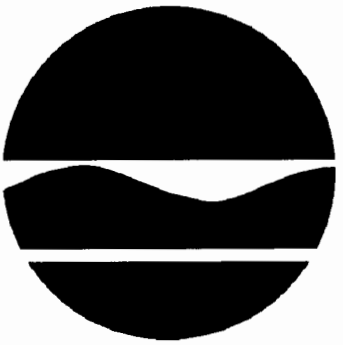
ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

Preliminary Site Assessment Report

Stock's Pond - Site No. 915082
Depew - Erie County

DATE: November 1993



Prepared for:

New York State
Department of Environmental Conservation

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Bureau of Hazardous Site Control
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Introduction

The following information is excerpted from E.C. Jordan Co.'s June 1992 Draft Site Work Plan and is also presented in E.C. Jordan's January 1991, "Task 1: Data Records Search and Assessment, Preliminary Site Assessment, Stock's Pond, Final Report." Both were prepared for the New York State Department of Environmental Conservation (NYSDEC).

Site Description

The Stock's Pond site is located at the southeast corner of Broadway and Transit Road in the Village of Depew, Erie County, New York. (Figure 1) The site is approximately 2.5 acres in size and is located fifty feet north of Cayuga Creek. (Figure 2) The area surrounding the site is residential and commercial.

The site was originally used as a quarry in the late 1800's. Ice was cut from the resulting pond beginning around 1910 until 1937. The pond was later filled in with foundry sand, slag, and lagoon sludge hauled from Dresser Industries between 1967 and 1978. Records indicate that from 1967 through 1978, approximately 71,831 cubic yards of material was dumped at the site. This included approximately 34,411 cubic yards of lagoon sludge, 30,107 cubic yards of sand and 7,313 cubic yards of slag. In the late 1970's, there were reports of building contractors illegally dumping broken concrete and clay on site. The Stock family leveled the area and constructed a clay berm to prevent access to and limit illegal dumping at the site.

The Stock family sold the property to Leo Piotrowski in 1985. In 1986 the site was developed; a parking lot and Arby's restaurant were constructed over the disposal area. Evidence of the former pond and berms no longer exits because most of the site is now paved with asphalt.

Previous Investigations

Surface water and soil samples were collected at two locations by the New York State Department of Environmental Conservation Region 9 Office in December of 1981. (Figure 3) Samples were analyzed for heavy metals, phenolics, and halogenated organics. The first sample was obtained from a ponded area adjacent to the site to the east. Analytical results indicated the presence of lead (140 ppm), zinc (150 ppm) and phenolics (0.9 ppm) in the soil and phenol (0.02 ppm) in the ponded water. The second sample, obtained from a leachate breakout in the southwestern portion of the fill area, indicated the presence of lead (0.10 ppm) and zinc (0.351 ppm) in the water sample, and lead (32 ppm), zinc (110 ppm) and phenolics (8.4 ppm) in the soil sample.

A Phase I report was completed by Recra Environmental in February 1986. No additional sampling was conducted during this investigation.

