GEI Consultants

Consulting
Engineers and
Scientists

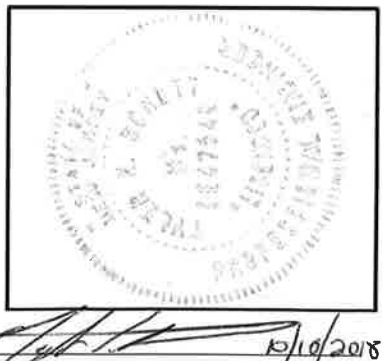
Annual CCR Inspection Report

Mercer Generating Station, Hamilton Township, New Jersey

Submitted to:
PSEG Fossil LLC
80 Park Plaza
Newark, NJ 07101

Submitted by:
GEI Consultants, Inc.
18000 Horizon Way, Suite 200
Mt. Laurel, New Jersey 08054

October 16, 2018
Project 1504710



10/10/2018

Tyler K. Schott, P.E.
Project Manager
NJ PE #24GE04794800
Date:

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TKS/lsf

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1. Introduction

On behalf of PSEG Fossil (PSEG), GEI Consultants, Inc. (GEI) has prepared the 2018 Annual Inspection Report for the Coal Combustion Residuals (CCR) Surface Impoundments[1] (Impoundments) at the Mercer Generating Station. There are two inactive Impoundments:

- North Fly Ash Pond; and
- South Fly Ash Pond.

This report was prepared to meet the requirements of 40 CFR 257.83.

1.1 Description of Impoundments

The Mercer Generating Station is owned by PSEG Power and located at 2512 Lamberton Road in Hamilton Township, New Jersey. The facility maintains 10-acre North Fly Ash Pond and a 6-acre South Fly Ash Pond that ceased receiving CCR prior to October 19, 2015. The impoundments are constructed as predominantly incised impoundments with a bermed wall along Lamberton Road that varies in height above the surrounding grade by five-to-six feet. A Notice of Intent (NOI) to initiate closure of the CCR impoundment under Section 257.100 of the CCR Rule was posted on the PSEG CCR Rule Compliance Data and Information website on November 6, 2015. Though closure by removal of all CCR is no longer permitted under Section 257.100 of the CCR, Closure of these CCR impoundments is proceeding in accordance with Section 257.102 of the CCR rule and the associated 547-day timeframe extension. As documented in a March 23, 2017 memo prepared by GEI, CCR removal was completed on October 19, 2016 and all CCR has been removed from the Impoundments.

[1] CCR Surface Impoundment is defined at 40 CFR 257.53.

2. 2018 Annual Inspection

2.1 Annual Inspection

As required by 40 CFR 257.83(b), inspections of all CCR surface impoundments were performed by a qualified professional engineer (Tyler K. Schott, NJ P.E. #24GE04794800) on multiple occasions. The October 19, 2016 inspection served as the initial inspection. As discussed above, the Impoundments are inactive and have been closed through removal of all CCR. The berms surrounding each Impoundment are still present and were inspected as part of the 2018 annual inspection conducted on August 3, 2018.

2.1.1 Review of Available Information

In accordance with 257.83(b)(i), a review of available information regarding the status and condition of the CCR unit is required. There were no available design documents or impoundment testing data to perform a quantitative analysis of the berm condition. Based on the visual observations of the impoundments during inspections, and the inactive/closed status of the impoundments, quantitative evaluation of each impoundment was not necessary.

2.1.2 Visual Inspection of the CCR unit

In accordance with 257.83(b)(ii), a visual inspection of the CCR unit to identify signs of distress or malfunction is required. The Impoundments are inactive and have been closed. Based on the visual inspections, the berms are in good condition and no signs of distress or malfunction was observed.

2.1.3 Visual Inspection of Hydraulic Structures

In accordance with 257.83(b)(iii), a visual inspection of any hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit is required. The hydraulic control structures were inspected visually by facility personnel on a weekly basis and subject to frequent inspection by a licensed Professional Engineer. Throughout the process of closure by removal, the hydraulic control structures remained intact, structurally sound, and unused. Discharge from the Mercer facility impoundments would require a significant volume of water and positive action from facility personnel to initiate discharge.

3. Annual Inspection Report

The following sections are required to be inspected and included in the inspection report as stated in 40 CFR 257.83(2).

