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June 28, 2013

Payson Long
Remedial Bureau D
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-7013

Re: Multi Site G, WA D007626-17
Dzus Fasteners Site, 1-52-077
Sediment Sampling in Lake Capri and Willetts Creek, April 2013

Dear Mr. Long:

Sediment samples were collected in Lake Capri and Willetts Creek to assess the extent of elevated concentrations in the samples collected during the 5-quarter long-term monitoring at the Site. Sampling was conducted in April 2013. A Site location map is provided in Figure 1.

As detailed in the scope of work, sediment samples were collected along five transects in Lake Capri and at 100 foot intervals along Willetts Creek. Lake samples were collected using an Ekman grab sampler. Willetts Creek samples were collected using dedicated stainless steel spoons. Sediment was transferred to laboratory supplied jars and placed in an ice filled cooler. Proper chain of custody was maintained throughout the sampling event. Samples were shipped to the lab via Federal Express.

Sample locations are shown on Figure 2. Seventy samples were collected from Willetts Creek (Figure 3) and 27 samples were collected from Lake Capri (Figure 4). In addition to the samples collected in the main channel of Willetts Creek, the field team also collected samples from wetland areas adjacent to the creek (designated as “A” and “B” samples) and at stormwater outfalls. Five field duplicates were collected as well as five MS/MSD sample pairs.

Samples were analyzed for cadmium by Hampton-Clarke Veritech Laboratories. The Willetts Creek samples are summarized on Table 1 and Figure 3. Lake Capri samples are summarized on Table 2 and Figure 4.

On Figures 5 and 6, the cadmium concentrations were assigned a color based on the lowest effects (LE) and highest effects (HE) levels as found in the NYSDEC Technical Guidance for Screening Contaminated Sediments (1999). The color codes are:

- Blue – not detected
- Light blue – less than 0.6 mg/kg (LE criterion)
- Green – 0.6 to 9 mg/kg (HE criterion and Site cleanup criterion is 9 mg/kg)

- Orange – 9 to 90 mg/kg
- Red – greater than 90 mg/kg

The highest cadmium concentration, 1,600 mg/kg, found during this investigation was from a wetland area (SED-CR7A) adjacent to an outfall that originates in the parking lot of the strip mall on Union Boulevard, south of the Dzus Facility. The nearby main channel samples, SED-CR6, 7 and 8 are all below the cleanup criterion.

As shown on Figure 5, Willetts Creek sediment samples, the first 800 feet of the Creek south of the Dzus facility is mostly below the cleanup criterion of 9 mg/kg, with the exception of two wetland locations. Twelve of the 17 Willetts Creek samples adjacent to the Beach Street Middle School, SED-CR9 through SED-CR20, are at concentrations above 90 mg/kg and three more are above 9 mg/kg. This portion of the Creek is approximately 1,100 feet long. The average concentration in this portion of the Creek is 170 mg/kg.

Another area of elevated concentrations is between SED-CR 23 and SED-CR25 where four of five wetland samples are above the cleanup criterion and two are above 90 mg/kg. The main channel samples are below the criterion.

Of the 27 sediment samples collected in Lake Capri, none were below criterion as shown on Figure 6. Concentrations ranged as high as 160 mg/kg. Twelve of the 27 Lake Capri sediment samples had concentrations above 90 mg/kg.

Very truly yours,

AECOM Technical Services Northeast, Inc.

