Remedial Action Report – Forrest Street Properties (AOC FSP-1A, AOC FSP-1B, AOC FSP-2A, and AOC FSP-2B) Soil Garfield Avenue Group PPG, Jersey City, New Jersey

# Appendix G

# **Deed Notice**

The deed notice for Chromate Chemical Production Waste-related impacts on Lot 15 is provided in this appendix. Public Service Electric and Gas Company (PSEG), as the former manufactured gas plant (MGP) operator, is leading the remedial action of impacts related to the operation of the former MGP. PSEG is responsible for preparing and filing the deed notice associated with MGP impacts, and therefore, that deed notice is not included in this submittal.

Hudson County Recording Data Page Honorable Diane Coleman Hudson County Register	Official Use Only - Barcode 20211230010135600 1/29 12/30/2021 12:42 PM DEED Bk: 9626 Pg: 703 DIANE COLEMAN Hudson County, Register of Deeds Receipt No. 164694
Record & Return To: K and L Gates - SC One Newark Center, Tenth Floor Newark, NJ 07102	Official Use Only - Reality Transfer Fee

Date of Document:	Type of Document:
11/02/2021	DEED
First Party Name:	Second Party Name:
100 FOREST ASSOCIATES LLC	NJ DEPARTMENT OF ENVIRONMENTAL PROTECTION
Additional Parties:	•

# THE FOLLOWING SECTION IS REQUIRED FOR DEEDS ONLY

Block: 21501

Lot: 14.01

Municipality: Jersey City

Consideration: **\$0.00** 

Mailing Address of Grantee:

401 E STATE ST., TRENTON, NJ 08608

 THE FOLLOWING SECTION IS FOR ORIGINAL MORTGAGE BOOKING & PAGING INFORMATION FOR

 ASSIGNMENTS, RELEASES, SATISFACTIONS, DISCHARGES, AND OTHER ORIGINAL MORTGAGE AGREEMENTS ONLY

 Original Book:
 Original Page:

 Instrument No:
 Original Page:

#### HUDSON COUNTY RECORDING DATA PAGE

DO NOT DETACH THIS PAGE FROM THE ORIGINAL DOCUMENT AS IT CONTAINS IMPORTANT RECORDING INFORMATION AND IS PART OF THE PERMANENT RECORD.

Return Address: Dorothy Laguzza, Esq., K&L Gates LLP One Newark Center, Tenth Floor Newark, NJ 07102-5285

# DEED NOTICE

IN ACCORDANCE WITH N.J.S.A. 58:10B-13, THIS DOCUMENT IS TO BE RECORDED IN THE SAME MANNER AS ARE DEEDS AND OTHER INTERESTS IN REAL PROPERTY.

Prepared by:	ly me	
[Signature]	/	

Dorothy Laguzza [Print name below signature]

[Print name below signature]

DEED NOTICE

This Deed Notice is made as of the 2 day of November, 2021, by 100 Forrest Associates L.L.C. with an address of 28 Bromleigh Road Stewart Manor, NY 11530 (together with his/her/its/ their successors and assigns, collectively "Owner").

1. THE PROPERTY. 100 Forrest Associates, L.L.C. with an address of is 2473 NW 66th Drive, Boca Raton, FL 33496 is the owner in fee simple of certain real property designated as Block 21501, Lot 14.01, on the tax map of the City of Jersey City, Hudson County; the New Jersey Department of Environmental Protection Program Interest Number (Preferred ID) for the contaminated site which includes this property is 775706 and the property is more particularly described in Exhibit A, which is attached hereto and made a part hereof (the "Property").

2. REMEDIATION.

i. The New Jersey Department of Environmental Protection has approved this Deed Notice as an institutional control for the Property, which is part of the remediation of the Property. The Property is subject to a Partial Consent Judgment Concerning PPG Sites entered into by NJDEP, the City of Jersey City, and PPG and approved by the court on June 26, 2009 (Superior Court of New Jersey, Chancery Division-Hudson County, Docket No. C-77-05 ("Consent Judgment")). ii. N.J.A.C. 7:26C-7 requires the Owner, among other persons, to obtain a soil remedial action permit for the soil remedial action at the Property. That permit will contain the monitoring, maintenance and biennial certification requirements that apply to the Property.

3. SOIL CONTAMINATION. PPG has remediated contaminated soil at the Property, such that soil contamination remains at certain areas of the Property that contains contaminants in concentrations that do not allow for the unrestricted use of the Property. Such soil contamination is described, including the type, concentration and specific location of such contamination, and the existing engineering controls on the site are described, in Exhibit B, which is attached hereto and made a part hereof. As a result, there is a statutory requirement for this Deed Notice and engineering controls in accordance with N.J.S.A. 58:10B-13.

4. CONSIDERATION. In accordance with the remedial action for the site which included the Property, and in consideration of the terms and conditions of that remedial action, and other good and valuable consideration, Owner has agreed to subject the Property to certain statutory and regulatory requirements that impose restrictions upon the use of the Property, to restrict certain uses of the Property, and to provide notice to subsequent owners, lessors, lessees and operators of the Property of the restrictions and the monitoring, maintenance, and biennial certification requirements outlined in this Deed Notice and required by law, as set forth herein.

5A. RESTRICTED AREAS. Due to the presence of contamination remaining at concentrations that do not allow for unrestricted use, the Owner has agreed, as part of the remedial action for the Property, to restrict the use of certain parts of the Property (the "Restricted Areas"); a narrative description of these restrictions is provided in Exhibit C, which is attached hereto and made a part hereof. The Owner has also agreed to maintain a list of these restrictions on site for inspection by governmental officials.

5B. RESTRICTED LAND USES. The following statutory land use restrictions apply to the Restricted Areas:

i. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(10), prohibits the conversion of a contaminated site, remediated to non-residential soil remediation standards that require the maintenance of engineering or institutional controls, to a child care facility, or public, private, or charter school without the Department's prior written approval, unless a presumptive remedy is implemented; and

ii. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(12), prohibits the conversion of a landfill, with gas venting systems and or leachate collection systems, to a single family residence or a child care facility.

5C. ENGINEERING CONTROLS. Due to the presence and concentration of these contaminants, the Owner has also agreed, as part of the remedial action for the Property, to the placement of certain engineering controls on the Property; a narrative description of these engineering controls is provided in Exhibit C.

