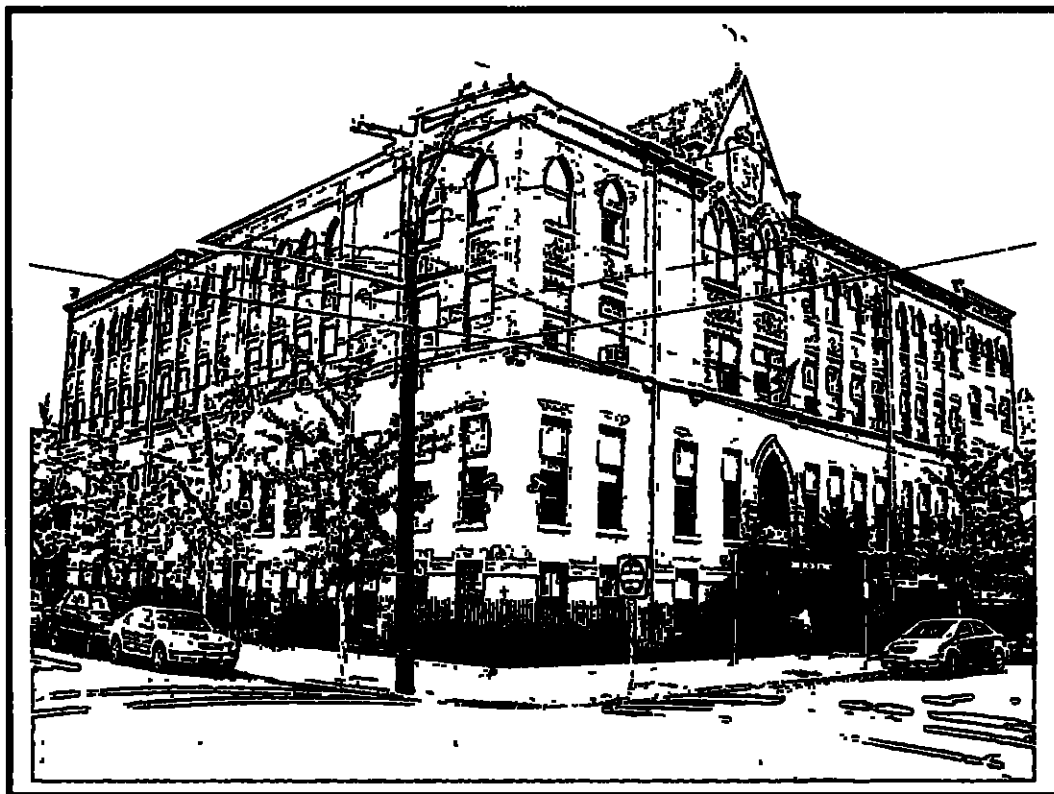


Plate:
62

Photo View:
Northeast

Photographer:
Philip A.
Hayden

Date:
May 20, 2008

View of the 1899 St. Anthony's School and Convent at the corner of Sixth Street and Brunswick Street. The building is a contributing resource to the individually eligible St. Anthony's Polish Roman Catholic Church and School Complex.



Plate:
63

Photo View:
Northwest

Photographer:
Glenn R.
Modica

Date:
May 16, 2008

Overview, intersection of Sixth Street and Brunswick Street, depicting a parking lot and miscellaneous commercial buildings (at left). A 1953 brick building associated with the Holy Rosary Roman Catholic Church on Sixth Street appears at the far right.

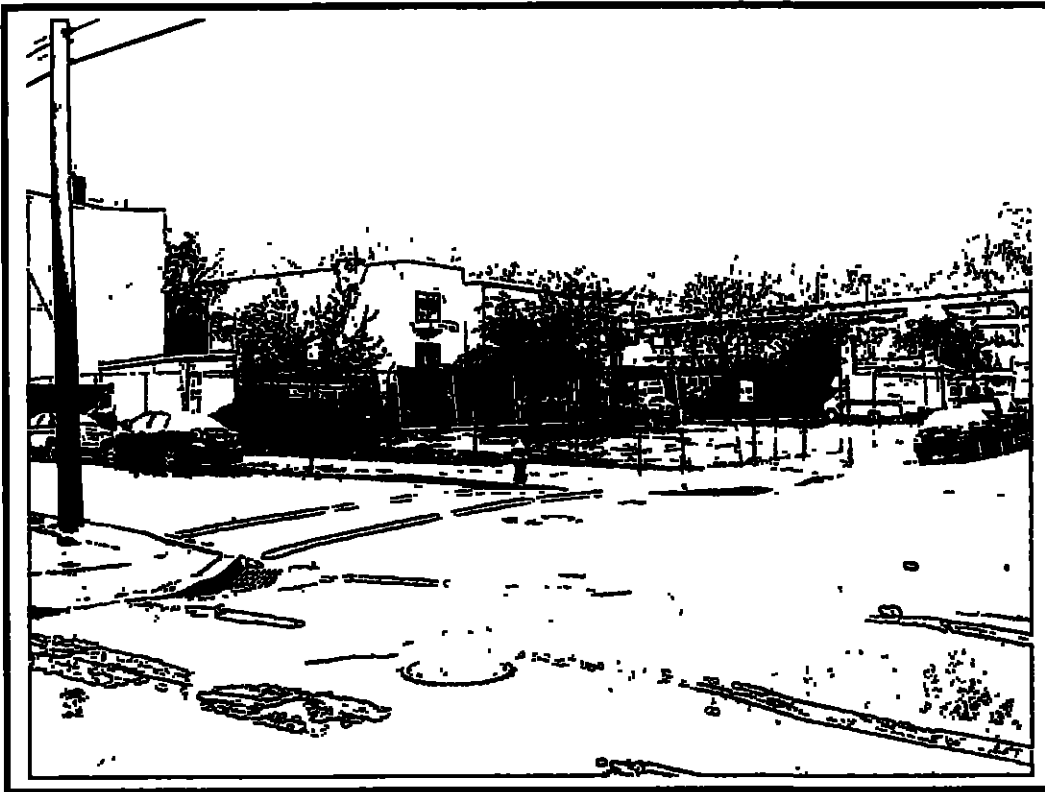


Plate:
102

Photo View:
Southwest

Photographer:
Glenn R
Modica

Date:
May 16, 2008

Overview, intersection of Sixth Street and Brunswick Street, depicting a vacant lot comprising Block 415, Lot 50 of the Harsimus Branch right-of-way. Note the rear elevations of buildings fronting on Fifth Street.

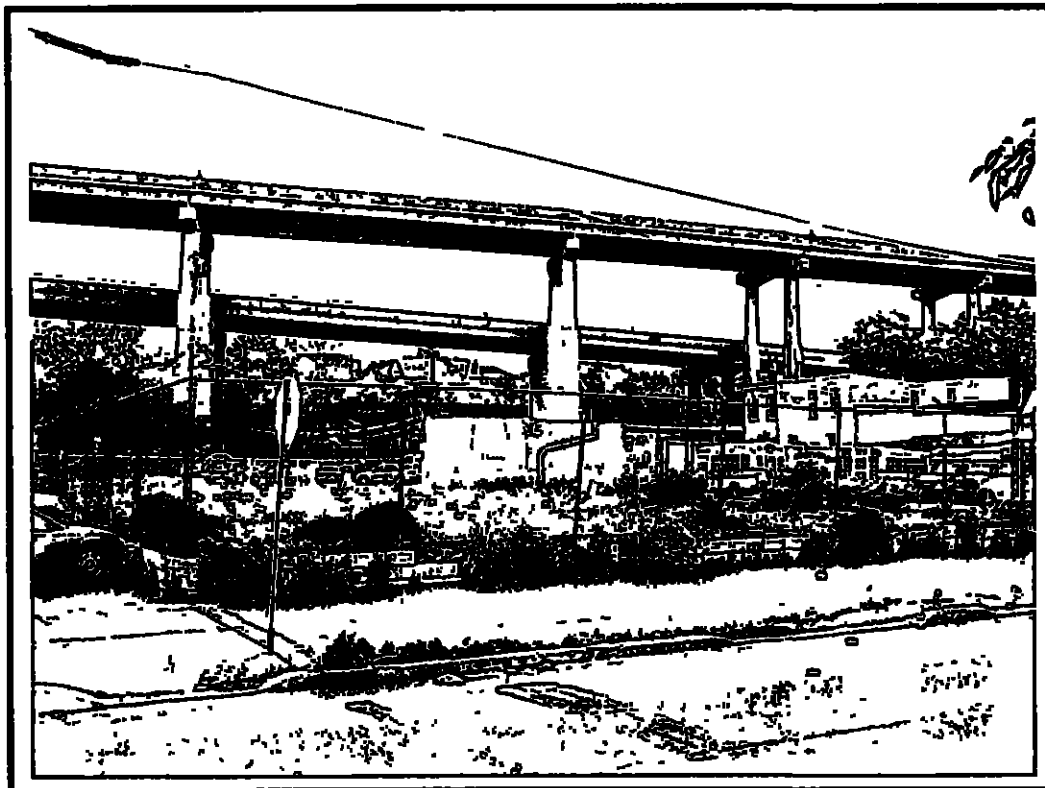


Plate:
103

Photo View:
Northwest

Photographer:
Philip A
Hayden

Date:
May 20, 2008

Overview, Vacant lot at the intersection of Sixth Street and Division Street. Note the New Jersey Turnpike Extension in the background.

APPENDIX B

**SUBSURFACE AND GEOTECHNICAL
INVESTIGATION REPORT
SIXTH STREET EMBANKMENT PROJECT
JERSEY CITY, NEW JERSEY**

Prepared for:

JERSEY CITY REDEVELOPMENT AGENCY

Prepared by:

**DRESDNER ROBIN
371 Warren Street
Jersey City, New Jersey 07302
(201) 217-9200**

NOVEMBER 1998
SUBSURFACE AND GEOTECHNICAL INVESTIGATION REPORT
SIXTH STREET EMBANKMENT PROJECT
JERSEY CITY, NEW JERSEY

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CERTIFICATIONS

DRESDNER
—ROBIN—

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- 3 Relevant Sections of Laboratory Quality Assurance Plan
- 4 Geotechnical Investigation Report

ATTACHMENT

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**SUBSURFACE AND GEOTECHNICAL INVESTIGATION REPORT
SIXTH STREET EMBANKMENT PROJECT
JERSEY CITY, NEW JERSEY**

1.0 INTRODUCTION

This Subsurface Site Investigation (SI) and Geotechnical Report has been prepared for the Jersey City Redevelopment Agency (JCRA) property which consists of six former Conrail embankments (hereinafter the "Site") located along the south side of 6th Street between Luis Munoz Marin Boulevard (to the east) and Brunswick Avenue (to the west), in Jersey City, New Jersey. The investigation was conducted to obtain geotechnical and environmental data within and beneath the embankments. DRESDNER ROBIN conducted the investigation in accordance with the scope of work set forth in a proposal dated October 20, 1997 as modified at a meeting with JCRA on November 7, 1997.

2.0 SITE DESCRIPTION

The Site consists of six former rail embankments situated within a predominantly residential area along 6th Street between Luis Munoz Marin Blvd. and Brunswick Ave. at Block 317, Lot 50.A, Block 280, Lot 50.A, Block 247, Lot 50.A, Block 354, Lot 50.A, Block 389.1, Lot 50, and Block 415, Lots 50PL and 52 in Jersey City, New Jersey. The embankments were constructed as filled structures confined by vertical cut stone retaining walls on all sides. The embankments, varying approximately 15 to 25 feet in height, 400 feet in length, and 90 to 100 feet wide, were built in the late 1800's. The location of the Site relative to the region is shown on Figure 1. A site plan depicting the embankments and soil sampling locations (environmental and geotechnical) is presented as Figure 2.

3.0 SCOPE OF WORK

The investigation program was developed to obtain geotechnical and environmental data from each of the six rail embankment structures. The embankments are all inaccessible from ground level necessitating that equipment and personnel be lifted into place. Upon consultation with the JCRA it was determined to conduct the work in two phases. The environmental borings were obtained through the use of a truck mounted Geoprobe system lifted by crane onto each of the embankment areas. The geotechnical samples were collected from borings conducted at-grade immediately adjacent to the embankment walls.

DRESDNER ROBIN conducted an environmental sampling program to assess the type and level of contamination associated with the embankments at the Site. In conjunction with the environmental sampling program, DRESDNER ROBIN subcontracted MATRIX Environmental and Geotechnical Services, Inc. (MATRIX) to conduct a geotechnical investigation at the Site.

**DRESDNER
—ROBIN—**

The Environmental Sampling Program consisted of collecting soil samples for analytical purposes from 2 shallow borings made in each embankment (See Figure 2). Continuous sampling was conducted through the embankment material up to 4 feet into the underlying fill/native soil. Three samples were collected at predetermined depths from each of the shallow borings and submitted for laboratory analysis for Target Compound List +30/Target Analyte List (TCL/TAL+30), Total Petroleum Hydrocarbons (TPH) and Hexavalent Chromium (Cr^{6+}). The sampling depths were staggered so as to provide a representative profile of the embankment material and the underlying native soil that will be impacted by the proposed site development.

The analyses were performed on standard turn-around basis by Envirotech Research, Inc. of Edison, New Jersey; a New Jersey certified laboratory. The analytical results were compared with applicable NJDEP soil cleanup criteria to evaluate the management of the material during site development, including the potential for reuse on other city projects.

The geotechnical borings were advanced utilizing a Mobile B-57 truck mounted drill rig using hollow stem augers and split spoon samplers. Geotechnical borings were advanced adjacent to the six raised embankments to a depth of 24 feet below ground surface (bgs) see Figure 2. Standard split spoon sampling (five feet intervals) was conducted in each boring for geotechnical purposes. Geotechnical samples were collected for moisture content, grain size, and/or Atterberg limits on representative samples from each geotechnical boring.

4.0 METHODS AND PROCEDURES

4.1 Environmental Investigation

A total of 12 soil borings were conducted in order to collect environmental data at the Site. Two soil borings were conducted on each of the six embankments. Soil samples were collected for laboratory analysis at staggered depths providing a representative profile of the embankment material and the underlying native soil. Drilling of the soil borings was performed by Summit Drilling Company Inc., a New Jersey licensed well driller. The soil boring locations are shown on Figure 2. A cross-section of the embankments showing the sample depths is presented as Figure 3. Drilling activities were conducted under the supervision of a DRESDNER ROBIN geologist. Drilling was conducted on December 3 through December 5, 1997. The soil borings were performed in accordance with the procedures and protocols detailed in the NJDEP Field Sampling Procedures Manual.

A crane was used to lift the drilling equipment on top of each embankment. Soil borings were advanced using a pickup mounted Geoprobe System to a depth of 16 to 32 feet below the top of the embankments (up to four feet into the native soil). Continuous sampling was conducted through the embankment material and up to four feet within the native soil. Borings were advanced using a hydraulically driven core-barrel sampler. Three soil samples were collected per boring using a 4 foot stainless-steel core barrel with an acetate liner for sample recovery. The

Geoprobe drilling tools were decontaminated before each use. Upon opening the acetate liner, the soil was visually inspected for contamination and screened with an HNu photoionization detector (PID) for organic vapors. Soil samples submitted for VOC analysis were collected using the NJDEP required methanol preservation method.

Descriptions of the soil lithology and PID results were recorded in DRESDNER ROBIN boring logs (See Appendix 1). The soil lithology was classified using the modified Burmister Classification System for soil descriptions.

All soil samples were obtained in compliance with NJDEP-specified procedures (NJDEP Field Sampling Procedures Manual) and the investigation proposal dated October 20, 1997 as modified by a meeting between JCRA and DRESDNER ROBIN. The soil samples were retrieved daily by the laboratory courier. All soil samples were submitted for TCL+30/TAL, TPH, and Cr+6 analysis. A sampling summary table is included as Table 1. Aqueous quality assurance/quality control (QA/QC) field rinse and trip blank samples were collected to demonstrate that the sampling protocols did not lend any uncertainty to the analytic findings with regard to handling practices or the type of materials used for sampling. Three duplicate and three field blank samples were collected and analyzed for the same parameters as the soil samples. An analytical methods/quality assurance summary is provided in Table 2. Analyses were performed by Envirotech Research, Inc. of Edison, New Jersey, a New Jersey certified laboratory.

