FINAL PLAN OF REMEDIAL ACTION

TRAILS & PATHWAYS, CHRISTINA PEDESTRIAN BRIDGE

May 2015

Wilmington, Delaware *DNREC Project No. DE-1560*

This Final Plan of Remedial Action (Final Plan) presents clean-up actions required by the Department of Natural Resources and Environmental Control (DNREC) to address environmental contamination at the Trails & Pathways, Christina Pedestrian Bridge.

DNREC issued public notice of the Proposed Plan of Remedial Action (Proposed Plan) for the Site on May 6, 2015 and opened a 20-day public comment period. The Proposed Plan is attached. There were no comments from the public; therefore, the Proposed Plan is adopted as the Final Plan.

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

Timothy T. Ratsep, Program Administrator
Site Investigation and Restoration Section

June 2, 2015
Date

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PROPOSED PLAN OF REMEDIAL ACTION

Trails & Pathways, Christina Pedestrian Bridge
Wilmington, Delaware
DNREC Project No. DE-1560

May 2015

Delaware Department of Natural Resources and Environmental Control
Division of Waste and Hazardous Substances
Site Investigation & Restoration Section
391 Lukens Drive
New Castle, Delaware 19720

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PROPOSED PLAN OF REMEDIAL ACTION

Trails & Pathways, Christina Pedestrian Bridge
Wilmington, Delaware
DNREC Project No. DE-1560

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

Approved by:

Timothy Ratsep, Environmental Program Administrator
Site Investigation & Restoration Section

May 4, 2015
Date

What is the Proposed Plan of Remedial Action?

The Proposed Plan of Remedial Action (Proposed Plan) summarizes the clean-up (remedial) actions that are being proposed to address the contamination found at the Trails & Pathways, Christina River Pedestrian Bridge Site (Site) for public comment. A legal notice is published in the newspaper for a 20-day comment period. The Delaware Department of Natural Resources and Environmental Control—Site Investigation and Restoration Section (DNREC-SIRS) considers and addresses all public comments received and publishes a Final Plan of Remedial Action (Final Plan) for the Site.

What is the Trails & Pathways, Christina River Pedestrian Bridge Site?

The Site is owned by the Delaware Department of Transportation (DelDOT) and is the proposed area of construction for a pedestrian bridge across the Christina River. The Site is located between I-495 to the south of the site and the I-95 to the north, just south of the Wilmington City limits, in New Castle County (Figure 1). The area of the proposed bridge crosses the Christina River, immediately east of the Interstate-95 Bridge (Figure 2).

The Site is part of the Industrial Track Greenway Phase III, 1st State Trails and Pathways Project and will connect and complete the trail between New Castle to the south and the existing Wilmington Waterfront to the north. The Site is strictly the area featuring the proposed construction of the Christina River Pedestrian Bridge (Figure 3, "Trails & Pathways Christina River Pedestrian Bridge Site").

What happened at the Trails & Pathways, Christina Pedestrian Bridge Site?

The Site is part of the former New Castle Industrial Track, a rail line connecting the Wilmington Riverfront to the city of New Castle. The rail line was operated by the Penn Central Railroad until 1975, when it was taken out of service. The former rail bridge was removed in approximately 1984. The tracks were removed in the mid-1990s and the right-of-way acquired by the State of Delaware.

What is the environmental problem at the Trails & Pathways, Christina Pedestrian Bridge Site?

DNREC-SIRS completed an investigation of the Site through a Facility Evaluation (FE) in December 2014. This FE tested soil borings in the boundary of the Site. Based on the data, contaminants of potential concern (COPC) include arsenic, barium, cyanide, PAHs , and

polychlorinated biphenyls (PCBs). Arsenic, barium, and cyanide were the only metals detected above their respective DNREC Screening Levels (SLs) in the soil samples. Four of the five samples where elevated concentrations of arsenic were detected came from locations featuring black coal ash railroad ballast. Five PAHs were detected at concentrations greater than their respective screening level in one sample and not detected in any of the other 3 soil samples.

The only unacceptable human health risk exposure pathway at this Site is direct contact to the coal ash fill to workers during construction activities. A potential secondary human health risk exposure pathway would be to the general public using the completed trail through direct contact with the former rail line ballast and debris material.

What does the owner want to do at the Trails & Pathways, Christina Pedestrian Bridge Site?

The Site owner, DelDOT, plans to construct a pedestrian bridge at the Site, and workers will be excavating and removing soil to construct footers for this bridge. The remainder of the trail will be constructed at the same time in order to complete this as a non-motorized transportation corridor.

