SOVEREIGN CONSULTING INC.

February 22, 2019

Jessica LaClair
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233-7016

RE: Supplement to the Pre-Design Investigation Data Summary Report Amendment
Former Anaconda Plant (a.k.a. Harbor at Hastings Site) Site No. 3-60-022
Hastings-On-Hudson, New York

Dear Ms. LaClair:

Please find attached on behalf of Atlantic Richfield Company the *Supplement to the Pre-Design Investigation Data Summary Report Amendment.* This document has been prepared for submittal to the New York State Department of Environmental Conservation (NYSDEC) in accordance with the requirements of the Record of Decision dated March 2012, the Remedial Design Work Plan dated July 2014, the NYSDEC's May 5, 2017 Conditional Approval of the Pre-Design Investigation (PDI) Data Summary Report (DSR) submitted in August 2015, and the NYSDEC's June 19, 2018, letter response to the PDI DSR Amendment submitted May 2018.

If you have any questions or comments on this submittal, please feel free to contact Paul Johnson at
832-619-5825.

Sincerely,
Sovereign Consulting Inc.

Martha D. Gopal
Senior Project Scientist

Enclosure

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SOVEREIGN CONSULTING INC.

SUPPLEMENT TO PRE-DESIGN INVESTIGATION DATA SUMMARY REPORT AMENDMENT

FEBRUARY 22, 2019

FORMER ANACONDA WIRE AND CABLE PLANT SITE
a.k.a. HARBOR AT HASTINGS SITE

1 River Street
Hastings-on-Hudson, New York
NYSDEC Site No. 3-60-022

Prepared for:

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1. Introduction

The purpose of this Supplement is to describe investigations and present information that Atlantic Richfield (AR) has collected since the Pre-Design Investigation Data Summary Report Amendment was submitted to the New York State Department of Environmental Conservation (NYSDEC) on May 25, 2018 (2018 PDI Amendment) for the Former Anaconda Wire & Cable Company Site (Site # 3-60-022). The Site is located on the east shore of the Hudson River at 1 River Street, Hastings-on-Hudson, New York. As indicated in the 2018 PDI Amendment, this additional investigation was needed to fully define the extents of dredging in Operable Unit Number 2 (OU-2). Specifically:

1. Additional Off-shore pre-delineation sampling was proposed in Kinnally Cove to further refine the removal areas presented in the 2018 PDI Amendment, and;
2. Variability sampling was proposed in the area of Old Marina and Kinnally Cove that contained inconsistent and varying detections of Total PCBs, to evaluate variability and refine the recommended removal areas.

This additional investigation was approved by NYSDEC in a letter dated June 13, 2018 and was conducted from September 24 through October 3, 2018. Twenty-four pre-delineation borings (VC-541 through VC-564) were advanced in Kinnally Cove. Thirty-seven variability borings were advanced with sample identification suffix A, B and C. Nine variability borings were located in Old Marina and 28 were located in Kinnally Cove.

Additionally, the fifth annual round of baseline groundwater sampling was conducted in September 2018 in accordance with the "Baseline Sampling and Analysis Plan" (BSAP). The BSAP was approved by NYSDEC in 2013 and changes/updates to the program were made in 2013 and 2014 as agreed with NYSDEC.

The following presents a summary of sample collection methods, a summary and evaluation of results, recommended revised dredge areas in Old Marina and Kinnally Cove based on those results, and the results of the 2018 baseline groundwater sampling.

Consistent with the NYSDEC's comments on the 2017 Preliminary Design dated March 13, 2018 and subsequent discussions, this Supplement represents the completion of the Pre-design investigation. Consistent with that letter, upon approval of the OU-1 excavation and OU-2 dredge limits provided in the 2018 PDI Amendment and this Supplement, AR will submit the revised drawings that reflect any changes to the design limits presented in the 2017 Preliminary Design Report to NYSDEC for review.

Several tables and figures provided in the 2018 PDI Amendment were updated to include the 2018 data and are presented herein using the same table and figure numbers from the 2018 PDI Amendment, distinguished by the date of this Supplement in the title block. These tables and figures replace the previous versions contained in the 2018 PDI Amendment. Table 3.5C

was newly created for this Supplement. Figure 3.2B of the Amendment is attached for convenience. Details are provided in the Table of Contents.

2. Sediment Sampling

The subject additional sediment investigation was performed in general accordance with the Remedial Design Work Plan (work plan), Former Anaconda Wire & Cable Plant Site, prepared by Haley & Aldrich of New York (Haley & Aldrich) for Atlantic Richfield Company (AR), dated July 2014. The work plan was prepared in accordance with the OU-1 Record of Decision (ROD) Amendment and the OU-2 ROD as well as the Amended Order on Consent dated November 6, 2013. Specifically, the offshore (OU-2) sediment delineation program was designed in accordance with the OU-2 ROD.

Vibracore samples and petite ponar grab surface samples were collected from boat-mounted equipment. Sampling was conducted by CR Environmental of Falmouth, MA, who conducted the past OU-2 sediment sampling for the Site. Samples were processed by Sovereign Consulting Inc. and were analyzed by Pace Analytical Laboratory in Minneapolis, Minnesota. Data validation was performed by Environmental Standards, Inc. of Valley Forge, PA.

2.1 OFF-SHORE PRE-DELINEATION (KINNALLY COVE)

This section supplements section 2.6 of the 2018 PDI Amendment.

The purpose of the Off-shore pre-delineation program was to provide supplementary data for making decisions regarding design of the remedy, relative to the extent of sediment that will be required to be dredged.

The Backwater portion of the off-shore pre-delineation program originally consisted of sampling in the Old Marina, North Boat Slip, and South Boat Slip, which are characterized by slower river velocities and increased deposition and have a Total PCB remediation goal of 1 mg/kg to a depth of 6 feet. Based on the OU-2 ROD, a portion of the Old Marina is considered a Backwater Area. The balance of the Old Marina and Kinnally Cove, which were investigated subsequent to the ROD, have characteristics similar to the other Backwater Areas such as low river velocity and increased deposition. The data evaluation in the 2018 PDI Amendment and this Supplement therefore use the 1 mg/kg criterion as a point of reference for the sediments in the Old Marina and Kinnally Cove.

Following submittal of the 2018 PDI Amendment, additional pre-delineation sampling was conducted in Kinnally Cove around the two removal areas recommended in the 2018 PDI Amendment. Specifically, 24 additional delineation borings VC-541 through VC-564 were advanced in Kinnally Cove and these locations are shown in Figure 3.6W. The delineation locations were approximately 15 feet from the existing sediment sample locations that they were meant to delineate. The distance of 15 feet is based on a 30 by 30-foot (ft) grid, which is the size of the NYSDEC accepted dredge areas for the OU-2 Deepwater and Northwest Areas. Based on the results of these 12 delineation samples (VC-541 through VC-552) 12 additional step-out delineation borings (VC-553 through VC-564) were advanced. Step-out locations were approximately 30 ft from the delineation sample locations and midway between the

delineation sampling location and an existing boring location. Locations were adjusted as needed based on field conditions, as described in Section 2.3.

Consistent with past sampling and the RDWP, sampling and analysis were conducted as follows. An initial 0 to 0.5 feet depth interval (feet below mudline, or ft bml) and a 0.5 to 1 ft interval were collected. One-foot incremental sampling intervals were collected up to 6 ft bml to refine the PCB distribution data and residual concentrations as applicable. One, two-foot interval sample (i.e. 6-8 ft bml) was analyzed as needed to document sediment concentrations that will be left in place after remedial action (i.e. documentation samples).

Compliance with procedures described in the RDWP was maintained through work completion. Results and any work plan adjustments are discussed in Section 2.3.

2.2 OFF-SHORE VARIABILITY SAMPLING (OLD MARINA & KINNALLY COVE)

This section supplements Section 2.6 of the 2018 PDI Amendment.

Variability sampling was conducted in the western portion of Old Marina and the eastern portion of Kinnally Cove to determine if concentrations above 1 mg/kg Total PCBs in the original sample were isolated. This area contained 13 existing sediment sample locations, as shown in attached Figure 3.6W, which contain inconsistent and varying concentrations of PCBs, similar to the OU-2 Deepwater locations where variability sampling was performed in 2015.

Three variability sediment locations (denoted with the suffix A, B, or C) were collected approximately 10 ft from each of the 13 sediment sample locations, with one to the north, one to the southeast and one to the southwest of each of the sediment sample locations, where access was feasible to advance the boring. The distance of 10 feet is consistent with past variability sampling that was completed for the OU-2 Deepwater Area, as approved by NYSDEC in the Remedial Design Work Plan dated July 15, 2014. As proposed in the 2018 PDI Amendment, two rather than three variability samples were collected at each of VC-532 and VC-537. Collection of a sample north of VC-537 was not feasible because it was within 5 ft of the shoreline. The existing sample location VC-533 was 15 ft southeast of VC-532 and was used as the variability sample for this location.

Consistent with past variability sampling and the RDWP, sampling and analysis were conducted as follows. An initial 0 to 0.5 ft depth interval bml and a 0.5 to 1 ft interval were collected. One-foot incremental sampling intervals were collected up to 6 ft bml to refine the PCB distribution data and residual concentrations as applicable. One, two-foot interval sample (i.e. 6-8 ft bml) was analyzed as needed to document sediment concentrations that will be left in place after remedial action (i.e. documentation samples).

Compliance with procedures described in the work plan was maintained through work completion. Results and any work plan adjustments are discussed in Section 2.3.

2.3 PRE-DELINEATION & VARIABILITY SAMPLING RESULTS (OLD MARINA & KINNALLY COVE)

This section supplements Section 3.6.2 of the 2018 PDI Amendment.

Several tables and figures provided in the 2018 PDI Amendment were updated to include the 2018 data and are presented herein using the same table and figure numbers from the 2018 PDI Amendment, distinguished by the date of this Supplement in the title block. These tables and figures replace the previous versions contained in the 2018 PDI Amendment. Table 3.5C was newly created for this Supplement. Figure 3.2B of the Amendment is attached for convenience. Details are provided in the Table of Contents.

Table 3.5C provides Old Marina and Kinnally Cove Total PCB analytical results for variability samples, and Table 3.6B provides Total PCB analytical results for all offshore delineation samples. Table 4.4A shows the correlation between Total PCB detections and metals detections greater than background in delineation samples. Only PCB data have been added to this table, since no new metals data were collected in 2018.

Figures 3.6I through 3.6P (Sheet 3) show Total PCB concentrations at each depth interval in Old Marina and Kinnally Cove. Sheets 2 of Figures 3.6K, 3.6N, 3.6O, and 3.6P show a small portion of Old Marina; therefore, these sheets have been updated for consistency. Figure 3.6W presents Total PCB concentrations over all depth intervals combined, in Old Marina and Kinnally Cove.

The following adjustments were made during sample collection based on field conditions:

- VC-517A, B, C: Repeated attempts were made to advance variability borings to 10 ft bml within approximately 20 ft of VC-517. However, at 5 ft bml, an obstruction was encountered at each attempted location and variability samples could not be collected below 5 ft bml.
- VC-522A, B, C and VC-532A, C: The variability sample locations were adjusted around VC-522 and VC-532 due to the presence of cobbles from the surface to 2 ft bml in some areas.

2.4 SEDIMENT EVALUATION (OLD MARINA & KINNALLY COVE)

This section supplements Sections 4.4.2 and 7.6 of the 2018 PDI Amendment.

Total PCB concentrations in all delineation, delineation step out, and variability boring locations collected in 2018 were above 1 mg/kg in at least one of the intervals of interest analyzed.

In the Old Marina, sediment PCB detections in excess of 1 mg/kg increase with depth in most cases, with higher concentrations detected primarily in the 4 to 6 feet bml depth interval, which varied depending on the location within the Old Marina. In Kinnally Cove, sediment PCB

detections in excess of 1 mg/kg increase with depth, with higher concentrations detected primarily in the 2 to 5 feet bml depth intervals, which also varied depending on the location within Kinnally Cove. The deposition depths in the eastern portion of Kinnally Cove also were influenced by historic sediment deposition, which appears to have limited the depth of sediments influenced by Total PCBs. As shown in Figure 3.6W, most locations in both areas have detections below 1 mg/kg in the 0 to 1.0 feet interval. While the Old Marina has a few detections in excess of 1 mg/kg in the 0 to 0.5 feet interval, the sediments at this depth interval in Kinnally Cove are all below 1 mg/kg.

PCBs were detected at concentrations in excess of 1 mg/kg over more of the vertical column in Old Marina sediments than in those in Kinnally Cove, except in the western and northwestern portions of the Old Marina. In these areas, concentrations in excess of 1 mg/kg are deeper than 3 ft bml, as seen in vibracore locations VC-510, VC-512, VC-514, and VC-518. In the northwestern portion of the Old Marina, the remnants of a former boat house structure to the south of VC-512 and VC-514 may be acting as a sediment deposition barrier. In the northwestern area of Kinnally Cove, the distribution pattern appears similar to that in the Old Marina. However, in most of Kinnally Cove, concentrations greater than 1 mg/kg are limited in the vertical column to only a few depth intervals. As one proceeds east in Kinnally Cove, concentrations in excess of 1 mg/kg are largely limited to the 2 to 6 ft interval bml and become shallower as one continues east.

The sediment deposition differences between the Old Marina and Kinnally Cove may be the result of river currents, with movement limited to some extent by the remnants of submerged structures in the Old Marina not related to the former Site operations. These include the former ship remnant that extends west from the northwest corner of the Tennis Club property, and the former boat houses located southwest of this former ship. In addition to these structures, there may be other obstructions in the Old Marina and Kinnally Cove from past use and dumping, not related to the activities associated with Site operations. Since the Old Marina had docking facilities, past maintenance of the Old Marina likely included dredging, which may have relocated and redistributed some of the impacted sediments within the Old Marina and Kinnally Cove.

2.5 CONCLUSIONS (OLD MARINA & KINNALLY COVE)

This section supplements Sections 4.4.2 and 7.6 of the 2018 PDI Amendment.

Based on these results, the removal areas presented in the 2018 PDI Amendment were adjusted as shown in Figure 4.4J. The removal area is now recommended to extend throughout most of the footprint of Old Marina and Kinnally Cove, to the depth intervals indicated in Figure 4.4J, based on the vertical distribution of Total PCBs at concentrations above 1 mg/kg.

In the Old Marina, within the boundaries illustrated in Figure 4.4J, dredging is recommended to 6 ft bml to remove Total PCB concentrations greater than 1 mg/kg consistent with the OU-2 ROD. In Kinnally Cove, within the boundaries illustrated in Figure 4.4J, dredging is

recommended to depths ranging from 3 to 6 ft bml based on the vertical distribution of Total PCB concentrations greater than 1 mg/kg. Although a portion of the Old Marina and the entirety of Kinnally Cove are not considered in the OU-2 ROD, the planned removal approach follows the remedial goals outlined in the OU-2 ROD for Backwater Areas.

The following provides clarification for specific sample locations within the Old Marina and Kinnally Cove, in support of the boundaries and depths illustrated in Figure 4.4J.

- Old Marina – VC-517: The concentration of Total PCBs measured at the 1 to 2 ft interval is slightly greater than the removal criteria of 1 mg/kg, at 1.2 mg/kg. The variability samples collected around VC-517 at this interval all have estimated ("J") Total PCB concentrations below 1 mg/kg, and the average of all Total PCB concentrations at this interval is 0.77 mg/kg. The total PCB concentrations at all other depth intervals to 6 ft bml in VC-517 are below 1 mg/kg. The average for the Total PCB concentrations at the 1 to 2 ft interval demonstrates the sediments in this area can be excluded from dredging.