4.2 Geotechnical Investigation

During the period November 24 through November 26, 1997, MATRIX conducted geotechnical investigations at the Site. A total of 11 soil borings were conducted alongside the embankments in order to obtain geotechnical information for the underlying soil. Boring location (B-1) was eliminated from the planned drilling program of 12 borings due to the presence of underground utility lines. The borings were conducted by Summit Drilling Co. in accordance with ASTM D-1586, Standard Method for Penetration Test and Split-Barrel Sampling of Soils. Two soil borings were advanced at street level adjacent to each of the elevated railroad embankments. Split spoon soil samples were taken at nominal intervals of five feet. The locations of the soil borings are shown on Figure 2. Representative soil samples were collected and tested in the MATRIX geotechnical laboratory for moisture content, grain size, and/or Atterberg limits. For more detailed information about the methodology used during the geotechnical investigation, See Appendix 4.

5.0 RESULTS

5.1 Environmental Investigation

5.1.1 Soil Characteristics

The geology within the six railroad embankments has been interpreted from the geologic information gathered during drilling activities. Soil boring logs are presented in Appendix 1. The fill materials within the embankment consist primarily of brown to red-brown silty sand mixed with minor amounts of gravel, cinders, and brick fragments. Based on visual and field screening observations, soil samples collected from the embankments did not indicate any physical evidence of contamination.

5.1.2 Soil Quality

Volatile Organic Compounds

The analytical results for all soil samples collected from the embankments during the environmental investigation indicate that the volatile organic compound (VOC) concentrations were all detected below the NJDEP residential direct contact soil cleanup criteria. The laboratory analytical results are summarized in Table 3. The laboratory data summary sheets are provided in Appendix 2. The complete laboratory report is provided as an Attachment.

Semivolatile Organic Compounds

All base neutral compound concentrations were detected below the NJDEP residential direct contact soil cleanup criteria with the exception of several polynuclear aromatic hydrocarbons (PAH). With the exception of soil sample locations SB-7, SB-8, and SB-10, PAH's were reported in exceedance of one or more of the NJDEP residential direct contact soil cleanup criteria in all soil samples collected from the embankments during the environmental investigation. The PAH's consisted of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(h)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, and dibenz(a,h)anthracene. PAH concentrations ranged from 720 to 12,000 ug/kg. Sampling results are presented in Table 4. The PAH concentrations in exceedance of the NJDEP criteria are presented on Figure 4. The laboratory data summary sheets are provided in Appendix 2. The complete laboratory report is provided as an Attachment.

Pesticides/ Polychlorinated Biphenyls

Pesticides/polychlorinated biphenyls (PCB) concentrations were not detected above the NJDEP residential direct contact soil cleanup criteria for any soil samples collected from the embankments during the environmental investigation. The laboratory analytical results are summarized in Table 5. The laboratory data summary sheets are provided in Appendix 2. A complete laboratory report is provided as an Attachment.

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Inorganic Compounds

Inorganic compounds were detected below the NJDEP residential direct contact soil cleanup criteria except for lead, mercury, antimony and arsenic. Lead was detected above the NJDEP residential direct contact soil cleanup criteria (400 mg/kg) at soil boring locations SB-5 (10.5-11.0 feet; 1020 mg/kg), SB-7 (1.5-2.0 feet; 509 mg/kg), SB-11 (3.0-3.5 feet; 569 mg/kg and 22.0-22.5 feet; 3340 mg/kg), and SB-12 (12.5-13.0 feet; 420 mg/kg). Mercury was detected above the residential direct contact soil cleanup criteria at SB-1 (11.5-12.0; 15.9 mg/kg). Antimony was detected above the residential direct contact soil cleanup criteria at a concentration of 15.7 mg/kg at SB-4 (1.5-2.0), and 33.2 mg/kg at SB-7 (1.2-2). Arsenic was also detected above the residential direct contact soil cleanup criteria (20 mg/kg) at a concentrations of 23.5 mg/kg at SB-4 (1.5-2), 24.5 mg/kg at SB-7 (1.5-2), and 34.9 mg/kg at SB-11 (3-3.5).

Sampling results are presented in Table 6. The metals concentrations in exceedance of the NJDEP residential direct contact cleanup criteria are shown on Figure 3. The laboratory data summary sheets are provided in Appendix 2. A complete laboratory report is provided as an Attachment.

Wet Chemistry (Chromium VI, Total Cyanide, and Total Petroleum Hydrocarbons)

Chromium VI (Cr^{6+}), Total Cyanide, and Total Petroleum Hydrocarbons (TPHC) concentrations were not detected above the NJDEP residential direct contact soil cleanup criteria in any soil samples collected from within embankments during the environmental investigation. The laboratory analytical results are summarized in Table 7. The laboratory data summary sheets are provided in Appendix 2. The complete laboratory report is provided as an Attachment.

5.2 Geotechnical Investigation Results

The soil borings advanced during the geotechnical investigation revealed a subsoil profile consisting of a surface fill layer overlying native red brown and gray silty sands and gravels, and clayey silts. Fill is generally encountered to 2.5 feet below grade (bg) or less, except at B-6 where fill was measured at 7 feet bgs. Fill was not identified in borings B-2 and B-7. The fill material consist predominately of silty sands and gravel with small amounts of cinders, bricks and concrete fragments. The native soil generally consists of loose to very compact silty sands and gravels, and firm to very stiff clays and silts. Layers of fibrous peat and soft organic silt were revealed in the subsurface profile in four borings (B-8, B-8, B-11, and B-12) in the western portion of the site.

The MATRIX report, evaluating the environmental characteristics of the embankment fill and native soil and the geotechnical properties of the native soils, is included as Appendix 3. The report discusses the suitability of the fill for possible reuse on or off the site, and addresses the following geotechnical issues:

- The type and engineering quality of the existing embankment materials and recommendations for reuse as structural fill.

- Recommendations for an appropriate type of building foundation system.
- Recommendations for foundation design, substructure wall design, and foundation installation criteria.
- Recommendations for slab support and underslab drainage requirements.
- Estimation of post-construction settlement of the recommended foundation system.
- Recommendations for management of groundwater during and after foundation and substructure construction.
- Recommendations for borrow material, if required, and material compaction and general earthwork construction procedures.

6.0 EMBANKMENT DEMOLITION COST ESTIMATE

The cost of embankment demolition can vary greatly depending on the availability of a reuse market for the soil and stone block materials of construction. As a result, timing and the availability of projects able to utilize contaminated fill materials will be a significant factor in the demolition cost of the embankment. To develop a range for likely costs, DRESDNER ROBIN has considered two disposal options: beneficial reuse and landfill disposal.

For quantity estimation purposes, DRESDNER ROBIN has assumed that the walls increase in thickness one foot horizontal per two feet vertical (2:1) from top to bottom, and that they extend a maximum eight feet below grade. Based on these assumptions and field measurements of the size of each embankment, the volumes of sandstone and soil to be removed calculate as follows:

Summary of Volume Calculations
(quantities in cubic yards)

Embankment	Sandstone Volume	Soil Volume	Total Volume
Brunswick St.-Monmouth	12600	30000	42600
Monmouth Ave.-Cole St.	11350	27625	38975
Cole St.-Jersey Ave.	10850	27250	38100
Jersey Ave.-Erie St.	9350	26000	35350
Erie St.-Manila Ave.	8100	23425	31525
Manila Ave.-Marin Blvd.	6775	20500	27275
West of Brunswick St. ⁽¹⁾	225	0	225
Total all Embankments	59250	154800	214050

The calculations assume that all of the sandstone (including that which is below grade) will be removed and that all soil contained by the embankments (above grade only) will be removed. These calculations are presented in Appendix 5.

⁽¹⁾ Remaining portion of embankment wall west of Brunswick Street to be removed

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Disposal options of beneficial reuse, and landfill disposal are presented below to cover the range of costs that will be reflected in market timing. Based on the limited environmental investigation conducted by DRESDNER ROBIN, it is assumed that all of the soils from the embankment will be considered contaminated (non-hazardous ID-27 waste) and will require disposal in a permitted beneficial reuse area or landfill. DRESDNER ROBIN has also assumed that the volume of subsurface sandstone to be removed will not be replaced with clean fill and that building footings and sub-basement construction will occupy the excavated areas.

Removal Cost Factors

Embankment Removal/Excavation/Loadout	\$ 1,100,000
Hauling	
- 2 Mile	\$ 1,995,000
- 5 Mile	\$ 2,520,000
- 10 Mile	\$ 2,940,000
Disposal ID-27 @ \$40/TN	\$ 8,050,000
Disposal of Stone @ \$ 10/CY	\$ 600,000

As indicated by the above listed cost factors, removal of the embankment can range from approximately \$3.0M to \$9.7M. Under the best possible circumstances a project seeking significant fill volumes may be willing to remove the embankment for the value of the fill.

7.0 CONCLUSIONS AND RECOMMENDATIONS

1. The analytical results for soil samples collected as part of the environmental investigation of the six embankments indicate that the concentrations of volatile organics, acid extractables, pesticides, PCBs, TPH, Cr⁶⁺ and cyanide in the fill materials are below the NJDEP residential direct contact soil cleanup criteria with the exception of several PAHs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(h)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene and dibenz(a,h)anthracene). The concentrations of all metals were below the NJDEP residential direct contact soil cleanup criteria with the exception of lead, arsenic, mercury and antimony.
2. The analytical results for the soil samples collected of the embankment material indicate the soil cannot be reused as clean fill at other city projects due to the elevated concentrations of several PAHs and metals above the NJDEP residential direct contact soil cleanup criteria. The options for the final disposition of the soil in the embankments are recycling or disposal at a landfill, possibly as final cover at the landfill. If the material is reused at other city projects, the material would most likely need to be used as subsurface fill material, covered with either clean fill or some other institutional control (buildings, asphalt or pavement) and a Declaration of Environmental Restrictions (DER) would be required for the location receiving the soil.

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3. Refer to Appendix 4, MATRIX Environmental geotechnical evaluation for conclusions and recommendations regarding the geotechnical investigation.
4. Measurements and calculations of the embankments have estimated that the total volume of material to be removed is 59,250 cubic yards of sandstone and 154,800 cubic yards of soil. The results of the environmental investigation show that the soils in the embankments will most likely be classified as non-hazardous (ID-27) waste. This will prohibit reuse of these soils at other sites without appropriate engineering and institutional controls. Based on the calculated amounts of sandstone and soil and the necessity to dispose of the soils, the total estimated cost of demolition of the embankments will likely vary between \$3.0M and \$9.7M depending on the disposal option available for the soils.

TABLE 1

**SAMPLING SUMMARY TABLE
SIXTH STREET, JERSEY CITY, NEW JERSEY**

BORING	SAMPLE NUMBER	MEDIUM	SAMPLE DEPTH (feet below top of embankment)	Analytical Parameters	Sampling Method
SB-1	SB1/1.5-2	Soil	1.5-2	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB1/11.5-12	Soil	11.5-12	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB1/19.5-20	Soil	19.5-20	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
SB-2	SB2/1.5-2	Soil	1.5-2	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB2/15.5-16	Soil	15.5-16	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB2/19.5-20	Soil	19.5-20	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
SB-3	SB3/1.5-2	Soil	1.5-2	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB3/10-10.5	Soil	10-10.5	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB3/19.5-20	Soil	19.5-20	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
SB-4	SB4/1.5-2	Soil	1.5-2	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB4/14.5-15	Soil	14.5-15	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB4/23.5-24	Soil	23.5-24	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
SB-5	SB5/1.5-2	Soil	1.5-2	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB5/10.5-11	Soil	10.5-11	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB5/23.5-24	Soil	23.5-24	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
SB-6	SB6/2.5-3	Soil	2.5-3	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB6/12.5-13	Soil	12.5-13	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB6/23.5-24	Soil	23.5-24	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
SB-7	SB7/1.5-2	Soil	1.5-2	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB7/19.5-20	Soil	19.5-20	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB7/27.5-28	Soil	27.5-28	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
SB-8	SB8/1.5-2	Soil	1.5-2	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB8/15.5-16	Soil	15.5-16	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB8/27.5-28	Soil	27.5-28	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
SB-9	SB9/1.5-2	Soil	1.5-2	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB9/16-16.5	Soil	16-16.5	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB9/24-24.5	Soil	24-24.5	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
SB-10	SB10/1.5-2	Soil	1.5-2	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB10/11-11.5	Soil	11-11.5	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB10/31.5-32	Soil	31.5-32	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
SB-11	SB11/3-3.5	Soil	3-3.5	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB11/22-22.5	Soil	22-22.5	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB11/31-31.5	Soil	31-31.5	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
SB-12	SB12/1.5-2	Soil	1.5-2	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB12/12.5-13	Soil	12.5-13	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe
	SB12/31-31.5	Soil	31-31.5	TCL/TAL+30,TPH, Cr ⁶⁺	GeoProbe

TABLE 2

**Analytical Methods/Quality Assurance Summary Table
Sixth Street Embankment Project
Jersey City, New Jersey**

Matrix Type	# Sample	Field Blank/ Trip Blank	Analytical Parameters	Analytical Methods	MS/MSD	Duplicates	Split- Spoon	Performance Evaluation Samples	Sample Preservation	Sample Holding Time
oil	36	Field Blanks:								
		FB12397 MEOH-12397 12/3/97	TCL/TAL+30, Cr ⁶⁺ , TPH	See Appendix 3	None	Dup. Of (Dup. Of SB2/15.5-16)	None	None	See Appendix 3	See Appendix 3
		FB12497 MEOH-FB 12/4/97	TCL/TAL+30, Cr ⁶⁺ , TPH	See Appendix 3	None	Dup. 2 (Dup of SB9/1.5-2)	None	None	See Appendix 3	See Appendix 3
		FB125197 12/5/97	TCL/TAL+30, Cr ⁶⁺ , TPH	See Appendix 3	None	Dup. 3 (Dup of SB-12/12.5-13)	None	None	See Appendix 3	See Appendix 3
		Trip Blanks:								
		MEOH-TB 34373 12/3/97	TCL VOA	See Appendix 3	None					
		MEOH-TB 34537 12/4/97	TCL VOA	See Appendix 3	None					
		MEOH-TB 34697 12/5/97	TCL VOA	See Appendix 3	None					

TABLE 2

Summary Analytical Results of Volatile Organic Compounds for Soil Samples Collected
South Street Remediation Project
Jersey City, New Jersey

Sample ID / Sample Depth	500-1-5-3	500-1-5-16	500-27-5-28	500-1-5-2	500-16-16-1	500-24-24-5	500-19-1-2	500-1-11-5	500-31-1-32	500-1-3-3	500-42-22-5	500-1-3-1-5
Lab Sample Number	34544	34544	34544	34544	34544	34547	34548	34548	34550	34553	34554	34555
Sampling Date	12/04/97	12/04/97	12/04/97	12/04/97	12/04/97	12/04/97	12/04/97	12/04/97	12/04/97	12/04/97	12/04/97	12/04/97
Matrix	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Drifted Factor	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
VOLATILE COMPOUNDS (GC/MS)												
Chloroethane	520,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Bromomethane	75,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Vinyl Chloride	2,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000
Chloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	415,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000
Acetone	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Carbon Disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	8,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
1,1,2-Dichloroethane	570,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
trans-1,2-Dichloroethane	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
cis-1,2-Dichloroethane	75,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Chlorobenzene	12,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
1,2-Dichlorobenzene	6,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
2-Chlorotoluene	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
1,1,1-Trichloroethane	210,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Carbon Tetrachloride	2,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Bromochloromethane	11,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000
1,2-Dichloropropane	10,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000
1,1,1-Trichloropropane	23,000	54,000	54,000	54,000	54,000	54,000	54,000	54,000	54,000	54,000	54,000	54,000
1,2-Dichlorobenzene	116,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
1,2,3-Trichlorobenzene	22,000	420,000	420,000	420,000	420,000	420,000	420,000	420,000	420,000	420,000	420,000	420,000
Benzene	3,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000
trans-1,3-Dichloropropane	4,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Bromobenzene	80,000	370,000	370,000	370,000	370,000	370,000	370,000	370,000	370,000	370,000	370,000	370,000
4-Methyl-2-Pentanone	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
2-Heptanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	4,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
1,1,2,2-Tetrachloroethane	34,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000
Chlorobenzene	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Toluene	37,000	660,000	660,000	660,000	660,000	660,000	660,000	660,000	660,000	660,000	660,000	660,000
Ethylbenzene	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Styrene	23,000	97,000	97,000	97,000	97,000	97,000	97,000	97,000	97,000	97,000	97,000	97,000
Nonane (Dist)	410,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Total Volatile Compounds (VOCs) (n)	1,100	840	1,200	1,000	840	5,700	840	4,200	2,400	840	2,000	1,500
Total Estimated Conc. VOCs (TICs) (n)	1,100	840	1,200	1,000	840	5,700	840	4,200	2,400	840	2,000	1,500

Notes:

* Values listed reflect the combined standards for the de and trans isomers of 1,3-Dichloropropane.

