FINAL PLAN OF REMEDIAL ACTION

SCANNED
JAN 21 2009
File# 1395 B9

Pavilion Site

5th and DuPont Streets
Wilmington, DE

January 2009
DNREC Project No. DE-1395

This Final Plan of Remedial Action (Final Plan) presents the Department of Natural Resources and Environmental Control's (DNREC's) determination that the excavation and removal of the impacted soils, completed under an interim action in 2008, removed the risk to the polycyclic aromatic hydrocarbons (PAHs) and pesticides from this Site.

DNREC issued public notice of the Proposed Plan for the Site on Sunday, December 7, 2008 and opened a 20-day public comment period, which ended on January 7, 2009. The Proposed Plan requires no further remedial action at the Pavilion Site.

The Proposed Plan also includes the location of additional information found on the DNREC web page and in the DNREC office at Lukens Drive in New Castle.

There were no comments or questions from the public regarding the Proposed Plan. Therefore, the Proposed Plan was adopted as the Final Plan (see attached).

Approval:
This Final Plan meets the requirements of the Hazardous Substance Cleanup Act.

Kathleen Stiller-Banning 1/15/09
Kathleen Stiller-Banning, Program Manager II
Division of Air and Waste Management

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PROPOSED PLAN OF REMEDIAL ACTION

Pavilion Site
5th and DuPont Streets
Wilmington, DE
DNREC Project No. DE-1395

December 2008

Delaware Department of Natural Resources and Environmental Control
Division of Air and Waste Management
Site Investigation & Restoration Branch
391 Lukens Drive
New Castle, Delaware 19720

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PROPOSED PLAN OF REMEDIAL ACTION

Pavilion Site
5th and DuPont Streets
Wilmington, DE
DNREC Project No. DE-1395

Approval:
This Proposed Plan meets the requirements of the Hazardous Substance Cleanup Act.

Approved by:

James D. Werner, Director
Division of Air and Waste Management

3 Dec 2008
Date

Pavilion Site
5th and DuPont Streets
Wilmington, DE

What is the Pavilion Site? The Pavilion site is a piece of property made up of 4 contiguous parcels located at the northwestern corner of the intersection of 5th and DuPont Streets in Wilmington, Delaware. The property was certified as a Brownfield Site by DNREC-SIRB on August 15, 2006. Most recently, the site was used as a parking lot by St. Francis Hospital.

Tax parcel numbers: 26-026.20-314, 26-027.10-159, 26-027.30-001, and 26-027.30-002
Nearest major intersection: 5th Street and DuPont Street
Area: 0.3 acres
Zoning: Exempt Residential and Exempt Commercial
Utilities: Water and sewer utilities are available at the Pavilion site from the City of Wilmington; however the site is not currently connected to these utilities.
Nearest surface water body: A small, unnamed intermittent stream is mapped at a distance of ~½ mile to the north of the property, which flows northeast into the Brandywine Creek 1 mile from the site.
Groundwater: Shallow groundwater at the site flows generally northeast, toward the Brandywine Creek. The site is not within the 100-year flood plain of Brandywine Creek.
Surrounding property: Surrounding land use is residential and commercial. St. Francis Hospital occupies several properties to the north of the site.

What happened at the Pavilion Site? Previous owners of portions of the property used it for residential and industrial purposes which may have resulted in contamination of the soils. In addition, historical development within the City of Wilmington often used fill materials later found to contain contamination.