- Kinnally Cove – VC-539: The concentration of Total PCBs measured at the 3 to 4 ft interval is slightly greater than 1 mg/kg, at 1.4 mg/kg. The variability samples collected around VC-539 at this interval all have Total PCB concentrations below 1 mg/kg, and the average of all Total PCB concentrations at this interval is 0.53 mg/kg. The average for the Total PCB concentrations at the 3 to 4 ft interval demonstrates the sediments at this depth can be excluded from dredging, and the recommended dredge depth is 3 ft bml.

- Kinnally Cove – VC-563: The concentration of Total PCBs measured at the 4 to 5 ft interval is slightly greater than 1, at 1.2 mg/kg. Since there are no variability samples around this location, two sample locations adjacent to VC-563 were reviewed to determine the distribution of Total PCBs at the 4 to 5 ft interval. Sample location VC-530 is located to the southeast and sample location VC-537 is located to the northeast of VC-563, which results indicate the concentration of Total PCBs at 4 to 5 feet to be only 0.077 and 0.204 mg/kg, respectively. The average of the Total PCB concentrations in the three samples collected at this interval is 0.49 mg/kg. The average of the Total PCB concentrations at the 4 to 5 ft interval demonstrate the sediments at this depth can be excluded from dredging, and the recommended dredge depth is 4 ft bml.

The distribution of individual Aroclors has been evaluated for the Old Marina and Kinnally Cove. For the Old Marina, the Aroclor distribution by depth indicates the Aroclors associated with historic operations at the property appear to be more abundant at depth intervals below five feet. The Aroclors related to other potential sources appear to be more abundant in the depth intervals above five feet. This distribution indicates that Aroclors associated with historic operations at the property may have influenced the sediments during a limited historic time period, which decreased after that period of time. The distribution of these two groups of Aroclors in the Old Marina are similar in Kinnally Cove, with two notable differences. First, at depths from 0 to 2 feet in Kinnally Cove, the Aroclors associated with other potential sources are more abundant. Second, the Aroclors associated with historic operations at the 4 to 5 ft

depth interval are more abundant. Below 5 feet, the Aroclors associated with other potential sources were more abundant. Based on this, it appears that portions of Kinnally Cove may have been influenced by Aroclors associated with historic operations during a more discrete period of time.

3. Baseline Groundwater Sampling

This section supplements Sections 2.2.2, 3.2.3, and 7.2 of the 2018 PDI Amendment.

Baseline groundwater sampling has been completed to monitor shallow groundwater prior to remedial construction and allow for evaluating the long-term effectiveness of the remedy. To date, five rounds of sampling have occurred in 2014, 2015, 2016, 2017, and 2018. Prior results were reported in the 2015 PDI Report, the 2015 Baseline Data Report, and the 2016 Amendment to Baseline Data Report. Results through 2017 were reported in Table 3.2C of the 2018 PDI Amendment. Results of 2018 groundwater sampling are summarized in attached Page 5 of Table 3.2C. Attached Figure 3.2B from the 2018 PDI Amendment (not revised) shows the monitoring well locations.

Sampling and analysis in 2018 were completed consistent with the Baseline Sampling and Analysis Plan (BSAP) and past events. The BSAP was approved by NYSDEC in 2013 and changes/updates to the program were made in 2013 and 2014 as agreed with NYSDEC. The approach for the baseline groundwater sampling program was to sample shallow-screened wells upgradient of areas without known PCB and/or Site-specific metal impacted soils greater than remedial criteria. Baseline groundwater sampling also was performed at locations downgradient or proximate to PCB, lead or other suspected sources of soil contamination. The results of the groundwater sampling will establish a baseline for groundwater quality.

Baseline groundwater sampling has been completed for three upgradient wells located on the Site (PDMW-16S, PDMW-20S (replaced by PDMW-27S) and PDMW-19S) and three wells located on the western portion of the Site (MW-01A, MW-05 and MW-09) as shown in Figure 3.2B. MW-05, MW-09, PDMW-16S and PDMW-20S were abandoned as part of a NYSDEC-approved, sitewide well abandonment effort in 2016. Monitoring wells MW-01A and PDMW-27S were sampled in 2017 and 2018.

As reported in the 2018 PDI Amendment, sample results from PDMW-27S indicated an exceedance of drinking water standards for PCBs in 2014, with much lower values near or below the standard for 2015 and 2016. During the 2017 and 2018 sampling, PCBs were not detected in any wells including PDMW-27S. PCBs have not been detected in half of the wells in any sampling event, and the maximum PCB concentration detected in any well over this time period was 3.126 ug/L in 2016.

Based on these results, additional action is not required. Groundwater sampling will continue annually until the beginning of construction.

4. Path Forward

Consistent with the NYSDEC's comments on the 2017 Preliminary Design dated March 13, 2018 and subsequent discussions, this Supplement represents the completion of the Pre-design investigation. Consistent with that letter, upon approval of the OU-1 excavation and OU-2 dredge limits provided in the 2018 PDI Amendment and this Supplement, AR will submit the revised drawings that reflect any changes to the design limits presented in the 2017 Preliminary Design Report to NYSDEC for review.

TABLES

TABLE 3.2C - SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
WELL SAMPLING LOCATIONS
FORMER ANACONDA CABLE AND WIRE COMPANY - HASTINGS-ON-HUDSON, NEW YORK
FEBRUARY 2019

Location **Sample Date** **Sample Type** **Sample Name**	**Standards, Criteria, and Guidance Values (Unfiltered) (ug/L)**	MW-01A 9/20/2018 Unfiltered MW-01A-092018	MW-01A 9/20/2018 FD, Unfiltered MW-01A-092018-FD	PDMW-27S 9/20/2018 Unfiltered PDMW-27S-092018
Total Metals (ug/L)				
Beryllium	3	ND (5)	ND (5)	ND (5)
Copper	200	ND (10)	ND (10)	**12.2**
Lead	25	ND (10)	**4.9 J**	**6 J**
Zinc	2000	ND (20)	ND (20)	**31.9**
PCBs (ug/L)				
Aroclor 1016	-	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor 1221	-	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor 1232	-	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor 1242	-	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor 1248	-	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor 1254	-	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor 1260	-	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor 1262	-	ND (0.1)	ND (0.1)	ND (0.1)
Aroclor 1268	-	ND (0.1)	ND (0.1)	ND (0.1)
Total PCBs	0.09	ND (0.1)	ND (0.1)	ND (0.1)

Notes & Abbreviations:
ND (Not detected above laboratory detection limits)
FD (Field Duplicate)
1. Results in **bold** were detected.
2. Results are above SCG values.

TABLE 3.5C - SUMMARY OF SEDIMENT ANALYTICAL RESULTS FOR BACKWATER INVESTIGATION - TOTAL PCBs
VARIABILITY SAMPLING LOCATIONS IN OLD MARINA AND KINNALLY COVE
FORMER ANACONDA CABLE AND WIRE COMPANY - HASTINGS-ON-HUDSON, NEW YORK
FEBRUARY 2019

Sample Locations		Depth Intervals (feet)							
Results in mg/kg		0 - 0.5	0.5 - 1	1-2	2-3	3-4	4-5	5-6	6-8
Old Marina	VC-511	0.24	0.35	0.25	0.52	0.55	0.80	4.1	11
	VC-511A	--	--	--	--	--	--	13	6.7
	VC-511B	--	--	--	--	--	--	6.2	7.6 J
	VC-511C	--	--	--	--	--	--	4.9	4.5
	VC-517	0.34	0.23	1.2	0.77	0.94	0.89	2.1	5.7 J
	VC-517A	--	--	0.85 J	--	--	--	--	--
	VC-517B	--	--	0.52 J	--	--	--	--	--
	VC-517C	--	--	0.52 J	--	--	--	--	--
	VC-518	0.26	0.095	0.42	0.13	0.87	1.2	--	--
	VC-518A	--	--	--	--	--	4.3	--	--
	VC-518B	--	--	--	--	--	2.9	--	--
	VC-518C	--	--	--	--	--	6 J	--	--
Kinnally Cove	VC-522	0.62	0.26 J	1.8	2.0	1.9	3.2	ND	ND
	VC-522A	--	--	5.8	4.5	5.2	5.1	--	--
	VC-522B	--	--	1.7	4.3	4.1	8.4	--	--
	VC-522C	--	--	1.2	4.4	5.3	5.7	--	--
	VC-525	0.083 J	0.061 J	0.35	0.38	1.1	1.2	0.14	--
	VC-525A	--	--	--	--	3.6	36	--	--
	VC-525B	--	--	--	--	15.6 J	1.2	--	--
	VC-525C	--	--	--	--	5.1	8.1	--	--
	VC-526	0.10 J	0.068 J	0.14 J	0.94	0.84	1.3	0.037 J	
	VC-526A	--	--	--	--	--	ND	--	--
	VC-526B	--	--	--	--	--	9.9	--	--
	VC-526C	--	--	--	--	--	ND	--	--
	VC-530	0.43 J	0.54	1.3 J	1.2	4.0	0.077 J	ND	0.016 J
	VC-530A	--	--	1.3 J	2.9	9.3	--	--	--
	VC-530B	--	--	6.7	3.9	5.9	--	--	--
	VC-530C	--	--	0.61	4.8	29	--	--	--
	VC-531	0.22 J	0.48 J	4.2	8.0	2.6	ND	0.034 J	0.081 J
	VC-531A	--	--	2.5	3.9	9.2	--	--	--
	VC-531B	--	--	5.1	4.9 J	2.3	--	--	--
	VC-531C	--	--	2.8	4.4	5.2	--	--	--
	VC-532	0.25 J	5.2	4.2	4.9	2.3	0.039 J	0.085 J	0.011 J
	VC-532A	--	0.21 J	5.8	1.7	0.097 J	--	--	--
	VC-532C	--	0.49 J	5.7	2.2	2.3	--	--	--

TABLE 3.5C - SUMMARY OF SEDIMENT ANALYTICAL RESULTS FOR BACKWATER INVESTIGATION - TOTAL PCBs
VARIABILITY SAMPLING LOCATIONS IN OLD MARINA AND KINNALLY COVE
FORMER ANACONDA CABLE AND WIRE COMPANY - HASTINGS-ON-HUDSON, NEW YORK
FEBRUARY 2019

Sample Locations		Depth Intervals (feet)							
Results in mg/kg		0 - 0.5	0.5 - 1	1-2	2-3	3-4	4-5	5-6	6-8
Kinnally Cove - Continued	VC-537	0.41 J	0.49 J	1.1 J	0.93	11	0.2 J	0.065 J	ND
	VC-537A	--	--	0.30	--	7.8	--	--	--
	VC-537B	--	--	3.9	--	7.7	--	--	--
	VC-538	0.27 J	0.74 J	2.1	3.4	0.76	0.083 J	0.017 J	ND J
	VC-538A	--	--	2.4	15	--	--	--	--
	VC-538B	--	--	2.0	4 J	--	--	--	--
	VC-538C	--	--	2.9	3.2	--	--	--	--
	VC-539	0.39 J	1.7	1.8	17.1 J	1.4	0.17 J	0.028 J	0.015 J
	VC-539A	--	0.54 J	2.8 J	3.0	0.61	--	--	--
	VC-539B	--	0.49	4.0	4.1	0.027 J	--	--	--
	VC-539C	--	0.54 J	2.7 J	15	0.1 J	--	--	--
	VC-540	0.41 J	0.51	3.3	5.8	ND	ND	ND	ND
	VC-540A	--	--	2.1	7.0	--	--	--	--
	VC-540B	--	--	5.9	6.5	--	--	--	--
	VC-540C	--	--	3.6	12	--	--	--	--

Notes & Abbreviations

ND (Not detected above laboratory detection limits); J (Estimated value); "--" (Sample not analyzed or not collected)

Variability samples in Old Marina and Kinnally Cove were collected in September/October 2018

1. Results are < 1 mg/kg overlying a sample > 1 mg/kg.
2. Results are < 1 mg/kg, contiguous for at least 3 ft, and overlying a sample > 1 mg/kg.
3. Results are > 1 mg/kg.

TABLE 3.6B - SUMMARY OF SEDIMENT ANALYTICAL RESULTS FOR NEARSHORE AND BACKWATER - TOTAL PCBs
NEARSHORE, OLD MARINA, KINNALLY COVE AND NORTH BOAT SLIP LOCATIONS
FORMER ANACONDA CABLE AND WIRE COMPANY - HASTINGS-ON-HUDSON, NEW YORK
FEBRUARY 2019

Sample Locations		Depth Interval							
Results in mg/kg		0 - 0.5 (ft)	0.5 - 1 (ft)	1 - 2 (ft)	2 - 3 (ft)	3 - 4 (ft)	4 - 5 (ft)	5 - 6 (ft)	6 - 8 (ft)
Nearshore	VC-401	1.39	3.3	4.9	5.2	8.5	8.2	7.3	4.3
	VC-402	0.68	1.16	2.7	5.0	3.5	5.1	5.2	2.8
	VC-403	0.11 J	0.36	1.93	2.4	4.8	7.3	1.55	1.49
	VC-404	2.2	0.68	11	1.29	2.8	4.8	6.7	3.1
	VC-405	0.47	0.95	5.9	2.7	5.1	5.4	6.2	0.84
	VC-406	0.32	0.13	0.33	ND	ND	ND	ND	ND
	VC-407	0.11	ND	ND	ND	ND	ND	ND	ND
	VC-408	0.32	114	7.5	ND	ND	ND	ND	ND
	VC-409	0.36	5.7	28	1.71	2.9	0.25	ND	0.081 J
	VC-410	0.40	1.56	3.1	3.7	6.6	1.17	0.13	ND
	VC-411	0.32	0.61	1.39	3.5	1.74	58	ND	ND
	VC-412	0.21	0.76	1.03	5.6	4.0	5.6	11	13
	VC-413	0.24	0.39	1.83	0.65	0.63	2.3	4.1	4.7
	VC-414	0.39	0.52	0.5	0.45	0.53	4.3	1.37	4.3
	VC-415	0.27	0.36	0.51	0.55	1.02	1.40	1.30	2.6
	VC-416	0.47	1.59	0.80	0.82	1.51	2.9	1.85	3.6
	VC-417	0.30	0.61	1.50	2.3	1.39	3.0	2.8	4.2
	VC-418	0.19	9.1	111	2.3	2.4	3.3	4.4	2.2
	VC-419	19	1.83	1.10	0.85	3.9	6.0	4.0	ND
	VC-420	0.68	1.36	0.87	2.9	4.2	22	0.18	0.081 J
	VC-421	0.89	2.0	4.9	13	4.7	23	0.10	ND
	VC-422	0.73	2.9	3.0	2.3	6.8	2.4	3.0	ND
Old Marina	VC-501	4.5	2.6	1.51	2.1	2.8	4.0	165	31
	VC-502	0.25	1.92	1.30	2.3	3.4	5.3	4.0	0.30
	VC-503	0.091 J	1.60	2.4	3.7	4.6	5.1	5.8	4.5
	VC-504	1.07	1.68	1.66	2.5	3.7	5.0	4.6	2.9
	VC-505	0.41	1.59	1.69	4.1	5.7	6.1	4.0	1.65
	VC-506	0.13	0.21	0.78	2.4	3.3	4.8	4.6	7.8
	VC-507	0.33	0.26	0.46	1.03	3.9	6.3	3.2	ND
	VC-508	0.19	0.27	1.40	0.79	1.64	7.8	5.2	0.83
	VC-509	0.77	1.60	2.6	3.4	5.5	6.8	7.0	8.3
	VC-510	0.46	0.21	0.32	0.73	1.59	3.0	4.9	5.2
	VC-511	0.24	0.35	0.75	0.52	0.55	0.80	4.1	11
	VC-512	0.27	0.30	0.34	0.74	0.51	9.9	0.49	4.3
	VC-513	0.31	0.65	3.2	4.1	5.1	2.6	5.5	ND
	VC-514	0.31	0.33	0.24	0.76	1.97	1.75	1.73	17
	VC-515	0.25	0.29	0.65	1.25	3.2	9.8	0.092	ND
	VC-516	0.39	0.24	0.82	2.2	3.2	14	ND	ND
	VC-517	0.34	0.23	1.17	0.77	0.94	0.89	2.1	5.7 J
	VC-518	0.26	0.10	0.46	0.13	0.87	1.20	-	-