U - This compound was not detected at the indicated concentration.

J - Data indicate the presence of a compound but results are insufficient for identification. The results are less than the detection limit.

D - This sample was analyzed in the laboratory which is an approximate value.

NA - This indicates possible laboratory contamination of the environmental sample.

MR - Not analyzed.

Dup Duplicate sample of 500-1-5-16

Dup Duplicate sample of 500-1-5-3

Dup Duplicate sample of 500-1-5-13

TABLE 3

Summary Analytical Results of Volatile Organic Compounds for Soil Samples Collected
Sixth Street Enhancement Project
Jersey City, New Jersey

Sample ID / Sample Name Lab Sample Number Sampling Date Matrix Dilution Factor Units	8813-1-2 34689 12/05/97 SOLID 50.0 ug/kg	813-12.5-13 34689 12/05/97 SOLID 50.0 ug/kg	813-31-37.5 34681 12/05/97 SOLID 50.0 ug/kg	Dup 34398 12/05/97 SOLID 50.0 ug/kg	Dup-2 34538 12/05/97 SOLID 50.0 ug/kg	Dup-3 34682 12/05/97 SOLID 50.0 ug/kg
VOLATILE COMPOUNDS (GC/MS)						
Chloroethane	530,000	1,000,000	18,000	140 U	150 U	120 U
Bromochloroethane	71,000	1,000,000	1,000	140 U	150 U	120 U
Vinyl Chloride	2,000	7,000	10,000	140 U	150 U	120 U
Chloroethene	NA	NA	NA	140 U	150 U	120 U
Methylene Chloride	49,000	210,000	1,000	140 U	150 U	120 U
Acetone	1,000,000	1,000,000	100,000	140 U	150 U	120 U
Carbon Disulfide	NA	NA	NA	140 U	150 U	120 U
1,1-Dichloroethane	8,000	150,000	18,000	140 U	150 U	120 U
1,1-Dichloroethene	870,000	1,000,000	18,000	140 U	150 U	120 U
trans-1,2-Dichloroethane	1,000,000	1,000,000	50,000	140 U	150 U	120 U
cis-1,2-Dichloroethane	710,000	1,000,000	1,000	140 U	150 U	120 U
Chloroform	19,000	20,000	1,000	140 U	150 U	120 U
1,2-Dichloroethane	8,000	24,000	1,000	140 U	150 U	120 U
2-Chloroethane	1,000,000	1,000,000	50,000	140 U	150 U	120 U
1,1,1-Trichloroethane	210,000	1,000,000	50,000	140 U	150 U	120 U
Bromochloroethane	11,000	46,000	1,000	140 U	150 U	120 U
1,2-Dichloroethene	10,000	43,000	1,000	140 U	150 U	120 U
cis-1,3-Dichloropropene	4,000	5,000	1,000	140 U	150 U	120 U
trans-1,3-Dichloropropene	23,000	54,000	1,000	140 U	150 U	120 U
Trichloroethane	110,000	1,000,000	1,000	140 U	150 U	120 U
Dibromochloromethane	22,000	420,000	1,000	140 U	150 U	120 U
1,1,2-Trichloroethane	3,000	13,000	1,000	140 U	150 U	120 U
Benzene	4,000	5,000	1,000	140 U	150 U	120 U
trans-1,2-Dichloroethene	80,000	370,000	1,000	140 U	150 U	120 U
4-Methyl-2-Pentene	1,000,000	1,000,000	50,000	140 U	150 U	120 U
2-Heptene	NA	NA	NA	140 U	150 U	120 U
1,1,2,3-Tetrachloroethane	4,000	8,000	1,000	140 U	150 U	120 U
1,1,2,3-Tetrachloroethane	34,000	71,000	1,000	140 U	150 U	120 U
Toluene	1,000,000	1,000,000	500,000	140 U	150 U	120 U
Chlorobenzene	27,000	890,000	1,000	140 U	150 U	120 U
Ethylbenzene	1,000,000	1,000,000	100,000	140 U	150 U	120 U
Styrene	23,000	97,000	100,000	140 U	150 U	120 U
Xylene (Total)	410,000	1,000,000	10,000	140 U	150 U	120 U
Total Condensable VOCs (LC)	3,000	750	9	5000	3100	9
Total External Cond. VOCs (LC)						

Notes
* Values listed reflect the combined standards for the cis and trans isomers of 1,2-Dichloroethene
U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound but could not be identified. The result is less than the amount listed but greater than zero. The concentration given is an approximate value.

B - The sample was found to be laboratory blank, so no results were reported.

This indicates possible laboratory contamination of the workstreamed sample.

NR - Not analyzed

Over Duplicate sample of SB2-15.5-16

Dup2 Duplicate sample of SB2-15.5-2

Dup3 Duplicate sample of SB12-12.5-13

**Summary Analytical Results of Semivolatile Organic Compounds for Soil Samples Collected
Sixth Street Embankment Project
Jersey City, New Jersey.**

Well ID / Sample Depth	Sample Number	Sampling Date	Con Factor	New Jersey Residential Direct Contact Ground Water Soil Cleanup Criteria (ug/kg)	New Jersey Non-Residential Direct Contact Ground Water Soil Cleanup Criteria (ug/kg)	New Jersey Residential Direct Contact Ground Water Soil Cleanup Criteria (ug/kg)	New Jersey Non-Residential Direct Contact Ground Water Soil Cleanup Criteria (ug/kg)	881-11-5-12	881-11-5-20	882-1-5-2	882-1-5-20	882-19-5-20	883-1-3-2	883-10-10-5	883-19-5-20	884-1-5-2
				ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
VOLATILE COMPOUNDS (GC/MS)																
Phenol	10,000,000	10,000,000	50,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
2-Chlorophenol	260,000	5,200,000	10,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
2-Methylphenol	2,000,000	10,000,000	NA	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
4-Methylphenol	2,000,000	10,000,000	NA	31 J	25 J	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
2-Nitrophenol	NA	NA	NA	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
2,4-Dinitrophenol	1,100,000	10,000,000	10,000	12 J	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
2,4-Dichlorophenol	170,000	3,100,000	10,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
4-Chloro-3-methylphenol	10,000,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
2,4,6-Trichlorophenol	82,000	270,000	10,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
2,4,5-Trichlorophenol	5,000,000	10,000,000	50,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
2,4-Dichlorophenol	110,000	2,100,000	10,000	750 U	1500 U	750 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
4-Nitrophenol	NA	NA	NA	750 U	1500 U	750 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
4,6-Dinitro-2-methylphenol	6,000	24,000	100,000	750 U	1500 U	750 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,2-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	360 U
1,4-Dichlorobenzene	5,100,000	10,000,000	100,000	350 U	750 U	400 U	300 U	430 U	400 U	400 U	400 U	400 U				

OTHER ITEMS OF INTEREST ARE:

Table 4

Summary Analytical Results of Semi-volatile Organic Compounds for Soil Samples Collected
Sixth Street Embankment Project
Jersey City, New Jersey

File ID / Sample Depth Sample Number Sampling Date Ion Factor	New Jersey Residential Direct Contact Soil Cleanup Criteria (ug/kg)	New Jersey Non- Residential Direct Contact Ground Water Soil Cleanup Criteria (ug/kg)	New Jersey Impact to Ground Water Soil Cleanup Criteria (ug/kg)	S81-15-2 34360 12/03/97 SOLID 1.0 ug/kg	S81-11-12 34381 12/03/97 SOLID 2.0 ug/kg	S81-19-20 34352 12/03/97 SOLID 1.0 ug/kg	S82-15-2 34353 12/03/97 SOLID 1.0 ug/kg	S82-15-20 34365 12/03/97 SOLID 1.0 ug/kg	S82-19-20 34364 12/03/97 SOLID 1.0 ug/kg	S83-15-2 34366 12/03/97 SOLID 1.0 ug/kg	S83-10-10.5 34367 12/03/97 SOLID 1.0 ug/kg	S83-19-20 34368 12/03/97 SOLID 1.0 ug/kg	S84-15-2 34370 12/03/97 SOLID 1.0 ug/kg
VOLATILE COMPOUNDS (GC/MS) (con.)													
Fluoranthene	2,300,000	10,000,000	100,000	1000	17000	20 U	110	4300	11 J	4200	3300	20 U	1300
Pyrene	1,700,000	10,000,000	100,000	610	15000	20 U	72	3500	8.1 J	2400	2700	20 U	750
Benzofluoranthene	1,100,000	10,000,000	100,000	380 U	750 U	400 U	360 U	430 U	400 U	380 U	400 U	400 U	380 U
2,3-Dibenzofluoranthene	2,000	5,000	100,000	780 U	1500 U	760 U	760 U	850 U	780 U	770 U	800 U	800 U	760 U
Benzofluoranthene	900	4,000	500,000	500	4500	12 J	110	2100	20 U	1400	1700	20 U	480
Chrysene	3,000	40,000	500,000	580	7500	20 U	170	2300	20 U	2800	1700	20 U	1200
Benzo(a)fluoranthene	48,000	210,000	100,000	380 U	750 U	400 U	360 U	430 U	260 J	280 J	400 U	180 J	180 J
Benzo(b)fluoranthene	1,100,000	10,000,000	100,000	380 U	750 U	400 U	360 U	430 U	400 U	380 U	400 U	400 U	380 U
Benzo(k)fluoranthene	900	4,000	500,000	1700	4800	20 U	120	2700	20 U	3600	1800	20 U	1200
Benzo(a)anthracene	800	4,000	500,000	530	3000	20 U	19 J	1000	20 U	1000	700	20 U	340
Benzo(a)pyrene	680	4,000	500,000	170	7300	20 U	24	2100	20 U	720	780	20 U	270
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	240	4400	20 U	33	1200	20 U	580	200	20 U	94
Dibenz(a,h)anthracene	660	660	100,000	100	870	20 U	18 J	310	20 U	190	200	20 U	220
Benzofluoranthene	NA	NA	NA	140	4100	20 U	32	980	20 U	390	650	20 U	220
at Confirmed Conc. BUA's (5)				8550	89210	0	554	34860	0	31010	17991	0	9281
at Estimated Conc. BUA TCS (5)				12740	25920	0	5790	12220	0	43290	4910	0	17650

Mass listed reflect the combined standards for the 2,4,6-Trichlorobenzene mixture.

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria.

The results is less than the quantitation limit but greater than zero.

The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample.

NA - This indicates possible laboratory contamination of the environmental sample.

NR - Not available

IR - Not analyzed

Qup - Duplicate sample of S82-15.5-18

Qup2 - Duplicate sample of S82-15.5-2

Qup3 - Duplicate sample of S812-12.5-13

Qup4 - Concentration exceeds NJDEP Residential Direct Contact

Soil Cleanup Criteria

**Summary Analytical Results of Semivolatile Organic Compounds for Soil Samples Collected
Sixth Street Embankment Project
Jersey City, New Jersey.**

Site ID / Sample Depth	Sample Number	Sampling Date	Season	New Jersey Residential Direct Contact Soil Cleanup Criteria (ug/kg)	New Jersey Non- Residential Direct Contact Soil Cleanup Criteria (ug/kg)	New Jersey Impact to Ground Water Soil Cleanup Criteria (ug/kg)	SB4-14-5-15	SB4-21-5-24	SB5-1-5-2	SB5-10-5-11	SB5-21-5-24	SB6-2-5-1	SB6-12-5-13	SB6-21-5-24	SB7-1-5-2	SB7-19-5-20
Phenol	10,000,000	30,000,000	50,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
2-Chlorophenol	2,800,000	10,000,000	10,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
2-Methylphenol	2,800,000	10,000,000	NA	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
4-Methylphenol	2,800,000	10,000,000	NA	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
2-Nitrophenol	NA	NA	NA	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
2,4-Dimethylphenol	1,100,000	10,000,000	10,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
2,4-Dichlorophenol	170,000	3,100,000	10,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
4-Chloro-3-methylphenol	10,000,000	10,000,000	10,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
2,4,6-Trichlorophenol	270,000	300 U	10,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
2,4,5-Trichlorophenol	62,000	10,000,000	50,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
2,4,6-Trichlorophenol	8,800,000	10,000,000	50,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
2,4-Dinitrophenol	110,000	2,100,000	10,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
4-Nitrophenol	NA	NA	NA	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
4,8-Dinitro-2-methylphenol	NA	NA	NA	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000	24,000	100,000	350 U	410 U	350 U	350 U	410 U	350 U	350 U	410 U	350 U	1900 U	350 U	350 U	350 U
Perfluorooctanoic acid	5,000															

See footnotes on next page.

**Summary Analytical Results of Semivolatile Organic Compounds for Soil Samples Collected
Sixth Street Enticement Project
Jersey City, New Jersey.**

[illegible]

values listed reflect the combined standards for the 2,4,6-Dinitrobenzene mixture.

U. The compound was not detected at the indicated concentration.

J. Data indicates the preference of a compound may mean the elimination channel. The results in terms of the elimination have had greater than zero.

The results are less than the expectation with the greater than zero. The conclusion comes as an unexpected finding.

The concentration given is an approximate value.

Fig. 8 - The analyte was found in the laboratory flask and was in the sample.

NA Not available
This indicator provides secondary confirmation of the environmental impact."

[illegible]

19 - Not indexed

Dup - Duplicate sample of S82-15.5-16.

Group 2 - Duplicate sample of SB6-15-2 -
Group 3 - Duplicate sample of SB12-12 5-13

Sup3 - Duplicate sample of SB12-12.5-13
Conservation services NITFB Residential Direct Contract

Concentration exceeds NDEP Residential Limits Criteria
Salt Creek in Illinois

Sol Cleanup Criteria:

Abstract

THE UNIVERSITY OF CHICAGO

Table 4

**Summary Analytical Results of Semi-volatile Organic Compounds for Soil Samples Collected
South Street Embankment Project
Jersey City, New Jersey.**

File ID / Sample Depth Sample Number Sampling Date Lab Don Factor	SB1-27.5-28 34541 12/04/97 SOLID 1.0 up/down	SB8-15-2 34542 12/04/97 SOLID 1.0 up/down	SB8-16.5-16 34543 12/04/97 SOLID 1.0 up/down	SB8-27.5-28 34544 12/04/97 SOLID 1.0 up/down	SB8-15-2 34545 12/04/97 SOLID 1.0 up/down	SB8-16.5-16 34546 12/04/97 SOLID 5.0 up/down	SB8-24-24.5 34547 12/04/97 SOLID 1.0 up/down	SB10-15-2 34548 12/04/97 SOLID 1.0 up/down	SB10-11-11.5 34549 12/04/97 SOLID 1.0 up/down	SB10-31.5-32 34550 12/04/97 SOLID 1.0 up/down
MI VOLATILE COMPOUNDS (GC/MS) (cont.)										
Fluoranthene	2,300,000	10,000,000	100,000	110	560	23,000	4,200	160	63	140
Pyrene	1,700,000	10,000,000	100,000	89	580	23,000	9800	170	81	140
Buflbenzophenanthene	1,100,000	10,000,000	100,000	400 U	370 U	1900 U	410 U	400 U	280 U	400 U
1,2,3-Dichlorobenzene	2,000	6,000	100,000	780 U	720 U	3700 U	820 U	816 U	780 U	780 U
Benzofluoranthene	800	4,000	500,000	40	230	8680	1800	82	40	70
Chrysene	9,000	40,000	600,000	120	250	8700	2100	140	34	88
Ben[2-Ethyl]phenanthrene	48,000	210,000	100,000	400 U	370 U	1800 U	980	400 U	390 U	360 J
Ben[2-Ethyl]anthracene	1,100,000	10,000,000	100,000	400 U	370 U	1900 U	410 U	400 U	280 U	400 U
Benzofluoranthene	900	4,000	500,000	94	250	8700	2300	120	40	88
Benzofluoranthene	860	4,000	500,000	38	100	3400	660	38	20 U	35
Benzo[a]pyrene	900	4,000	500,000	35	220	7700	1600	78	32	50
Indeno[1,2,3-cd]pyrene	660	4,000	500,000	25	100	3800	890	35	20 U	30 U
Dibenz[ah]anthracene	640	660	100,000	42	44	830	250	20 U	20 U	20 U
Benzo[ghi]perylene	NA	NA	NA	27	110	3400	870	39	20 U	29
at Concent Conc BNA's (g)	2611	939	1370	101	6025	141830	27228	1184	371	794
at Estimated Conc BNA TICs (g)	430	560	560	0	1210	30700	11780	0	0	0

values listed reflect the combined standards for the 2,4,7,8-Chlorodioxins mixture.