6A. CHANGE IN OWNERSHIP AND REZONING.

i. The Owner and the subsequent owners, lessors, and lessees, shall cause all leases, grants, and other written transfers of an interest in the Restricted Areas to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. The Owner and the subsequent owners shall provide written notice to the Department of Environmental Protection on a form provided by the Department and available at <u>www.nj.gov/srp/forms</u> within 30 calendar days after the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the Owner's or subsequent owner's interest in the Restricted Area.

iii. The Owner and the subsequent owners shall provide written notice to the Department, on a form available from the Department at <u>www.nj.gov/srp/forms</u>, within thirty (30) calendar days after the owner's petition for or filing of any document initiating a rezoning of the Property to residential.

6B. SUCCESSORS AND ASSIGNS. This Deed Notice shall be binding upon Owner and upon Owner's successors and assigns, and subsequent owners, lessors, lessees and operators while each is an owner, lessor, lessee, or operator of the Property.

7A. ALTERATIONS, IMPROVEMENTS, AND DISTURBANCES.

i. The Owner and all subsequent owners, lessors, and lessees shall notify any person, including, without limitation, tenants, employees of tenants, and contractors, intending to conduct invasive work or excavate within the Restricted Areas, of the nature and location of contamination in the Restricted Areas, and, of the precautions necessary to minimize potential human exposure to contaminants.

ii. Except as provided in Paragraph 7B, below, no person shall make, or allow to be made, any alteration, improvement, or disturbance in, to, or about the Property which disturbs any engineering control at the Property without first retaining a licensed site remediation professional. Nothing herein shall constitute a waiver of the obligation of any person to comply with all applicable laws and regulations including, without limitation, the applicable rules of the Occupational Safety and Health Administration.

iii. A soil remedial action permit modification is required for any permanent alteration, improvement, or disturbance and the owner, lessor, lessee or operator shall submit the following within 30 days after the occurrence of the permanent alteration, improvement, or disturbance:

(A) A Remedial Action Workplan or Linear Construction Project notification and Final Report Form, whichever is applicable;

(B) A Remedial Action Report and Termination of Deed Notice Form; and

(C) A revised recorded Deed Notice with revised Exhibits, and Remedial Action Permit Modification or Remedial Action Permit Termination form and Remedial Action Report.

iv. No owner, lessor, lessee or operator shall be required to obtain a Remedial Action Permit Modification for any temporary alteration, improvement, or disturbance, provided that the site is restored to the condition described in the Exhibits to this Deed Notice, and the owner, lessee, or operator complies with the following:

(A) Restores any disturbance of an engineering control to pre-disturbance conditions within 60 calendar days after the initiation of the alteration, improvement or disturbance;

(B) Ensures that all applicable worker health and safety laws and regulations are followed during the alteration, improvement, or disturbance, and during the restoration;

(C) Ensures that human exposure to contamination in excess of the remediation standards does not occur; and

(D) Describes, in the next biennial certification the nature of the temporary alteration, improvement, or disturbance, the dates and duration of the temporary alteration, improvement, or disturbance, the name of key individuals and their affiliations conducting the temporary alteration, improvement, or disturbance, the notice the Owner gave to those persons prior to the disturbance.

7B. EMERGENCIES. In the event of an emergency which presents, or may present, an unacceptable risk to the public health and safety, or to the environment, or an immediate environmental concern, see N.J.S.A. 58:10C-2, any person may temporarily breach an engineering control provided that that person complies with each of the following:

i. Immediately notifies the Department of Environmental Protection of the emergency, by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337;

ii. Hires a Licensed Site Remediation Professional (unless the Restricted Areas includes an unregulated heating oil tank) to respond to the emergency;

iii. Limits both the actual disturbance and the time needed for the disturbance to the minimum reasonably necessary to adequately respond to the emergency;

iv. Implements all measures necessary to limit actual or potential, present or future risk of exposure to humans or the environment to the contamination;

v. Notifies the Department of Environmental Protection when the emergency or immediate environmental concern has ended by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

vi. Restores the engineering control to the pre-emergency conditions as soon as possible; and

vii. Submits to the Department of Environmental Protection within 60 calendar days after completion of the restoration of the engineering control, a report including: (a) the nature and likely cause of the emergency; (b) the measures that have been taken to mitigate the effects of the emergency on human health and the environment; (c) the measures completed or implemented to restore the engineering control; and (d) any changes to the engineering control or site operation and maintenance plan to prevent reoccurrence of such conditions in the future.

# 8. TERMINATION OF DEED NOTICE.

i. This Deed Notice may be terminated only upon recording a Department-approved Termination of Deed Notice, available at N.J.A.C. 7:26C Appendix C, with the office of the Register of Deeds and Mortgages of Hudson County, New Jersey, expressly terminating this Deed Notice.

ii. Within 30 calendar days after recording a Department-approved Termination of Deed Notice, the owner of the property should apply to the Department for termination of the soil remedial action permit pursuant to N.J.A.C. 7:26C-7.

9. ACCESS. The Owner, and the subsequent owners, lessors, lessees, and operators agree to allow the Department, its agents and representatives access to the Property to inspect and evaluate the continued protectiveness of the remedial action that includes this Deed Notice and to conduct additional remediation to ensure the protection of the public health and safety and of the environment if the subsequent owners, lessors, lessees, and operators, during their ownership, tenancy, or operation, and the Owner fail to conduct such remediation pursuant to this Deed Notice as required by law. The Owner, and the subsequent owners, lessors, and lessees, shall also cause all leases, subleases, grants, and other written transfers of an interest in the Restricted Areas to contain a provision expressly requiring that all holders thereof provide such access to the Department.

#### 10. ENFORCEMENT OF VIOLATIONS.

i. This Deed Notice itself is not intended to create any interest in real estate in favor of the Department of Environmental Protection, nor to create a lien against the Property, but merely is intended to provide notice of certain conditions and restrictions on the Property and to reflect the regulatory and statutory obligations imposed as a conditional remedial action for this site. ii. The restrictions provided herein may be enforceable solely by the Department against any person who violates this Deed Notice. To enforce violations of this Deed Notice, the Department may initiate one or more enforcement actions pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C, and require additional remediation and assess damages pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C.

11. SEVERABILITY. If any court of competent jurisdiction determines that any provision of this Deed Notice requires modification, such provision shall be deemed to have been modified automatically to conform to such requirements. If a court of competent jurisdiction determines that any provision of this Deed Notice is invalid or unenforceable and the provision is of such a nature that it cannot be modified, the provision shall be deemed deleted from this instrument as though the provision had never been included herein. In either case, the remaining provisions of this Deed Notice shall remain in full force and effect.