Paul Kareth

Paul Kareth
Project Manager

Enclosures

TABLE 1
DZUS FASTENERS SITE (1-52-033)
WILLETTS CREEK SEDIMENT SAMPLE RESULTS - APRIL 2013

Lab Sample ID:	Client Sample ID:	Result	Units
AC71997-001	SED-CR01	1.4	mg/Kg
AC71997-002	SED-CR02	ND	mg/Kg
AC71997-003	SED-CR03	1.7	mg/Kg
AC71997-004	SED-CR04	ND	mg/Kg
AC71997-005	SED-CR04A	220	mg/Kg
AC71997-063	OUTFALL-4	ND	mg/Kg
AC71997-080	SED 6	1.0	mg/Kg
AC71997-006	SED-CR05	ND	mg/Kg
AC71997-007	SED-CR06	ND	mg/Kg
AC71997-008	SED-CR07	1.2	mg/Kg
AC71997-009	SED-CR07A	1,600	mg/Kg
AC71997-064	OUTFALL-7	27	mg/Kg
AC71997-010	SED-CR08	3.4	mg/Kg
AC71997-011	SED-CR09	460	mg/Kg
AC71997-012	SED-CR10	190	mg/Kg
AC71997-013	SED-CR11	240	mg/Kg
AC71997-014	SED-CR12	370	mg/Kg
AC71997-015	SED-CR13	5.5	mg/Kg
AC71997-065	OUTFALL-13	210	mg/Kg
AC71997-016	SED-CR14	200	mg/Kg
AC71997-017	SED-CR15	250	mg/Kg
AC71997-018	SED-CR16	130	mg/Kg
AC71997-019	SED-CR17	250	mg/Kg
AC71997-020	SED-CR17A	94	mg/Kg
AC71997-021	SED-CR18	150	mg/Kg
AC71997-022	SED-CR19	14	mg/Kg
AC71997-066	OUTFALL-19	0.95	mg/Kg
AC71997-023	SED-CR20	12	mg/Kg
AC71997-024	SED-CR20A	18	mg/Kg
AC71997-025	SED-CR20B	310	mg/Kg
AC71997-026	SED-CR21	1.5	mg/Kg
AC71997-027	SED-CR22	ND	mg/Kg
AC71997-067	OUTFALL-22	ND	mg/Kg
AC71997-028	SED-CR23	1.8	mg/Kg
AC71997-029	SED-CR23A	61	mg/Kg
AC71997-030	SED-CR23B	59	mg/Kg
AC71997-109	SED-CR24	ND	mg/Kg
AC71997-112	SED-CR24A	120	mg/Kg
AC71997-110	SED-CR24B	93	mg/Kg
AC71997-111	OUTFALL-24	ND	mg/Kg
AC71997-031	SED-CR25	1.3	mg/Kg
AC71997-113	SED-CR25A	ND	mg/Kg
AC71997-032	SED-CR26	4.0	mg/Kg
AC71997-033	SED-CR27	5.1	mg/Kg
AC71997-034	SED-CR28	2.9	mg/Kg
AC71997-035	SED-CR28A	ND	mg/Kg
AC71997-114	SED-CR28B	82	mg/Kg
AC71997-036	SED-CR29	11	mg/Kg

TABLE 1
DZUS FASTENERS SITE (1-52-033)
WILLETTS CREEK SEDIMENT SAMPLE RESULTS - APRIL 2013

Lab Sample ID:	Client Sample ID:	Result	Units
AC71997-037	OUTFALL-29	4.2	mg/Kg
AC71997-038	SED-CR30	0.96	mg/Kg
AC71997-039	OUTFALL-30	1.1	mg/Kg
AC71997-079	SED 5	2.3	mg/Kg
AC71997-040	SED-CR31	50	mg/Kg
AC71997-041	SED-CR32	0.89	mg/Kg
AC71997-042	OUTFALL-32	2.0	mg/Kg
AC71997-043	SED-CR33	0.77	mg/Kg
AC71997-045	SED-CR34	ND	mg/Kg
AC71997-046	SED-CR34A	63	mg/Kg
AC71997-047	SED-CR35	1.4	mg/Kg
AC71997-048	SED-CR36	ND	mg/Kg
AC71997-050	OUTFALL=36	ND	mg/Kg
AC71997-051	SED-CR37	ND	mg/Kg
AC71997-052	SED-CR38	ND	mg/Kg
AC71997-053	SED-CR39	ND	mg/Kg
AC71997-054	OUTFALL-39	ND	mg/Kg
AC71997-055	SED-CR40	ND	mg/Kg
AC71997-056	SED-CR41	ND	mg/Kg
AC71997-057	SED-CR42	ND	mg/Kg
AC71997-058	SED-CR43	ND	mg/Kg
AC71997-061	OUTFALL-43	1.1	mg/Kg
MS/MSD			
AC71997-059	SED-CR43-MS	56	mg/Kg
AC71997-060	SED-CR43-MSD	55	mg/Kg
AC71997-068	SED-CR-34 MS	65	mg/Kg
AC71997-069	SED-CR-34 MSD	58	mg/Kg
AC71997-070	SED-CR-35 MS	65	mg/Kg
AC71997-071	SED-CR-35 MSD	71	mg/Kg
AC71997-072	SED-CR-38 MS	59	mg/Kg
AC71997-073	SED-CR-38 MSD	60	mg/Kg
AC71997-099	SED LE4 MS	360	mg/Kg
AC71997-100	SED LE4 MSD	480	mg/Kg
Field Blanks			
AC71997-107	FB B	ND	ug/L
AC71997-108	FB P	ND	ug/L
Field Duplicates			
AC71997-044	SED-CR-133 (SED CR-33)	0.73	mg/Kg
AC71997-049	SED-CR-136 (SED CR-36)	ND	mg/Kg
AC71997-062	OUTFALL 143 (OUTFALL 43)	1.6	mg/Kg