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria.

The results are less than the quantitation limit, but greater than zero.

The concentration given is an approximate value.

8 - The analyte was found in the laboratory blank as well as the sample.

This indicates possible laboratory contamination of the environmental sample.

NA - Not available

NR - Not analyzed

Dup - Duplicate sample of SB8-15.5-16.

Dup2 - Duplicate sample of SB8-15-2

Dup3 - Duplicate sample of SB12-12.5-13.

Concentration exceeds NCEP Residential Direct Contact

Soil Cleanup Criteria.

**Summary Analytical Results of Semivolatile Organic Compounds for Soil Samples Collected
Sixth Street Embankment Project
Jersey City, New Jersey.**

Sample ID / Sample Description	Sample Number	Sampling Date	Location	Concentration Factor	New Jersey Residential Direct Contact Soil Cleanup Criteria (ug/kg)	New Jersey Non-Residential Direct Contact Soil Cleanup Criteria (ug/kg)	New Jersey Residential Indirect Contact Ground Water Soil Cleanup Criteria (ug/kg)	SB11-3-1.5	SB11-22-22.5	SB11-31.5-32	SB12-1.5-2	SB12-12.5-13	SB12-31.5-31.5	Dup	Dup2	Dup3
VOLATILE COMPOUNDS (GC/MS)																
Phenol	10,000,000	200,000	10,000,000	20,000	15 J	42 J	400 U	380 U	300 U	120 J	410 U	410 U	300 U	27 J	360 U	360 U
2-Chlorophenol	2,800,000	2,800,000	2,800,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
2-Methylphenol	2,800,000	2,800,000	2,800,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
4-Methylphenol	2,800,000	2,800,000	2,800,000	NA	18 J	62 J	400 U	380 U	300 U	48 J	410 U	410 U	300 U	34536	120597	120597
2-Methylphenol	2,800,000	2,800,000	2,800,000	NA	18 J	62 J	400 U	380 U	300 U	48 J	410 U	410 U	300 U	34536	120597	120597
2,4-Dimethylphenol	1,100,000	1,100,000	1,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
2,4-Dimethylphenol	1,100,000	1,100,000	1,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
4-Chloro-3-methylphenol	170,000	170,000	170,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
4-Chloro-3-methylphenol	170,000	170,000	170,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
2,4,6-Trichlorophenol	10,000,000	10,000,000	10,000,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
2,4,6-Trichlorophenol	10,000,000	10,000,000	10,000,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
2,4-Dinitrophenol	110,000	110,000	110,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
4-Nitrophenol	NA	NA	NA	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
4,6-Dichloro-2-methylphenol	8,000	8,000	8,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
Perchlorophenol	800	800	800	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,2-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,3-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,2-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,2-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlorobenzene	5,100,000	5,100,000	5,100,000	NA	420 U	410 U	400 U	380 U	300 U	410 U	410 U	300 U	34536	120597	120597	34692
1,4-Dichlor																

See footnotes on next page.

**Summary Analytical Results of Benzo(b)fluoranthene Organic Compounds for Soil Samples Collected
South Street Embankment Project
Jersey City, New Jersey**

Sample ID / Sample Depth	New Jersey Residential Direct Contact Criteria (ug/kg)	New Jersey Non-Residential Direct Contact Criteria (ug/kg)	New Jersey Residential Impact to Ground Water Soil Cleanup Criteria (ug/kg)	S811-3-3.5 34693 1205/97 SOLID 1.0 up/kg	S811-22-22.5 34694 1205/97 SOLID 1.0 up/kg	S811-31.5-32 34695 1205/97 SOLID 1.0 up/kg	S812-1.5-2 34696 1205/97 SOLID 1.0 up/kg	S812-12.5-13 34697 1205/97 SOLID 1.0 up/kg	S812-31.5-31.5 34698 1205/97 SOLID 1.0 up/kg	Dup 34699 1205/97 SOLID 1.0 up/kg	Dup2 34538 1204/97 SOLID 1.0 up/kg	Dup3 34592 1205/97 SOLID 1.0 up/kg
VOLATILE COMPOUNDS (GC/MS) (con.)												
Fluoranthene	2,300,000	10,000,000	100,000	7300	1000	7700	220	4100	410 U	360 U	410 U	360 U
Pyrene	1,700,000	10,000,000	100,000	6300	910	7400	150	3500	7300	4700	200	4700
Butyloxyphenylisole	1,100,000	10,000,000	100,000	420 U	420 U	410 U	400 U	300 U	5400	220	410 U	4200
3,3'-Dichlorodiphenylmethane	2,000	6,000	100,000	830 U	830 U	770 U	700 U	780 U	410 U	360 U	410 U	360 U
Benzofluoranthene	900	4,000	500,000	3080	490	4300	82	1590	240	810 U	810 U	730 U
Chrysene	9,000	40,000	500,000	3000	830	5000	250	1700	280	1900	150	1900
Benzo(a)fluoranthene	48,000	210,000	100,000	420 U	420 U	410 U	400 U	390 U	4100	256	410 U	2000 J
Benzo(b)fluoranthene	1,100,000	10,000,000	100,000	420 U	420 U	410 U	400 U	390 U	170 JR	2000	410 U	360 U
Benzo(k)fluoranthene	900	4,000	50,000	3190	560	3190	200	1700	270	2886	2886	2886
Benzo(e)pyrene	900	4,000	500,000	1180	220	3180	42	1360	100	90	90	1860
Indeno(1,2,3-cd)pyrene	600	650	100,000	2690	450	7890	45	1360	200	4860	4860	1860
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	1300	280	5900	70	820	130	1860	1860	1860
Dibenz(a,h)anthracene	650	650	100,000	340	65	1300	28	200	34	1100	1100	1100
Benzo(g,h,i)perylene	NA	NA	NA	1200	280	3900	59	830	135	520	47	260
at Confident Conc. BMA's (G)				8159	8159	65320	1785	21975	3101	2000	100	1000
Estimated Conc. BMA Tics (G)				19900	4250	22170	16250	9990	1400	49560	2047	27800

values listed reflect the combined standards for the 2,4,7,5-Octadecylurea mixture.
 U - The compound was not detected at the indicated concentration.
 J - Data indicates the presence of a compound that meets the identification criteria.
 The results is less than the quantitation limit but greater than zero.
 The concentration given is an approximate value
 B - The analyte was found in the laboratory blank as well as the sample.
 That indicates possible laboratory contamination of the environmental sample
 NA - Not available
 R - Not analyzed.
 Dup - Duplicate sample of S82-12.5-16.
 ap2 - Duplicate sample of S89-1.5-2.
 ap3 - Duplicate sample of S812-12.5-13.
 [] - Concentration exceeds NJDEP Residential Direct Contact
 Soil Cleanup Criteria.

Table 8

Summary Analytical Results of Pesticides and Polychlorinated Biphenyl Compounds for Soil Samples Collected
South Street Embankment Project
Jersey City, New Jersey

Sample ID / Sample Depth Lab Sample Number Sampling Date Matrix Dilution Factor Units	SR1-1.5-3 34386 12/03/97 SOLID 1.0 1.0	SR1-1.5-12 34381 12/03/97 SOLID 1.0 1.0	SR1-1.5-20 34383 12/03/97 SOLID 1.0 1.0	SR2-1.5-3 34385 12/03/97 SOLID 1.0 1.0	SR2-1.5-10 34385 12/03/97 SOLID 1.0 1.0	SR2-1.5-20 34384 12/03/97 SOLID 1.0 1.0	SR3-1.5-3 34386 12/03/97 SOLID 1.0 1.0	SR3-1.5-10 34387 12/03/97 SOLID 1.0 1.0	SR3-1.5-20 34386 12/03/97 SOLID 1.0 1.0	SR4-1.5-3 34379 12/03/97 SOLID 1.0 1.0	SR4-1.5-10 34371 12/03/97 SOLID 1.0 1.0	SR4-2.5-3 34372 12/03/97 SOLID 1.0 1.0
PESTICIDES/PCBs												
Aldrin	40	170	90,000									
alpha-BHC	NA	NA	NA									
beta-BHC	NA	NA	NA									
delta-BHC	NA	NA	NA									
gamma-BHC (indane)	520	2,200	90,000									
Chlordane	NA	NA	NA									
4'-DDE	3,000	12,000	60,000									
4'-DDD	2,000	9,000	60,000									
4'-DDT	2,000	9,000	60,000									
Chlorthal	42	180	90,000									
Endosulfan	340,000	6,200,000	90,000									
Endosulfan Sulfate	340,000	6,200,000	90,000									
Endosulfan Sulfate	NA	NA	NA									
Endosulfan Sulfate	17,000	310,000	90,000									
Endosulfan Sulfate	NA	NA	NA									
Endosulfan Sulfate	150	360	90,000									
Heptachlor	NA	NA	NA									
Heptachlor Epoxide	280,000	5,200,000	90,000									
Toxaphene	100	200	90,000									
Aroclor-1016	480	2,000	90,000									
Aroclor-1221	480	2,000	90,000									
Aroclor-1232	480	2,000	90,000									
Aroclor-1242	480	2,000	90,000									
Aroclor-1248	480	2,000	90,000									
Aroclor-1254	480	2,000	90,000									
Aroclor-1260	480	2,000	90,000									

Notes:
 * Values listed reflect the combined standards for "Total PCBs"
 -- Soil Cleanup criteria is provided for "Endosulfan" without specifications if it is for
 Endosulfan I or Endosulfan II
 Duo Duplicate sample of SR2-1.5-10
 Duo Duplicate sample of SR2-1.5-3
 Duo Duplicate sample of SR1-1.5-3
 U - The compound was not detected at the indicated concentration.
 B - Reported value is less than the Method Detection Limit but greater than or
 equal to the Instrument Detection Limit.
 N - The related sample recovery is not within control limits.
 NR - Not analyzed.
 NA - Not available.

**Summary Analytical Results of Pesticides and Polychlorinated Biphenyl Compounds for Soil Samples Collected
Bluth Street Entertainment Project
Jersey City, New Jersey**

[illegible]

Values listed reflect the combined standards for "Total PCBs"
 All Classen's criteria is provided for "Endosulfan" subject specification of it is to
 Endosulfan I or Endosulfan II
 Dup Duplicate sample of 582-15-5-18
 Dup2 Duplicate sample of 589-1-5-2
 Dup3 Duplicate sample of 591-1-5-13
 U- The compound was not detected at the indicated concentration
 B - Reported value is less than the Method Detection Limit but greater than
 equal to the Instrument Detection Limit.
 N- The asked sample recovery is not within control limits.
 NR - Not analyzed.
 NA- Not available.

Summary Analytical Results of Polychlorinated Biphenyl Compounds for Soil Samples Collected
Sixth Street Embankment Project
Jersey City, New Jersey

Sample ID / Sample Depth	Lab Sample Number	Sampling Date	Matrix	Quality Factor	Lab	Dup-1	Dup-2	Dup-3
						34369	34358	34882
						12/03/87	12/04/87	12/05/87
						SOLID	SOLID	SOLID
						1.0	1.0	1.0
						ug/kg	ug/kg	ug/kg
PESTICIDES/PCAs								
Alrin	40	170	50,000			4.1 U	4.1 U	3.6 U
alpha-BHC	NA	NA	NA	New Jersey Residential Impact to Ground Water		4.1 U	4.1 U	3.8 U
beta-BHC	NA	NA	NA	Direct Contact		4.1 U	4.1 U	3.6 U
gamma-BHC(Lindane)	520	2,200	60,000	Soil Cleanup		4.1 U	4.1 U	3.8 U
Chlordane	NA	NA	NA	Soil Cleanup		83 U	82 U	74 U
4'-DDD	3,000	12,000	50,000	Soil Cleanup		4.1 U	4.1 U	3.6 U
4'-DDE	2,000	8,000	50,000	Soil Cleanup		4.1 U	4.1 U	3.6 U
4'-DDT	2,000	8,000	500,000	Soil Cleanup		4.1 U	4.1 U	3.6 U
Depth	42	180	50,000			4.1 U	4.1 U	3.8 U
Endosulfan	340,000	6,300,000	80,000			4.1 U	4.1 U	3.8 U
Endosulfan	340,000	8,300,000	40,000			4.1 U	4.1 U	3.6 U
Endosulfan	NA	NA	NA			4.1 U	4.1 U	3.8 U
Endrin	17,000	310,000	50,000			4.1 U	4.1 U	3.6 U
Endrin/chrysol	NA	NA	NA			8.8 U	8.4 U	3.6 U
Endosulfone	NA	NA	NA			4.1 U	4.1 U	3.6 U
Heptachlor	150	650	50,000			4.1 U	4.1 U	3.6 U
Heptachlor epoxide	NA	NA	NA			78 U	74 U	74 U
Methoxychlor	200,000	5,200,000	50,000			83 U	82 U	74 U
Toxaphene	100	200	50,000			83 U	82 U	74 U
Aroclor 1618	400	2,000	50,000			83 U	82 U	74 U
Aroclor 1221	400	2,000	50,000			83 U	82 U	74 U
Aroclor 1232	400	2,000	50,000			83 U	82 U	74 U
Aroclor 1242	400	2,000	50,000			83 U	82 U	74 U
Aroclor 1248	400	2,000	50,000			83 U	82 U	74 U
Aroclor 1254	400	2,000	50,000			83 U	82 U	74 U
Aroclor 1260	400	2,000	50,000			83 U	82 U	74 U

Notes

Values listed reflect the combined standards for "Total PCBs".
— See Caution criteria is provided for "Endosulfan" without specification if it is to Endosulfan I or Endosulfan II.

Dup Duplicate sample of 6857-15.5-16
Dup2 Duplicate sample of 3388-15-5
Dup3 Duplicate sample of 3312-12.5-13

U - The compound was not detected at the indicated concentration.
B - Reported value is less than the Method Detection Limit but greater than equal to the Instrument Detection Limit.

N - The spiked sample recovery is not within control limits.
NR - Not analyzed.
NA - Not available.

Table 6

**Summary Analytical Results of Inorganic Compounds for Soil Samples Collected
Sixth Street Embankment Project
Jersey City, New Jersey**

Sample ID / Sample Depth Lab Sample Number Sampling Date Matrix Drying Factor Units	S81-1-5-1 34568 12/03/97 SOLID NA	S81-1-1-12 34561 12/03/97 SOLID NA	S81-1-1-12 34562 12/03/97 SOLID NA	S82-1-5-1 34563 12/03/97 SOLID NA	S82-1-5-16 34565 12/03/97 SOLID NA	S82-1-5-20 34564 12/03/97 SOLID NA	S83-1-5-20 34566 12/03/97 SOLID NA	S83-10-10.5 34567 12/03/97 SOLID NA	S83-19-5-20 34568 12/03/97 SOLID NA	S84-1-5-20 34569 12/03/97 SOLID NA	S84-14-5-15 34570 12/03/97 SOLID NA
METALS											
Aluminum	1820	5420	8630	2090	5270	8660	1000	8280	11800	847	8200
Antimony	4.6	0.66 U	1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.8 U	1.1 U	1.1 U	1.1 U
Arsenic	17.0	3.6	3.0	14.9	9.2	7.3	15.0	5.5	5.5	23.8	2.8
Barium	32.5 B	88.9	18.7 B	27.1 B	16.6	64.9	44.9	96.2	53.3	42.8 B	65.6
Beryllium	0.37 B	0.26 B	0.43 B	0.53	0.36 B	0.64	0.29 B	0.44 B	0.44	0.36 B	0.48
Calcium	0.095 U	0.063 U	0.098 U	0.092 U	0.30 U	0.098 U	0.47 B	0.10 B	0.097 U	0.10 B	0.093 U
Chromium	287 B	18000	900 B	1780	2310	1860	474	530 B	1550	797 B	3470
Chromium	8.9	13.7	9.8	4.3	12.4	21.5	42.6 B	16.9	14.8	17.9	16.2
Cobalt	8.3 B	3.5 B	0.7 B	4.3 B	3.9 B	13.2	3.7	0.4 B	7.5 B	3.3 B	7.5 B
Copper	105	20.3	15.6	73.0	41.1	18.7	221	89.0	12.9	86.7	25.5
Iron	42900	11000	17200	15000	13400	24100	40400	15600	17900	31800	15400
Lead	174	280	8.0	84.3	345	8.8	254	212	8.4	302	317
Manganese	73.2 B	4410	3170	134 B	1300	3040	115 B	2940	3830	87.4 B	3180
Mercury	0.16	481	240	814	55.4	188	157	1.35	147	81.4	334
Molybdenum	11.8	15.3	0.020 U	0.09	13.4	0.020 U	0.34	0.02 B	0.02 B	0.23	0.08
Nickel	281	4130	14.0	43.6	13.4	16.8	21.6	20.1	17.1	14.9	17.1
Potassium	2.9	874	722 U	207 B	712	419 B	348 U	1360	673	378 U	2580
Selenium	0.33 U	4.99 U	1.2 U	1.7	1.7	1.2 U	2.8	1.1	1.2 U	2.8	1.1 U
Silver	101	150 B	102 U	0.32 U	0.26 U	0.34 U	0.39 U	0.21 U	0.34 U	0.32 U	0.33 U
Sodium	1.1 U	150 B	102 U	120 B	178 B	103 U	98.4 B	142 B	153 B	102 B	148 B
Thallium	12.0	0.88 U	1.2 U	1.1 U	1.2 U	1.2 U	1.0 U	1.1 U	1.2 U	1.1 U	1.1 U
Vanadium	12.0	14.1	14.8	8.8 B	17.2	16.8	22.9	21.9	16.8	13.8	18.8
Zinc	43.2	88.0	61.4	365	179	31.9	144	158	43.4	40.9	47.4

Notes:

Dup Duplicate sample of S82-15.5-16

Dup2 Duplicate sample of S89-1-5-2

Dup3 Duplicate sample of S812-12.5-13

Qualifiers

U - The compound was not detected at the indicated concentration.