12A. EXHIBIT A. Exhibit A includes the following maps of the Property and the vicinity:

i. Exhibit A-1: Vicinity Map - A map that identifies by name the roads, and other important geographical features in the vicinity of the Property (for example, USGS Quad map, Hagstrom County Maps);

ii. Exhibit A-2: Metes and Bounds Description - A tax map of lots and blocks as wells as metes and bounds description of the Property, including reference to tax lot and block numbers for the Property;

iii. Exhibit A-3: Property Map - A scaled map of the Property, scaled at one inch to 200 feet or less, and if more than one map is submitted, the maps shall be presented as overlays, keyed to a base map; and the Property Map shall include diagrams of major surface topographical features such as buildings, roads, and parking lots.

12B. EXHIBIT B. Exhibit B includes the following descriptions of the Restricted Areas:

i. Exhibit B-1: Restricted Area Map -- A separate map for each restricted area that includes:

(A) As-built diagrams of each engineering control, including caps, fences, slurry walls, (and, if any) ground water monitoring wells, extent of the ground water classification exception area, pumping and treatment systems that may be required as part of a ground water engineering control in addition to the deed notice;

(B) As-built diagrams of any buildings, roads, parking lots and other structures that function as engineering controls; and

(C) Designation of all soil and all upland sediment sample locations within the restricted areas that exceed any soil standard that are keyed into one of the tables described in the following paragraph.

ii. Exhibit B-2: Restricted Area Data Table - A separate table for each restricted area that includes either (A) or (B) through (F):

(A) Only for historic fill extending over the entire site or a portion of the site and for which analytical data are limited or do not exist, a narrative that states that historic fill is present at the site, a description of the fill material (e.g., ash, cinders, brick, dredge material), and a statement that such material may include, but is not limited to, contaminants such as PAHs and metals;

(B) Sample location designation from Restricted Area map (Exhibit B-1);

(C) Sample elevation based upon mean sea level;

(D) Name and chemical abstract service registry number of each contaminant with a concentration that exceeds the unrestricted use standard;

(E) The restricted and unrestricted use standards for each contaminant in the table; and

(F) The remaining concentration of each contaminant at each sample location at each elevation.

12C. EXHIBIT C. Exhibit C includes narrative descriptions of the institutional controls and engineering controls as follows:

i. Exhibit C-1: Deed Notice as Institutional Control: Exhibit C-1 includes a narrative description of the restriction and obligations of this Deed Notice that are in addition to those described above, as follows:

(A) Description and estimated size in square feet of the Restricted Areas as described above;

(B) Description of the restrictions on the Property by operation of this Deed Notice; and

(C) The objective of the restrictions.

ii. Exhibit C-2: Restricted Area A Engineering Control – High-Density Polyethylene (HDPE) Liner Overlain with Dense-Graded Aggregate (DGA) and Either an Asphalt Cap or Geosynthetic Cementitious Composite Mat (GCCM): Exhibit C-2 includes a narrative description of the HDPE Liner Overlain with DGA and Either an Asphalt Cap or GCCM Engineering Control as follows:

(A) Description of the engineering control;

(B) The objective of the engineering control; and

(C) How the engineering control is intended to function.

iii. Exhibit C-3: Restricted Area B Engineering Control – HDPE Liner: Exhibit C-2 includes a narrative description of the HDPE Liner Engineering Control as follows:

(A) Description of the engineering control;

(B) The objective of the engineering control; and

(C) How the engineering control is intended to function.

13 SIGNATURES IN WITNESS WHEREOF, Owner has executed this Deed Notice as of the date first written above.

WITNESS

100 Forrest Associates, LLC

CARAG LING Sole Member By Sal Caraghano Signdture]

ARACULANO

[Print name]

STATE OF FLORIDA SS COUNTY OF PALM BEACH

I certify that on <u>October 19, 2021</u>, Sal Caragliano personally came before me, and this person acknowledged under oath to my satisfaction, that this person

(a) Is the sole member of 100 Forrest Associates, LLC, the limited liability company named in this document,

(b) Signed, sealed and delivered this document as his or her act and deed in his capacity as a sole member of the limited liability company, and

(c) This document was signed and delivered by such limited liability company as its voluntary act, duly authorized.

Notary Public (gnature) MICHAEL L. MONCRIEFFE otary Public - State of Florida Commission # HH 062817

My Comm. Expires Dec 19, 202

Miller Muncheffe-Signed and sworn before me on Out 1 2021 \_\_\_\_, Notary Public

[Print name and title]

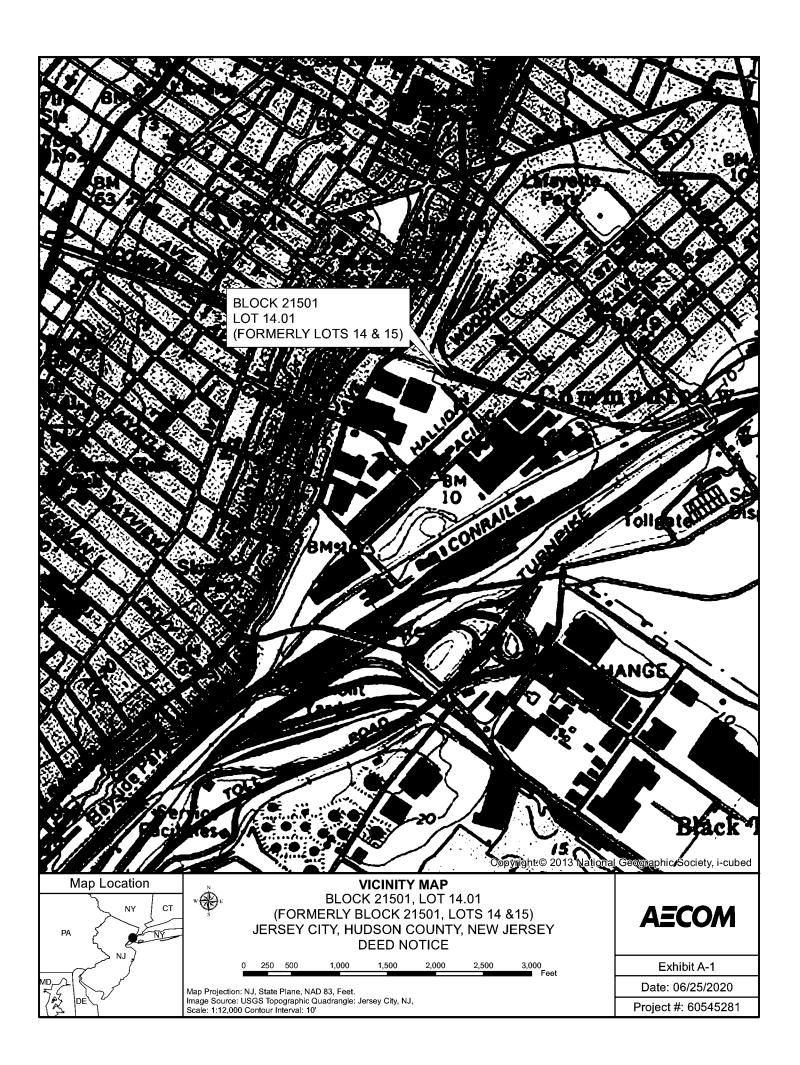
# EXHIBIT A

Maps of the Property and Vicinity

Exhibit A-1: Vicinity Map

Exhibit A-2: Metes and Bounds Description

Exhibit A-3: Property Map



#### Exhibit A-2



Facilities Mapping Specialists Environmental Site Mapping Transportation and Right-of-Way Serveys Expert Witness Services Aenal Base Mapping Cenified Drone Priors Hydrographic Bathymetric Surveys