TABLE 3.6B - SUMMARY OF SEDIMENT ANALYTICAL RESULTS FOR NEARSHORE AND BACKWATER - TOTAL PCBs
NEARSHORE, OLD MARINA, KINNALLY COVE AND NORTH BOAT SLIP LOCATIONS
FORMER ANACONDA CABLE AND WIRE COMPANY - HASTINGS-ON-HUDSON, NEW YORK
FEBRUARY 2019

Sample Locations		Depth Interval							
Results in mg/kg		0 - 0.5 (ft)	0.5 - 1 (ft)	1 - 2 (ft)	2 - 3 (ft)	3 - 4 (ft)	4 - 5 (ft)	5 - 6 (ft)	6 - 8 (ft)
Kinnally Cove	VC-519	0.37	0.12	0.26	0.91	1.97	10	5.9	ND
	VC-520	0.18	0.32	0.60	6.2	3.1	18	0.23	0.11
	VC-521	0.48	0.43	1.43	4.2	3.7	11	0.47	0.070
	VC-522	0.62	0.26	1.77	2.0	1.93	3.2	ND	ND
	VC-523	0.071	0.096	0.24	0.19	0.40	0.51	0.90	1.33
	VC-524	0.087	0.099	0.13	0.33	0.91	0.57	0.94	5.2
	VC-525	0.083	0.061	0.35	0.38	1.14	1.16	0.14	-
	VC-526	0.10	0.068	0.14	0.94	0.84	1.27	0.037	-
	VC-527	0.50 J	0.49 J	0.47 J	2.3	3.7 J	3.7	8.4 J	8.1
	VC-528	0.57 J	0.96	3.1 J	3.1	2.0	6.2	9.4	14 J
	VC-529	0.74 J	0.63 J	0.54 J	2.9	5.0	18	0.33 J	0.12 J
	VC-530	0.43 J	0.54	1.3 J	1.20	4.0	0.077 J	ND	0.016 J
	VC-531	0.22 J	0.48 J	4.2	8.0	2.6	ND	0.034 J	0.081 J
	VC-532	0.25 J	5.2	4.2	4.9	2.3	0.039 J	0.085 J	0.011 J
	VC-533	0.01 J	0.024 J	0.044 J	0.48 J	-	-	-	-
	VC-534	0.30 J	1.4 J	2.4	3.6	3.5	5.0	10	9.1 J
	VC-535	0.48 J	0.69 J	1.4 J	2.5	2.4	3.3	5.4	7.3
	VC-536	0.55 J	0.25 J	1.1 J	1.80	4.1	13	13	0.49
	VC-537	0.41 J	0.49 J	1.1 J	0.93	11	0.20 J	0.065 J	ND
	VC-538	0.27 J	0.74 J	2.1	3.4	0.76	0.083 J	0.017 J	ND
	VC-539	0.39 J	1.70	1.80	17.1 J	1.40	0.17 J	0.028 J	0.015 J
	VC-540	0.41 J	0.51	3.3	5.8	ND	ND	ND	ND
	VC-541	-	-	-	-	-	17	3.6	1.70
	VC-542	-	-	-	-	1.40	1.50	6.4	16
	VC-543	-	-	-	-	6.9	9.7	3.3	9.4
	VC-544	-	-	-	3.6	4.0	18	ND	-
	VC-545	-	-	1.80	4.3	2.4	2.8	ND	-
	VC-546	-	-	1.2 J	6.7	1.9 J	8.0	ND	-
	VC-547	-	-	-	2.1 J	2.2	5.4 J	7.2	5.1
	VC-548	-	-	-	2.8 J	4.5 J	6.8 J	4.1	11
	VC-549	-	-	0.9 J	2.3	2.5	1.40	3.0	12
	VC-550	-	-	-	3.5	6.4	23	0.19	-
	VC-551	-	-	-	3.5	8.4	8.1	ND	-
	VC-552	-	-	2.1	2.5	4.1	12	17	0.063
	VC-553	-	-	-	-	-	6.3 J	13	5.8
	VC-554	-	-	-	-	8.5	3.5	3.2	11
	VC-555	-	-	-	-	0.88	1.90	34	0.36
	VC-556	-	-	-	5.1	9.8	0.76	-	-
	VC-557	-	-	0.93	2.2	5.6	0.22	-	-
	VC-558	-	-	0.71	1.90	1.90	6.8	0.18	-
	VC-559	-	-	-	1.8 J	2.3	4.6	8.0	8.4
	VC-560	-	-	-	11	7.2	1.60	2.8	5.3
	VC-561	-	-	-	5.1	3.1	4.3	4.3	9.4
	VC-562	-	-	-	2.0	4.3	36	0.29	-
	VC-563	-	-	-	4.2 J	21	1.10	-	-
	VC-564	-	-	1.70	26	4.3	40	0.63	-

TABLE 3.6B - SUMMARY OF SEDIMENT ANALYTICAL RESULTS FOR NEARSHORE AND BACKWATER - TOTAL PCBs
NEARSHORE, OLD MARINA, KINNALLY COVE AND NORTH BOAT SLIP LOCATIONS
FORMER ANACONDA CABLE AND WIRE COMPANY - HASTINGS-ON-HUDSON, NEW YORK
FEBRUARY 2019

Sample Locations		Depth Interval							
Results in mg/kg		0 - 0.5 (ft)	0.5 - 1 (ft)	1 - 2 (ft)	2 - 3 (ft)	3 - 4 (ft)	4 - 5 (ft)	5 - 6 (ft)	6 - 8 (ft)
North Boat Slip	VC-601	0.60	2.3	3.2	1.06	3.9	3.1	4.0	7.3
	VC-602	0.41	0.15	0.46	1.04	2.2	1.76	2.6	4.6
	VC-603	0.36	0.42	0.55	0.80	0.99	2.9	2.3	6.1
	VC-604	1.57	0.59	0.51	0.79	1.21	1.71	25	2.7
	VC-605	0.24	0.21	0.27	1.14	1.34	3.4	8.8	3.5

Notes & Abbreviations

ND (Not detected above laboratory detection limits); J (Estimated value); "-" (Sample not analyzed or not collected)

VC-517 through VC-526 were collected in September 2015; VC-527 through VC-540 were collected in November 2017; VC-541 through VC-564 were collected in September/October 2018

1. Results are < 1 mg/kg overlying a sample > 1 mg/kg.
2. Results are < 1 mg/kg, contiguous for at least 3 ft, overlying a sample > 1 mg/kg.
3. Results are > 1 mg/kg.

TABLE 4.4A - SUMMARY OF SEDIMENT ANALYTICAL RESULTS FOR NEARSHORE AND BACKWATER LOCATIONS - TOTAL PCBs & METALS
NEARSHORE, OLD MARINA, AND NORTH BOAT SLIP LOCATIONS
FORMER ANACONDA CABLE AND WIRE COMPANY - HASTINGS-ON-HUDSON, NEW YORK
FEBRUARY 2019

Sample Locations Results in mg/kg		Depth Interval															
		0 - 0.5 (ft)		0.5 - 1 (ft)		1 - 2 (ft)		2 - 3 (ft)		3 - 4 (ft)		4 - 5 (ft)		5 - 6 (ft)		6 - 8 (ft)	
		PCBs	Metals	PCBs	Metals	PCBs	Metals	PCBs	Metals	PCBs	Metals	PCBs	Metals	PCBs	Metals	PCBs	Metals
Nearshore	VC-401	1.39		3.3		4.9	Cu	5.2	Cu Pb	8.5	Cu Pb	8.2	Cu Pb	7.3	Cu Pb Zn	4.3	Cu Pb Zn
	VC-402	0.68		1.16		2.7	Cu	5.0	Cu	3.5	Cu Pb	5.1	Cu	5.2	Cu	2.8	Cu Pb Zn
	VC-403	0.11 J		0.36		1.93		2.4		4.8	Cu Pb Zn	7.3	Cu Pb Zn	1.55	Cu Pb Zn	1.49	Cu Pb Zn
	VC-404	2.2		0.68		11		1.29		2.8	Cu Pb	4.8	Cu Pb	6.7	Cu Pb Zn	3.1	Cu Pb Zn
	VC-405	0.47		0.95		5.9		2.7	Pb	5.1	Pb Zn	5.4	Cu Pb	6.2	Cu Pb Zn	0.84	Cu Pb Zn
	VC-406	0.32	Cu Zn	0.13	Cu Pb Zn	0.33	Cu Pb Zn	ND	Cu Pb Zn	ND	Cu Pb Zn	ND	Cu Pb Zn	ND	Cu Pb Zn	ND	Cu Zn
	VC-407	0.11		ND	Cu Pb Zn	ND	Cu Pb Zn	ND	Cu Pb Zn	ND	Cu Pb Zn	ND	Cu Pb Zn	ND	Cu Pb Zn	ND	Cu Pb Zn
	VC-408	0.32		114	Cu Zn	7.5	Cu Pb Zn	ND	Cu Pb Zn	ND	Cu Pb Zn	ND	Cu Pb Zn	ND	Cu Pb Zn	ND	Cu Zn
	VC-409	0.36		5.7	Cu Pb Zn	28	Cu Pb Zn	1.71	Cu Pb Zn	2.9	Cu Pb Zn	0.25	Cu Zn	ND	Cu Zn	0.081	Cu
	VC-410	0.40		1.56	Cu	3.1	Cu Pb	3.7	Cu Pb Zn	6.6	Cu Pb Zn	1.17	Cu Pb Zn	0.13	Cu Pb Zn	ND	Cu Pb Zn
	VC-411	0.32		0.61		1.39	Cu	3.5	Cu Pb	1.74	Cu Pb Zn	58	Cu Pb Zn	ND	Cu Zn	ND	Cu Pb Zn
	VC-412	0.21		0.76	Cu	1.03	Cu	5.6	Cu Pb	4.0	Cu Pb	5.6	Cu Pb	11	Cu Pb	13	Cu Pb Zn
	VC-413	0.24		0.39		1.83		0.65	Cu	0.63	Cu	2.3	Cu	4.1	Cu	4.7	Cu Pb
	VC-414	0.39		0.52		0.50		0.45	Cu	0.53		4.3		1.37		4.3	Cu Pb Zn
	VC-415	0.27		0.36		0.51		0.55		1.02	Cu	1.40		1.30		2.6	
	VC-416	0.47		1.59		0.80		0.82		1.51		2.9		1.85		3.6	Cu
	VC-417	0.30		0.61	Cu	1.50	Cu	2.3	Cu	1.39		3.0	Cu Pb	2.8	Cu	4.2	Cu Pb
	VC-418	0.19		9.1	Cu	111	Cu	2.3	Cu	2.4	Cu Pb	3.3	Cu Pb	4.4	Cu Pb	2.2	Cu Pb Zn
	VC-419	19	Cu	1.83	Cu Pb	1.10	Cu Zn	0.85	Cu	3.9	Cu Pb	6.0	Cu Pb	4.0	Cu Pb Zn	ND	Cu
	VC-420	0.68		1.36	Cu	0.87	Cu	2.9	Cu	4.2	Cu Pb	22	Cu Pb Zn	0.18	Cu Pb	0.081	Cu Pb
	VC-421	0.89		2.0	Cu	4.9	Cu Pb	13	Cu Pb	4.7	Cu Pb	23	Cu Pb Zn	0.10	Cu Pb	ND	Cu
	VC-422	0.73		2.9	Cu	3.0	Cu	2.3	Cu Pb	6.8	Cu	2.4	Cu Pb Zn	3.0	Cu Pb	ND	
Old Marina	VC-501	4.5		2.6		1.51		2.1		2.8		4.0	Cu Pb Zn	165	Cu Pb Zn	31	Cu Pb Zn
	VC-502	0.25		1.92		1.30		2.3	Cu Pb Zn	3.4	Cu Zn	5.3	Cu Pb	4.0	Cu Pb Zn	0.30	Cu Zn
	VC-503	0.091 J		1.60		2.4	Zn	3.7	Cu Pb	4.6	Cu Pb Zn	5.1	Cu Pb Zn	5.8	Cu Pb Zn	4.5	Cu Pb Zn
	VC-504	1.07		1.68		1.66		2.5		3.7	Cu Pb Zn	5.0	Cu Pb Zn	4.6	Cu Pb Zn	2.9	Cu Pb Zn
	VC-505	0.41		1.59		1.69	Zn	4.1	Cu Zn	5.7	Cu Pb Zn	6.1	Cu Pb Zn	4.6	Cu Pb Zn	1.65	Cu Zn
	VC-506	0.13		0.21		0.78		2.4		3.3		4.8	Cu	5.4	Cu Pb Zn	7.8	Cu Pb Zn
	VC-507	0.33		0.26		0.46		1.03		3.9	Cu Pb Zn	6.3	Cu Pb	3.2	Cu	ND	Cu Zn
	VC-508	0.19		0.27		1.40		0.79		1.64		7.8	Cu Pb	5.2	Cu Pb Zn	0.83	Cu
	VC-509	0.77		1.60		2.6	Zn	3.4	Pb Zn	5.5	Cu Pb	6.8	Cu Pb Zn	7.0	Cu Pb Zn	8.3	Cu Pb Zn
	VC-510	0.46		0.21		0.32		0.73		1.59	Zn	3.0		4.9	Cu Pb Zn	5.2	Cu Pb Zn
	VC-511	0.24		0.35		0.75		0.52		0.55		0.80		4.1	Pb Zn	11	Cu Pb Zn
	VC-512	0.27		0.30		0.34		0.74		0.51		9.9		0.49		4.3	Cu Pb Zn
	VC-513	0.31		0.65		3.2		4.1	Cu Pb	5.1	Cu	2.6	Cu	5.5	Cu Zn	ND	Cu Zn
	VC-514	0.31		0.33		0.24		0.76		1.97		1.75	Cu Pb Zn	1.73	Cu Pb Zn	17	Cu Pb Zn
	VC-515	0.25		0.29		0.65		1.25		3.2	Cu Pb	9.8	Cu Pb Zn	0.092	Cu	ND	Cu
	VC-516	0.39		0.24		0.82		2.2	Cu	3.2	Cu Zn	14	Cu	ND	Cu Pb	ND	Cu Zn
	VC-517	0.34		0.23		1.20		0.77		0.94		0.89		2.1	Cu Pb Zn	5.7	Cu Pb Zn
	VC-518	0.26		0.10		0.46		0.13		0.87		1.20	Cu	-		-	