B - Reported value is less than the Method Detection Limit but greater than or

equal to the Instrument Detection Limit.

N - The spiked sample recovery is not within control limits.

NR - Not analyzed.

NA - Not available.

Concentration exceeds NJDEP Risk-Based Direct Contact Soil Cleanup Criteria.

Table 6
Summary Analytical Results of Inorganic Compounds for Soil Samples Collected
South Street Embankment Project
Jersey City, New Jersey

Sample ID / Sample Depth	SR4-11.5-24	SR5-10.5-11	SR5-10.5-24	SR6-12.5-13	SR6-12.5-24	SR7-10.5-20	SR7-10.5-28	SR8-1.5-2
Lab Sample Number	34372	34330	34331	34332	34334	34336	34341	34342
Sampling Date	12/04/87	12/04/87	12/04/87	12/04/87	12/04/87	12/04/87	12/04/87	12/04/87
Matrix	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Chromium Factor	NA	NA	NA	NA	NA	NA	NA	NA
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
METALS								
Aluminum	7970	8520	7340	2540	5790	8070	5600	1050
Antimony	1.1 U	3.4	1.4 B	1.4 B	1.8 B	2.1 B	1.1 B	3.6
Arsenic	2.6	2.7	2.7	2.7	2.0	4.2	3.4	8.4
Barium	48.8 B	86.2	33.7 B	82.1	89.7	80.2 B	52.1	49.2
Beryllium	0.47 B	0.36 B	0.41 B	0.28 B	0.22 B	0.32 B	0.31 B	0.19 B
Cadmium	0.100 U	0.30 B	0.14 U	0.14 U	0.14 U	0.16 U	0.14 U	0.14 U
Cerium	1800	3330	1380	883 B	10800	15000	3030	489 B
Chromium	10.2	13.5	8.3	14.9	11.0	16.5	10.0	4.4
Cobalt	4.5 B	9.6 B	5.9 B	7.2 B	6.7 B	6.1 B	4.8 B	1.8 B
Copper	13.7	73.5	38.4	16.2	27.4	26.2	25.5	36.0
Iron	12600	14200	13700	13100	13100	13000	14800	14500
Land	20.9	211	17.2	39.0	54.0	142	35.3	88.4
Magnesium	2280	4490	2090	2430	2430	3330	2410	93.8 B
Manganese	134	298	122	185	172	209	175	33.3
Mercury	0.09	0.92	0.94 B	0.06	0.13	0.27	0.21	0.10
Nickel	10.5	34.3	19.9	12.1	31.7	13.3	11.5	30.8
Potassium	539 B	3560	432 B	919	1380	1720	778 B	138 B
Selenium	1.2 U	1.1	1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.9
Silver	0.35 U	0.28 U	0.30 U	0.27 U	0.26 U	0.26 U	0.29 U	0.29 U
Sodium	169 B	323	98.8 U	78.8 U	88.4 B	318 B	133 U	80.8 B
Titanium	1.2 U	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.1 U	1.1 U
Vanadium	12.6	20.8	11.9 B	18.6	15.0	18.9	13.2	10.1 B
Zinc	44.9	279	89.0	49.3	56.0	178	58.2	160

Notes:
 Dup Duplicate sample of SR2-10.5-18
 Dup2 Duplicate sample of SR5-1.5-2
 Dup3 Duplicate sample of SR12-12.5-13
 Qualifiers
 U - The compound was not detected at the indicated concentration.
 B - Reported value is less than the Method Detection Limit but greater than or equal to the Instrument Detection Limit.
 N - The spiked sample recovery is not within control limits.
 NR - Not analyzed.
 NA - Not available.
 [] Concentration exceeds NJDEP Residential Direct Contact Soil Cleanup Criteria.

**Summary Analytical Results of Invertebrate Compounds for Ball Samples Collected
Sixth Street Embankment Project
- Jersey City, New Jersey**

Notes.
Dup Duplicate sample of SB2-15.5-16
Dup2 Duplicate sample of SB9-15-2
Dup3 Duplicate sample of SB12-17.5-13

U - The compound was not detected at the indicated concentration.
B - Reported value is less than the Method Detection Limit but greater than or equal to the Instrument Detection Limit.
N - The spiked sample recovery is not within control limits.
NR - Not analyzed
NA - Not available

Concentration exceeds NDEP Residential Direct Contact Soil Cleanup Criteria.

Table 8

Summary Analytical Results of Inorganic Compounds for Soil Samples Collected
South Street Enhancement Project
Jersey City, New Jersey

Sample ID / Sample Depth Lab Sample Number Sampling Date Matrix Detection Factor Units	SB12-15-2 34086 12/05/97 SOLID NA mg/kg	SB12-12-5-13 34088 12/05/97 SOLID NA mg/kg	SB12-31-31.5 34081 12/05/97 SOLID NA mg/kg	Dup 34386 12/05/97 SOLID NA mg/kg	Dup-2 34538 12/05/97 SOLID NA mg/kg	Dup-3 34852 12/05/97 SOLID NA mg/kg
METALS						
Aluminum	1470	4290	4460	3690	1750	4800
Antimony	NA	2.0 B	1.4 B	1.0 U	1.8 B	2.8 B
Asphalt	14	6.8	5.8	11.2	10.5	11.2
Barium	700	35.5 B	167	209	87.7	202
Beryllium	1	0.18 B	0.28 B	0.28 B	0.34 B	0.16 B
Cadmium	1	0.22 U	0.14 U	0.16 B	0.22 U	0.08 B
Cobalt	NA	149 B	15600	3030	800	11600
Copper	500	6.4	10.7	10.7	5.4	14.5
Chromium	NA	5.5 B	4.4 B	3.3 B	2.2 B	0.9 B
Cobalt	600	251	84.4	77.1	155	53.4
Iron	400	28400	13000	14000	15000	20000
Lead	NA	320	152	865	58.5	103
Magnesium	NA	54.0 B	1800	1120 B	92.1 B	1850
Manganese	NA	277	327	43.2	29.5	340
Mercury	14	0.15	0.56	3.0	0.37	1.1
Nickel	250	7.7 B	15.2	10.2	7.4	16.3
Polonium	NA	144 B	773 B	400 B	100 B	378 B
Selenium	63	1.4 U	1.2 U	1.7	1.9 U	1.6 U
Silver	100	0.43 U	0.28 U	0.37 U	0.44 U	0.40 U
Sodium	NA	181	118 B	181 B	104 U	133 B
Thallium	2	1.0 U	1.0 U	1.1 U	1.6 U	1.5 U
Vanadium	370	7.8 B	15.6	13.7	13.4 B	16.2 B
Zinc	1,500	17.1	694	105	14.3	872

Notes:

Dup Duplicate sample of SB12-15.5-16

Dup2 Duplicate sample of SB12-15-2

Dup3 Duplicate sample of SB12-12.5-13

Qualifiers

U - The compound was not detected at the indicated concentration.
B - Reported value is less than the Method Detection Limit but greater than or equal to the Instrument Detection Limit.

N - The spiked sample recovery is not within control limits.

NR - Not analyzed.

NA - Not available

Concentration exceeds NJDEP Residential Direct Contact Soil Cleanup Criteria.

**Summary Analytical Results of Wet Chemistry Compounds for Soil Samples Collected
Sixth Street Embankment Project
Jersey City, New Jersey**

U. The compound was not detected at the indicated concentration.

NA- Not available

Fig. 2. Ductility curves

01401, 13071 •

•

•

1. Introduction

**Summary Analytical Results of Wet Chemistry Compounds for Soil Samples Collected
East River Embankment Project
Jersey City, New Jersey**

Sample ID / Sample Depth	Sample Number	Sampling Date	Matrix	Method	SR-15-2	SR-15-10	SR-15-20	SR-15-30	SR-15-40	SR-15-50	SR-15-60	SR-15-70	SR-15-80	SR-15-90	SR-15-100	SR-15-110	SR-15-120	SR-15-130	SR-15-140	SR-15-150	SR-15-160	SR-15-170	SR-15-180	SR-15-190	SR-15-200	SR-15-210	SR-15-220	SR-15-230	SR-15-240	SR-15-250	SR-15-260	SR-15-270	SR-15-280	SR-15-290	SR-15-300	SR-15-310	SR-15-320	SR-15-330	SR-15-340	SR-15-350	SR-15-360	SR-15-370	SR-15-380	SR-15-390	SR-15-400	SR-15-410	SR-15-420	SR-15-430	SR-15-440	SR-15-450	SR-15-460	SR-15-470	SR-15-480	SR-15-490	SR-15-500	SR-15-510	SR-15-520	SR-15-530	SR-15-540	SR-15-550	SR-15-560	SR-15-570	SR-15-580	SR-15-590	SR-15-600	SR-15-610	SR-15-620	SR-15-630	SR-15-640	SR-15-650	SR-15-660	SR-15-670	SR-15-680	SR-15-690	SR-15-700	SR-15-710	SR-15-720	SR-15-730	SR-15-740	SR-15-750	SR-15-760	SR-15-770	SR-15-780	SR-15-790	SR-15-800	SR-15-810	SR-15-820	SR-15-830	SR-15-840	SR-15-850	SR-15-860	SR-15-870	SR-15-880	SR-15-890	SR-15-900	SR-15-910	SR-15-920	SR-15-930	SR-15-940	SR-15-950	SR-15-960	SR-15-970	SR-15-980	SR-15-990	SR-15-1000	SR-15-1010	SR-15-1020	SR-15-1030	SR-15-1040	SR-15-1050	SR-15-1060	SR-15-1070	SR-15-1080	SR-15-1090	SR-15-1100	SR-15-1110	SR-15-1120	SR-15-1130	SR-15-1140	SR-15-1150	SR-15-1160	SR-15-1170	SR-15-1180	SR-15-1190	SR-15-1200	SR-15-1210	SR-15-1220	SR-15-1230	SR-15-1240	SR-15-1250	SR-15-1260	SR-15-1270	SR-15-1280	SR-15-1290	SR-15-1300	SR-15-1310	SR-15-1320	SR-15-1330	SR-15-1340	SR-15-1350	SR-15-1360	SR-15-1370	SR-15-1380	SR-15-1390	SR-15-1400	SR-15-1410	SR-15-1420	SR-15-1430	SR-15-1440	SR-15-1450	SR-15-1460	SR-15-1470	SR-15-1480	SR-15-1490	SR-15-1500	SR-15-1510	SR-15-1520	SR-15-1530	SR-15-1540	SR-15-1550	SR-15-1560	SR-15-1570	SR-15-1580	SR-15-1590	SR-15-1600	SR-15-1610	SR-15-1620	SR-15-1630	SR-15-1640	SR-15-1650	SR-15-1660	SR-15-1670	SR-15-1680	SR-15-1690	SR-15-1700	SR-15-1710	SR-15-1720	SR-15-1730	SR-15-1740	SR-15-1750	SR-15-1760	SR-15-1770	SR-15-1780	SR-15-1790	SR-15-1800	SR-15-1810	SR-15-1820	SR-15-1830	SR-15-1840	SR-15-1850	SR-15-1860	SR-15-1870	SR-15-1880	SR-15-1890	SR-15-1900	SR-15-1910	SR-15-1920	SR-15-1930	SR-15-1940	SR-15-1950	SR-15-1960	SR-15-1970	SR-15-1980	SR-15-1990	SR-15-2000	SR-15-2010	SR-15-2020	SR-15-2030	SR-15-2040	SR-15-2050	SR-15-2060	SR-15-2070	SR-15-2080	SR-15-2090	SR-15-2100	SR-15-2110	SR-15-2120	SR-15-2130	SR-15-2140	SR-15-2150	SR-15-2160	SR-15-2170	SR-15-2180	SR-15-2190	SR-15-2200	SR-15-2210	SR-15-2220	SR-15-2230	SR-15-2240	SR-15-2250	SR-15-2260	SR-15-2270	SR-15-2280	SR-15-2290	SR-15-2300	SR-15-2310	SR-15-2320	SR-15-2330	SR-15-2340	SR-15-2350	SR-15-2360	SR-15-2370	SR-15-2380	SR-15-2390	SR-15-2400	SR-15-2410	SR-15-2420	SR-15-2430	SR-15-2440	SR-15-2450	SR-15-2460	SR-15-2470	SR-15-2480	SR-15-2490	SR-15-2500	SR-15-2510	SR-15-2520	SR-15-2530	SR-15-2540	SR-15-2550	SR-15-2560	SR-15-2570	SR-15-2580	SR-15-2590	SR-15-2600	SR-15-2610	SR-15-2620	SR-15-2630	SR-15-2640	SR-15-2650	SR-15-2660	SR-15-2670	SR-15-2680	SR-15-2690	SR-15-2700	SR-15-2710	SR-15-2720	SR-15-2730	SR-15-2740	SR-15-2750	SR-15-2760
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U. The compound was not detected at the indicated concentration.

NR • Not analyzed

OPERATING FOR YOU

'Dup. Duplicate sample of 5H2-15.5-16.

2. Duplicate samples of 500-1 B-2.

Aug. 3 Duplicate sample of 5812-12.5-13

- NUCEP Total Organic Carbon Content -

TABLE 7

**Summary Analytical Results of Wet Chemistry Compounds for Soil Samples Collected
Shah Street Embankment Project
Jersey City, New Jersey**

[illegible]

U - The compound was not detected at the indicated concentration.

URL - Not analyzed.