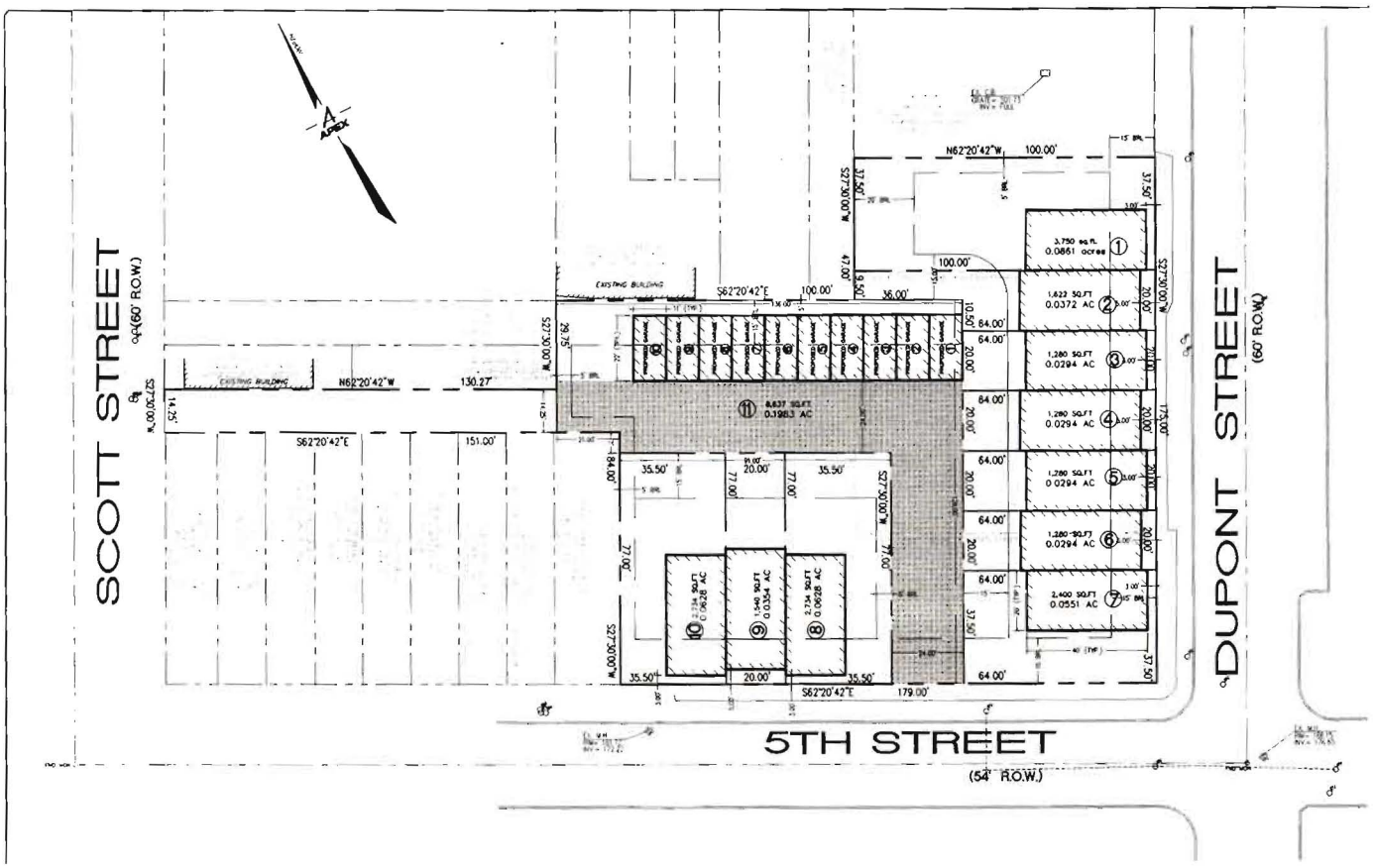
- The southwestern quarter of the property was occupied by residential structures from approximately 1901 until 1989.
- The southeastern quarter of the property was occupied by a large commercial/industrial building which reportedly operated as a sheet metal fabrication plant between 1968 and 1989. This building was demolished prior to 1992, at which time the entire property was paved for use as a parking area. It was purchased by St. Francis Hospital in March of 1989.
- Historical construction within Wilmington often incorporated the use of fill materials which have been found to contain high levels of metals and semi-volatile organic compounds (PAHs). Most of this fill material allegedly originated from the riverfront areas during excavation and redevelopment of former industrial properties. It is possible that this fill material was used at the Pavilion property in the past.