TABLE 4.4A - SUMMARY OF SEDIMENT ANALYTICAL RESULTS FOR NEARSHORE AND BACKWATER LOCATIONS - TOTAL PCBs & METALS
NEARSHORE, OLD MARINA, AND NORTH BOAT SLIP LOCATIONS
FORMER ANACONDA CABLE AND WIRE COMPANY - HASTINGS-ON-HUDSON, NEW YORK
FEBRUARY 2019

Sample Locations Results in mg/kg		Depth Interval															
		0 - 0.5 (ft)		0.5 - 1 (ft)		1 - 2 (ft)		2 - 3 (ft)		3 - 4 (ft)		4 - 5 (ft)		5 - 6 (ft)		6 - 8 (ft)	
		PCBs	Metals	PCBs	Metals	PCBs	Metals	PCBs	Metals	PCBs	Metals	PCBs	Metals	PCBs	Metals	PCBs	Metals
Kinnally Cove	VC-519	0.37		0.12		0.26		0.91		2.0	Cu Pb Zn	10	Cu Pb Zn	5.9	Cu Pb Zn	ND	Cu Pb
	VC-520	0.18		0.32		0.60		6.2	Cu Pb	3.1	Cu Pb	18	Cu Pb Zn	0.23	Cu Pb	0.11	Cu Zn
	VC-521	0.48		0.43		1.40		4.2	Cu	3.7	Cu Pb Zn	11	Cu Pb Zn	0.47	Cu Pb Zn	0.070	Cu Pb Zn
	VC-522	0.62		0.26		1.80	Cu	2.0	Cu Pb Zn	1.90	Cu Zn	3.2	Cu Pb Zn	ND	Cu Pb Zn	ND	
	VC-523	0.071		0.096		0.24		0.19		0.40		0.51		0.90	Pb Zn	1.30	Cu Pb Zn
	VC-524	0.087		0.099		0.13		0.33		0.91	Cu Pb	0.57	Cu Pb Zn	0.94	Cu Pb Zn	5.2	Cu Pb Zn
	VC-525	0.083		0.061		0.35		0.38	Cu Pb Zn	1.10	Cu Pb Zn	1.20	Cu Pb Zn	0.14	Cu Zn	-	
	VC-526	0.10		0.068		0.14		0.94	Cu	0.84	Cu Pb Zn	1.30	Cu Pb Zn	0.037	Cu Pb Zn	-	
	VC-527	0.50 J		0.49 J		0.47 J		2.3		3.7 J		3.7		8.4 J		8.1	Cu Pb
	VC-528	0.57 J		0.96		3.1 J		3.1	Cu	2.0	Cu	6.2	Cu	9.4	Cu Pb	14.3 J	Cu Pb Zn
	VC-529	0.74 J		0.63 J		0.54 J		2.9	Cu Pb	5.0	Cu	18	Cu Pb Zn	0.33 J	Cu	0.12 J	Cu
	VC-530	0.43 J		0.54		1.3 J		1.20	Cu	4.0	Cu	0.077 J	Cu Pb	ND	Cu Zn	0.016 J	Cu Zn
	VC-531	0.22 J		0.48 J		4.2	Cu	8.0	Cu	2.6	Cu	ND	Cu Zn	0.034 J	Cu Zn	0.081 J	
	VC-532	0.25 J		5.2	Cu	4.2	Cu Pb	4.9	Cu Pb Zn	2.3	Cu	0.039 J		0.085 J		0.011 J	
	VC-533	0.01 J		0.024 J		0.044 J		0.48 J		-	-	-	-	-	-	-	-
	VC-534	0.30 J	-	1.4 J	-	2.4	-	3.6		3.5		5.0		10		9.1 J	
	VC-535	0.48 J	-	0.69 J	-	1.4 J		2.5	Cu	2.4	Cu	3.3	Cu	5.4	Cu Pb	7.3	Cu Pb
	VC-536	0.55 J	-	0.25 J		1.1 J	Cu	1.80	Cu	4.1	Cu	13	Cu	13	Cu	0.49	Cu
	VC-537	0.41 J	-	0.49 J	-	1.1 J		0.93	Cu	11	Cu	0.2 J	Cu	0.065 J	Cu	ND	Cu Zn
	VC-538	0.27 J	-	0.74 J		2.1	Cu	3.4	Cu	0.76	Cu	0.083 J	Cu	0.017 J	Cu Zn	ND J	
	VC-539	0.39 J	-	1.70		1.80	Cu	17.1 J	Cu Pb	1.40	Cu	0.17 J		0.028 J		0.015 J	-
	VC-540	0.41 J	-	0.51		3.3	Cu	5.8	Cu	ND	Cu	ND		ND		ND	-
	VC-541	-	-	-	-	-	-	-	-	-	-	17	-	3.6	-	1.70	-
	VC-542	-	-	-	-	-	-	-	-	1.40	-	1.50	-	6.4	-	16	-
	VC-543	-	-	-	-	-	-	-	-	6.9	-	9.7	-	3.3	-	9.4	-
	VC-544	-	-	-	-	-	-	3.6	-	4.0	-	18	-	ND	-	-	-
	VC-545	-	-	-	-	1.80	-	4.3	-	2.4	-	2.8	-	ND	-	-	-
	VC-546	-	-	-	-	1.2 J	-	6.7	-	1.9 J	-	8.0	-	ND	-	-	-
	VC-547	-	-	-	-	-	-	2.1 J	-	2.2	-	5.4 J	-	7.2	-	5.1	-
	VC-548	-	-	-	-	-	-	2.8 J	-	4.5 J	-	6.8 J	-	4.1	-	11	-
	VC-549	-	-	-	-	0.9 J	-	2.3	-	2.5	-	1.40	-	3.0	-	12	-
	VC-550	-	-	-	-	-	-	3.5	-	6.4	-	23	-	0.19	-	-	-
	VC-551	-	-	-	-	-	-	3.5	-	8.4	-	8.1	-	ND	-	-	-
	VC-552	-	-	-	-	2.1	-	2.5	-	4.1	-	12	-	17	-	0.063	-
	VC-553	-	-	-	-	-	-	-	-	-	-	6.3 J	-	13	-	5.8	-
	VC-554	-	-	-	-	-	-	-	-	8.5	-	3.5	-	3.2	-	11	-
	VC-555	-	-	-	-	-	-	-	-	0.88	-	1.90	-	34	-	0.36	-
	VC-556	-	-	-	-	-	-	5.1	-	9.8	-	0.76	-	-	-	-	-
	VC-557	-	-	-	-	0.93	-	2.2	-	5.6	-	0.22	-	-	-	-	-
	VC-558	-	-	-	-	0.71	-	1.90	-	1.90	-	6.8	-	0.18	-	-	-
	VC-559	-	-	-	-	-	-	1.8 J	-	2.3	-	4.6	-	8.0	-	8.4	-
	VC-560	-	-	-	-	-	-	11	-	7.2	-	1.60	-	2.8	-	5.3	-
	VC-561	-	-	-	-	-	-	5.1	-	3.1	-	4.3	-	4.3	-	9.4	-
	VC-562	-	-	-	-	-	-	2.0	-	4.3	-	36	-	0.29	-	-	-
	VC-563	-	-	-	-	-	-	4.2 J	-	21	-	1.10	-	-	-	-	-
	VC-564	-	-	-	-	1.70	-	26	-	4.3	-	40	-	0.63	-	-	-
North Boat Slip	VC-601	0.60		2.3		3.2		1.06	Pb	3.9	Cu	3.1	Cu Zn	4.0	Cu Pb Zn	7.3	Cu Pb Zn
	VC-602	0.41	Cu	0.15		0.46		1.04	Pb	2.2	Cu Pb	1.76	Cu Pb	2.6	Cu Pb Zn	4.6	Cu Pb Zn
	VC-603	0.36		0.42		0.55		0.80		0.99		2.9	Pb Zn	2.3	Cu Pb	6.1	Cu Pb Zn
	VC-604	1.57		0.59		0.51		0.79		1.21		1.71		25	Cu Pb Zn	2.7	Cu Pb Zn
	VC-605	0.24		0.21		0.27		1.14		1.34	Zn	3.4	Cu Pb Zn	8.8	Cu Pb Zn	3.5	Cu Pb Zn

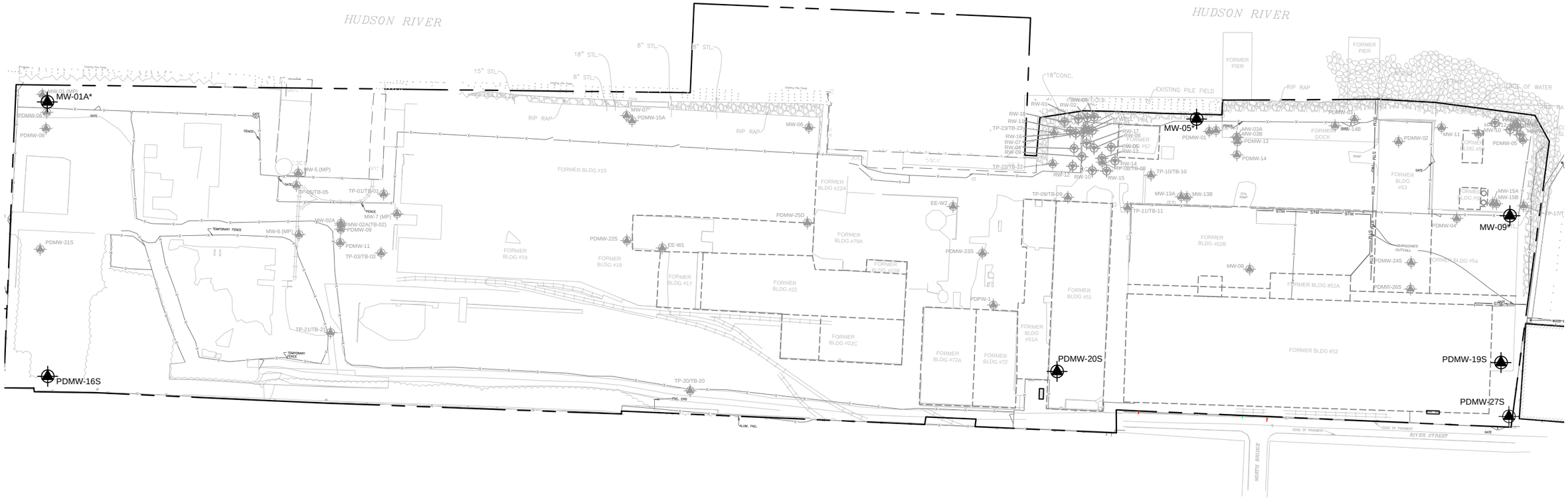
Notes & Abbreviations

ND (Not detected above laboratory detection limits); J (Estimated value); "-" (Sample not analyzed or not collected)

Samples VC-517 through VC-526 were collected in September 2015; VC-527 through VC-540 were collected in November 2017;
VC-541 through VC-564 were collected in September/October 2018

1. Total PCB Results are < 1 mg/kg overlying a sample > 1 mg/kg.
2. Total PCB Results are < 1 mg/kg, contiguous for at least 3 ft, overlying a sample > 1 mg/kg.
3. Total PCB Results shaded red are > 1 mg/kg.
4. Metals column shaded in red indicates the metals that exceed criteria. Criteria for Cu (copper) is 129 mg/kg; Pb (lead) is 132 mg/kg; and Zn (zinc) is 234 mg/kg)
5. Blank cells indicate metals data were collected and results were below criteria.
6. Dashes indicate samples were not analyzed for metals.

FIGURES



LEGEND

- PROPERTY LINE
- RAIL ROAD
- EXISTING STRUCTURES
- FORMER STRUCTURES
- FENCE
- RETAINING WALL
- WOODED AREA
- RIP-RAP
- PDI SAMPLING WELL LOCATION
- EXISTING MONITORING WELL
- RECOVERY WELL

NOTES

1. BASE PLAN BASED ON ELECTRONIC CAD FILE ENTITLED "TOPOGRAPHIC SURVEY" REVISED 22 JULY 2014 BY WENDEL WD ARCHITECTURE, ENGINEERING, SURVEYING AND LANDSCAPE ARCHITECTURE P.C. OF BUFFALO, NEW YORK.
2. RIP-RAP DESIGNATION IN THE RIVER IS BASED ON INTERPRETATION OF SIDE SCAN SONAR DATA PERFORMED BY OCEAN SURVEYS, INC. ON 10-16 DECEMBER 2012 AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME.
3. WELLS MW-05, MW-09, PDMW-16S, AND PDMW-20S WERE ABANDONED AS PART OF A LARGER SITE WELL ABANDONMENT EFFORT IN OCTOBER 2016.

N

0 80 160

SCALE IN FEET

FIGURE 3.2B
PDI GROUNDWATER SAMPLING LOCATIONS

NYSDEC SITE #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

SOVEREIGN CONSULTING INC.

File: X:\SOVEREGN\HastingsOnHudson\Drawings\Report2017_figs\R2017_Fig3-2B_2006_OU1_SAMPLING.dwg R2017_Fig3-2B_2006_OU1_SAMPLING.dwg FIG 3.2B Date: 5/21/2018