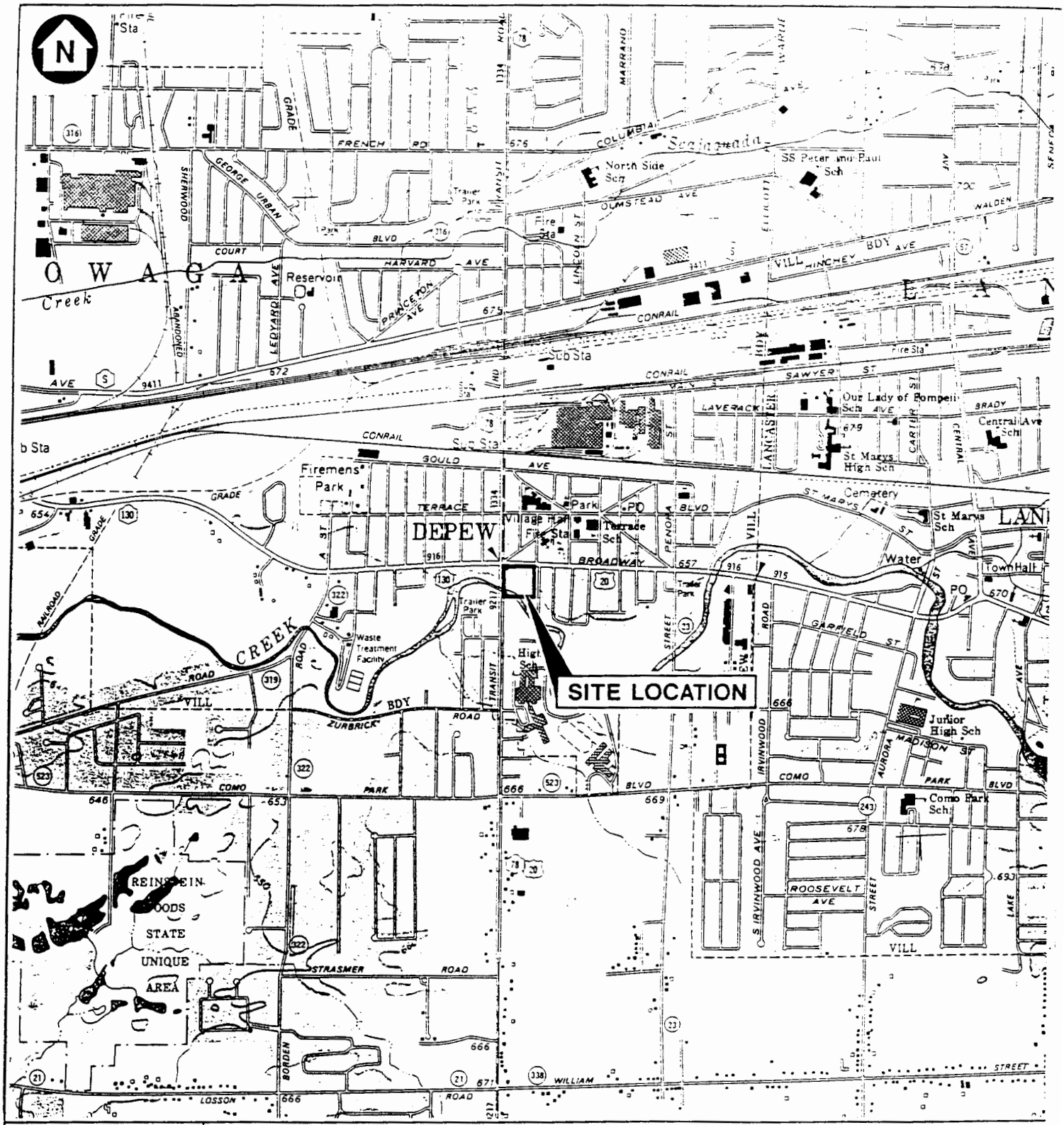
Additional Sampling

On August 6, 1992, Central Office and Regional Office staff sampled water, sediment and foundry sand waste at the site. (Figure 4) The samples were analyzed for full TCL (Target Compound List) volatiles, semivolatiles, PCBs/pesticides, metals and cyanide. Foundry sand samples were also analyzed for EP Toxicity Metals. The results of this sampling effort are shown on Tables 1 through 3.

Conclusions

The wastes disposed at the site, including foundry sands with phenolic binders, are not listed hazardous wastes. Additionally, sampling of the waste materials reveals that they do not meet criteria for characteristic hazardous wastes. The placement of lagoon sludges, foundry sands and slag at this site therefore does not constitute hazardous waste disposal. Significant threat has not been fully evaluated, however based on all of the sampling completed to date, significant threat does not appear to be indicated.