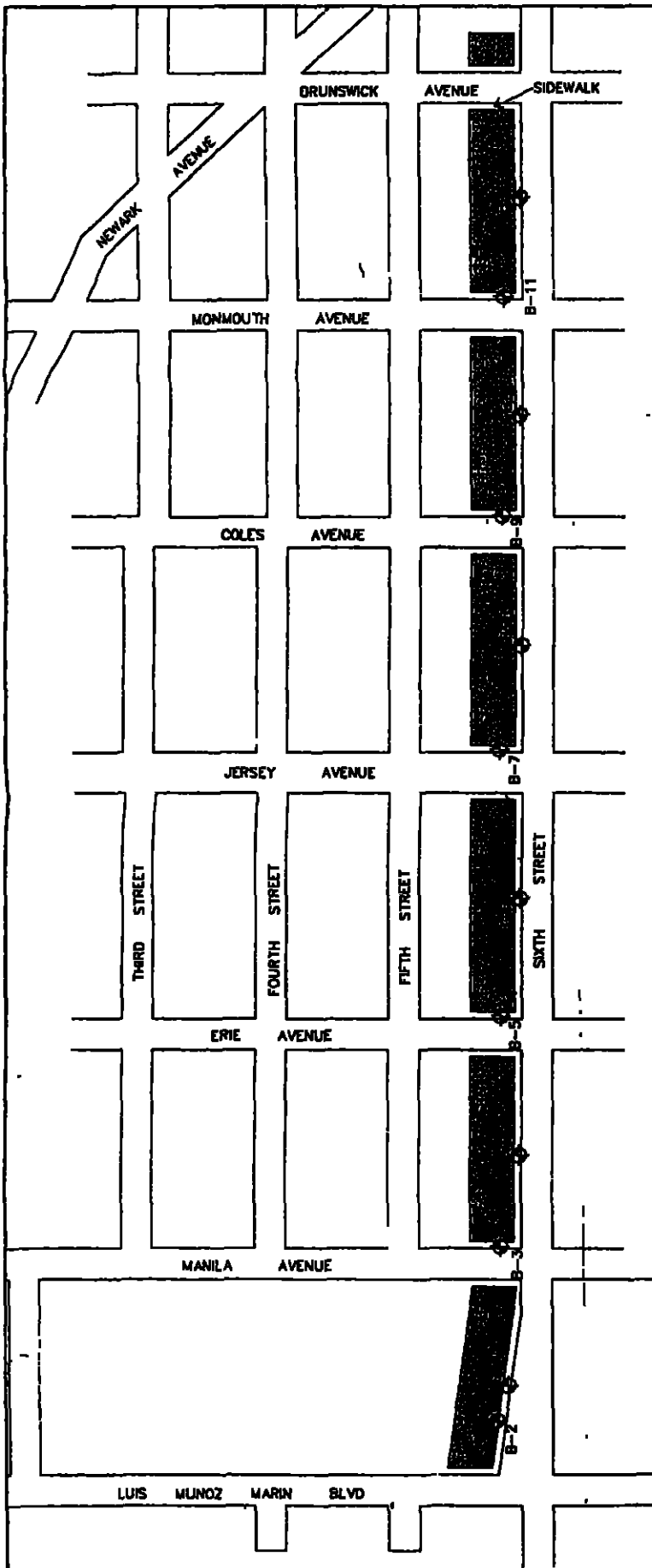
NA- Not available.

Dup. Duplicate sample of 502-18.5-18.

Qn. 2 Duplicate sample of 889-1.5-2

Out. 3 Duplicate sample of 9812-12.5-13.

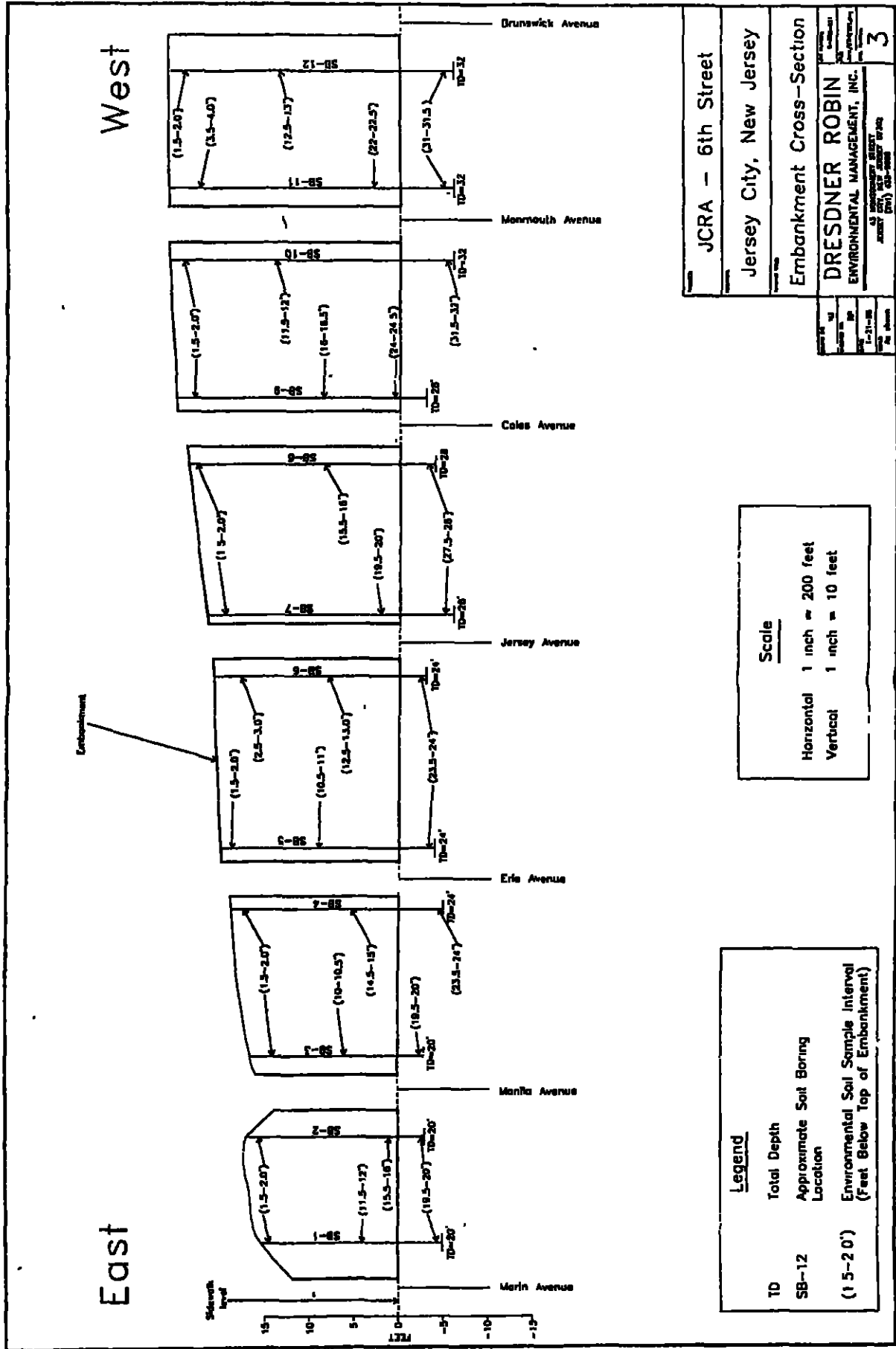
* NUDEP Total Organic Content Criteria.



LEGEND

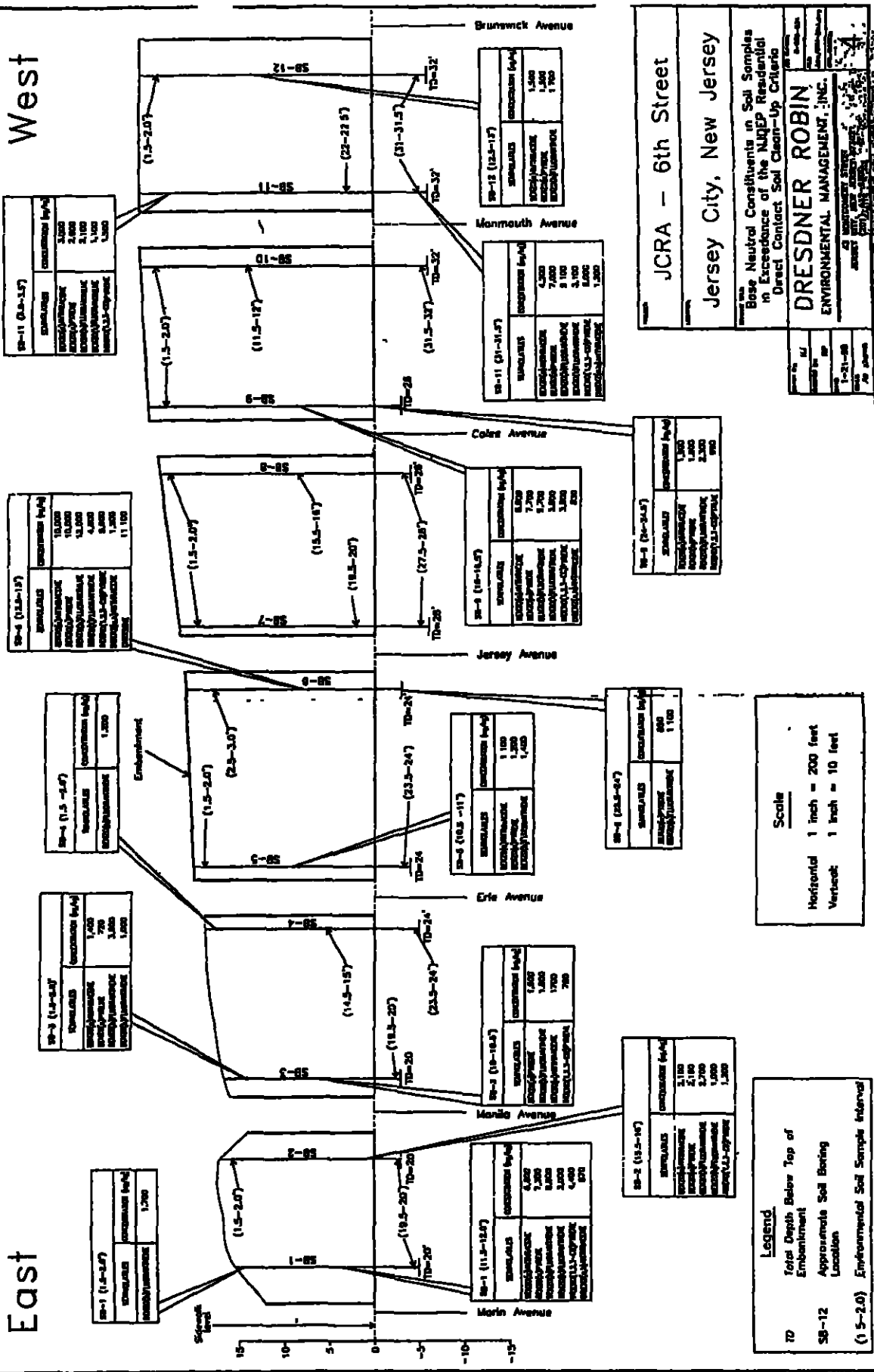
B-12 GEOTECHNICAL SOIL BORING LOCATION
 SB-12 ENVIRONMENTAL SOIL BORING LOCATION
 AREA OF FORMER CORRAL RAILROAD EMBARMENT
 NOTE: BORING DELETED FROM THE GEOTECHNICAL DRILLING PROGRAM DUE TO UNDERGROUND UTILITY LOCATION CONFLICT
 B-10

JCRA - 6th STREET	
JERSEY CITY, NEW JERSEY	
SOIL BORING LOCATION MAP	
DRESDNER ROBIN ENVIRONMENTAL MANAGEMENT, INC.	
200 WEST 11TH STREET JERSEY CITY, NJ 07310 (201) 922-1000	
DATE: 1-21-88 BY: [Signature] CHECKED: [Signature] SCALE: 1" = 200'	2



East

West

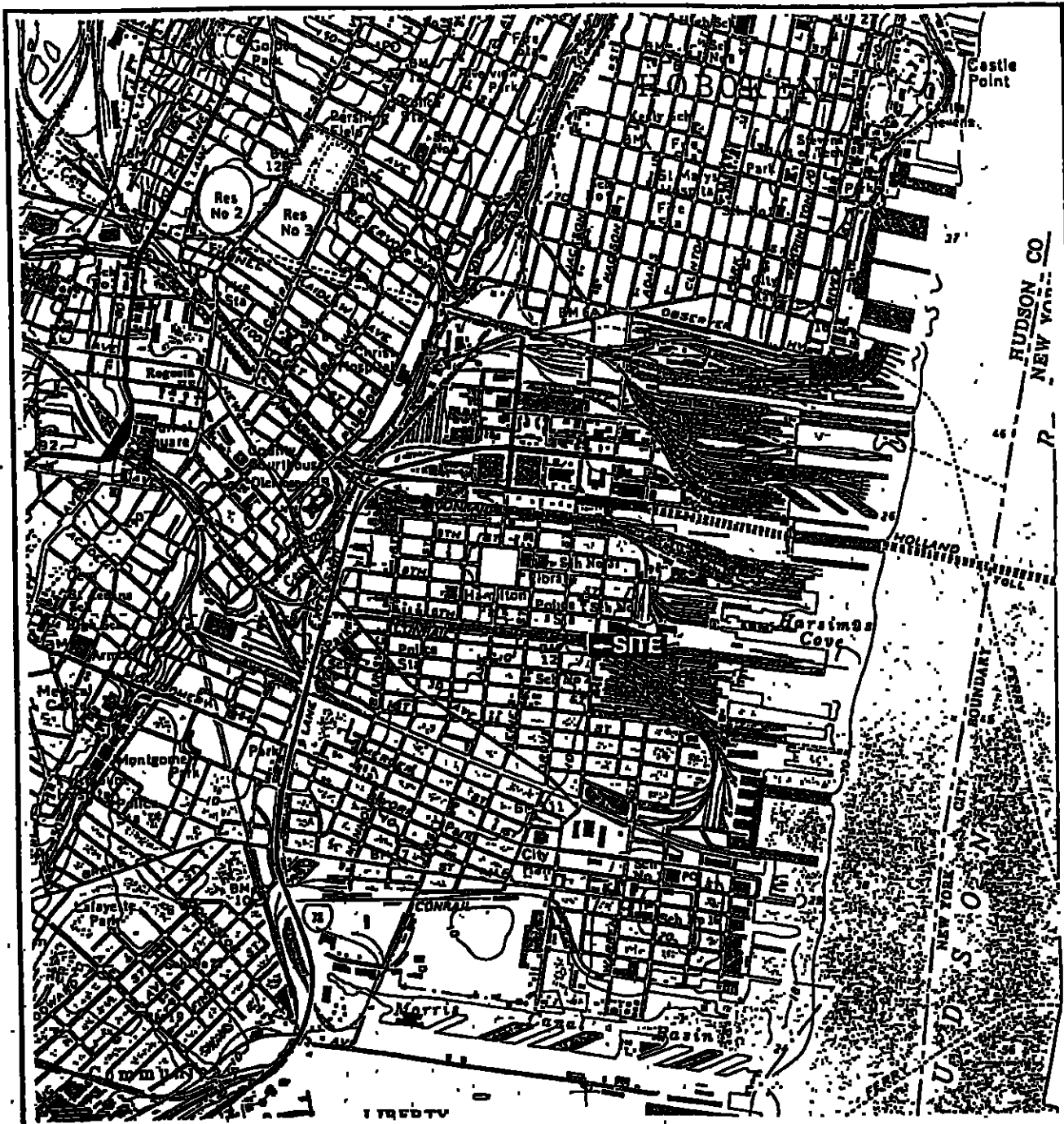


JCRA - 6th Street
Jersey City, New Jersey

Base Neutral Constituents in Soil Samples
in Excess of the NJDEP Residential
Direct Contact Soil Clean-Up Criteria

DRESDNER ROBIN
ENVIRONMENTAL MANAGEMENT, INC.

400 WEST 17TH STREET
JERSEY CITY, NJ 07310
201-961-1234



Scale 1:24000

N40°43.490' W74°02.455' Contour Interval 10 feet
S. P. C.: N689609.21901 E2173445.14439

**DRESDNER ROBIN
ENVIRONMENTAL
MANAGEMENT, INC.**

REGIONAL LOCATION
Sixth Street Embankments
Jersey City, N.J.

Source: USGS 7.5 Min. Series
Jersey City, NJ-NY
Quadrangle 119671



FIGURE

1

APPENDIX C



RON S. CORZINE
Governor

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Environmental Regulation
Office of Permit Coordination and Environmental Review
401 East State Street
P.O. Box 423
Trenton, New Jersey 08625-0423
Phone: (609) 292-3600 Fax: (609) 777-1330

LISA P. JACKSON
Commissioner

March 4, 2008

Mr. John K. Enright
Associate General Counsel
Conrail
1000 Howard Boulevard, 4th Floor
Mt. Laurel, NJ 08054

RE: Track Abandonment
Harsimus Branch & Hudson Street Industrial Track
Jersey City, Hudson County
STB No. 167 (Sub-No. 1189X)

Dear Mr. Enright:

The Office of Permit Coordination and Environmental Review of the New Jersey Department of Environmental Protection (NJDEP) has completed its review of your recent letter regarding the Conrail railroad lines known as the Harsimus Branch and the Hudson Street Industrial Track in Jersey City, Hudson County, New Jersey, STB No. 167 (Sub-No. 1189X). Conrail is proposing to abandon a portions of these lines. Your letter asked if there are any coastal zone areas in the vicinity of the proposal, and what effect would the proposal have on these zones.