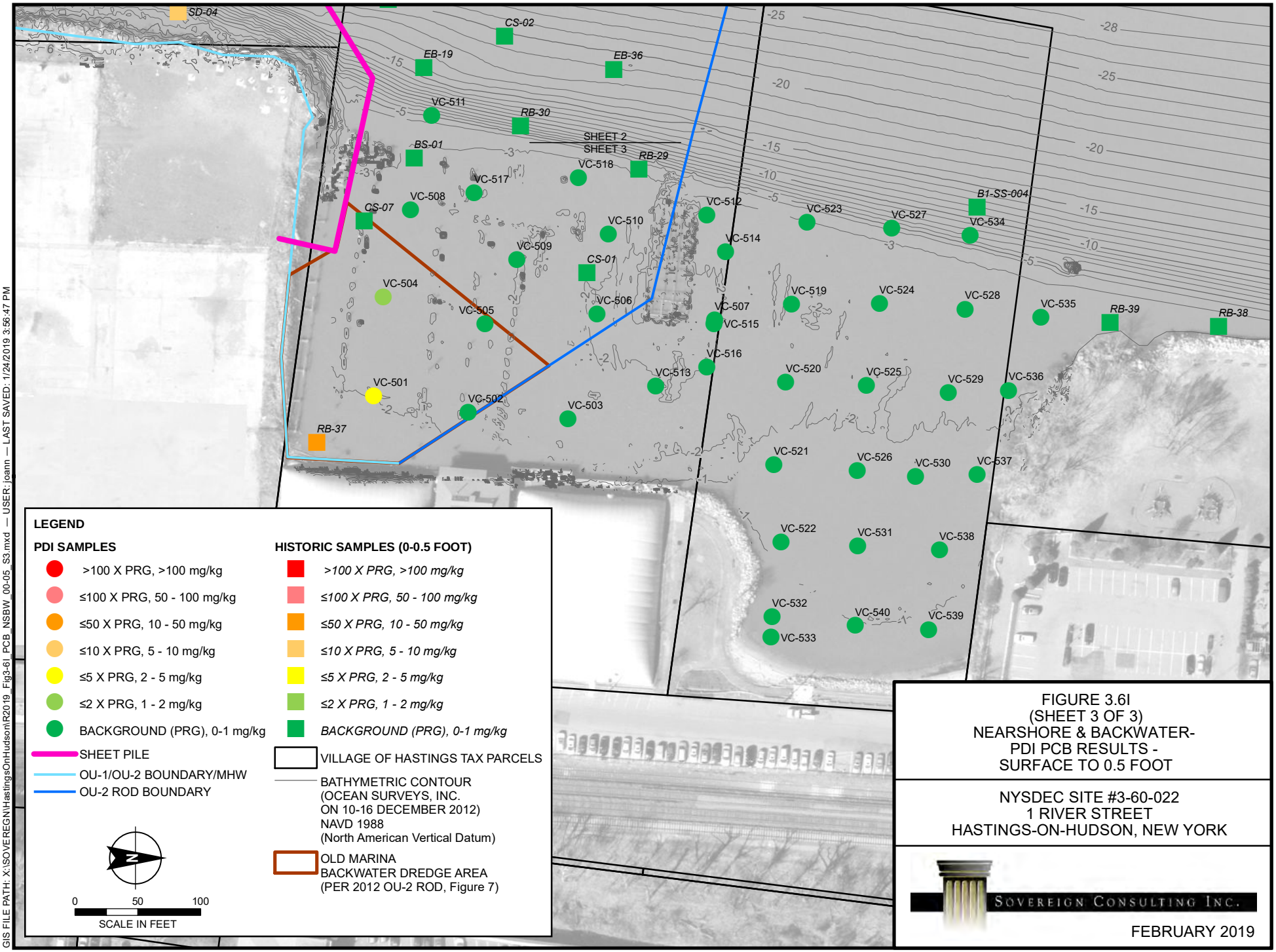
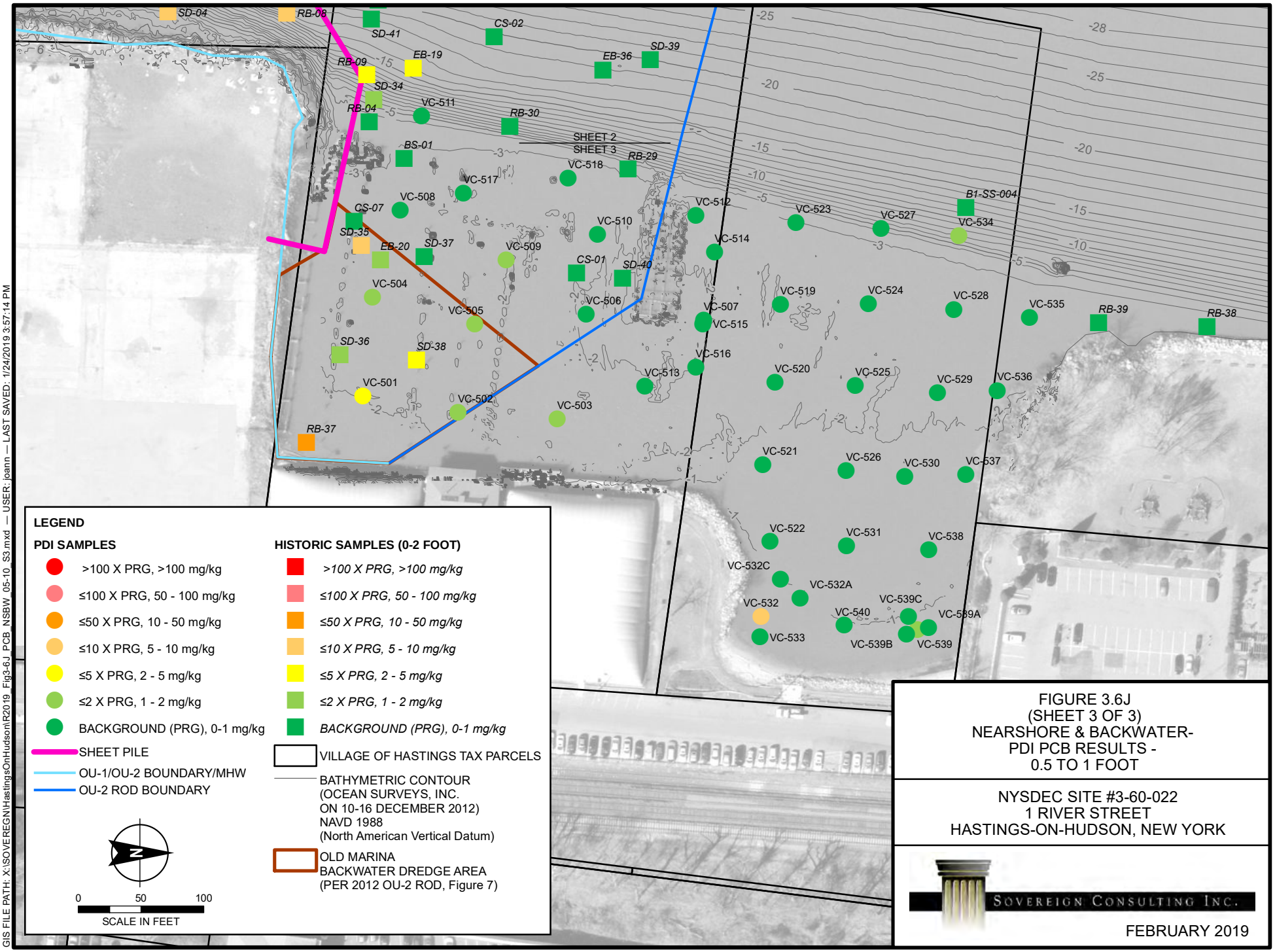


FIGURE 3.6I
(SHEET 3 OF 3)
NEARSHORE & BACKWATER-
PDI PCB RESULTS -
SURFACE TO 0.5 FOOT

NYSDEC SITE #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

SOVEREIGN CONSULTING INC.

FEBRUARY 2019



LEGEND

PDI SAMPLES

- >100 X PRG, >100 mg/kg
- ≤100 X PRG, 50 - 100 mg/kg
- ≤50 X PRG, 10 - 50 mg/kg
- ≤10 X PRG, 5 - 10 mg/kg
- ≤5 X PRG, 2 - 5 mg/kg
- ≤2 X PRG, 1 - 2 mg/kg
- BACKGROUND (PRG), 0-1 mg/kg
- SHEET PILE
- OU-1/OU-2 BOUNDARY/MHW
- OU-2 ROD BOUNDARY

HISTORIC SAMPLES (0-2 FOOT)

- *>100 X PRG, >100 mg/kg*
- *≤100 X PRG, 50 - 100 mg/kg*
- *≤50 X PRG, 10 - 50 mg/kg*
- *≤10 X PRG, 5 - 10 mg/kg*
- *≤5 X PRG, 2 - 5 mg/kg*
- *≤2 X PRG, 1 - 2 mg/kg*
- *BACKGROUND (PRG), 0-1 mg/kg*
- VILLAGE OF HASTINGS TAX PARCELS
- BATHYMETRIC CONTOUR (OCEAN SURVEYS, INC. ON 10-16 DECEMBER 2012) NAVD 1988 (North American Vertical Datum)
- OLD MARINA BACKWATER DREDGE AREA (PER 2012 OU-2 ROD, Figure 7)

N

0 50 100

SCALE IN FEET

FIGURE 3.6J
(SHEET 3 OF 3)
NEARSHORE & BACKWATER-
PDI PCB RESULTS -
0.5 TO 1 FOOT

NYSDEC SITE #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

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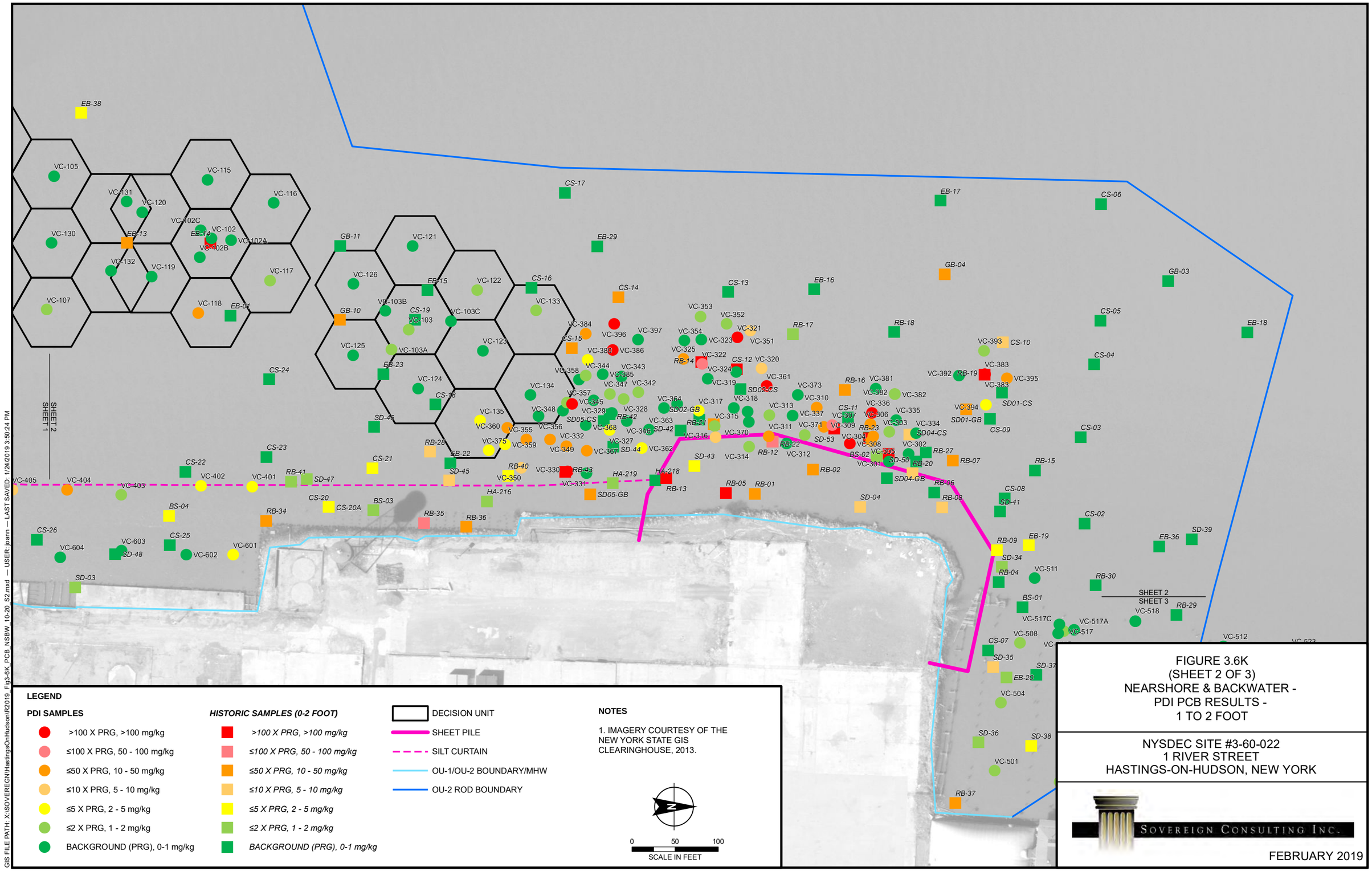

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LEGEND

PDI SAMPLES

- >100 X PRG, >100 mg/kg
- ≤100 X PRG, 50 - 100 mg/kg
- ≤50 X PRG, 10 - 50 mg/kg
- ≤10 X PRG, 5 - 10 mg/kg
- ≤5 X PRG, 2 - 5 mg/kg
- ≤2 X PRG, 1 - 2 mg/kg
- BACKGROUND (PRG), 0-1 mg/kg

HISTORIC SAMPLES (0-2 FOOT)

- *>100 X PRG, >100 mg/kg*
- *≤100 X PRG, 50 - 100 mg/kg*
- *≤50 X PRG, 10 - 50 mg/kg*
- *≤10 X PRG, 5 - 10 mg/kg*
- *≤5 X PRG, 2 - 5 mg/kg*
- *≤2 X PRG, 1 - 2 mg/kg*
- *BACKGROUND (PRG), 0-1 mg/kg*

- DECISION UNIT
- SHEET PILE
- SILT CURTAIN
- OU-1/OU-2 BOUNDARY/MHW
- OU-2 ROD BOUNDARY

NOTES

1. IMAGERY COURTESY OF THE NEW YORK STATE GIS CLEARINGHOUSE, 2013.

N

0 50 100

SCALE IN FEET

FIGURE 3.6K
(SHEET 2 OF 3)
NEARSHORE & BACKWATER -
PDI PCB RESULTS -
1 TO 2 FOOT

NYSDEC SITE #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

SOVEREIGN CONSULTING INC.

FEBRUARY 2019

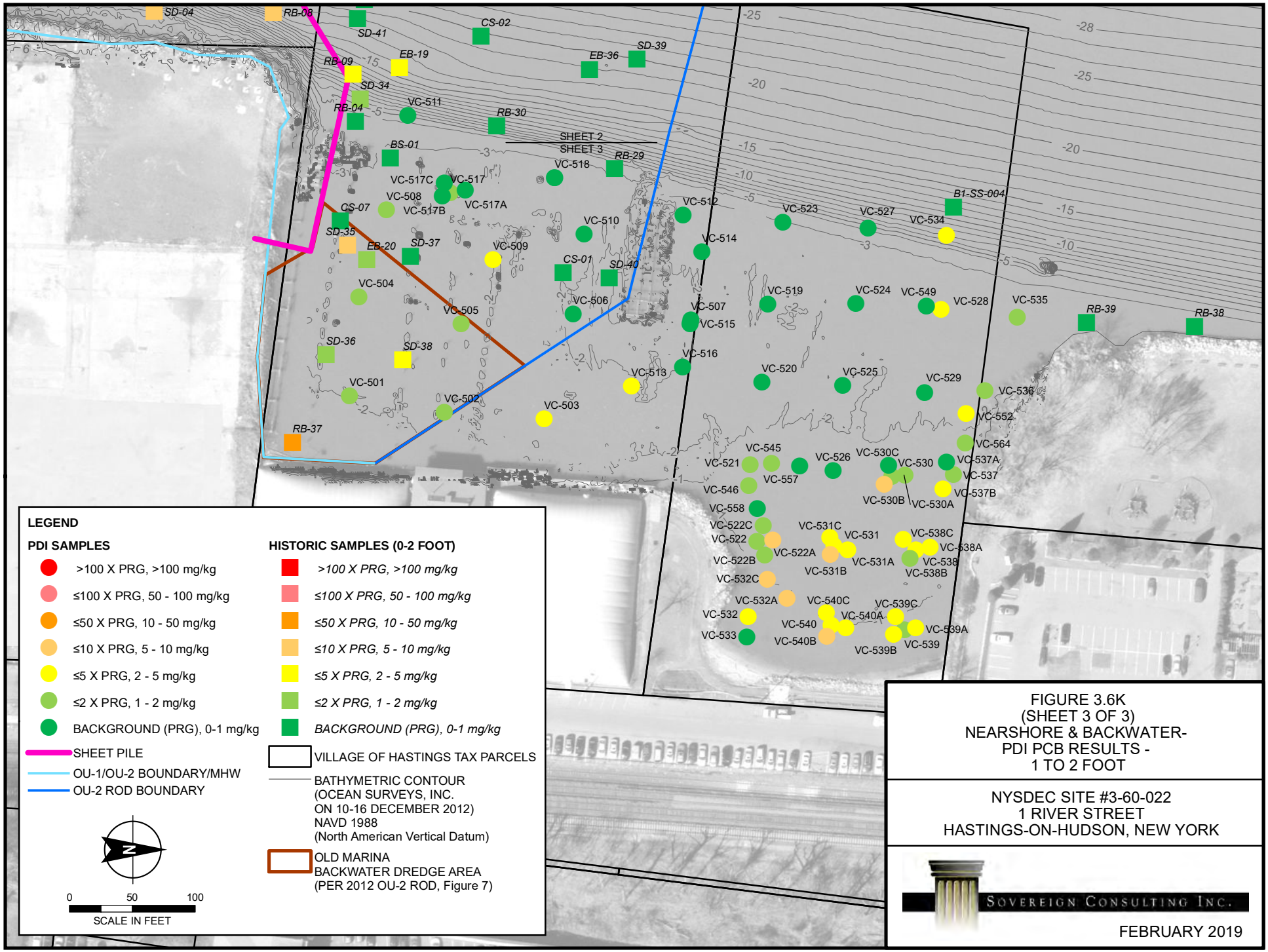

FIGURE 3.6K
(SHEET 3 OF 3)
NEARSHORE & BACKWATER-
PDI PCB RESULTS -
1 TO 2 FOOT

NYSDEC SITE #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

SOVEREIGN CONSULTING INC.