3.1 Changes in Geometry

No changes in geometry were noted. The Impoundments have undergone closure by removal.

3.2 Location and Type of Instrumentation

Historically, there was no instrumentation used to evaluate the status and condition of the berms associated with facility CCR impoundments. Due to the closure of the Impoundments, no new instrumentation is required for monitoring.

3.3 Depths and Elevations

Evaluation of the minimum, maximum and present depth and elevation of the impounded water is required as part of the inspection report. The CCR has been fully removed and therefore this portion of the annual inspection is not applicable.

3.4 Storage Capacity

The Impoundments have undergone closure and therefore have no storage capacity available for CCR.

3.5 Volumes

The CCR has been fully removed and therefore this portion of the annual inspection is not applicable.

3.6 Structural Weakness

The Impoundments have undergone closure. The berms surrounding the Impoundments remain unchanged. There were no observed structural weaknesses in the Impoundments.

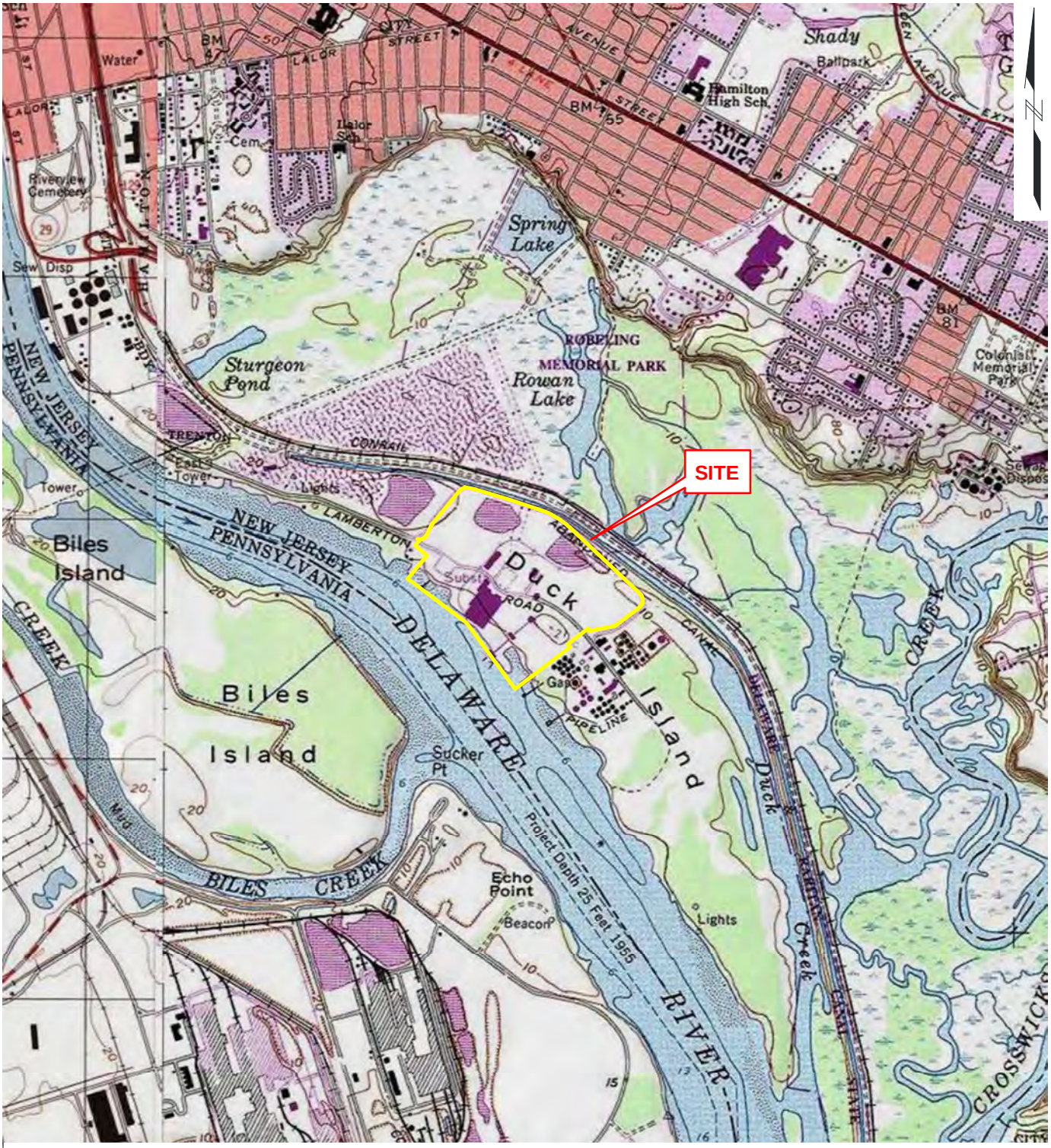
3.7 Other Noted Changes

As discussed throughout, the Impoundments are closed. Many of the inspection items required by 40 CFR 257.83(2) and discussed above are not applicable as the CCR has been removed.

3.8 Deficiency Identified

No deficiencies were observed as part of the annual inspection activities for the Impoundments.

Figures



SOURCE:

1. USGS TOPOGRAPHIC MAP ACCESSED VIA ARCGISONLINE.COM

0 2,000 4,000

SCALE: 1" = 2000'

Annual CCR Inspection Report PSEG - Mercer Hamilton, New Jersey	GEI Consultants	SITE LOCATION MAP
PSEG Power, LLC New Jersey	Project 1504710	August 2017 Fig. 1

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LEGEND:

Approximate Property Line

SOURCE:
1. AERIAL FROM ESRI WORLD IMAGERY - 2015.

0 400 800

SCALE: 1" = 400'

Annual CCR Inspection Report
PSEG - Mercer
Hamilton, New Jersey

PSEG Power, LLC
New Jersey

GEI Consultants

SITE PLAN

Project 1504710 | October 2018 | Fig. 2

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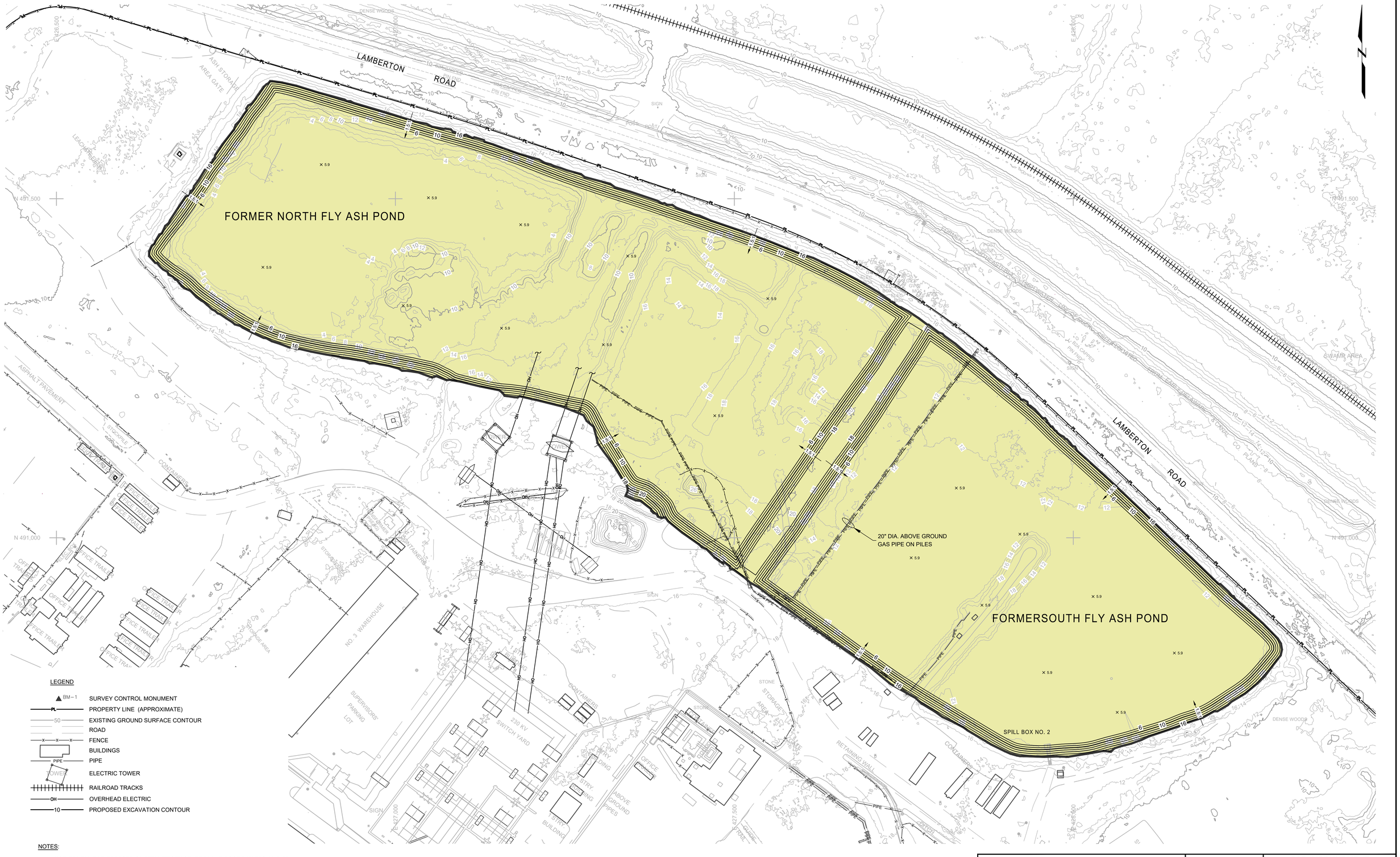