# DESCRIPTION OF A DEED NOTICE AREA LOCATED ON LOT 14.01 BLOCK 21501 JERSEY CITY, HUDSON COUNTY, NEW JERSEY

BEGINNING at a point on the northeasterly sideline of Forrest Street, where the same is intersected by the dividing line between Lot 12 and Lot 14.01, being the beginning point of lands of 100 Forrest Associates described in Deed Book 3496 at Page 131, having a NAD83 New Jersey State Plane Coordinate of North: 683596.3 East: 611778.1 (US Survey Feet), said point being 222.00 feet from the northwesterly line of Halladay Street; and runs thence

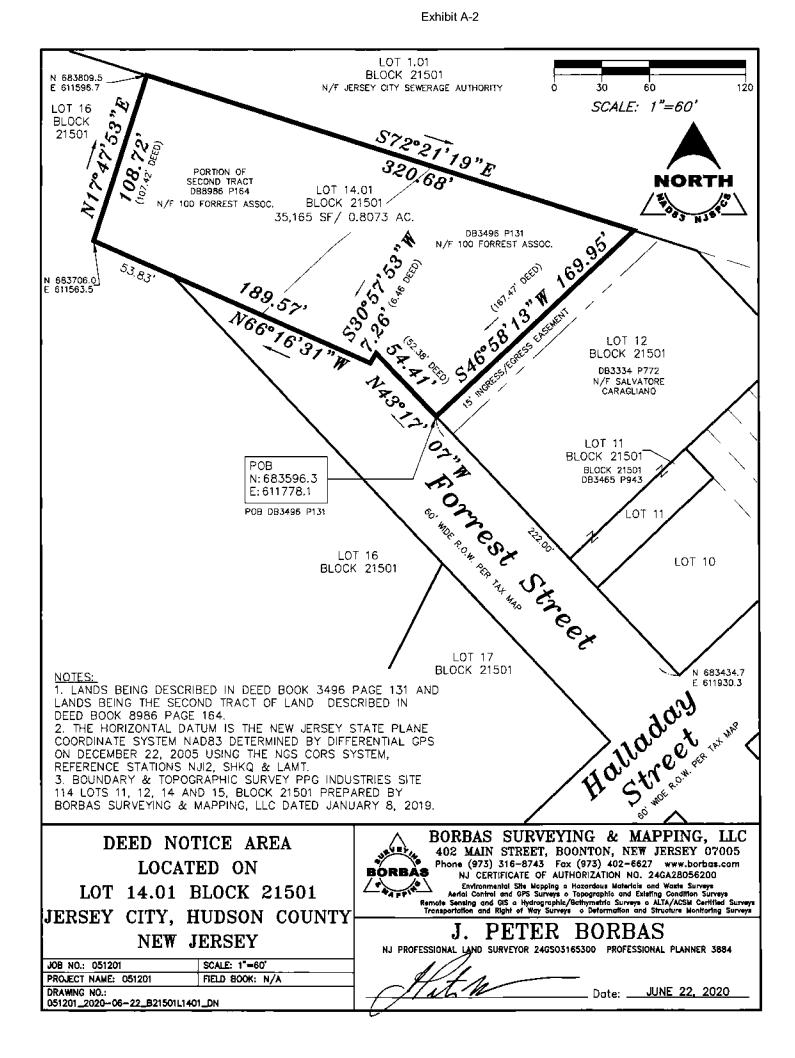
- 1. Along the northeasterly sideline of Forrest Street, North 43 degrees 17 minutes 07 seconds West 54.41 feet to an angle point in same; thence
- 2. Still along the northeasterly sideline of Forrest Street, South 30 degrees 57 minutes 53 seconds West 7.26 feet to an angle point in same; thence
- Still along the northeasterly sideline of Forrest Street and continuing along the dividing line between Lot 14.01 and Lot 16 Block 21501, North 66 degrees 16 minutes 31 seconds West 189.57 feet to a point; thence
- Still along said dividing line between Lot 14.01 and Lot 16 Block 21501, North 17 degrees 47 minutes 53 seconds East 108.72 feet to a point in the southerly line of Lot 1.01 Block 21501, lands now or formerly of Jersey City Sewerage Authority; thence
- 5. Along the dividing line between Lot 1.01 and Lot 14.01 Block 21501, South 72 degrees 21 minutes 19 seconds East 320.68 feet to a point; thence
- By a line two- and one-half feet (2.5') southeasterly of and parallel to a building line, South 46 degrees 58 minutes 13 seconds West 169.95 feet to the northeasterly sideline of Forrest Street and the point and place of BEGINNING.

Containing 135,165 square feet or 0.8073 acres of land.