The NJDEP's Office of Coastal Management's review of your letter and attached maps has determined that the abandonment of the lines may be either in or affect the coastal zone of New Jersey. If so, the proposed abandonment and associated activities or outcomes may have to be considered in terms of federal consistency standards. The Office of Coastal Management request that Conrail provide additional information regarding the current conditions on site and what is planned to be done at the site. They are most concerned with how the proposal will impact the Hudson River Waterfront Walkway and perpendicular access to the Walkway. Please contact Ruth Ehinger of the Office of Coastal Management at (609) 633-2201 if you have any questions regarding these comments.

Thank you for the opportunity to review the proposed abandonment.

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth C. Koschek". The signature is fluid and cursive, with the first name "Kenneth" and last name "Koschek" clearly distinguishable.

Kenneth C. Koschek
Supervising Environmental Specialist
Office of Permit Coordination
and Environmental Review

C: Ruth Ehinger, NJDEP
Charlie Welch, NJDEP

CONRAIL



March 26, 2008

Via Fax and US Mail

Kenneth C. Koschek
NJ Department of Environmental Protection
Office of Permit Coordination and Environmental Review
P. O. Box 423
Trenton, NJ 08625-0423

Dear Mr. Koschek:

In response to your March 4, 2008 letter (attached), Conrail submits the following supplemental information.

Question: The Office of Coastal Management request that Conrail provide additional information regarding the current conditions on site and what is planned to be done at the site. They are most concerned with how the proposal will impact the Hudson River Waterfront Walkway and perpendicular access to the Walkway.

Response: The subject lines of the proposed abandonment were used for rail freight operations. There are no existing undergrade bridges along the lines. However, historically, an elevated portion of the Harsimus Branch consisted of an undergrade bridge that traversed several street intersections. While the bridge no longer exists, some of the bridge supports are standing. Another elevated portion of the Harsimus Branch was supported by an embankment, which now consists of six blocks of embankment structures ("Embankment"). The Embankment was further supported by stone walls. The bridge spans connecting the Embankment were removed between the mid-1960s and the mid-1990s. The rails and ties of the subject lines were also removed over that period. Conrail's proposed abandonment will not involve will not involve any type of activity and, accordingly, there will be no impact on the Hudson River Waterfront Walkway or perpendicular access to the Walkway.

If I may be of any further assistance, please feel free to contact me at (856) 231-7206.

Sincerely,

John K. Enright / rkd

John K. Enright
Associate General Counsel
1000 Howard Boulevard, 4th Floor
Mt. Laurel, NJ 08054

cc: Ruth Ehinger



United States Department of the Interior

FISH AND WILDLIFE SERVICE

New Jersey Field Office
927 North Main Street, Building D
Pleasantville, New Jersey 08232
Tel: 609-646-9310 Fax: 609-646-0352
<http://www.fws.gov/northeast/njfieldoffice>



IN REPLY REFER TO:
08-I-0286

MAR 06 2008

The U.S. Fish and Wildlife Service (Service) is unable to respond to your recent request for project or site review pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended, 16 U.S.C. 1531 *et seq.*) (ESA). Staffing constraints currently limit the Service's New Jersey Field Office to reviewing only those projects that *may affect* federally listed species. The *may affect* determination is made by the federal action agency or non-federal project proponent using the information and instructions on our web site at <http://www.fws.gov/northeast/njfieldoffice/Endangered/consultation.html>. Service concurrence with a *no effect* determination is not required under the ESA.

If you wish to resubmit your request, please follow the instructions on our web site, and indicate which federally listed species under Service jurisdiction may occur in the project's impact area (*i.e.*, the *action area*). To expedite Service review, please provide all relevant project information listed on our web site. For projects in the northern counties of Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Morris, Passaic, Somerset, Sussex, Union, and Warren (*i.e.*, range of the Indiana bat (*Myotis sodalis*)), please indicate whether or not tree clearing is proposed, and, if so, describe the species, size (diameter at breast height), and number (or acres) of trees proposed for removal.

Please also refer to our web site for current lists of federally listed and candidate species in New Jersey, the National Bald Eagle Management Guidelines, and contacts for obtaining current information regarding State-listed and other species of concern from the New Jersey Natural Heritage and Endangered and Nongame Species Programs.

Reviewing Biologist:

Wendy Walsh
Wendy Walsh

Authorizing Supervisor:

John C. Staples
John C. Staples



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

MAR 12 2008

John K. Enright
Associate General Counsel
Conrail
1000 Howard Boulevard, 4th Floor
Mt. Laurel, New Jersey 08054

Dear Mr. Enright:

Thank you for providing the Environmental Protection Agency (EPA) the opportunity to comment on the project information Conrail plans to utilize to support a Surface Transportation Board railroad line abandonment application. EPA understands that CSX Transportation, Inc. and Norfolk Southern Railway Company also intend to file Notices of Discontinuance of Service for the same lines concurrently with Conrail's application.

The proposed project involves abandonment of a segment of the Harsimus Branch and the entire adjacent Hudson Street Industrial Track, both of which are located in Hudson County, Jersey City, New Jersey. EPA has evaluated the project description and U.S.G.S. maps included with your letter. However, before responding to your request for a determination regarding whether a Clean Water Act Section 402 permit is required, we are requesting additional information, as follows:

- A Section 402 permit is required if there are any point source discharges (via pipes, ditches, storm drainage, construction site runoff) to waters of the U.S. from the site, e.g., to the Hudson River. Will there be such a discharge and what is the source of the discharge?**
- GIS mapping indicates that the site contains wetland resources. Is there any hydrological connection to the Hudson River? If so, a Section 404 permit is required for placing any dredged or fill materials into wetlands and other waters of the U.S.**
- Has a site investigation been conducted to ascertain the presence of hazardous materials, such as polychlorinated biphenyls (PCBs)? If so, how will these materials be managed to avoid degradation of water quality standards?**

In addition, according to your letter, the rails and ties have already been removed and no salvage activity or land disturbance was involved. Please describe these prior activities more fully, including the environmental mitigation measures which were implemented, and provide a copy of the permit which was obtained, if any. If you have any questions regarding this letter, please contact LeAndrea Dames of my staff at (212) 637-3705.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Grace Musumeci". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Grace Musumeci, Chief
Environmental Review Section
Strategic Multi-Media Programs Branch

CONRAIL®



March 25, 2008

Grace Musumeci, Chief
Environmental Review Section
U.S. Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866

Dear Ms. Musumeci:

In response to your March 12, 2008 letter, Conrail submits the following supplemental information.

Question: A Section 402 permit is required if there are any point source discharges (via pipes, ditches, storm drainage, construction site runoff) to waters of the U.S. from the site, e.g., to the Hudson River. Will there be such a discharge and what is the source of the discharge?

Response: The proposed abandonment will not involve any activity that will create any point source discharges to waters of the U.S.

Question: GIS mapping indicates that the site contains wetland resources. Is there any hydrological connection to the Hudson River? If so, a Section 404 permit is required for placing any dredged or fill materials into wetlands and other waters of the U.S.

Response: The proposed abandonment does not involve excavation or other activity that would create any dredged or fill materials, and therefore no dredged or fill materials will be placed into wetlands or other waters of the U.S.

Question: Has a site investigation been conducted to ascertain the presence of hazardous materials, such as polychlorinated biphenyls (PCBs)? If so, how will these materials be managed to avoid degradation of water quality standards?

Response: In connection with a proposed redevelopment by a third party, of the property surrounding and including the embankment, soil sampling and analysis was conducted in 2005, which concluded that any detected contamination can be designated as "Historical Fill" type contamination. Moreover, the proposed abandonment will not

involve any type of activity and, accordingly, there will be no degradation of water quality standards.

Question: In addition, according to your letter, the rails and ties have already been removed and no salvage activity or land disturbance was involved. Please describe these prior activities more fully, including the environmental mitigation measures which were implemented, and provide a copy of the permit which was obtained, if any.

Response: For the most part, the abandonment involved the removal of bridge spans that connected six sections of an embankment that remains in place. It was Conrail's policy and practice (or that of its predecessor railroads), during the time of said removal activities (mid-60s to mid-90s), to engage an outside contractor for such demolition and removal work. Any such contractor was required to obtain whatever permits were necessary. While Conrail does not have a record of what permits, if any, were obtained in connection with the prior removal, we note that most of the subject rail lines were elevated and, therefore, not located near any waterways nor in need of soil excavation.

If I may be of any further assistance, please contact me at (856) 231-7206.

Thank you for your cooperation.

Sincerely,

Handwritten signature of John K. Enright in cursive script.

John K. Enright
Associate General Counsel
1000 Howard Boulevard, 4th Floor
Mt. Laurel, NJ 08054

Enclosure(s)



State of New Jersey

DEPARTMENT OF TRANSPORTATION
P O Box 600
Trenton, New Jersey 08625-0600

JON S CORZINE
Governor

KRIS KOLLURI, Esq.
Commissioner

March 13, 2008

John K. Enright
Associate General Counsel
CONRAIL
1000 Howard Boulevard, 4th Floor
Mt. Laurel, NJ 08054

RE: Harrimus Branch/Hudson Street Industrial Track Abandonment Proceeding
STB No.: AB167 (Sub-No. 1189X) – Conrail
STB No.: AB55 (Sub-No. 686X) – CSX Transportation, Inc.
STB No.: AB290 (Sub-No. 306X) – Norfolk Southern Railway

Dear Mr Enright:

The New Jersey Department of Transportation (NJDOT) Bureau of Rail Services has reviewed your letter of February 7, 2008 regarding the above cited abandonment proceeding.

The NJDOT has no interest in this transaction as it pertains to rail freight services.

Sincerely,

James L. Badgley
Manager
Rail Services



Simon Monroe
<Simon.Monroe@noaa.gov>
04/21/2008 05:17PM

To "Ennght, John" <John.Ennght@Conrail.com>
cc Surface Transportation Board <sea@stb.dot.gov>, National
Society of Professional Surveyors
<Dawn.James@acsm.net>, Gilbert Mitchell
bcc

Subject: NGS Response, STB Docket AB-167 (SUB NO. 1189X)

Thank you for sharing your railroad abandonment environmental report for
Jersey City, Hudson County, NEW JERSEY

Approximately 00 geodetic survey marks may be located in the area described,
If marks will be disturbed by the abandonment, [THE RAILROAD] shall
consult with the National Geodetic Survey (NGS) at least 90 days prior to
beginning salvage activities that will disturb, or destroy any geodetic station
marks are described on the attached file. Additional advice is provided at
<http://geodesy.noaa.gov/marks/railroads>

ID	VID	Vert_Source	Approx.	Approx.	Ulab	Designation
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No Stations Found.

EXHIBIT C

CONRAIL

February 6, 2009

New Jersey State Clearinghouse
State Review Process
Office of the Governor
P O. Box 001
Trenton, NJ 08625-0001

Stephen Dilts, Commissioner
New Jersey Dept. of Transportation
1035 Parkway Avenue
CN-600
Trenton, NJ 08625

U. S. Department of the Interior
National Park Service
Chief, Recreation Resources Assistance Division
1849 C Street, NW - Room 3129
Washington, DC 20240

U.S. Department of the Interior
National Park Service
Chief, Land Resources Division
1849 C Street - Room 3120
Washington, DC 20240

Bob Korpanty
Department of Defense - MTMCTEA
Attn: Railroads for National Defense
720 Thimble Shoals Boulevard, Suite 130
Newport News, VA 23606-2574

Gail Kimbell, Chief
USDA Forest Service
Sidney R. Yates Federal Building
1400 Independence Avenue, SW
Washington, DC 20250-0003

RE: Docket No. AB 167 (Sub-No. 1189X)
Consolidated Rail Corporation -- Abandonment
Exemption -- in Hudson County, New Jersey

Docket No AB 55 (Sub-No 686X)
CSX Transportation, Inc. -- Discontinuance
Exemption -- in Hudson County, New Jersey

Docket No. AB 290 (Sub-No. 306X)
Norfolk Southern Railway Company -- Discontinuance
Exemption -- in Hudson County, New Jersey

Dear Sir/Madam:

This is to notify you pursuant to 49 C F R. 1152.50(d)(1) that on or after February 26, 2009, Consolidated Rail Corporation ("Conrail"), CSX Transportation, Inc. ("CSXT"), and Norfolk Southern Railway Company ("NS") intend to file combined Notices of Exemption with the Surface Transportation Board for abandonment (Conrail) and discontinuance of service (CSXT and NS) of the rail line shown on the attached map, and more fully described below:

Name: Harsimus Branch

Location: Hudson County, New Jersey, traversing United States Postal Service
Zip Codes 07302, 07306, and 07310

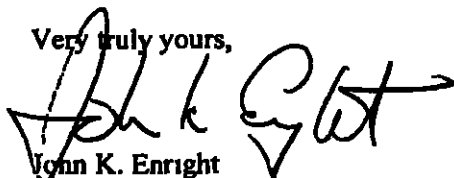
Description of Track: From approximately milepost 0.0± to approximately milepost
1.36± in the city of Jersey City, Hudson County, New Jersey

Length of Track: 1.36 total miles±

The Notices of Exemption will be filed pursuant to the provisions of 49 C.F.R. 1152.50 regarding abandonment of out-of-service lines of railroad. Based on information in our possession, the line does not contain federally granted rights-of-way. Any documentation in our possession will be made available promptly to those requesting it.

If you have any questions concerning this proceeding, please call me at the number shown below.

Very truly yours,



John K. Enright
Associate General Counsel
1717 Arch Street, 32nd Floor
Philadelphia, PA 19103
(215) 209-5012

Enclosure

cc: Anne K. Quinlan, Secretary
Surface Transportation Board
395 E Street, SW
Washington, D.C. 20423-0001

Regional Director
National Park Service – Northeast Region
U S Custom House
200 Chestnut Street, 5th Floor
Philadelphia, PA 19106

Begin Milepost 0.00

HARSIMUS BRANCH
LINE CODE 1420

End Milepost 1.36

LIBERTY
STATE PARK

JERSEY CITY, N. J. - N. Y.
N4037.5-W7400/7 5

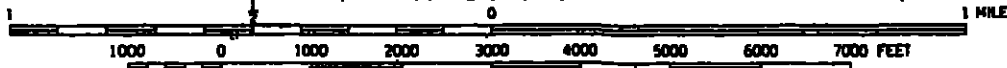
1967
PHOTOREVISED 1981
DMA 6165 II NE-SERIES V822