LEGEND

▲ BM – 1	SURVEY CONTROL MONUMENT
PL	PROPERTY LINE (APPROXIMATE)
50	EXISTING GROUND SURFACE CONTOUR
	ROAD
X X X	FENCE
	BUILDINGS
PIPE	PIPE
TOWER	ELECTRIC TOWER
	RAILROAD TRACKS
OH	OVERHEAD ELECTRIC
10	PROPOSED EXCAVATION CONTOUR

NOTES:

1. HORIZONTAL DATUM BASED ON NEW JERSEY STATE PLANE COORDINATES, NAD 83.
2. VERTICAL DATUM BASED ON NAVD 88.
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Annual CCR Inspection Report PSEG - Mercer Hamilton, New Jersey	GEI Consultants	CCR IMPOUNDMENT FOOTPRINT AND INITIAL CONDITIONS PLAN - NORTH AND SOUTH FLY ASH PONDS
PSEG Power, LLC New Jersey	Project 1504710	October 2018 Fig. 3

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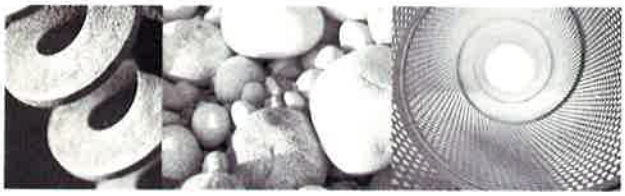

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80 Park Plaza
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October 27, 2017
Project 1504710