TABLE 2
DZUS FASTENERS SITE (1-52-033)
LAKE CAPRI SEDIMENT SAMPLE RESULTS - APRIL 2013

Lab Sample ID:	Client Sample ID:	Result	Units
AC71997-074	SED 1	90	mg/Kg
AC71997-075	SED 1A	100	mg/Kg
AC71997-076	SED 2	99	mg/Kg
AC71997-081	SED LA1	67	mg/Kg
AC71997-082	SED LA2	57	mg/Kg
AC71997-083	SED LA3	120	mg/Kg
AC71997-084	SED LA4	84	mg/Kg
AC71997-085	SED LB1	74	mg/Kg
AC71997-086	SED LB2	62	mg/Kg
AC71997-087	SED LB3	140	mg/Kg
AC71997-088	SED LB4	73	mg/Kg
AC71997-089	SED LB5	96	mg/Kg
AC71997-090	SED LC1	91	mg/Kg
AC71997-091	SED LC2	21	mg/Kg
AC71997-092	SED LC3	160	mg/Kg
AC71997-093	SED LC4	84	mg/Kg
AC71997-094	SED LC5	120	mg/Kg
AC71997-102	SED LD1	150	mg/Kg
AC71997-103	SED LD2	140	mg/Kg
AC71997-104	SED LD3	66	mg/Kg
AC71997-106	SED LD4	88	mg/Kg
AC71997-105	SED LD5	36	mg/Kg
AC71997-097	SED LE1	46	mg/Kg
AC71997-077	SED 3	19	mg/Kg
AC71997-078	SED 4	29	mg/Kg
AC71997-098	SED LE4	140	mg/Kg
AC71997-101	SED LE5	140	mg/Kg
MS/MSD			
AC71997-059	SED-CR43-MS	56	mg/Kg
AC71997-060	SED-CR43-MSD	55	mg/Kg
AC71997-068	SED-CR-34 MS	65	mg/Kg
AC71997-069	SED-CR-34 MSD	58	mg/Kg
AC71997-070	SED-CR-35 MS	65	mg/Kg
AC71997-071	SED-CR-35 MSD	71	mg/Kg
AC71997-072	SED-CR-38 MS	59	mg/Kg
AC71997-073	SED-CR-38 MSD	60	mg/Kg
AC71997-099	SED LE4 MS	360	mg/Kg
AC71997-100	SED LE4 MSD	480	mg/Kg
Field Blanks			
AC71997-107	FB B	ND	ug/L
AC71997-108	FB P	ND	ug/L
Duplicates			
AC71997-095	SED ZE (SED 3)	17	mg/Kg
AC71997-096	SED ZF (SED 4)	14	mg/Kg