FIGURES



SOURCE: N.Y.S. DEPARTMENT OF TRANSPORTATION, LANCASTER QUADRANGLE DATED 1988, 7.5 MINUTE SERIES

SITE NO: 915082
LOCATION: VILLAGE OF DEPEW
ERIE COUNTY

FIGURE 1
SITE LOCATION MAP
STOCK'S POND
PRELIMINARY SITE ASSESSMENT
NEW YORK STATE DEC

ECJORDANCO

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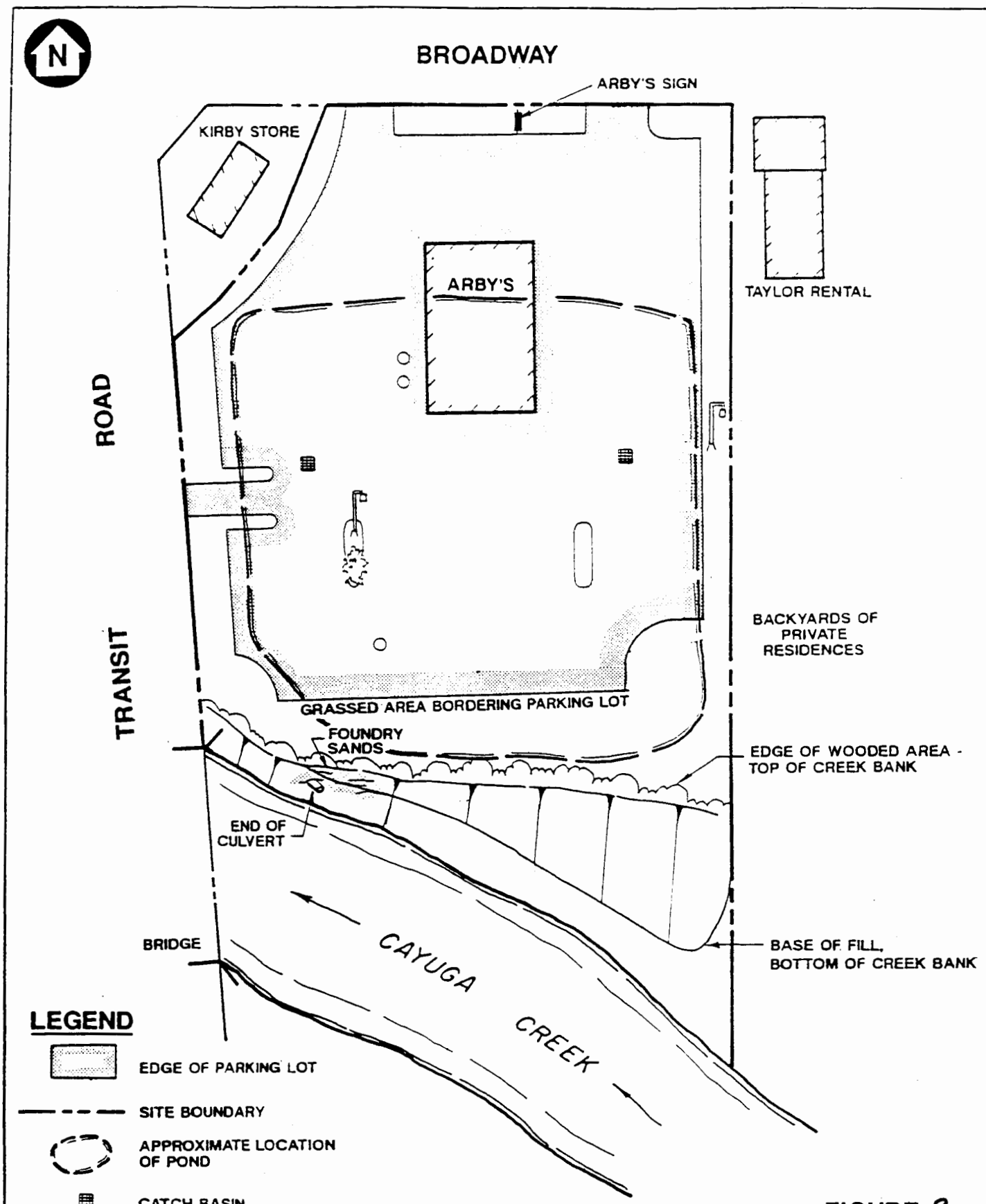

SITE NO.: 915082
LOCATION: VILLAGE OF DEPEW, ERIE, NEW YORK

NOT TO SCALE

FIGURE 2
SITE PLAN
STOCK'S POND
PRELIMINARY SITE ASSESSMENT
NEW YORK STATE DEC

E.C.JORDAN CO.