ANTICIPATED LINE ABANDONMENT
HARSIMUS BRANCH

■■■■■■■■ ANTICIPATED ABANDONMENT

EXHIBIT "A"
1 of 2

SCALE 1 24 000



Jersey City, New Jersey

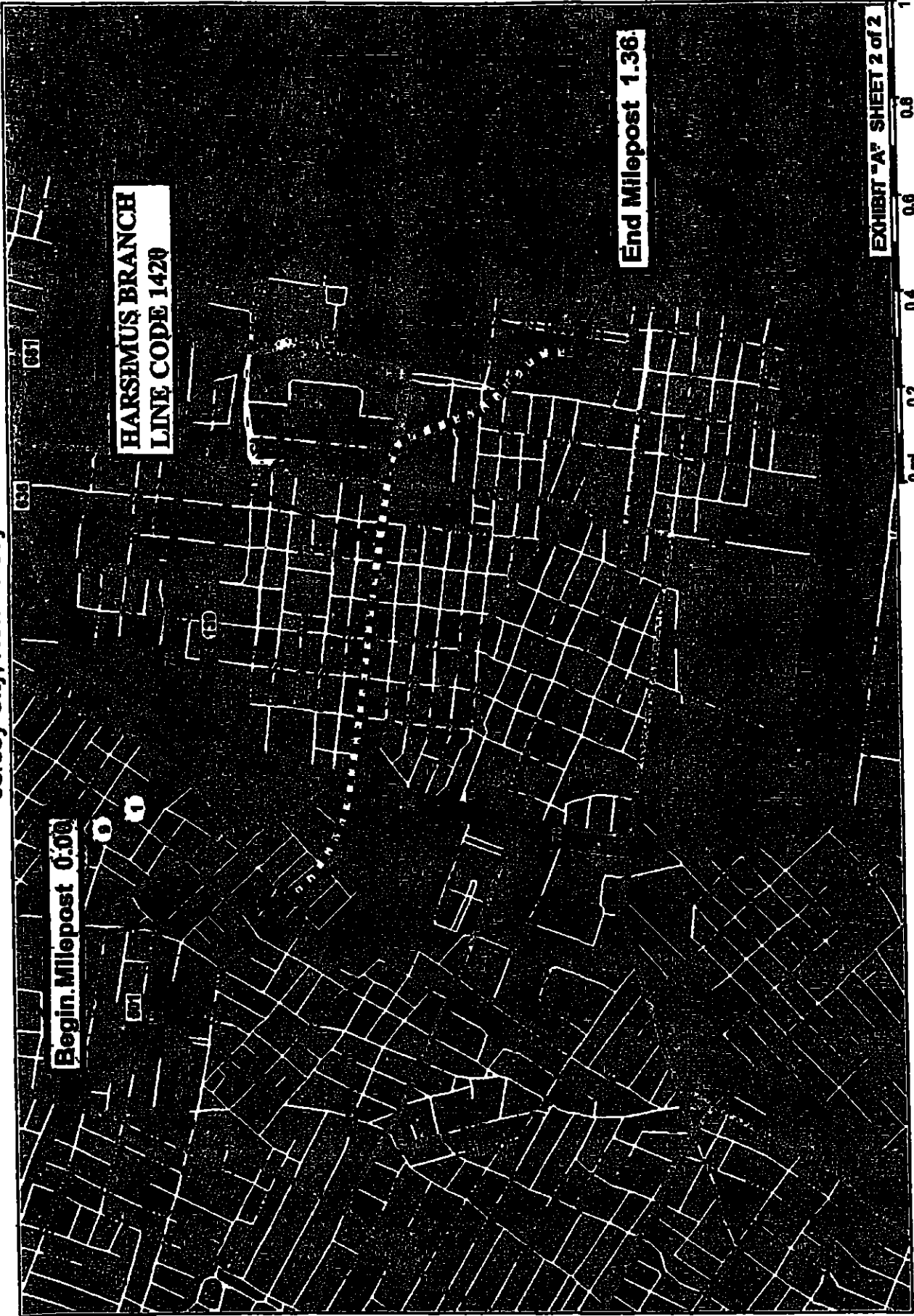


EXHIBIT D

February 6, 2009

To: All Parties on Attached Service List

Re: Docket No. AB 167 (Sub-No. 1189X)
Consolidated Rail Corporation—Abandonment
Exemption—in Hudson County, New Jersey

Docket No. AB 55 (Sub-No. 686X)
CSX Transportation, Inc.—Discontinuance
Exemption—in Hudson County, New Jersey

Docket No. AB 290 (Sub-No 306X)
Norfolk Southern Railway Company—Discontinuance
Exemption—in Hudson County, New Jersey

On January 6, 2009, Consolidated Rail Corporation (“Conrail”), CSX Transportation, Inc. (“CSXT”), and Norfolk Southern Railway Company (“NS”) filed with the Surface Transportation Board (“STB”) combined Notices of Exemption for abandonment (Conrail) and discontinuance of service (CSXT and NS) regarding a rail line known as the Harsimus Branch (between milepost 0.00 and 1.36) in the City of Jersey City, Hudson County, New Jersey. The same day, pursuant to 49 C.F.R. §§ 1105.7, 1105.8, and 1105.11, Conrail served a consultation notice on the public agencies specified in those regulations, along with its Supplemental Environmental and Historic Report. Because the consultation notice was not served 20 days in advance of the filing of the Notices of Exemption, as required by the regulations, and because Conrail was moving to stay the effective date of the Notices of Exemption for 180 days, Conrail sought a waiver from the STB of the pre-filing notification requirement. In a decision served January 26, 2009, the STB denied Conrail’s request for a waiver of the pre-filing notification requirement and Conrail’s motion to stay the effective date of the Notices of Exemption for 180 days—without prejudice to Conrail refiling under the normal procedure for abandonment notices of exemption.

Conrail intends to refile its Notice of Exemption on or about February 26, 2009, under the normal procedure. The Supplemental Environmental and Historic Report that Conrail circulated on January 6, 2009, has not changed. A month has passed since Conrail circulated that Report. Nevertheless, out of an abundance of caution, to ensure there is no question of compliance with 49 C.F.R. §§ 1105.7, 1105.8, and 1105.11, Conrail is again providing a copy of that Supplemental Environmental and Historic Report describing the proposed abandonment undertaking and the possible indirect environmental and historical effects that may arise from reuse of the "Embankment" portion of the property by third parties after abandonment, as well as a map of the affected area.

Conrail does not believe that any particular reuse is reasonably foreseeable or that the proposed abandonment would be the proximate cause of such reuse. A number of potential uses have been proposed for the property, and active negotiations continue about the various possibilities. Two possibilities appear more likely than others. The first is that the property will be acquired by the City and converted to a public park. The second is that the current owners of the various properties making up the Embankment will develop those properties for residential housing. Although Conrail does not believe that either of those reuse possibilities is reasonably foreseeable or would be caused by abandonment of the right-of-way, Conrail has addressed them in the attached Supplemental Environmental and Historic Report.

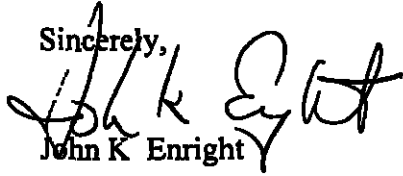
Conrail is providing this Report so that you may review the information that will form the basis for the STB's independent environmental and historic preservation analysis of this proceeding. If any of the information is misleading or incorrect, if you believe that pertinent information is missing, or if you have any questions about the Board's environmental review process, please contact the Section of Environmental Analysis ("SEA"), Surface Transportation Board, 395 E Street, SW, Washington, DC 20423, telephone (202) 245-0295, and refer to Docket No. AB 167 (Sub-No. 1189X). Because the applicable statutes and regulations impose stringent deadlines for processing this action, your written comments to SEA (with a copy to our representatives) would be appreciated within 3 weeks.

Your comments will be considered by the Board in evaluating the environmental and/or historic preservation impacts of the contemplated action. If there are any questions concerning this proposal, please contact our representatives directly. Conrail's representatives are John K. Enright, Associate General Counsel, Consolidated Rail Corporation, who may be contacted by telephone at (215) 209-5012 or by mail at 1717

All Parties on Attached Service List
February 6, 2009
Page 3

Arch Street, 32nd Floor, Philadelphia, PA 19103, and Robert M. Jenkins III, Mayer
Brown LLP, who may be contacted by telephone at (202) 263-3261 or by mail at 1909 K
Street, NW, Washington, DC 20006.

Sincerely,

A handwritten signature in black ink, appearing to read "John K. Enright". The signature is written in a cursive, flowing style with a large initial "J" and "E".

John K Enright

Begin Milepost. 0.00

HARSIMUS BRANCH
LINE CODE 1420

End Milepost 1.36

LIBERTY
STATE PARK

JERSEY CITY, N. J. - N. Y.
N4037 5-W7400/7 5

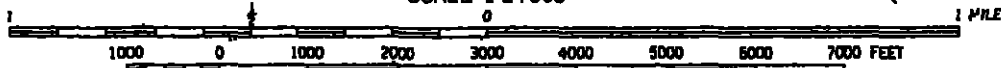
1967
PHOTOREVISED 1981
DMA 6165 II NE-SERIES V822

ANTICIPATED LINE ABANDONMENT
HARSIMUS BRANCH

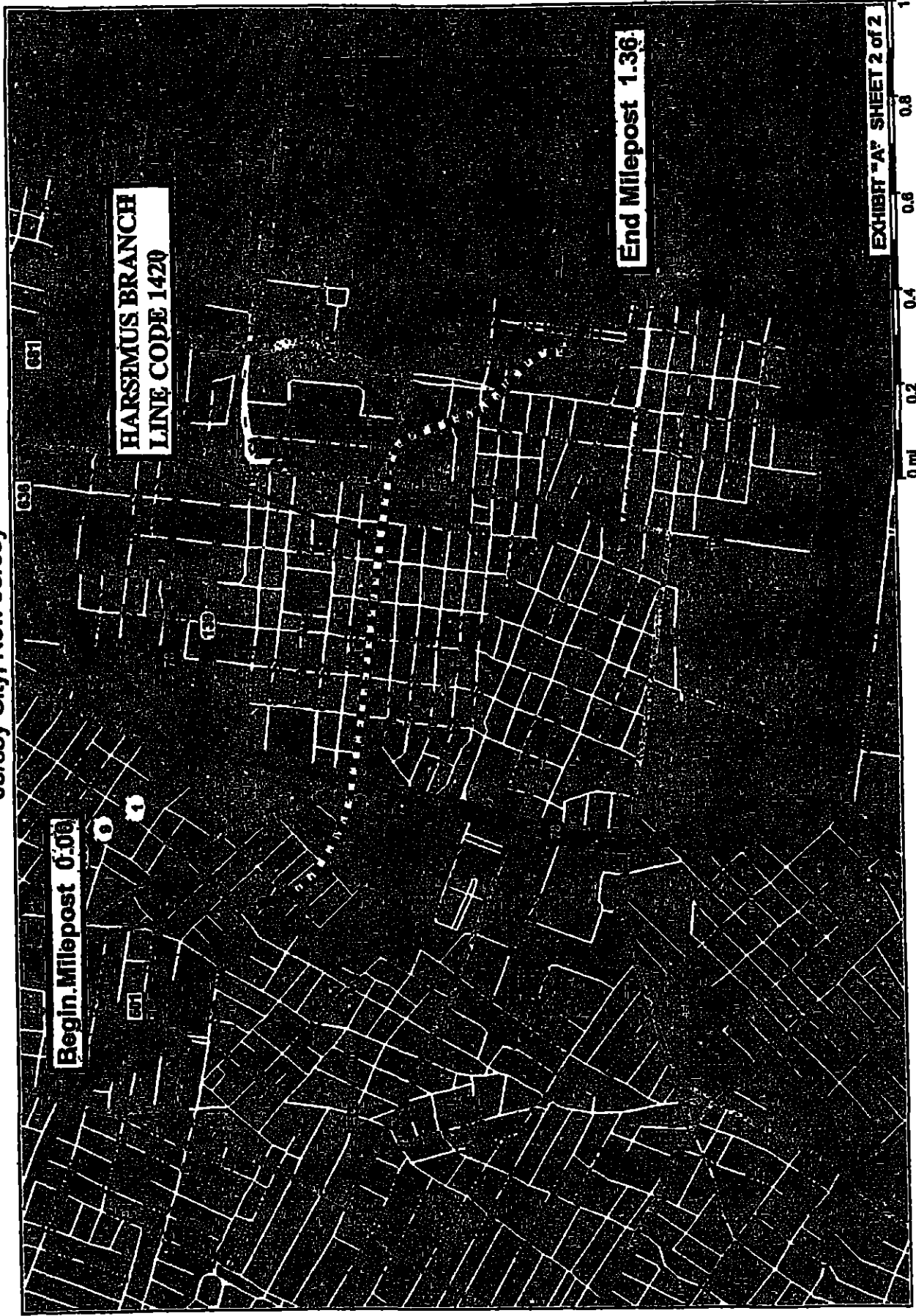
■■■■■■■■■■ ANTICIPATED ABANDONMENT

EXHIBIT "A"
1 of 2

SCALE 1:24000



Jersey City, New Jersey



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(Barilux Canada and/or Geometric Canada), all rights reserved.

AGENCY SERVICE LIST

Bradley M. Campbell, Commissioner
State Historic Preservation Office
Department of Environmental Protection
401 East State Street
P.O. Box 404
Trenton, NJ 08625-0404

New Jersey State Clearinghouse
State Review Process
Office of the Governor
P.O. box 001
Trenton, NJ 08625-0001

Robert B. Piel, Jr., Manager
NJ Department of Environmental Protection
Bureau of Inland Regulation
401 East State Street, 7th Floor
P.O. Box 402
Trenton, NJ 08625-0402

Kenneth C. Koschek
NJ Department of Environmental Protection
Office of Permit Coordination and
Environmental Review
P O. Box 418
Trenton, NJ 08625-0418

Thomas A. DeGise
County Executive
Justice Brennan Court House
583 Newark Avenue
Jersey City, NJ 07306

The District Engineer
U.S. Army Engineer District, New York
Jacob K. Javits Federal Building
26 Federal Plaza, Room 2109
New York, NY 10278-0090

U.S. Fish and Wildlife Service
New Jersey Field Office
927 North Main Street
Heritage Square, Building D
Pleasantville, NJ 08232

Grace Musumeci, Chief
Environmental Review Section
U.S. Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866

**Mayor Jerramiah T. Healy
City Hall – 280 Grove Street
Jersey City, NJ 07302**

**Richard Snay, Chief
Spatial Reference System Division
National Geodetic Survey
1315 East-West Highway
Silver Spring, MD 20910-3282**

**U.S. Department of the Interior
National Park Service
Chief, Recreation Resources Assistance Division
1849 C Street, NW
Room 3129
Washington, DC 20240**

**Stephen D. Marks, Director
Hudson County Planning Division
Justice Brennan Court House
583 Newark Avenue
Jersey City, NJ 07306**

**State Conservationist
Natural Resources Conservation Service
220 Davidson Avenue, 4th Floor
Somerset, NJ 08873-4115**

**Regional Director
National Park Service
U.S. Custom House
200 Chestnut Street, 5th Floor
Philadelphia, PA 19106**

**NJ Department of Environmental Protection
Bureau of Coastal and Land Use Enforcement,
North Central Region
P.O. Box 422
401 East State Street, 4th Floor
Trenton, NJ 08625-0422**

EXHIBIT E



BEST LOCAL CLASSIFIEDS

Notices and Announcements-Legal Notice

AD TEXT

Legal Notices

NOTICE Consolidated Rail Corporation ("Conrail") gives notice that on or after February 26, 2009, it intends to file with the Surface Transportation Board, 395 E Street, SW, Washington, DC 20423, a Verified Notice of Exemption under 49 C.F.R. 1152 Subpart F-Exempt Abandonments, permitting the abandonment of a 1.36-mile segment of what the Board has determined to be a line of railroad, between railroad Milepost 0.00 (CP Waldo) and Milepost 1.36 (east of Washington Street), which traverses through United States Postal Service Zip Codes 07302, 07306, and 07310 in the City of Jersey City, Hudson County, New Jersey. (According to the Board, the Milepost at CP Waldo is 2.54 and the Milepost at a point near Marin Boulevard is 1.30. The Board has not assigned a Milepost number to the point east of Washington Street.) The proceeding will be docketed as STB No. AB 167 (Sub-No. 1189X). Simultaneous with Conrail's filing of its abandonment application, CSX Transportation, Inc. ("CSXT") and Norfolk Southern Railway Company ("NS") will be filing Verified Notices of Discontinuance of Service with respect to the same property, and these applications will be docketed as STB No. AB 55 (Sub-No. 686X) and STB No. AB 290 (Sub-No. 306X). The Board's Section of Environmental Analysis (SEA) will generally prepare an Environmental Assessment (EA), which will normally be available 25 days after the filing of the notice of exemption. Comments on environmental and energy matters should be filed no later than 15 days after the EA becomes available to the public and will be addressed in a Board decision. Interested persons may obtain a copy of the EA or make inquiries regarding environmental matters by writing to the Section of Environmental Analysis, Surface Transportation Board, 395 E Street, SW, Washington, DC 20423, or by calling that office at 202-245-0295. Appropriate offers of financial assistance to revive railroad service can be filed with the Board. Requests for environmental conditions, public use conditions, or rail banking/trails use also can be filed with the Board. An original and 10 copies of any pleading that raises matters other than environmental issues (such as trails use, public use, and offers of financial assistance) must be filed directly with the Board's Office of the Secretary, 395 E Street, SW, Washington, DC 20423, and one copy must be served on applicants' representatives. Questions regarding offers of financial assistance, public use or trails use may be directed to the Board's Office of Congressional and Public Services at 202-245-0230. Copies of any comments or requests for conditions should be served on the Applicants' representatives. John K. Enright, Associate General Counsel, Consolidated Rail Corporation, 1717 Arch Street, 32nd Floor, Philadelphia, PA 19103, telephone 215-209-5012, and Robert M. Jenkins III, Mayer Brown LLP, 1909 K Street, NW, Washington, DC 20006, telephone 202-263-3261 \$147.00

Published in *The Star Ledger* 2/24 Updated 2/24