USGS NY Bay Shore West Quadrangle

U.S.G.S. 1:24 000 SCALE TOPOGRAPHIC MAP

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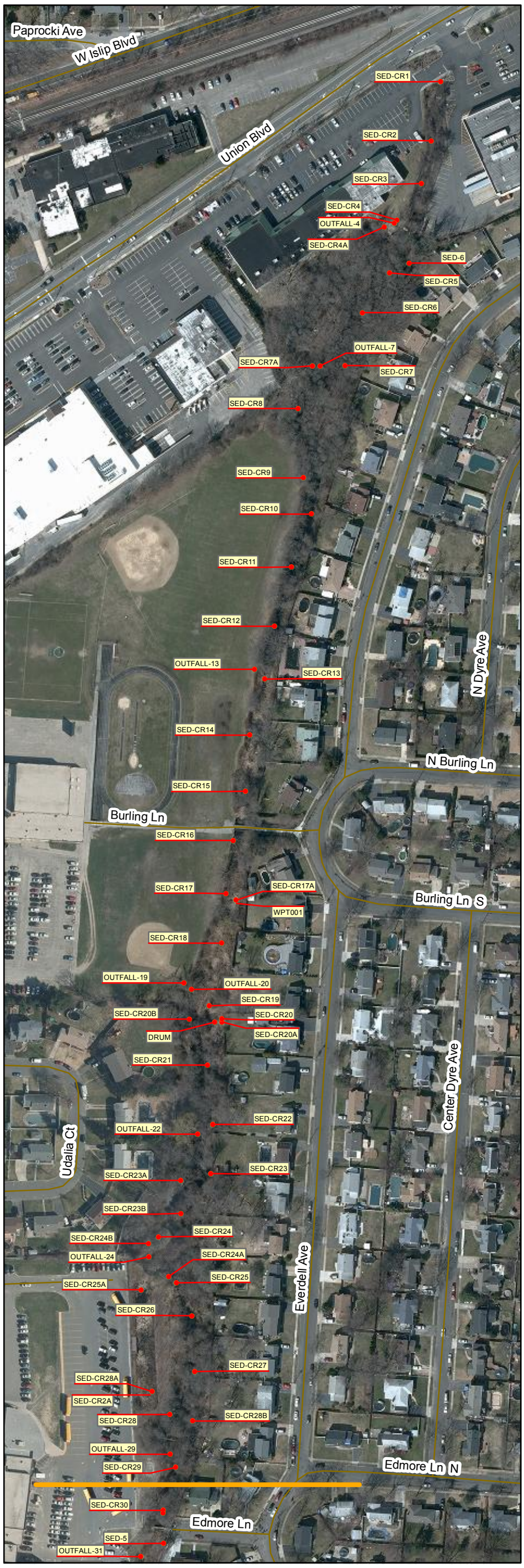
Prepared by: AECOM