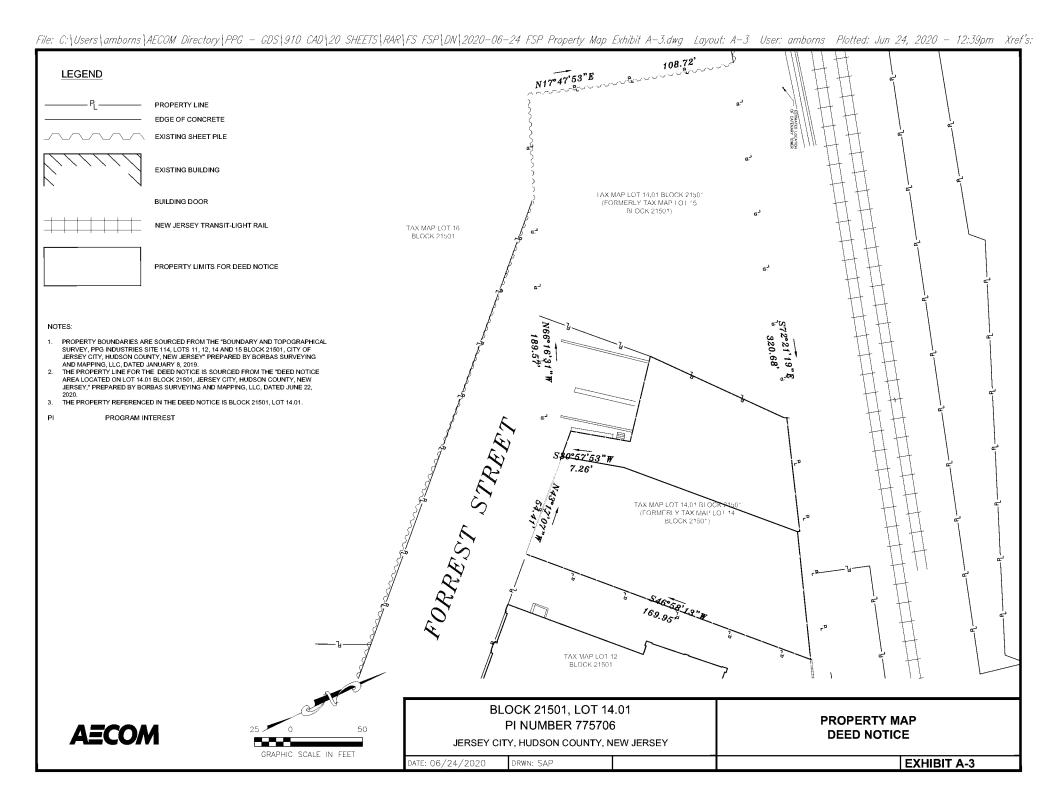
The basis of bearing for this description is the New Jersey State Plane Coordinate System (NAD83).

This description was prepared in accordance with a plan entitled, "DEED NOTICE AREA LOCATED ON LOT 14.01 BLOCK 21501 JERSEY CITY, HUDSON COUNTY NEW JERSEY", prepared by Borbas Surveying and Mapping, dated June 22, 2020.

J. Peter Borbas, PLS
 NJ 24GS03165300
 June 22, 2020



### Hudson County Register 20211230010135600 16/29



### EXHIBIT B

# Description of Restricted Area

Exhibit B-1A: Restricted Area Map – Restricted Area A –HDPE Liner Overlain with DGA and Either an Asphalt Cap or GCCM

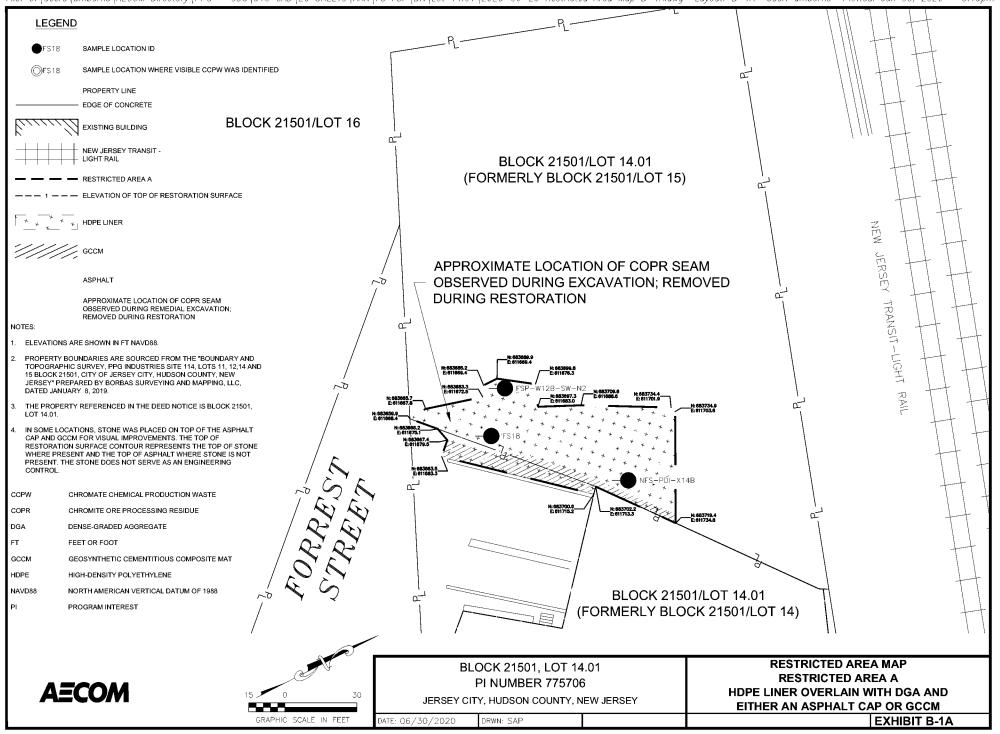
Exhibit B-1B: Engineering Control – As-Built Typical Section – Restricted Area A – HDPE Liner Overlain with DGA and Either an Asphalt Cap or GCCM

Exhibit B-1C: Restricted Area Map - Restricted Area B - HDPE Liner

Exhibit B-1D: Engineering Control – As-Built Typical Section – Restricted Area B – HDPE Liner

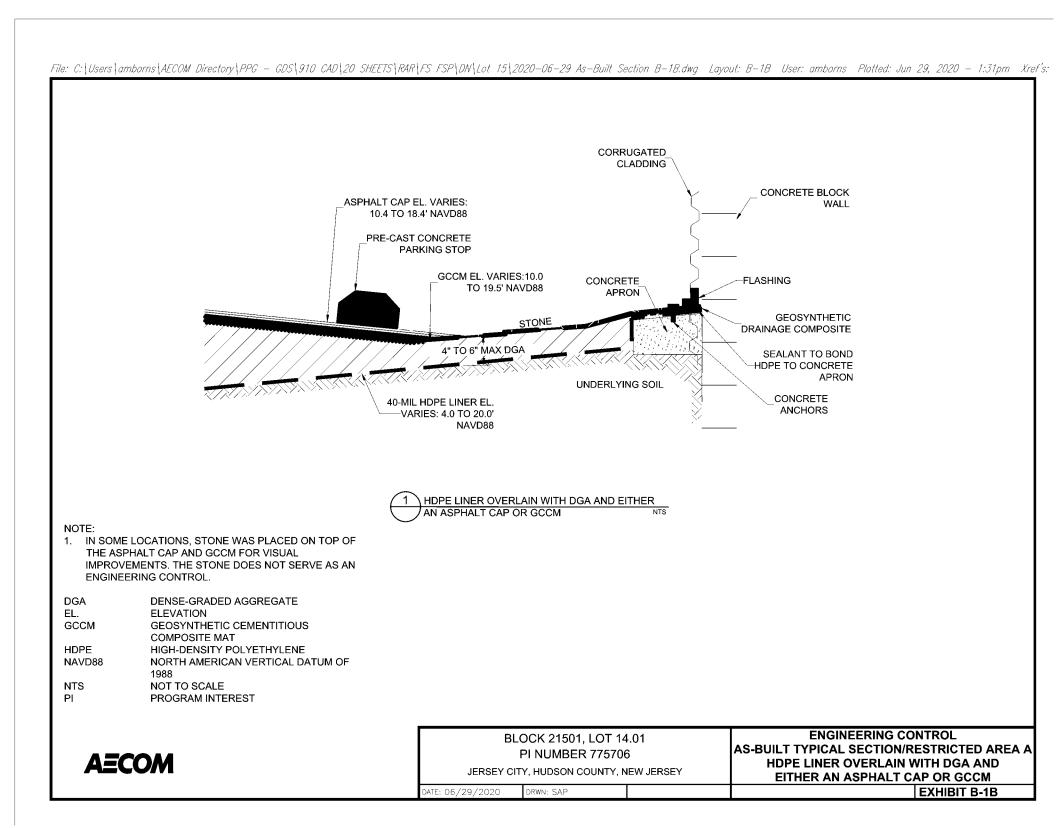
Exhibit B-2A: Restricted Area Data Table – Restricted Area A – HDPE Liner Overlain with DGA and Either an Asphalt Cap or GCCM