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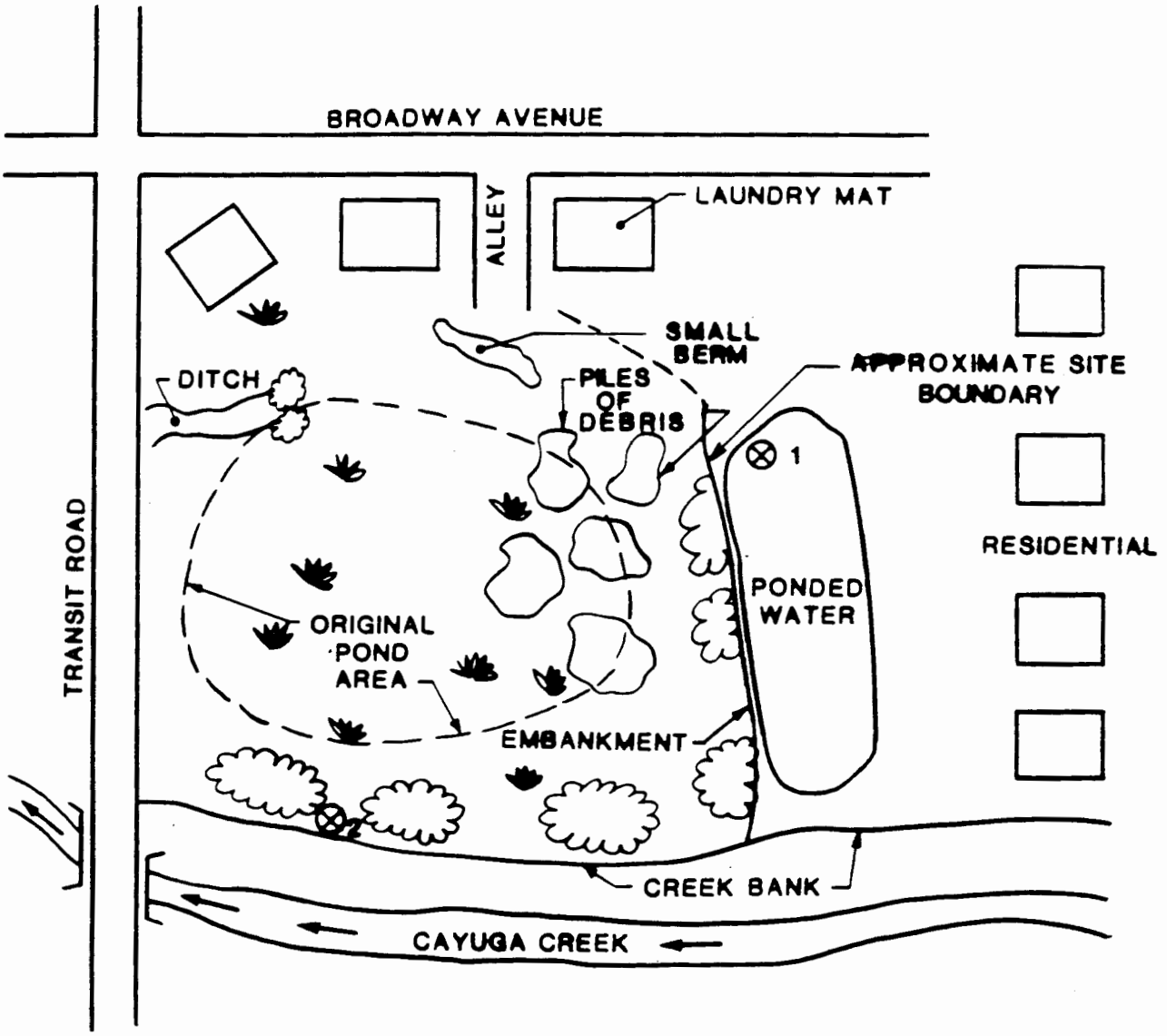


NOTE:

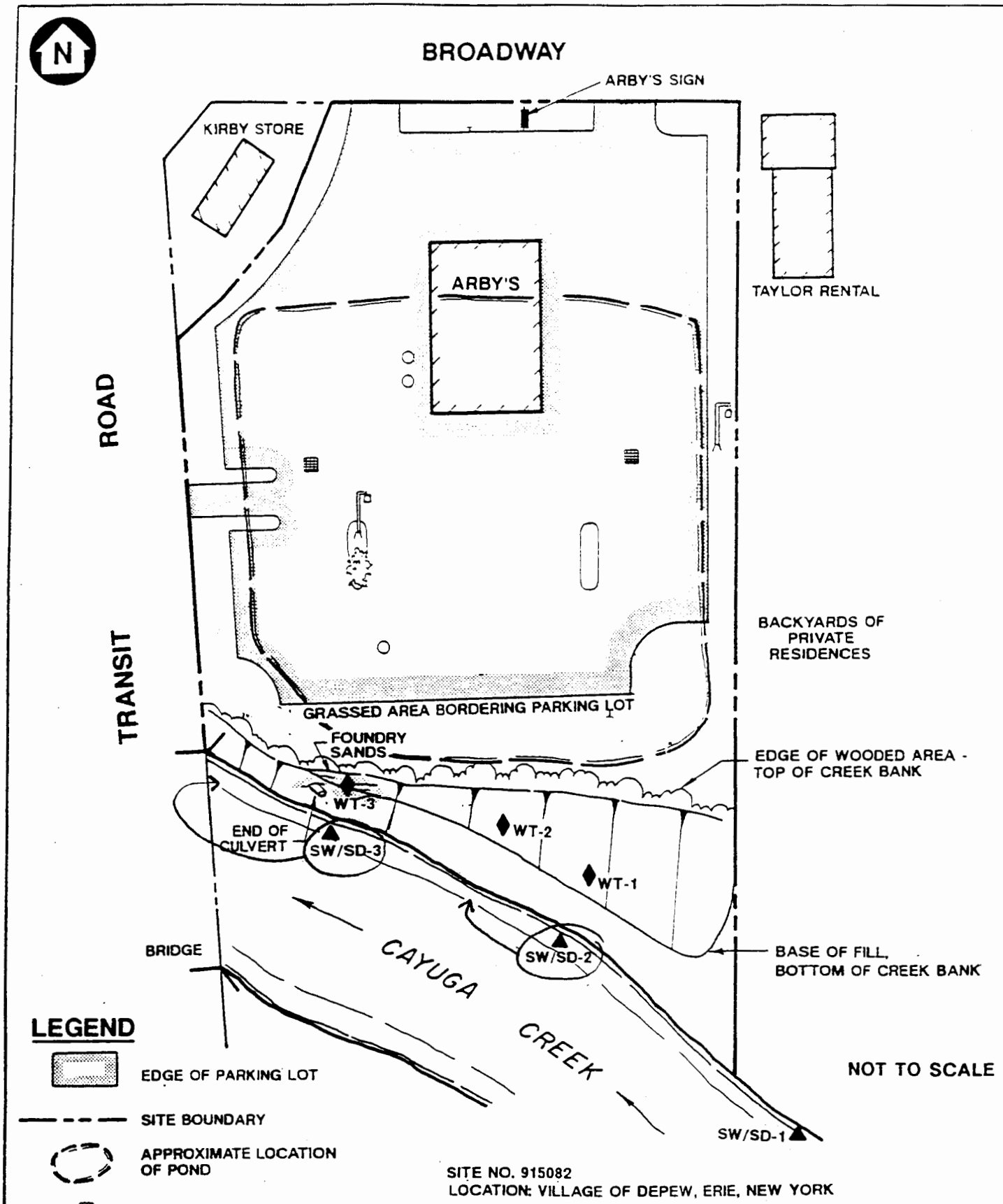
SITE MODIFIED SINCE INITIAL FIELD INSPECTION ON 12/11/85. SURFACE CONDITIONS PRESENTED ARE NO LONGER VALID DUE TO CONSTRUCTION OF RESTAURANT ON SITE AS OF 5/86.