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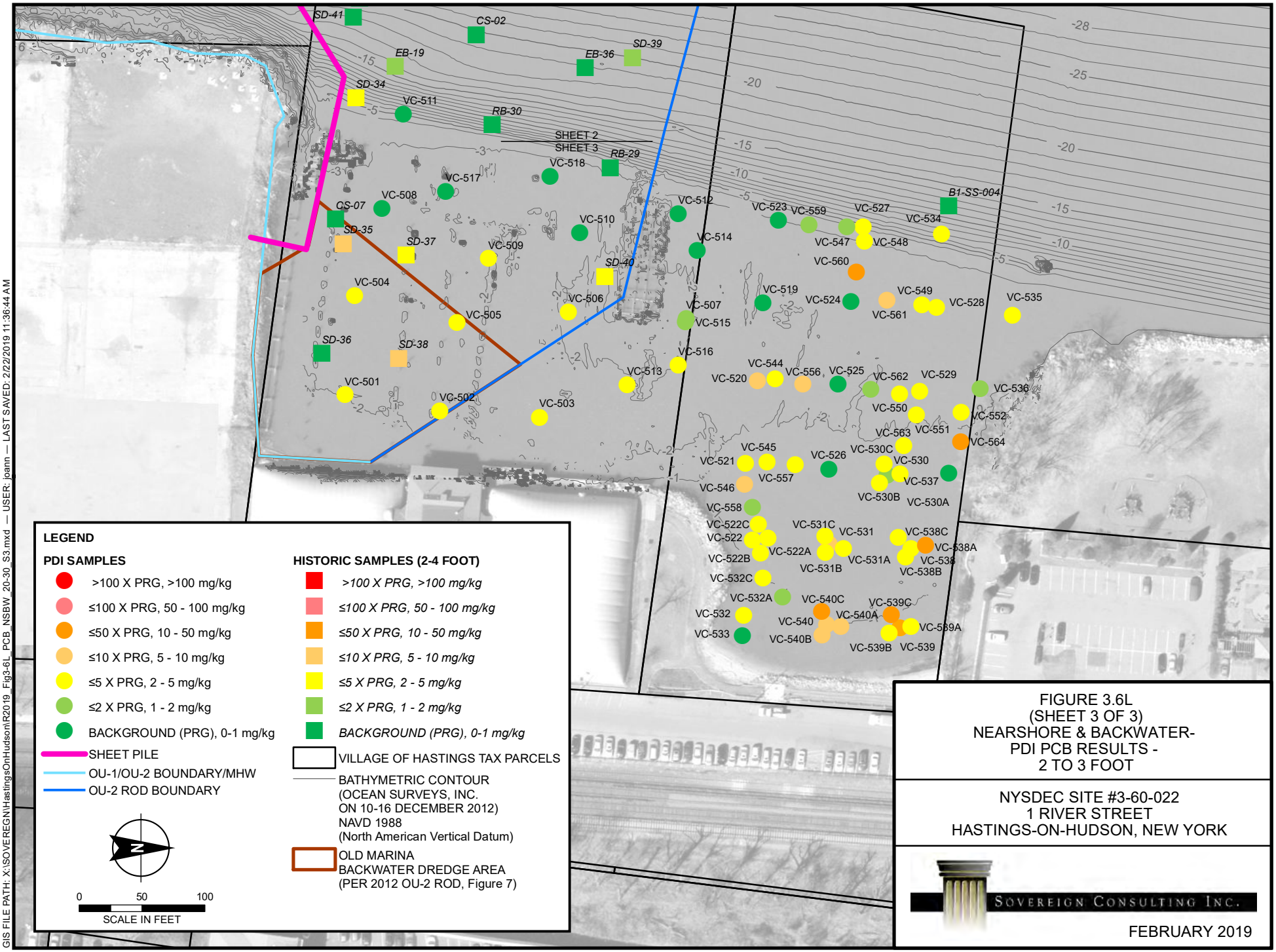

FIGURE 3.6L
(SHEET 3 OF 3)
NEARSHORE & BACKWATER-
PDI PCB RESULTS -
2 TO 3 FOOT

NYSDEC SITE #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

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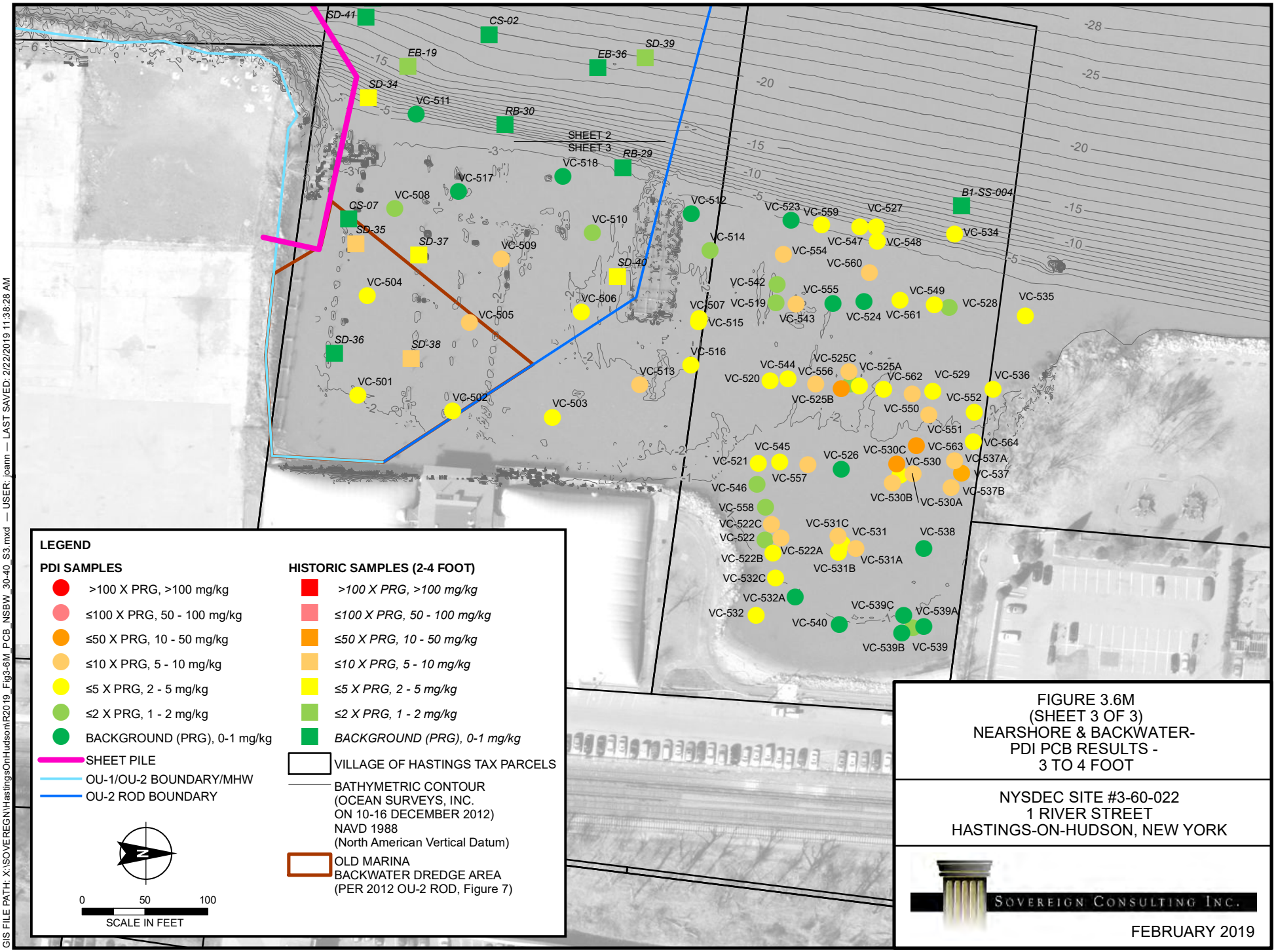
SD-41
CS-02
EB-19
EB-36
SD-39
SD-34
VC-511
RB-30
SHEET 2
SHEET 3
RB-29
VC-518
VC-517
VC-508
CS-07
SD-35
SD-37
VC-509
VC-510
VC-512
B1-SS-004
VC-523
VC-559
VC-527
VC-534
VC-514
VC-547
VC-548
VC-554
VC-560
SD-40
VC-504
VC-542
VC-555
VC-549
VC-528
VC-535
VC-506
VC-507
VC-519
VC-543
VC-524
VC-561
VC-505
VC-515
SD-36
SD-38
VC-516
VC-513
VC-544
VC-525C
VC-525A
VC-520
VC-556
VC-562
VC-529
VC-536
VC-501
VC-502
VC-503
VC-525B
VC-552
VC-550
VC-551
VC-564
VC-545
VC-526
VC-530C
VC-563
VC-521
VC-530
VC-537A
VC-557
VC-537
VC-546
VC-530B
VC-530A
VC-537B
VC-558
VC-522C
VC-531C
VC-531
VC-538
VC-522
VC-522A
VC-522B
VC-531A
VC-531B
VC-532C
VC-532A
VC-539C
VC-539A
VC-532
VC-540
VC-539B
VC-539
-28
-25
-20
-15
-10
-5
-3
-2
-1
6
LEGEND
PDI SAMPLES
>100 X PRG, >100 mg/kg
≤100 X PRG, 50 - 100 mg/kg
≤50 X PRG, 10 - 50 mg/kg
≤10 X PRG, 5 - 10 mg/kg
≤5 X PRG, 2 - 5 mg/kg
≤2 X PRG, 1 - 2 mg/kg
BACKGROUND (PRG), 0-1 mg/kg
SHEET PILE
OU-1/OU-2 BOUNDARY/MHW
OU-2 ROD BOUNDARY
HISTORIC SAMPLES (2-4 FOOT)
>100 X PRG, >100 mg/kg
≤100 X PRG, 50 - 100 mg/kg
≤50 X PRG, 10 - 50 mg/kg
≤10 X PRG, 5 - 10 mg/kg
≤5 X PRG, 2 - 5 mg/kg
≤2 X PRG, 1 - 2 mg/kg
BACKGROUND (PRG), 0-1 mg/kg
VILLAGE OF HASTINGS TAX PARCELS
BATHYMETRIC CONTOUR
(OCEAN SURVEYS, INC.
ON 10-16 DECEMBER 2012)
NAVD 1988
(North American Vertical Datum)
OLD MARINA
BACKWATER DREDGE AREA
(PER 2012 OU-2 ROD, Figure 7)
N
0
50
100
SCALE IN FEET
FIGURE 3.6M
(SHEET 3 OF 3)
NEARSHORE & BACKWATER-
PDI PCB RESULTS -
3 TO 4 FOOT
NYSDEC SITE #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK
SOVEREIGN CONSULTING INC.
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EB-38
EB-13
EB-14
EB-01
EB-15
EB-29
EB-17
EB-16
GB-03
EB-18
CS-24
EB-23
RB-14
VC-386
VC-380
VC-385
VC-344
VC-343
VC-342
VC-340
VC-339
VC-329
VC-347
VC-341
VC-364
VC-317
VC-338
VC-318
VC-337
VC-310
CS-11
VC-336
VC-335
VC-345
VC-326
VC-328
VC-346
SD-42
VC-315
RB-21
VC-370
VC-311
VC-306
VC-334
SD-46
VC-355
VC-363
EB-21
VC-316
VC-314
VC-309
VC-304
VC-303
VC-332
VC-327
VC-362
RB-12
VC-371
VC-305
EB-22
SD-44
SD-43
SD-52
SD-50
RB-07
CS-21
VC-330
HA-219
HA-218
HA-217
RB-02
RB-15
SD-47
SD-45
RB-05
HA-206
RB-20
VC-405
VC-404
VC-403
VC-402
VC-401
HA-221
HA-216
HA-215
RB-13
RB-01
HA-211
HA-209
RB-06
HA-205
HA-203B
RB-03
SD-41
CS-20
HA-223
HA-203
RB-08
CS-02
CS-26
VC-604
SD-48
VC-603
VC-602
VC-601
HA-201
EB-19
EB-36
SD-39
SD-34
RB-04
VC-511
SHEET 2
SHEET 3
VC-518C
VC-518A
VC-518
VC-517
VC-518B
VC-508
VC-512
SD-35
SD-37
VC-504
SD-36
SD-38
VC-501
SHEET 2
SHEET 1

LEGEND

PDI SAMPLES

- >100 X PRG, >100 mg/kg
- ≤100 X PRG, 50 - 100 mg/kg
- ≤50 X PRG, 10 - 50 mg/kg
- ≤10 X PRG, 5 - 10 mg/kg
- ≤5 X PRG, 2 - 5 mg/kg
- ≤2 X PRG, 1 - 2 mg/kg
- BACKGROUND (PRG), 0-1 mg/kg

HISTORIC SAMPLES (4-6 FOOT)

- *>100 X PRG, >100 mg/kg*
- *≤100 X PRG, 50 - 100 mg/kg*
- *≤50 X PRG, 10 - 50 mg/kg*
- *≤10 X PRG, 5 - 10 mg/kg*
- *≤5 X PRG, 2 - 5 mg/kg*
- *≤2 X PRG, 1 - 2 mg/kg*
- *BACKGROUND (PRG), 0-1 mg/kg*

- DECISION UNIT
- SHEET PILE
- SILT CURTAIN
- OU-1/OU-2 BOUNDARY/MHW
- OU-2 ROD BOUNDARY

NOTES

1. IMAGERY COURTESY OF THE NEW YORK STATE GIS CLEARINGHOUSE, 2013.

N

0 50 100
SCALE IN FEET

FIGURE 3.6N
(SHEET 2 OF 3)
NEARSHORE & BACKWATER -
PDI PCB RESULTS -
4 TO 5 FOOT

NYSDEC SITE #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

SOVEREIGN CONSULTING INC.