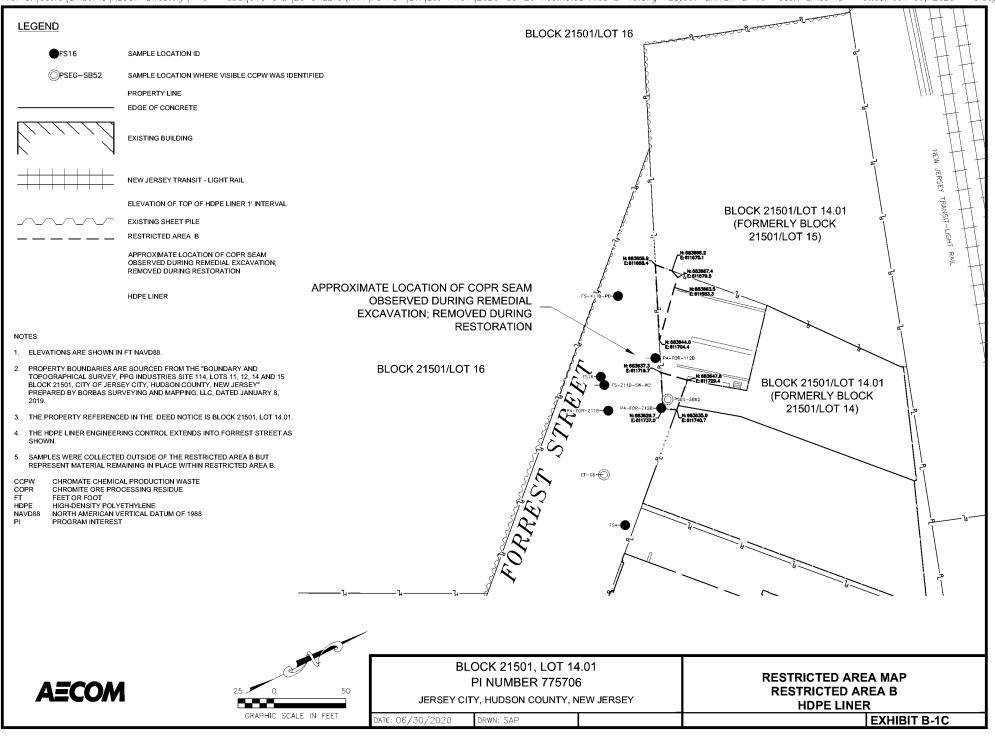
Exhibit B-2B: Restricted Area Data Table - Restricted Area B - HDPE Liner



File: C: Users amborns AECOM Directory PPG – GDS 910 CAD 20 SHEETS RAR FS FSP DN Lot 14.01 2020–06–29 Restricted Area Map B–1A.dwg Layout: B–1A User: amborns Plotted: Jun 30, 2020 – 3:19pm Xret

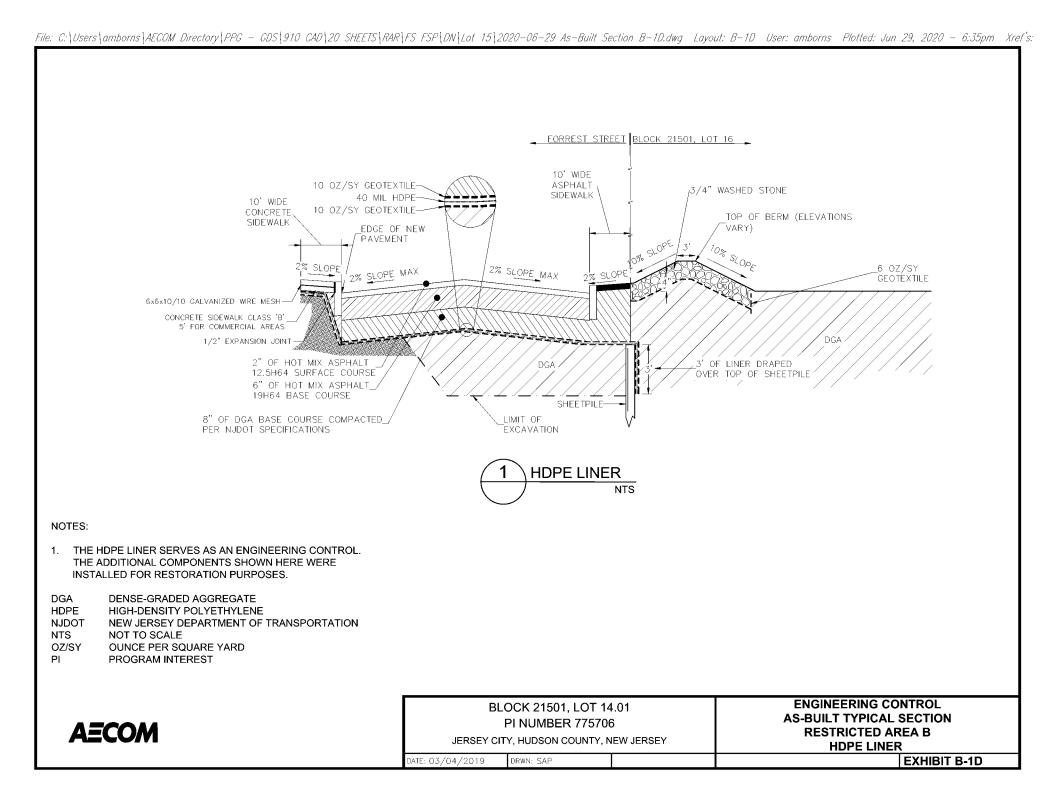
# Hudson County Register 20211230010135600 19/29