LEGEND

⊗1 WATER AND SOIL SAMPLE COLLECTED BY N.Y.S.D.E.C. 12/9/81

⊗2 WATER AND SOIL SAMPLE COLLECTED FROM LEACHATE BREAKOUT BY N.Y.S.D.E.C. 12/9/81

Scale: NTS			STOCK'S POND DEPEW, NEW YORK N.Y.S. SUPERFUND PHASE I	SITE MAP
	By	Date		
Dwn.	MJS	12/85		
Ckd.				
Ap'vd.				
Rev.			Project No. 5C280408	A FIGURE 3



SITE NO. 915082
LOCATION: VILLAGE OF DEPEW, ERIE, NEW YORK

FIGURE 4
EXPLORATION LOCATIONS
STOCK'S POND
PRELIMINARY SITE ASSESSMENT
NEW YORK STATE DEC

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TABLES

TABLE 1

SURFACE WATER SAMPLES
Date Sampled - August 6, 1992

STOCK'S POND SITE NO. 915082

PARAMETER	SW-1 A563-1A	SW-2 A563-2A	SW-3 A563-3A	STANDARD OR GUIDANCE VALUE
VOLATILES (ug/l)				
TCL Volatiles	ND	ND	ND	N/A
SEMIVOLATILES (ug/l)				
TCL Semivolatiles	ND	ND	ND	N/A
TIC's (Number found)	8	8	9	N/A

TABLE 1 (CONTINUED)

SURFACE WATER SAMPLES
Date Sampled - August 6, 1992

STOCK'S POND SITE NO. 915082

PARAMETER	SW-1 A563-1A	SW-2 A563-2A	SW-3 A563-3A	STANDARD OR GUIDANCE VALUE
METALS (ug/l)				
Aluminum	1120	316	159 B	100
Calcium	46600	46000	46000	N/A
Chromium	ND	10.0	ND	208*
Copper	ND	18.0 B	18.0 B	16.2*
Iron	1400	840	459	300
Lead	4.0	ND	5.0	5.2*
Magnesium	7110	7000	6890	N/A
Manganese	75.3	73.0	45.3	N/A
Potassium	744 B	814 B	789 B	N/A
Sodium	13200	15000	14600	N/A
Zinc	27.9	14.9	32.6	30

* Based on a calculated hardness of 145 ppm

TABLE 2

SEDIMENT SAMPLES - Date Sampled August 6, 1992

STOCK'S POND SITE NO. 915082

PARAMETER	SD-1/A563-1B	SD-2/A563-2B	SD-3/A563-3B
VOLATILES (ug/kg)			
Acetone	130	ND	20
2-Butanone	35	ND	ND
Toluene	21	ND	ND
SEMIVOLATILES (ug/kg)			
Naphthalene	20 J	15 J	24 J
2-Methylnaphthalene	ND	ND	31 J
Acenaphthylene	ND	ND	25 J
Acenaphthene	71 J	26 J	150 J
Dibenzofuran	29 J	ND	88 J
Diethylphthalate	34 BJ	25 BJ	27 BJ
Fluorene	110	38 J	200 J
Phenanthrene	880	260 J	1700
Anthracene	200 J	46 J	380 J
Carbazole	110 J	38 J	250 J
Di-n-Butylphthalate	ND	72 J	120 J
Fluoranthene	1500	430 J	2400
Pyrene	1500	380 J	4100 E
Butylbenzylphthalate	51 J	37 J	87 J
Benzo (a) Anthracene	640	190 J	1300
Chrysene	680	220 J	1500
Bis (2-Ethylhexyl) Phthalate	3400 B	180 BJ	2100 B
Benzo (b) Fluoranthene	910	280 J	2400
Benzo (k) Fluoranthene	540	150 J	1100
Benzo (a) Pyrene	500 J	170 J	1500
Indeno (1,2,3-cd) Pyrene	360 J	110 J	800
Dibenz (a,h) Anthracene	ND	ND	140 J
Benzo (g,h,i) Perylene	250 J	90 J	540
TIC's (No. Found)	19	20	20

TABLE 2 (CONTINUED)