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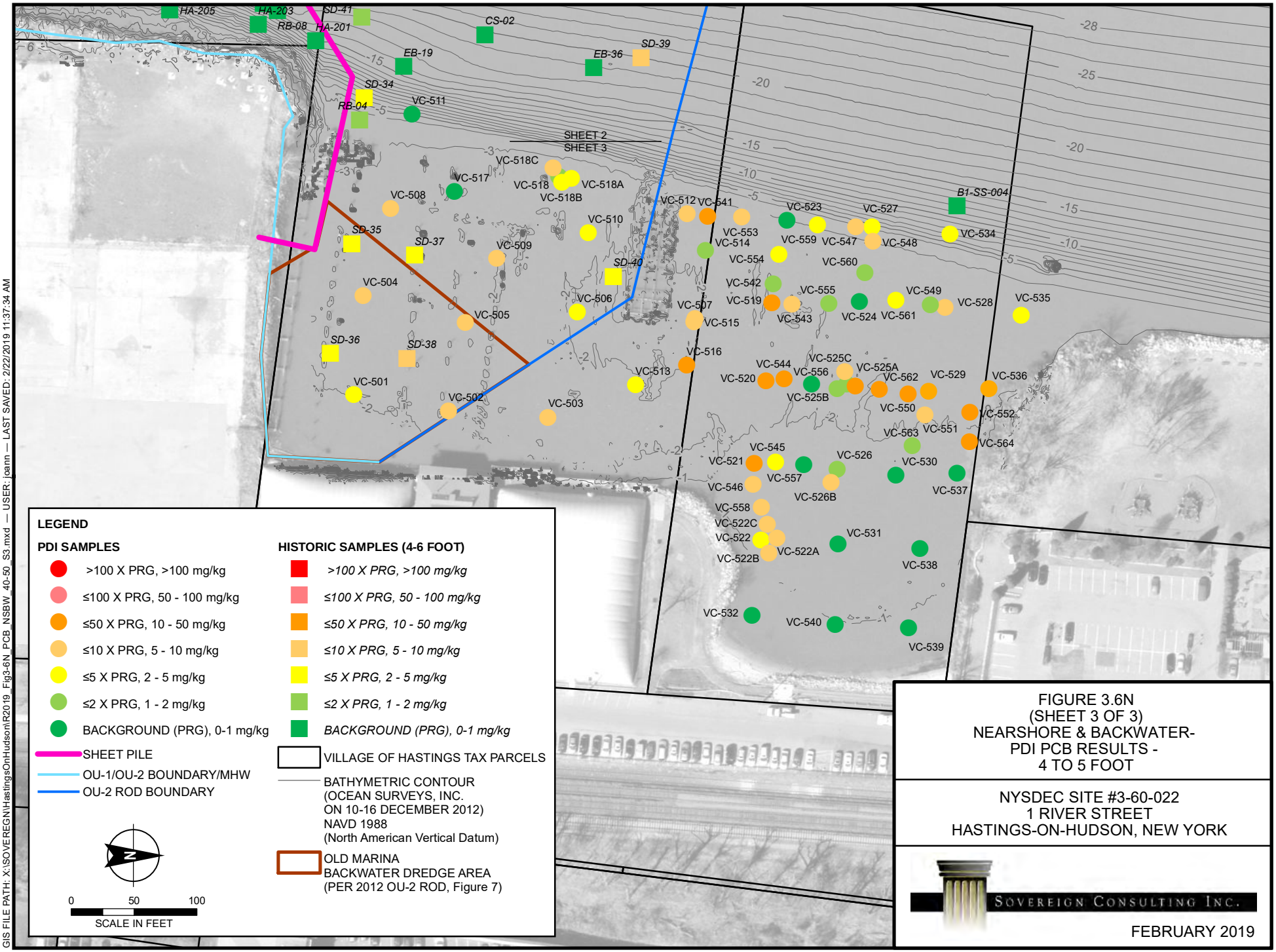

FIGURE 3.6N
(SHEET 3 OF 3)
NEARSHORE & BACKWATER-
PDI PCB RESULTS -
4 TO 5 FOOT

NYSDEC SITE #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

SOVEREIGN CONSULTING INC.

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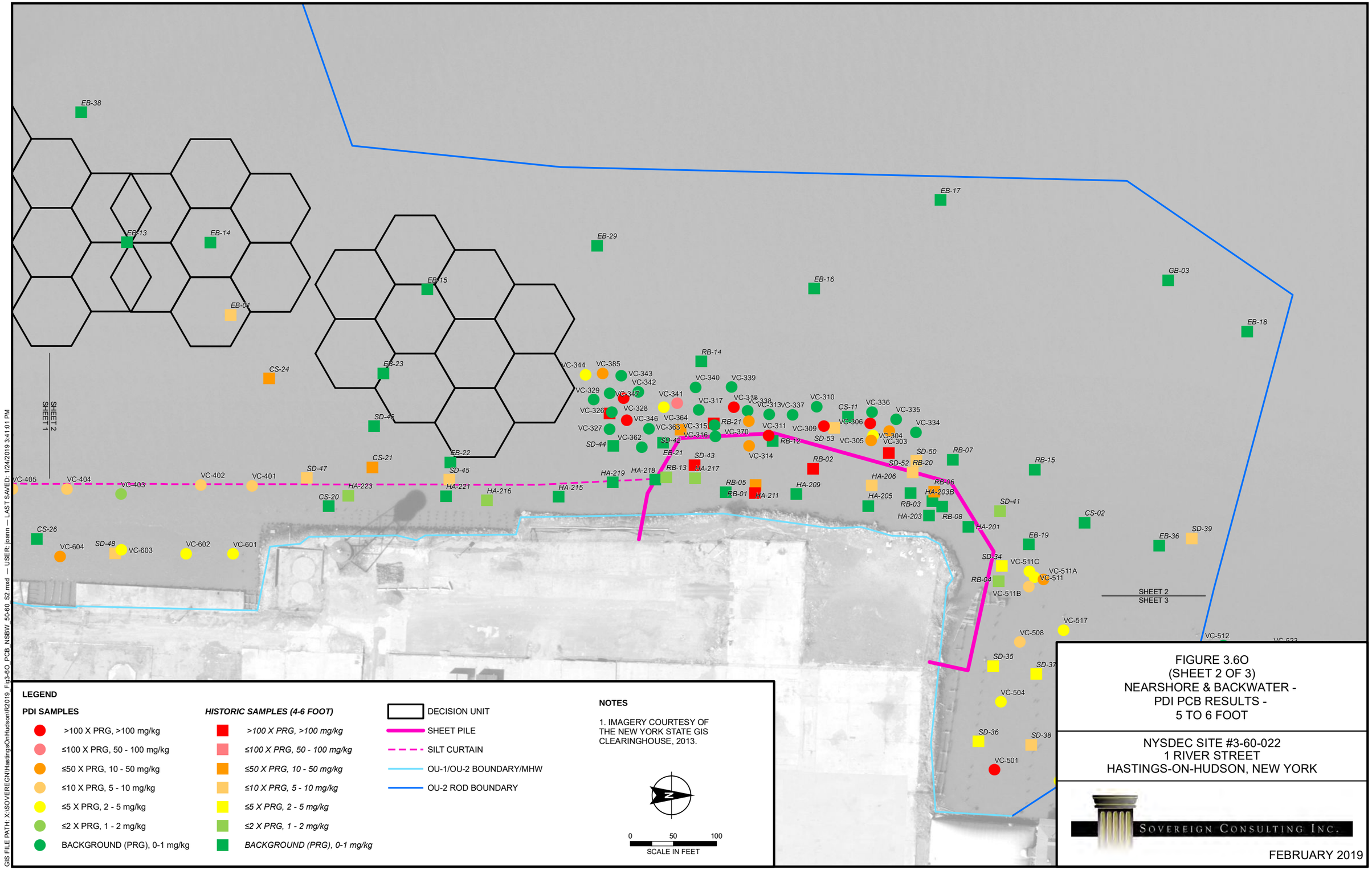

LEGEND

PDI SAMPLES

- >100 X PRG, >100 mg/kg
- ≤100 X PRG, 50 - 100 mg/kg
- ≤50 X PRG, 10 - 50 mg/kg
- ≤10 X PRG, 5 - 10 mg/kg
- ≤5 X PRG, 2 - 5 mg/kg
- ≤2 X PRG, 1 - 2 mg/kg
- BACKGROUND (PRG), 0-1 mg/kg

HISTORIC SAMPLES (4-6 FOOT)

- *>100 X PRG, >100 mg/kg*
- *≤100 X PRG, 50 - 100 mg/kg*
- *≤50 X PRG, 10 - 50 mg/kg*
- *≤10 X PRG, 5 - 10 mg/kg*
- *≤5 X PRG, 2 - 5 mg/kg*
- *≤2 X PRG, 1 - 2 mg/kg*
- *BACKGROUND (PRG), 0-1 mg/kg*

- DECISION UNIT
- SHEET PILE
- SILT CURTAIN
- OU-1/OU-2 BOUNDARY/MHW
- OU-2 ROD BOUNDARY

NOTES

1. IMAGERY COURTESY OF THE NEW YORK STATE GIS CLEARINGHOUSE, 2013.

N

0 50 100

SCALE IN FEET

FIGURE 3.6O
(SHEET 2 OF 3)
NEARSHORE & BACKWATER - PDI PCB RESULTS - 5 TO 6 FOOT

NYSDEC SITE #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

SOVEREIGN CONSULTING INC.

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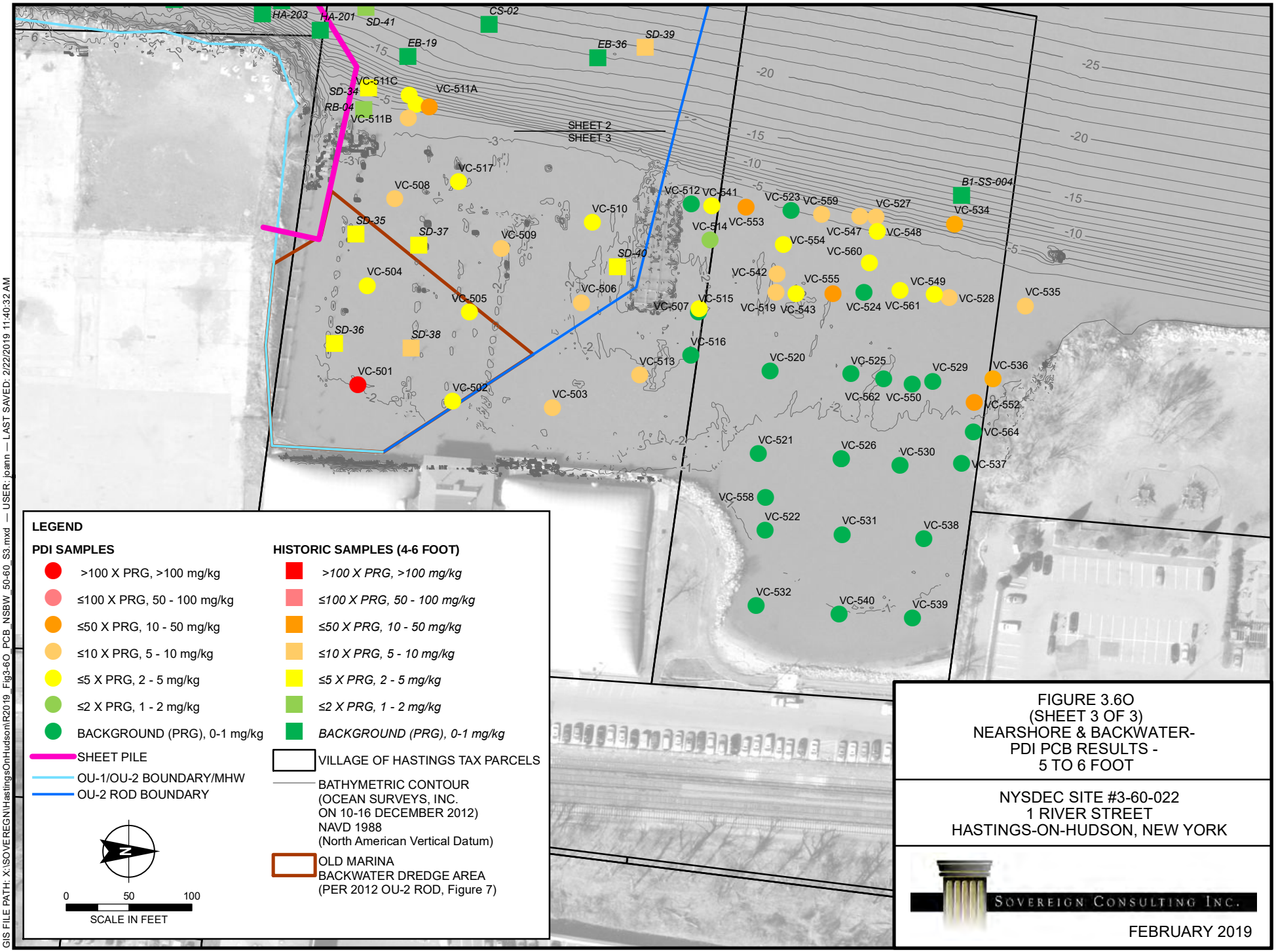

FIGURE 3.6O
(SHEET 3 OF 3)
NEARSHORE & BACKWATER-
PDI PCB RESULTS -
5 TO 6 FOOT

NYSDEC SITE #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

SOVEREIGN CONSULTING INC.

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EB-38
EB-13
EB-14
EB-01
EB-29
EB-15
GB-10
EB-23
SD-46
EB-16
GB-04
GB-03
EB-18
RB-17
RB-18
RB-14
RB-19
RB-16
VC-329
VC-328
VC-342
VC-326
VC-346
VC-327
SD-44
VC-317
VC-318
VC-338
SD-42
VC-315
VC-316
EB-21
RB-12
VC-309
VC-306
SD-53
RB-11
VC-304
SD-52
RB-27
SD-50
RB-20
RB-07
SD-43
RB-13
HA-217
HA-218
RB-43
HA-219
HA-215
RB-02
RB-10
RB-15
RB-05
HA-211
HA-209
HA-205
HA-206
RB-06
HA-203B
RB-03
RB-08
HA-203
HA-201
SD-41
RB-01
SD-47
SD-45
HA-221
HA-216
HA-223
VC-405
VC-404
VC-403
VC-402
VC-401
VC-604
SD-48
VC-603
VC-602
VC-601
RB-09
EB-19
EB-36
SD-39
SD-34
VC-511C
VC-511A
VC-511
RB-04
VC-511B
SHEET 2
SHEET 3
VC-517
VC-508
VC-512
VC-553
SD-35
SD-37
VC-504
SD-36
SD-38
VC-501
SHEET 1
SHEET 2

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LEGEND

PDI SAMPLES

- >100 X PRG, >100 mg/kg
- ≤100 X PRG, 50 - 100 mg/kg
- ≤50 X PRG, 10 - 50 mg/kg
- ≤10 X PRG, 5 - 10 mg/kg
- ≤5 X PRG, 2 - 5 mg/kg
- ≤2 X PRG, 1 - 2 mg/kg
- BACKGROUND (PRG), 0-1 mg/kg

HISTORIC SAMPLES (6-8 FOOT)

- *>100 X PRG, >100 mg/kg*
- *≤100 X PRG, 50 - 100 mg/kg*
- *≤50 X PRG, 10 - 50 mg/kg*
- *≤10 X PRG, 5 - 10 mg/kg*
- *≤5 X PRG, 2 - 5 mg/kg*
- *≤2 X PRG, 1 - 2 mg/kg*
- *BACKGROUND (PRG), 0-1 mg/kg*

- DECISION UNIT
- SHEET PILE
- SILT CURTAIN
- OU-1/OU-2 BOUNDARY/MHW
- OU-2 ROD BOUNDARY

NOTES

1. IMAGERY COURTESY OF THE NEW YORK STATE GIS CLEARINGHOUSE, 2013.

N

0 50 100
SCALE IN FEET

FIGURE 3.6P
(SHEET 2 OF 3)
NEARSHORE & BACKWATER -
PDI PCB RESULTS -
6 TO 8 FOOT

NYSDEC SITE #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

SOVEREIGN CONSULTING INC.