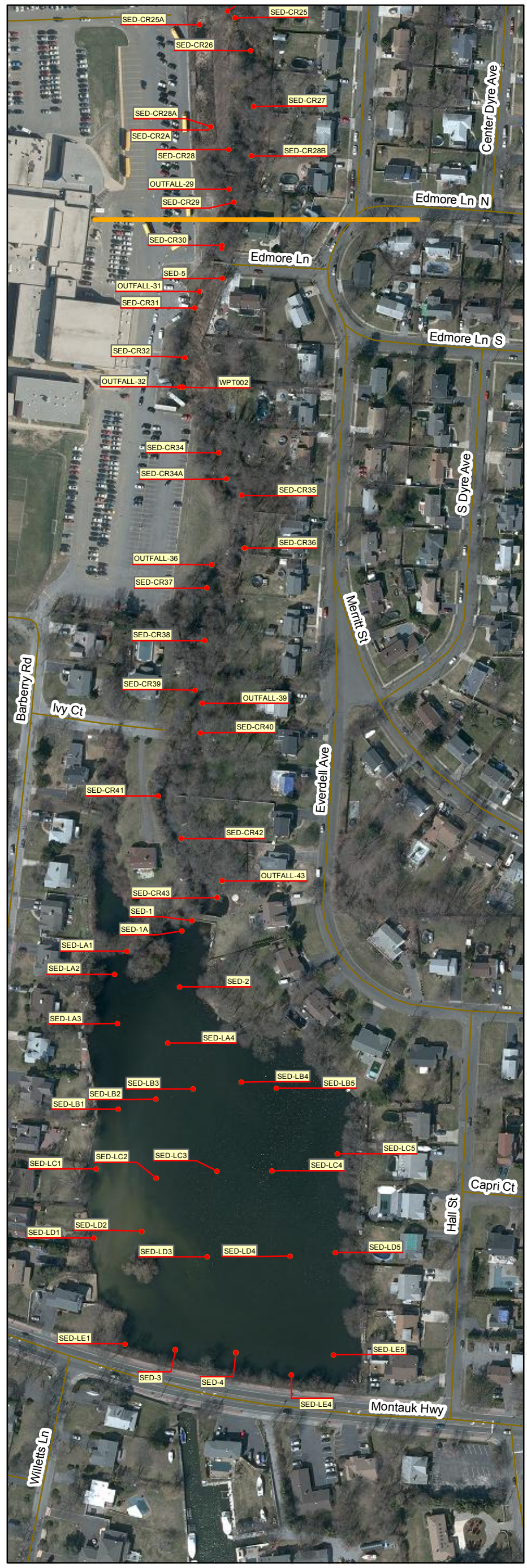
Prepared for: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Multi Site G
Operation, Maintenance & Monitoring

Site Location
Dzus Fasteners Site

Date:	Scale:	Figure No. :
January 2013	1 inch = 2,500 feet	1





0 100 200 400 600 800 Feet

Sources:
1. Sediment Locations, Handheld GPS Unit
2. Aerials, 2010 Half Foot 4 Band Long Island Zone
New York Statewide Digital Orthoimagery Program

Prepared by: AECOM

Prepared for: New York State Department of Environmental Conservation

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2013 Sediment Locations
Dzus Fasteners Site

Date:	Scale:	Figure No. :
June 2013	As Shown	2

Legend

Sample Location
Cadmium Concentration (mg/kg)

Match Line

0 50 100 200 300 400 Feet

Source:
Aerials from 2010 Half Foot 4 Band Long Island Zone
New York Statewide Digital Orthoimagery Program

Prepared by: AECOM

Prepared for: New York State Department of Environmental Conservation

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Willetts Creek Sediment
2013 Cadmium Concentrations
Dzus Fasteners Site

Date:	Scale:	Figure No. :
June 2013	As Shown	3

Legend

Sample Location
Cadmium Concentration (mg/kg)

Match Line

0 50 100 200 Feet

Sources:
Aerials from 2010 Half Foot 4 Band Long Island Zone
New York Statewide Digital Orthoimagery Program

Prepared by: AECOM

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Lake Capri Sediment
2013 Cadmium Concentrations
Dzus Fasteners Site

Date:	Scale:	Figure No. :
June 2013	As Shown	4

Legend

Cadmium (mg/kg)

- ND
- <0.6 (LEL)
- 0.6 - 9.0 (Cleanup Criterion)
- 9.0 - 90
- >90

0 50 100 200 300 400 Feet

Source:
Aerials from 2010 Half Foot 4 Band Long Island Zone
New York Statewide Digital Orthoimagery Program