What is the environmental problem at the Pavilion Site? The site was entered into DNRECs Brownfields Program based on previous limited investigations indicating the presence of construction debris (possible historic fill) and high concentrations of arsenic in the soil. Ten Bears Environmental, L.L.C. performed a Brownfields Investigation (BFI) at the site in March 2007. Four (4) of the 36 soil samples collected during the BFI contained contaminants at concentrations above the allowable levels for residential site use. Three (3) samples from proposed back yards contained semi-volatile organic PAHs, and one (1) sample contained pesticides. Arsenic and other metals were not identified at concentrations that would pose a risk to human or environmental health.

- The Contaminants of Concern at the site are semi-volatile organic PAHs and pesticides.
- The Risk Assessment indicated that direct soil contact by a future resident was the only complete human exposure pathway, limited to four (4) areas where the concentrations of COCs exceeded the Unrestricted Use (a.k.a. residential use) Uniform Risk-Based Standard (URS) established by DNREC.
- Because several gasoline stations are or have been located within the vicinity of the Pavilion site, the groundwater was sampled for gasoline-type constituents (volatile organic compounds), but none were detected.

What does the owner want to do at the Pavilion Site? The owner of the property is Cornerstone West, a not-for-profit community housing organization, which plans to build "affordable" residential townhouses for city residents on the property.

The plans for site redevelopment include the demolition of the existing parking lot and the construction of ten (10) townhouses with garages, concrete driveways and sidewalks (see figure below).



What clean-up actions have been taken at the Pavilion Site ? In accordance with a DNREC-approved Interim Action Work Plan (IAWP), the owner/developer excavated approximately 2,635 tons of contaminated soil and debris from the site and properly transported it to Soil Safe, Inc. in New Jersey for disposal between February 2008 and October 2008. Five post excavation samples that exhibited contaminant concentrations slightly above Delaware Uniform Risk Based Screening values for unrestricted use scenarios (i.e. residential) were shown to be below the DNREC acceptable risk level of 1×10^{-5}; therefore, they do not require further remediation.

How does DNREC plan to clean up the Pavilion Site? Based on the 2007 BFI Report and Interim Action Closeout Report, contaminated soils are no longer present on the site at concentrations that pose a risk to human health or the environment.

What are the long term plans for the Pavilion Site after the cleanup? Since the contaminated soils have been removed from the site and taken to a permitted disposal facility, DNREC does not require any post-remedy environmental monitoring on the property. After the 20-day public comment period, DNREC will issue a Final Plan of

Remedial Action. A Certificate of Completion of Remedy will then be issued for the property, without restrictions.

The results of the BFI indicate very limited areas of environmental concern at the site. Because the contaminated soils were removed from the site during interim action activities and disposed of at an off-site facility, there is little potential for future exposure to contaminated soil. The Pavilion property is located within the City of Wilmington's Groundwater Management Zone (GMZ), which prohibits the installation of groundwater wells for drinking water purposes.

How can I find additional information or comment on this Proposed Plan?

The complete file on the site including the Brownfield Investigation Report, which also includes a Preliminary Risk Assessment and the Interim Action Closeout Report, is available at the DNREC - Site Investigation and Restoration Branch office located at 391 Lukens Drive, New Castle, Delaware, 19720. Other site documents can also be found on DNREC's website:
www.DNREC.state.de.us/dnrec2000/Divisions/AWM/sirb

The 20-day public comment period ends on Wednesday, January 7, 2009. Please send written comments to the above DNREC office or call John Cargill, Project Manager, at 302-395-2600.