File: C:\Users\amborns\AECOM Directory\PPG - GDS\910 CAD\20 SHEETS\RAR\FS FSP\DN\Lot 14.01\2020-06-29 Restricted Area B-1C.dwg Layout: EXHIBIT B-1C User: amborns Plotted: Jun 30, 2020 - 3:06pm

# Hudson County Register 20211230010135600 21/29



# Exhibit B-2A Restricted Area Data Table - Restricted Area A HDPE Liner Overlain with DGA and Either an Asphalt Cap or GCCM Block 21501, Lot 14.01 Jersey City, Hudson County, New Jersey

Analyte CAS RN CrSCC Units					CHROMIUM (HEXAVALENT) 18540-29-9 20 mg/kg	
Location ID	Sample ID	Sample Depth Sample Elevation Interval Interval Date ID (ft bgs) (ft NAVD88) Collected		Result	Qualifier	
FSP-W12B-SW-N2	FSP-W12B-SW-N-3.5-4.0	3.5 to 4.0	6.4 to 5.9	06/30/2017	28.6	RA
FS18	FS18-2.0-2.5	2.0 to 2.5	9.6 to 9.1	03/17/2014	48.1	
FS18	FS18-4.0-4.5	4.0 to 4.5	7.6 to 7.1	03/17/2014	20.2	
FS18	FS18-4.0-4.5X	4.0 to 4.5	7.6 to 7.1	03/17/2014	24.2	
NFS-PDI-X14B	NFS-PDI-X14B-6.0-6.5	6.0 to 6.5	11.5 to 11	08/29/2016	25.8	J
NFS-PDI-X14B	NFS-PDI-X14B-8.0-8.5	8.0 to 8.5	9.5 to 9.0	08/29/2016	27.5	J
NFS-PDI-X14B	NFS-PDI-X14B-10.0-10.5	10.0 to 10.5	7.5 to 7.0	08/29/2016	76.6	J
NFS-PDI-X14B	NFS-PDI-X14B-12.0-12.5	12.0 to 12.5	5.5 to 5.0	08/29/2016	36.6	J

# Exhibit B-2A Restricted Area Data Table - Restricted Area A HDPE Liner Overlain with DGA and Either an Asphalt Cap or GCCM Block 21501, Lot 14.01 Jersey City, Hudson County, New Jersey

#### Notes:

A COPR seam, as shown on Exhibit B-1A, was identified during excavation activities approximately 1.2 to 1.7 ft bgs (El. 8.7 to 8.2 ft NAVD88). Material was removed during restoration activities, but COPR may remain in place within Restricted Area A.

Visible CCPW was encountered in boring FS18 from 1.8 to 2.5 ft bgs (EI. 9.8 to 9.1 ft NAVD88) and remains in place.

bgs - below ground surface

CAS RN - Chemical Abstracts Service Registry Number

CCPW - chromate chemical production waste

COPR - chromite ore processing residue

CrSCC - Chromium Soil Cleanup Criteria

DGA - dense-graded aggregate

El. - elevation

ft - feet

GCCM - geosynthetic cementitious composite mat

HDPE - high-density polyethylene

J - Indicates the result was an estimated value; the associated numerical value was an approximate concentration of the analyte in the sample.

mg/kg - milligrams per kilogram

N/A - not applicable

NAVD88 - North American Vertical Datum of 1988

NJDEP - New Jersey Department of Environmental Protection

RA - Indicates that the result for this analyte has been rejected, but is useable.

Bold result indicates a hexavelent chromium result exceeded the CrSCC.

# Exhibit B-2B Restricted Area Data Table - Restricted Area B HDPE Liner Block 21501, Lot 14.01 Jersey City, Hudson County, New Jersey

			Analyte CAS RN CrSCC RDCSRS-GAG NRDCSRS Units	S RN 18540-29-9 SCC 20 GAG N/A SRS N/A		VANADIUM 7440-62-2 N/A 390 1100 mg/kg		
Location ID	Sample ID	Sample Depth Interval	Sample Elevation Interval (ft NAVD88)	Date Collected				
FS16	FS16-5.0-5.5*	5.0 - 5.5	5.1 to 4.6	04/02/2014			598	
FS4	FS4-1.0-1.5*	1.0 - 1.5	9.1 to 8.6	03/21/2014	24.0	J		
FS-Z11B-SW-W2	FS-Z11B-SW-W-3.0-3.5*	3.0 - 3.5	6.9 to 6.4	07/01/2017	32.3	J		
P4-FOR-Y12B	P4-FOR-Y12B-0.5-1.0*	0.5 - 1.0	9.9 to 9.4	06/23/2016	36.3	J		
P4-FOR-Z11B	P4-FOR-Z11B-4.0-4.5*	4.0 - 4.5	6.0 to 5.5	06/17/2016	25.5	J		
P4-FOR-Z12B	P4-FOR-Z12B-3.0-3.5*	3.0 - 3.5	6.7 to 6.2	06/20/2016	28.9	J		

# Exhibit B-2B Restricted Area Data Table - Restricted Area B HDPE Liner Block 21501, Lot 14.01 Jersey City, Hudson County, New Jersey

#### Notes:

\*This sample was collected outside the boundary of Restricted Area B but may represent material remaining in place within Restricted Area B. A COPR seam, as shown on Exhibit B-1C, was identified during excavation activities approximately 0.8 to 2.0 ft bgs. Material was removed during restoration activities, but COPR may remain in place within Restricted Area B.

Visible CCPW was encountered and remains in place in boring PSEG-SB62 from 0.3 to 5.0 ft bgs (Elevation 9.7 to 5.0 ft NAVD88). Visible CCPW was encountered in boring EF-06 from 0.5 to 5.0 ft bgs (Elevation 9.3 to 5.3 ft NAVD88) and remains in place from 2.0 to 5.0 ft bgs (Elevation 8.3 to 5.3 ft NAVD88).

bgs - below ground surface

CAS RN - Chemical Abstracts Service Registry Number CCPW - Chromate Chemical Production Waste COPR - Chromite Ore Processing Residue CrSCC - Chromium Soil Cleanup Criteria ft - feet HDPE - high-density polyethylene J - Indicates the result was an estimated value; the associated numerical value was an approximate concentration of the analyte in the sample. mg/kg - milligrams per kilogram N/A - not applicable NAVD88 - North American Vertical Datum of 1988 NJDEP - New Jersey Department of Environmental Protection NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standard RDCSRS-GAG - Residential Direct Contact Soil Remediation Standard - Garfield Avenue Group (alternative remediation standard approved by the NJDEP on December 28, 2016).