Tyler K. Schott, P.E.
Project Manager
NJ PE #24GE04794800
Date: October 27, 2017

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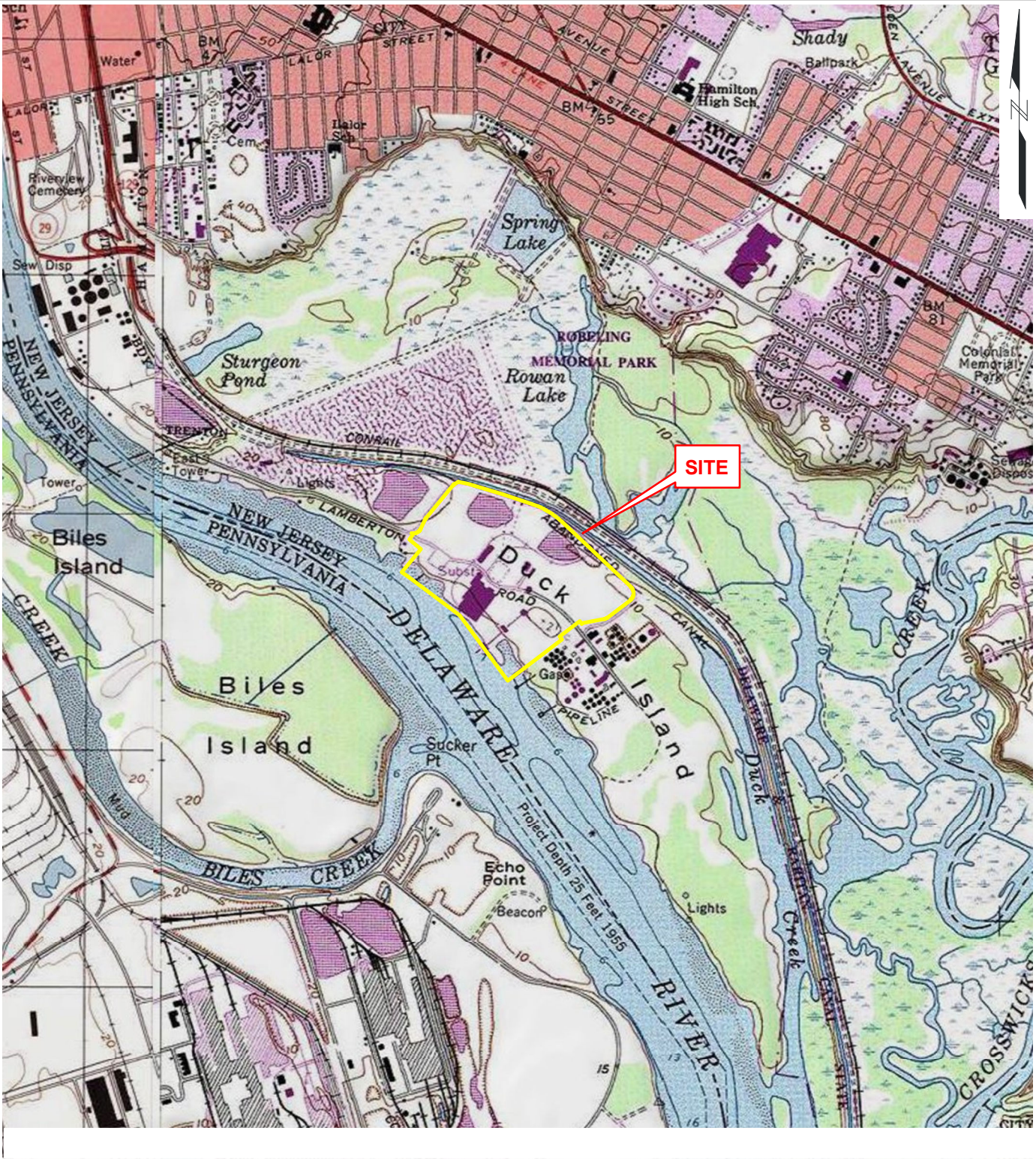

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0 2,000 4,000

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PSEG Power, LLC New Jersey	Project 1504710	August 2017 Fig. 1

Q:\Project\PSEG - Mercer\2017-08 Annual CCR Inspection Report\Fig 1 - Site Location.mxd

LEGEND:

- Approximate CCR Footprint
- Approximate Property Line

SOURCE:
1. AERIAL FROM ESRI WORLD IMAGERY - 2015.

0 400 800

SCALE: 1" = 400'

Annual CCR Inspection Report
PSEG - Mercer
Hamilton, New Jersey

PSEG Power, LLC
New Jersey

GEI Consultants

Project 1504710

SITE PLAN

October 2017 Fig. 2

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NORTH FLY ASH POND

SOUTH FLY ASH POND

LAMBERTON ROAD

20" DIA. ABOVE GROUND GAS PIPE ON PILES

SPILL BOX NO. 2

LEGEND

- BM-1 — SURVEY CONTROL MONUMENT
- PL — PROPERTY LINE (APPROXIMATE)
- 50 — EXISTING GROUND SURFACE CONTOUR
- ROAD
- FENCE
- BUILDINGS
- PIPE — PIPE
- TOWER — ELECTRIC TOWER
- RAILROAD TRACKS
- OH — OVERHEAD ELECTRIC
- 10 — PROPOSED EXCAVATION CONTOUR

NOTES:

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0 60 120

SCALE: 1" = 60'

Annual CCR Inspection Report
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Hamilton, New Jersey

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New Jersey

GEI Consultants

Project 1504710

CCR IMPOUNDMENT FOOTPRINT AND INITIAL CONDITIONS PLAN - NORTH AND SOUTH FLY ASH PONDS

October 2017 Fig. 3

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