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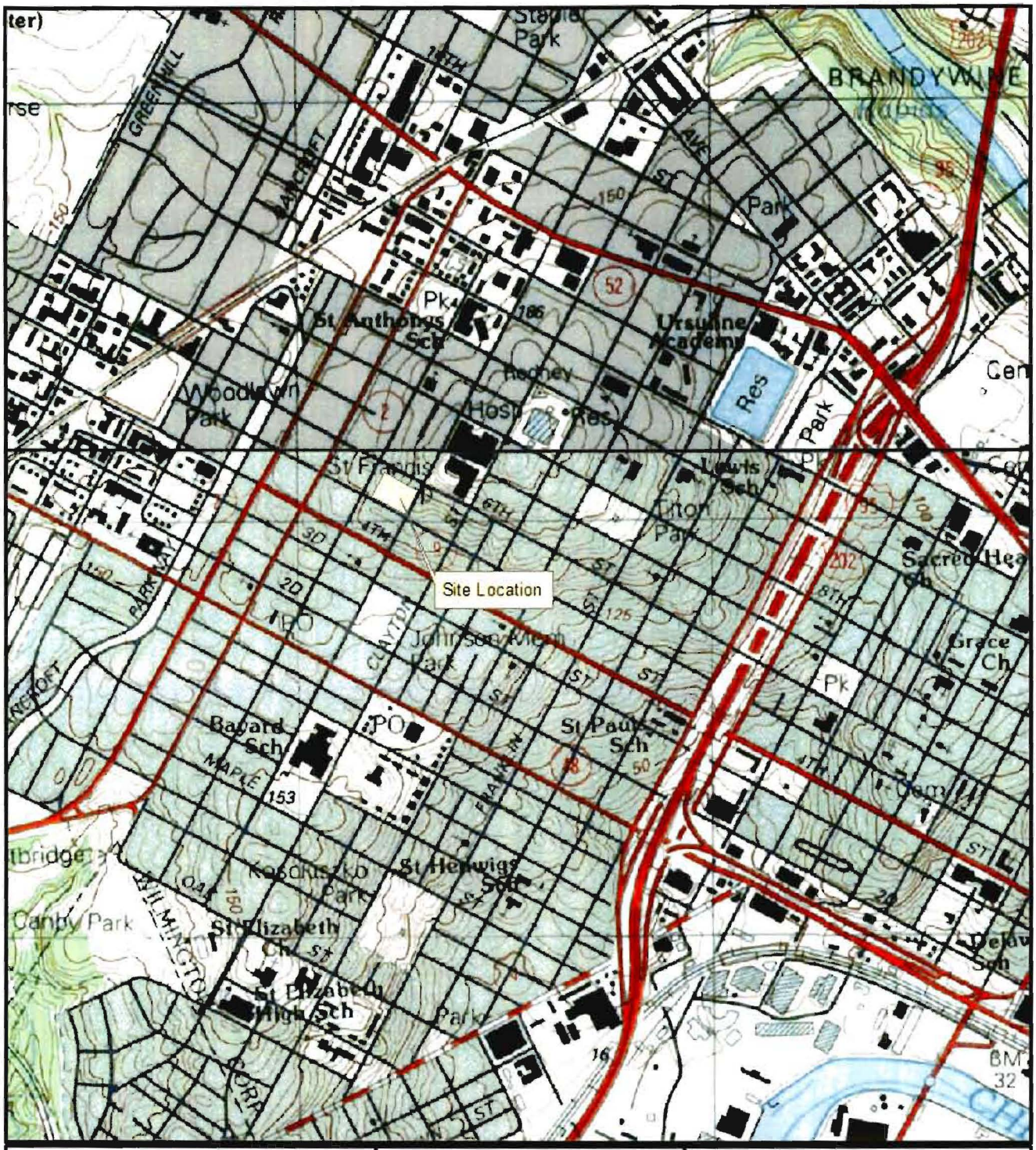

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1:12,000 1 inch equals 1,000 feet