What additional clean-up actions are needed at the Trails & Pathways, Christina Pedestrian Bridge Site?

DNREC-SIRS proposes the following remedial actions for the Site, which need to be completed before a Certificate of Completion of Remedy (COCR) can be issued.

1. Prior to construction activities, a Contaminated Materials Management Plan (CMMP) must be submitted to DNREC within 60 days of the issuance of the Final Plan of Remedial Action. The CMMP will provide guidance to enable construction workers to safely handle any potential contaminated soil at the Site.
2. Any coal ash/fill material excavated from the rail bed during the project and not reused below the paved areas of the trail or beneath 1 foot of clean fill at the Site will need to be disposed of at a proper off-site, licensed waste disposal facility. Additionally, any sediment removed from the Christina River during the project that cannot be reused at the Site and will need to be tested to determine off-site disposal options.
3. As part of the remedial actions, DelDOT will be responsible for developing and conducting Long Term Stewardship (LTS) activities related to the property. This LTS plan shall be submitted to DNREC for approval in accordance with the schedule set forth in the Remedial Action Work Plan.
4. An Environmental Covenant (EC) must be submitted to DNREC for approval within 60 days of the issuance of the Final Plan of Remedial Action.
5. The Environmental Covenant, consistent with Delaware's Uniform Environmental Covenants Act (7 Del.C. Chapter 79, Subchapter II) must be recorded in the Office of the [County] Recorder of Deeds within 60 days of the issuance of the Long Term Stewardship Plan. The Environmental Covenant must include the following activity and/or use restrictions:

[a.] Use Restriction. Use of the Property shall be restricted solely to non-residential type uses;

[b.] Limitation of Groundwater Withdrawal. No groundwater wells shall be installed and no groundwater shall be withdrawn from any well on the Property without the prior written approval of DNREC-SIRS and DNREC Division of Water as defined in the Southwest of Wilmington Groundwater Management Zone within which this Site lies;

[c.] Compliance with the Long Term Stewardship Plan. All work required by the Long Term Stewardship Plan must be performed to DNREC's satisfaction in accordance with the Plan; and

[d.] Compliance with Contaminated Materials Management Plan. All work required by the Contaminated Materials Management Plan must be performed to DNREC's satisfaction in accordance with the Plan.

6. A remedial Action Completion Report must be submitted to DNREC within 60 days of the completion of the remedial actions required in this plan.

7. A request for a Certification of Completion of Remedy (COCR) must be submitted to DNREC within 60 days of approval of the Remedial Action Completion Report.

What are the long term plans for the Site after the cleanup?

DelDOT will ensure that the trail and bridge is well maintained in perpetuity. The general maintenance of the trail will provide long term monitoring, which will be undertaken by DelDOT. A Certificate of Completion of Remedy (COCR) will be issued once all phases of the project are complete.

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

The complete file on the Site including the Remedial Investigation Report and the various reports are available at the DNREC office, 391 Lukens Drive in New Castle, 19720. Most documents are also found on: http://www.nav.dnrec.delaware.gov/DEN3/

The 20-day public comment period begins on May 6, 2015 and ends at close of business (4:30 pm) on May 27, 2015. Please send written comments to the DNREC office at 391 Lukens Drive, New Castle, DE 19720 to Todd Keyser, Project Officer or Robert Newsome, Public Information Officer.