Prepared by: AECOM

Prepared for: New York State Department of Environmental Conservation

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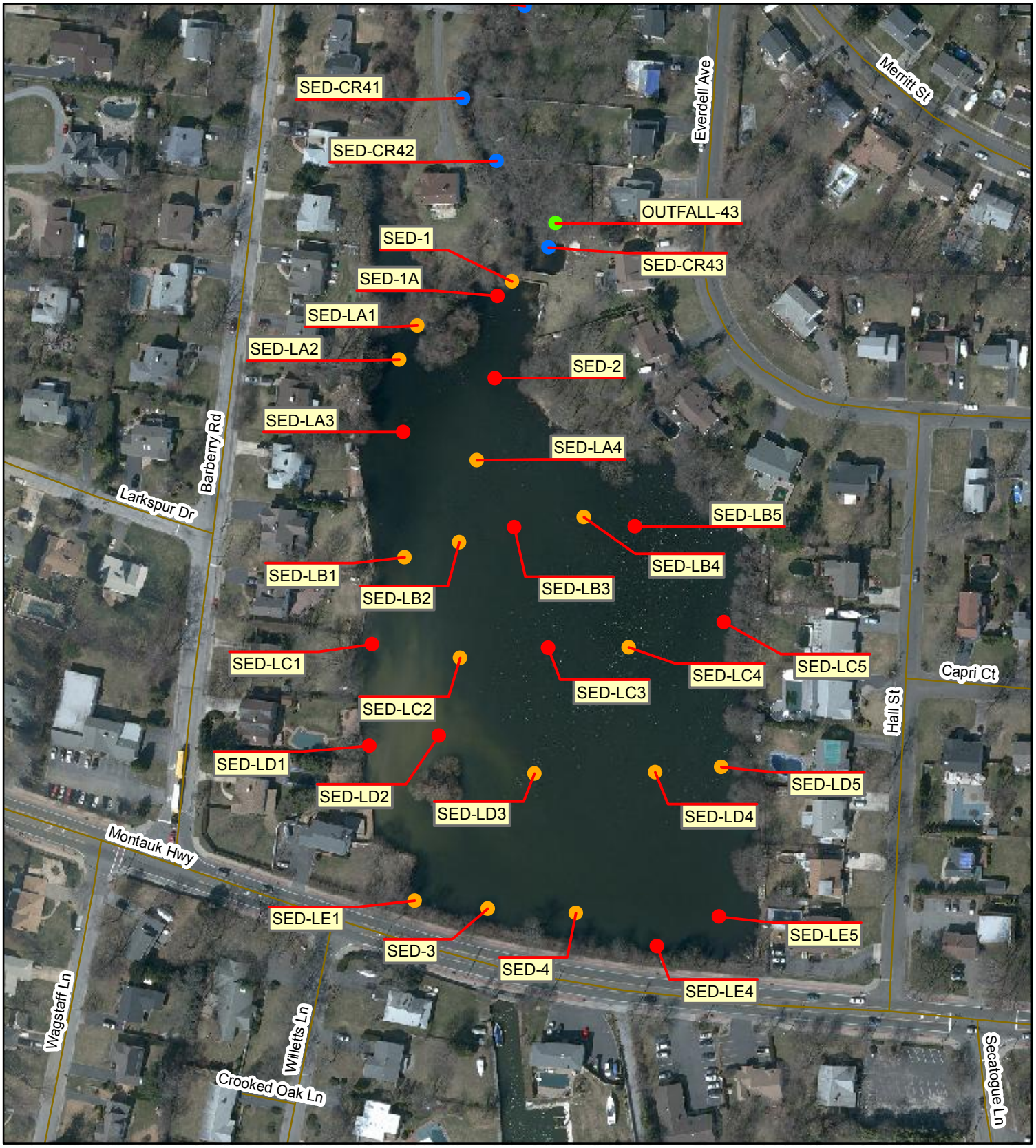
Willetts Creek Sediment
2013 Cadmium Concentrations by Range
Dzus Fasteners Site

Date:	Scale:	Figure No. :
June 2013	As Shown	5



Legend

Cadmium (mg/kg)

- ND
- <0.6 (LEL)
- 0.6 - 9.0 (Cleanup Criterion)
- 9.0 - 90
- >90

0 50 100 200 300 Feet

Source:
Aerials from 2010 Half Foot 4 Band Long Island Zone
New York Statewide Digital Orthoimagery Program

Prepared by: AECOM

Prepared for: New York State Department of Environmental Conservation

Multi Site G
Operation, Maintenance & Monitoring

Lake Capri Sediment
2013 Cadmium Concentrations by Range
Dzus Fasteners Site

Date:	Scale:	Figure No. :
June 2013	As Shown	6