DNREC
SITE INVESTIGATION &
RESTORATION BRANCH
391 LUKENS DR
NEW CASTLE, DE 19720-2774
302.395.2600

DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

FIGURE 1
PAVILLION DE-1395
SITE LOCATION MAP

AD005 IJ1_KDH080101

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Feet

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1:900 1 inch equals 75 feet

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SITE INVESTIGATION & RESTORATION BRANCH
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NEW CASTLE, DE 19720-2774
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FIGURE 2
PAVILLION DE-1395
TAX PARCEL MAP
2007 AERIAL

Glossary of Terms Used in this Proposed Plan

Brownfield	A property that is vacant or underutilized because of the perception or actual presence of an environmental problem.
Certified Brownfield	A brownfield that DNREC has determined is eligible for partial funding through the Delaware Brownfields Program.
Certificate of Completion of Remedy (COCR)	A formal determination by the Secretary of DNREC that remedial activities required by the Final Plan of Remedial Action have been completed.
Contamination	The introduction of harmful or hazardous matter into the environment
Exposure	Coming into contact with a substance through inhalation, ingestion, or direct contact with the skin; may be acute or chronic
Final Plan of Remedial Action	DNREC's plan for cleaning up a hazardous site after it has been reviewed by the public
Groundwater Management Zone	A geographical area where DNREC restricts drilling for ground water because it is contaminated
PAH	Polycyclic Aromatic Hydrocarbons—a class of chemical produced by the incomplete combustion of carbon containing substances
Preliminary Risk Assessment	A quantitative evaluation of only the most obvious and likely risks at a site
Proposed Plan of Remedial Action	A plan for cleaning up a hazardous site submitted by DNREC and subject to public comments
Risk	Likelihood or probability of injury, disease, or death
Site Specific Assessment	Field sampling and evaluation of a site financed by a grant to DNREC from the US EPA
Soil Management Plan	A written plan specifying how potentially contaminated soil material at a site will be sampled, evaluated, staged, transported and disposed of.
Uniform Environmental Covenant	A standardized form of a land use restriction that is recorded on the property deed of record and transfers with the land if sold to a new owner.

What is a *Proposed Plan?*

A Proposed Plan of Remedial Action (Proposed Plan) is a summary of how DNREC intends to clean up a contaminated site. A Final Plan of Remedial Action (Final Plan) is the adoption of the Proposed Plan, after all comments made by the public within the comment period of twenty days have been considered and addressed by DNREC.

The Delaware State Legislature passed the Hazardous Substance Cleanup Act (HSCA) in 1990. The Legislature made sure that members of the public would be informed about environmental problems in their own neighborhoods and have a chance to express their opinion concerning the clean up of those environmental problems before DNREC takes action.

After DNREC studies a site, it summarizes the problems there and proposes one or more possible solutions in a Proposed Plan. The Proposed Plan contains enough information to allow lay persons to understand the site and the intended remedy. It is not meant to be an engineering design document. More detailed information can be found in the reports and documents approved by DNREC. All of the documents and reports created by DNREC or consultants during the course of the investigation of the site are available to the public at the offices of DNREC-SIRB or at DNREC's website:

http://www.dnrec.state.de.us/dnrec2000/Divisions/AWM/sirb/sitefiles.asp.

DNREC issues the Proposed Plan by advertising it in at least one newspaper in the county where the site is located. The legal notices for the Proposed Plans and the Final Plans usually run on Wednesdays or Sundays in the legal classified section of the News Journal and/or the Delaware State News. The public comment period begins on the day (Wednesday), or the day after (Sunday) the newspaper publishes the legal notice for the Proposed Plan.

DNREC frequently holds public meetings during the comment period. Those meetings are usually held near the site in the evening. Citizens can request a public meeting if DNREC did not already schedule one.

Comments are collected at the public meetings, by phone or in writing. DNREC considers all comments and questions from the public before the Proposed Plan is finalized and adopted as a Final Plan.