Figure 1: Site Location Map
Figure 2: Site Sketch
Figure 3: Site Aerial View

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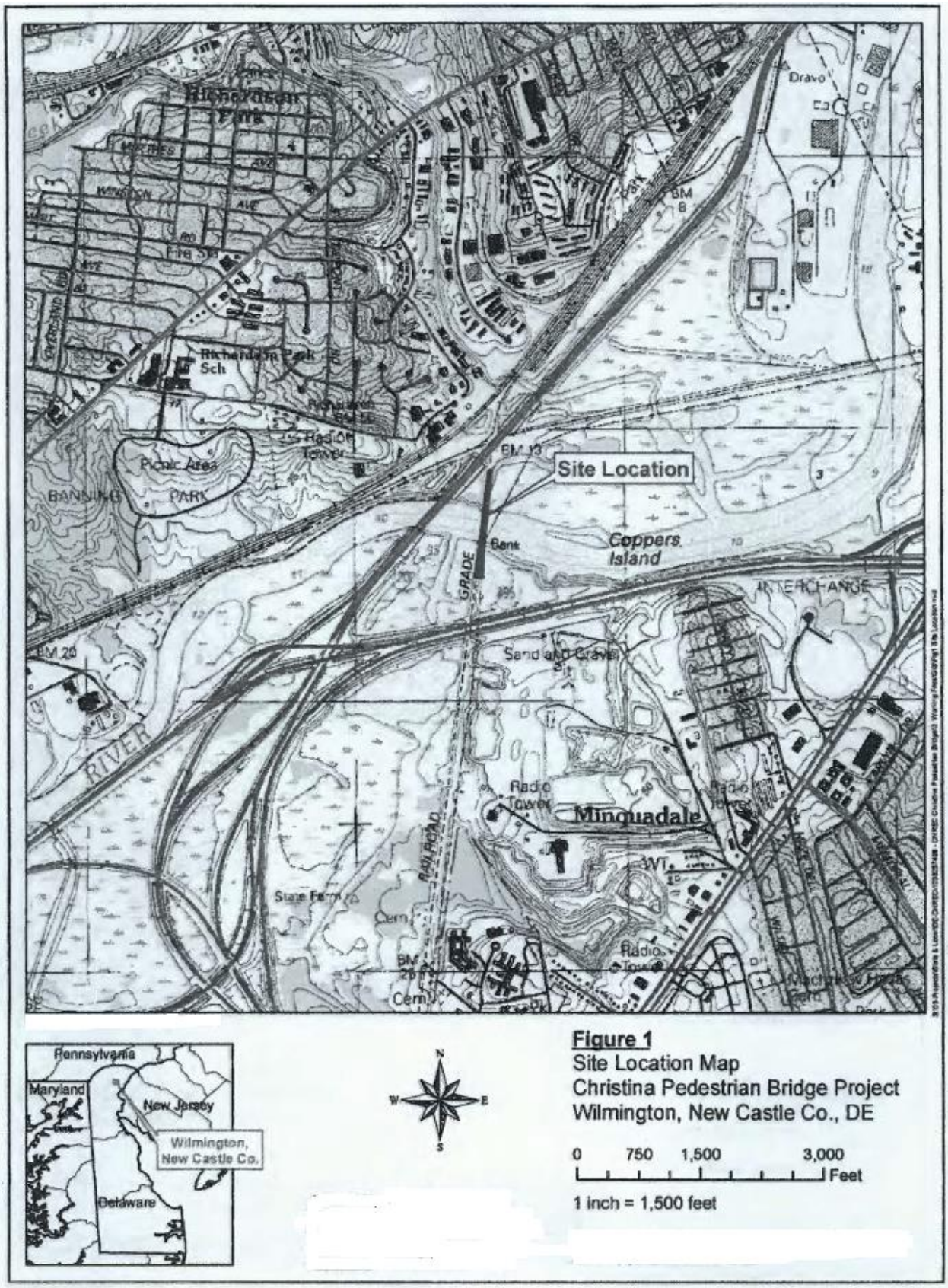

Figure 1
Site Location Map
Christina Pedestrian Bridge Project
Wilmington, New Castle Co., DE

0 750 1,500 3,000 Feet

1 inch = 1,500 feet

Source: Topo data from USGS DLG; Aerials from DelDOT; Roads from DelDOT

Legend

Limit of Disturbance*

Delaware Roads

Figure 2
Site Sketch
Christina Pedestrian Bridge Project
Wilmington, New Castle Co., DE

0 100 200 400 Feet

1 inch = 200 feet

*Note: Limit of disturbance should not impact wetlands.