Blank result indicates that the analyte did not exceed the CrSCC, RDCSRS-GAG, and/or NRDCSRS.

Bold result indicates a hexavelent chromium result that exceeded the CrSCC or a vanadium result that exceeded the RDCSRS-GAG.

# **EXHIBIT C**

Narrative descriptions of the institutional controls and engineering controls

Exhibit C-1: Deed Notice as Institutional Control

**Exhibit C-2:** Narrative Description of the Restricted Area A Engineering Control: HDPE Liner Overlain with DGA and Either an Asphalt Cap or GCCM

**Exhibit C-3:** Narrative Description of the Restricted Area B Engineering Control: HDPE Liner

# **EXHIBIT C**

Narrative descriptions of the institutional and engineering controls

# **Exhibit C-1: Deed Notice as Institutional Control**

# (A) Description and estimated size of the Restricted Areas:

The deed notice is for soil (Soil Restricted Area A and Soil Restricted Area B), located at Block 21510, Lot 14.01 in Jersey City, New Jersey, as depicted on **Exhibits B-1A** and **B-1C**.

In Restricted Area A, the contaminants of concern are visible Chromate Chemical Production Waste (CCPW) and hexavalent chromium ( $Cr^{+6}$ ). The estimated size of the Soil Restricted Area A is 1,995 square feet ( $ft^2$ ) (0.05 acres).

In Restricted Area B, the contaminants of concern are visible CCPW and  $Cr^{+6}$ . The estimated size of the Soil Restricted Area B is 414 ft<sup>2</sup> (0.01 acres). Note that although vanadium is present within adjacent Forrest Street at concentrations greater than the alternative remediation standard, it is not believed to be present on Block 21501, Lot 14.01 Restricted Area B based on clean delineation samples collected from location P4-FOR-Y12B.

# (B) Descriptions of the restrictions on the Property by operation of this Deed Notice:

The restrictions included in this Deed Notice minimize exposure to the contaminants of concern identified in **Exhibit C-1(A)**, which include visible CCPW,  $Cr^{+6}$  at concentrations greater than the Chromium Soil Cleanup Criteria (CrSCC) in Soil Restricted Area A, and visible CCPW,  $Cr^{+6}$  at concentrations greater than the CrSCC, and vanadium at concentrations greater than the alternative remediation standard in Soil Restricted Area B. Through the use of this Deed Notice and implementation of engineering controls, exposure to humans and the potential impact to the environment are reduced.

# (C) Objective of the restrictions:

The objective of the restrictions in this Deed Notice is to permit continued use of the Property while reducing the exposure of humans to, and the potential impact to the environment from, visible CCPW and  $Cr^{+6}$  in soil at concentrations greater than the CrSCC in Soil Restricted Area A, and visible CCPW,  $Cr^{+6}$  at concentrations greater than the CrSCC, and vanadium at concentrations greater than the alternative remediation standard in Soil Restricted Area B.

Hudson County Register 20211230010135600 28/29

# **Exhibit C-2: Narrative Description of the Restricted Area A Engineering Control: HDPE Liner Overlain with DGA and Either an Asphalt Cap or GCCM**

# (A) Description of the engineering control:

Following excavation, the ground surface was graded and compacted. A 40-mil highdensity polyethylene (HDPE) liner was placed on top of the prepared surface and the liner was sealed to the existing concrete apron of the building on Block 21501, Lot 14.01. Following installation of the HDPE liner, the HDPE liner was overlain with dense-graded aggregate (DGA) backfill material, except where the HDPE liner was placed on the concrete apron. Where placed on the concrete apron, the HDPE liner was covered with a geosynthetic drainage composite that was then covered with a geosynthetic cementitious composite mat (GCCM). The GCCM is intended to mitigate surface water runoff leakage through the wall of the building. Where the GCCM was not placed, asphalt was placed on top of the DGA. The horizontal extent of the HDPE Liner Overlain with DGA and Either an Asphalt Cap or GCCM Engineering Control is depicted on **Exhibit B-1A.** An as-built typical section detail of the HDPE Liner Overlain with DGA and Either an Asphalt Cap or GCCM Engineering Control is shown on **Exhibit B-1B**.

# **(B)** The objective of the engineering control:

The objective of the HDPE Liner Overlain with DGA and Either an Asphalt Cap or GCCM Engineering Control is to protect human health and the environment by restricting access and eliminating exposure to visible CCPW and/or  $Cr^{+6}$  present in the underlying soil at concentrations greater than the CrSCC.

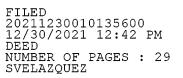
# (C) How the engineering control is intended to function:

The HDPE Liner Overlain with DGA and Either an Asphalt Cap or GCCM Engineering Control is intended to function as a physical barrier that prevents direct contact with and incidental exposure to visible CCPW and/or  $Cr^{+6}$  present in the underlying soil at concentrations greater than the CrSCC.

# **Exhibit C-3: Narrative Description of the Restricted Area B Engineering Control: HDPE Liner**

# (A) Description of the engineering control:

Following excavation throughout Forrest Street and into a portion of Block 21501, Lot 14.01, the ground surface was graded and compacted. A 40-mil thick HDPE liner was placed on top of the prepared surface. Along the southern boundary, the liner was draped over the top of the sheet pile. Along the northern boundary, the liner was placed to abut the buildings. The horizontal extent of the HDPE Liner is depicted on **Exhibit B-1C**. The HDPE Liner spans Block 21501, Lot 14.01 and the Forrest Street right-of-way. An as-built typical section of the HDPE Liner Engineering Control is shown on **Exhibit B-1D**.



# (B) The objective of the engineering control:

The objective of the HDPE Liner Engineering Control is to protect human health and the environment by restricting access and eliminating exposure to visible CCPW,  $Cr^{+6}$  at concentrations greater than the CrSCC, and vanadium at concentrations greater than the alternative remediation standard.

# (C) How the engineering control is intended to function:

The HDPE Liner Engineering Control is intended to function as a physical barrier that prevents direct contact with and incidental exposure to visible CCPW,  $Cr^{+6}$  at concentrations greater than the CrSCC, and vanadium at concentrations greater than the alternative remediation standard.