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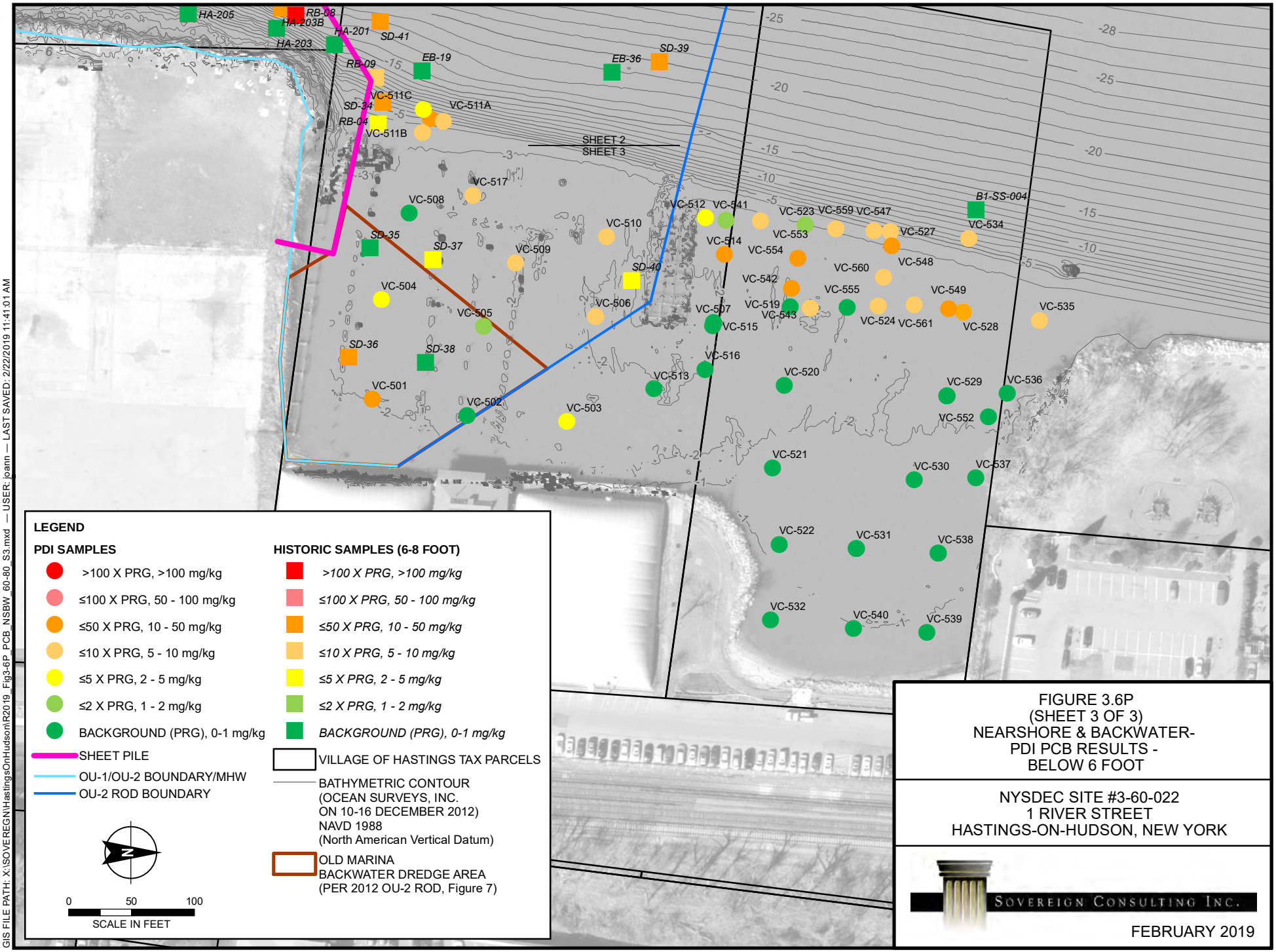
HA-205
RB-08
HA-203B
HA-201
SD-41
HA-203
RB-09
EB-19
EB-36
SD-39
VC-511C
VC-511A
SD-34
RB-04
VC-511B
SHEET 2
SHEET 3
VC-517
VC-508
VC-512
VC-541
VC-523
VC-559
VC-547
B1-SS-004
VC-534
VC-510
VC-553
VC-527
SD-35
SD-37
VC-509
VC-514
VC-554
VC-548
SD-40
VC-542
VC-560
VC-504
VC-555
VC-549
VC-506
VC-519
VC-543
VC-524
VC-561
VC-535
VC-505
VC-507
VC-515
VC-528
SD-36
SD-38
VC-516
VC-513
VC-520
VC-529
VC-536
VC-501
VC-502
VC-503
VC-552
VC-521
VC-530
VC-537
VC-522
VC-531
VC-538
VC-532
VC-540
VC-539
LEGEND
PDI SAMPLES
>100 X PRG, >100 mg/kg
≤100 X PRG, 50 - 100 mg/kg
≤50 X PRG, 10 - 50 mg/kg
≤10 X PRG, 5 - 10 mg/kg
≤5 X PRG, 2 - 5 mg/kg
≤2 X PRG, 1 - 2 mg/kg
BACKGROUND (PRG), 0-1 mg/kg
SHEET PILE
OU-1/OU-2 BOUNDARY/MHW
OU-2 ROD BOUNDARY
HISTORIC SAMPLES (6-8 FOOT)
>100 X PRG, >100 mg/kg
≤100 X PRG, 50 - 100 mg/kg
≤50 X PRG, 10 - 50 mg/kg
≤10 X PRG, 5 - 10 mg/kg
≤5 X PRG, 2 - 5 mg/kg
≤2 X PRG, 1 - 2 mg/kg
BACKGROUND (PRG), 0-1 mg/kg
VILLAGE OF HASTINGS TAX PARCELS
BATHYMETRIC CONTOUR
(OCEAN SURVEYS, INC.
ON 10-16 DECEMBER 2012)
NAVD 1988
(North American Vertical Datum)
OLD MARINA
BACKWATER DREDGE AREA
(PER 2012 OU-2 ROD, Figure 7)
N
0
50
100
SCALE IN FEET
FIGURE 3.6P
(SHEET 3 OF 3)
NEARSHORE & BACKWATER-
PDI PCB RESULTS -
BELOW 6 FOOT
NYSDEC SITE #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK
SOVEREIGN CONSULTING INC.
FEBRUARY 2019
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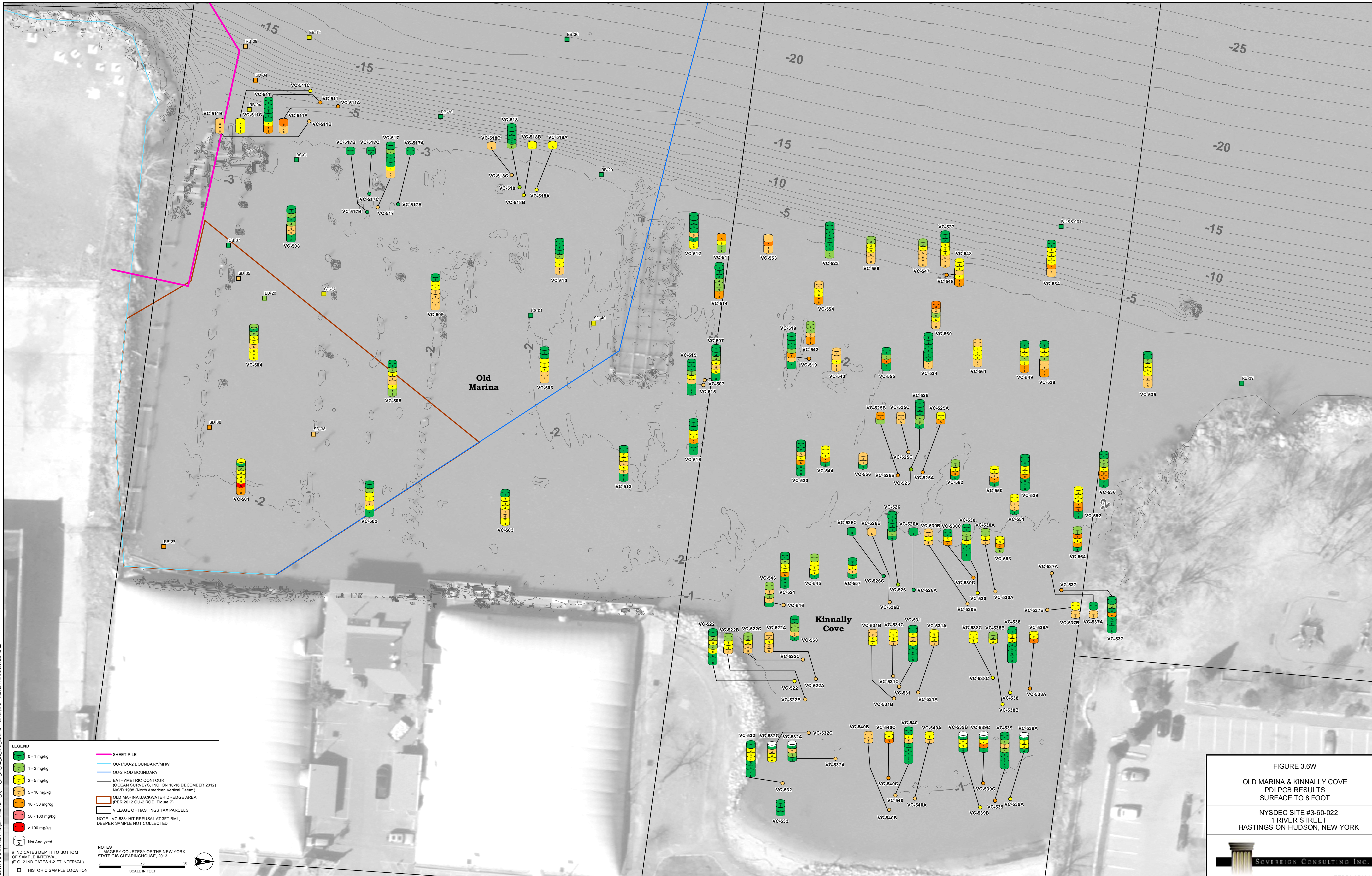

Old Marina
Kinnally Cove
LEGEND
0 - 1 mg/kg
1 - 2 mg/kg
2 - 5 mg/kg
5 - 10 mg/kg
10 - 50 mg/kg
50 - 100 mg/kg
> 100 mg/kg
Not Analyzed
# INDICATES DEPTH TO BOTTOM OF SAMPLE INTERVAL (E.G. 2 INDICATES 1-2 FT INTERVAL)
HISTORIC SAMPLE LOCATION
SHEET PILE
OU-1/OU-2 BOUNDARY/MHW
OU-2 ROD BOUNDARY
BATHYMETRIC CONTOUR (OCEAN SURVEYS, INC. ON 10-16 DECEMBER 2012) NAVD 1988 (North American Vertical Datum)
OLD MARINA BACKWATER DREDGE AREA (PER 2012 OU-2 ROD, Figure 7)
VILLAGE OF HASTINGS TAX PARCELS
NOTE: VC-533: HIT REFUSAL AT 3FT BML, DEEPER SAMPLE NOT COLLECTED
NOTES
1. IMAGERY COURTESY OF THE NEW YORK STATE GIS CLEARINGHOUSE, 2013.
0
25
50
SCALE IN FEET
N
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FIGURE 3.6W

OLD MARINA & KINNALLY COVE
PDI PCB RESULTS
SURFACE TO 8 FOOT

NYSDEC SITE #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

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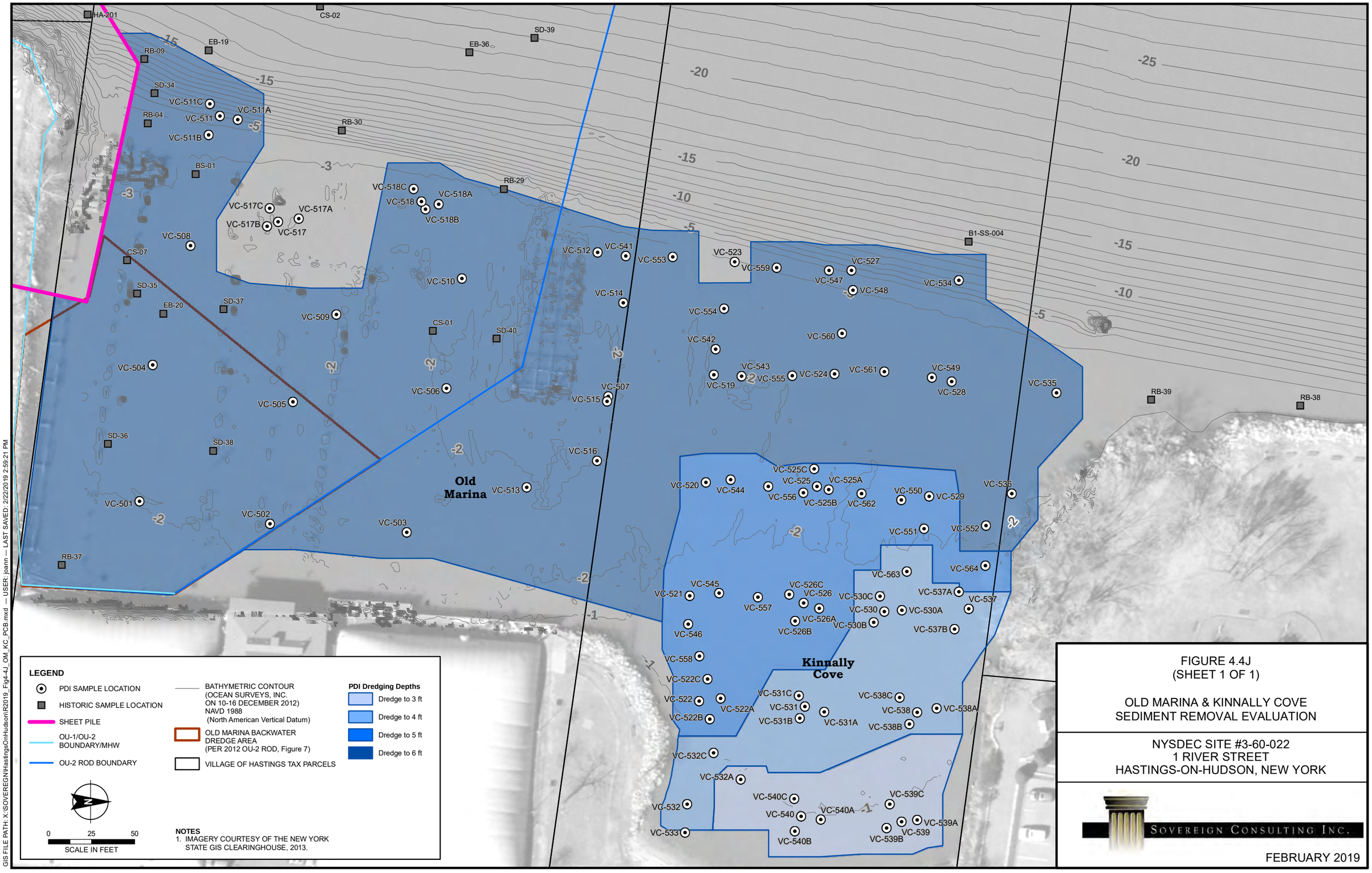

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FIGURE 4.4J
(SHEET 1 OF 1)

OLD MARINA & KINNALLY COVE
SEDIMENT REMOVAL EVALUATION

NYSDEC SITE #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

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