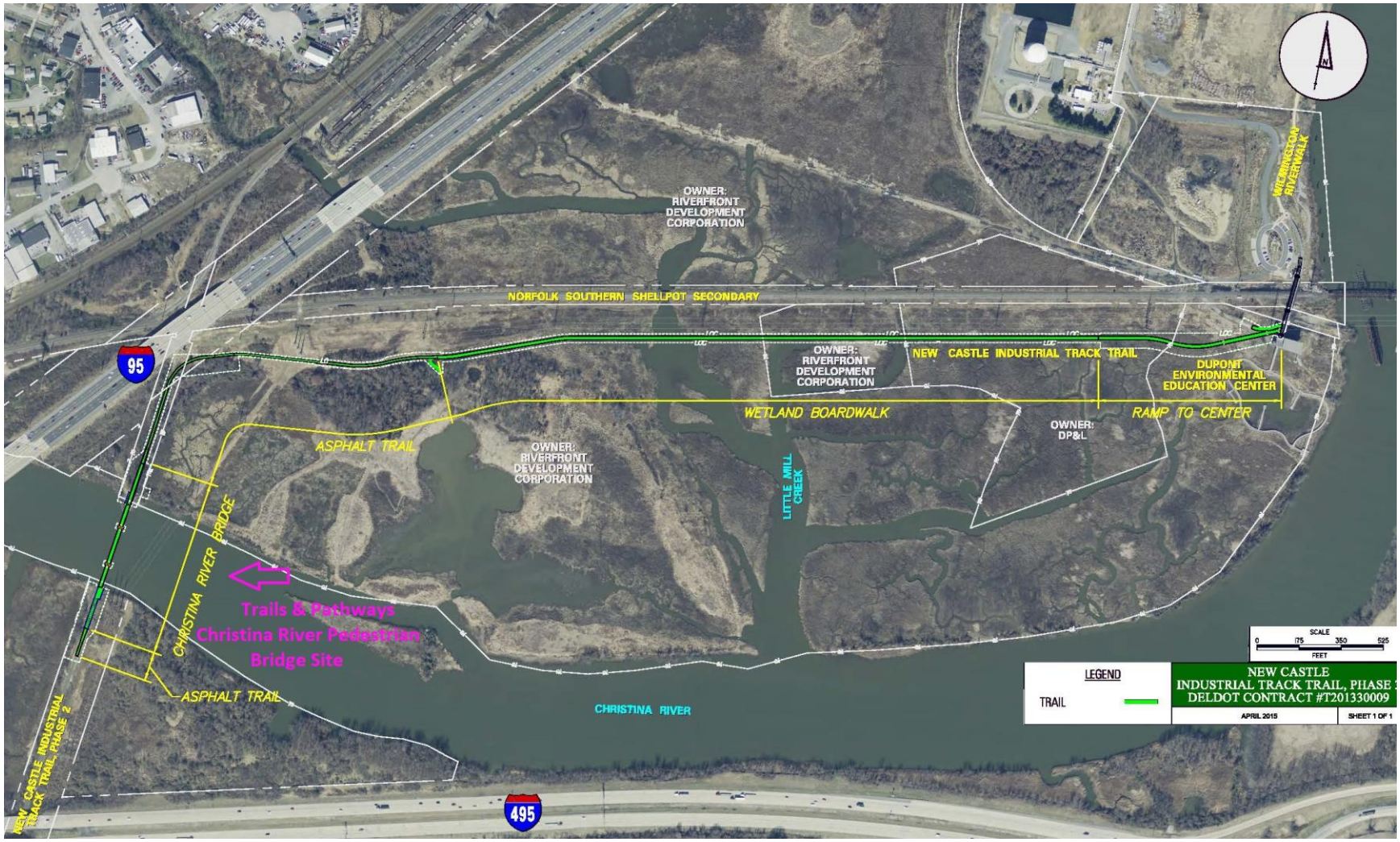

FIGURE 3

New Castle Industrial Track Trail

Glossary of Terms Used in this Proposed Plan

Certification 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.
Contaminant of Concern (COC)	Potentially harmful substances at concentrations above acceptable levels.
Exposure	Contact with a substance through inhalation, ingestion, or direct contact with the skin. Exposure may be short term (acute) or long term (chronic).
Final Plan of Remedial Action	DNREC's adopted plan for cleaning up a hazardous site.
Hazardous Substance Cleanup Act (HSCA)	Delaware Code Title 7, Chapter 91. The law that enables DNREC to identify parties responsible for hazardous substances releases and requires cleanup with oversight of the Department.
Human Health Risk Assessment (HHRA)	An assessment done to characterize the potential human health risk associated with exposure* to site related chemicals.
Polychlorinated biphenyls (PCBs)	A synthetic, carcinogenic chemical formerly used in a wide variety of industrial applications but banned from most uses by the US EPA in 1979.
Risk	Likelihood or probability of injury, disease, or death.
Facility Evaluation (FE)	Environmental study of a site which includes the sampling of soils, groundwater, surface water, sediment and/or wastes on the property, as appropriate. This evaluation is performed on behalf of the United States Environmental Protection Agency (U.S. EPA).
SIRS	Site Investigation Restoration Section of DNREC, which oversees cleanup of sites that were contaminated as a result of past use, from dry cleaners to chemical companies