SEDIMENT SAMPLES
Date Sampled - August 6, 1992

STOCK'S POND SITE NO. 915082

PARAMETER	SD-1 A563-1B	SD-2 A563-2B	SD-3 A563-3B
PESTICIDES/PCBs (ug/kg)			
Dieldrin	13 P	ND	2.7 JP
4,4'-DDE	4.2 J	1.8 J	ND
Endosulfan II	0.63 JP	0.56 JP	ND
4,4'-DDD	4.4 JP	3.9 JP	ND
4,4'-DDT	3.8 JP	ND	ND
Endrin aldehyde	ND	1.4 JP	ND
alpha-Chlordane	2.1 JP	2.5 J	1.1 JP
gamma-Chlordane	1.2 JP	1.4 JP	ND

TABLE 2 (CONTINUED)

SEDIMENT SAMPLES
Date Sampled - August 6, 1992

STOCK'S POND SITE NO. 915082

PARAMETER	SD-1 A563-1B	SD-2 A563-2B	SD-3 A563-3B
METALS (mg/kg)			
Aluminum	3930	3910	3450
Antimony	ND	ND	22.5
Arsenic	2.6 B	2.4	3.1
Barium	34.6 B	31.2 B	25.9 B
Cadmium	0.76 B	0.53 B	0.56 B
Calcium	20700	11300	85600
Chromium	10.4	14.5	11.7
Copper	25.0	24.6	19.4
Iron	11200	11000	10400
Lead	56.0	75.0	36.7
Magnesium	4450	3820	7540
Manganese	198	255	287
Nickel	11.8 B	11.4	12.9
Potassium	486 B	676 B	588 B
Sodium	451 B	348 B	432 B
Vanadium	7.7 B	10.3 B	5.9 B
Zinc	144	59.8	68.4

TABLE 3

FOUNDRY SAND WASTE SAMPLES - Date Sampled August 6, 1992
STOCK'S POND SITE NO. 915082

PARAMETER	WT-1 A563-04	WT-2 A563-05	WT-3 A563-06
VOLATILES (ug/kg)			
TCL Volatiles	ND	ND	ND
SEMIVOLATILES (ug/kg)			
Naphthalene	48 J	220 J	26 J
2-Methylnaphthalene	58 J	170 J	56 J
Acenaphthylene	14 J	78 J	ND
Acenaphthene	35 J	450	8 J
Diethylphthalate	22 BJ	18 BJ	18 BJ
Fluorene	ND	490	ND
Phenanthrene	470	3000 E	180 J
Anthracene	100 J	910	24 J
Carbazole	54 J	650	14 J
Di-n-Butylphthalate	48 J	ND	ND
Fluoranthene	690	3400 E	260 J
Pyrene	710	6400 E	250 J
Butylbenzylphthalate	ND	ND	13 J
Benzo (a) Anthracene	390	2800	140 J
Chrysene	410	2200	180 J
Bis (2-Ethylhexyl) Phthalate	790 B	1700 B	310 J
Benzo (b) Fluoranthene	530	3900 E	230 J
Benzo (k) Fluoranthene	250 J	1300	90 J
Benzo (a) Pyrene	310 J	2100	130 J
Indeno (1,2,3-cd) Pyrene	150 J	1100	54 J
Dibenz (a,h) Anthracene	31 J	240 J	ND
Benzo (g,h,i) Perylene	80 J	640	39 J
TIC's (No. Found)	20	2O	20

TABLE 3 (CONTINUED)

FOUNDRY SAND WASTE SAMPLES
Date Sampled - August 6, 1992

STOCK'S POND SITE NO. 915082

PARAMETER	WT-1 A563-04	WT-2 A563-05	WT-3 A563-06
PESTICIDES/PCBs (ug/kg)			
Endosulfan I	ND	1.7 JP	ND
4,4'-DDE	2.9 JP	ND	0.92 J
Endrin	ND	ND	2.3 JP
Endosulfan II	ND	ND	0.76 JP
4,4'-DDT	9.3 P	ND	3.3 J
Endrin aldehyde	7.8 P	ND	7.7 P
alpha-Chlordane	0.49 J	1.4 JP	0.48 JP

TABLE 3 (CONTINUED)

FOUNDRY SAND WASTE SAMPLES
Date Sampled - August 6, 1992

STOCK'S POND SITE NO. 915082

PARAMETER	WT-1 A563-04	WT-2 A563-05	WT-3 A563-06
METALS (mg/kg)			
Aluminum	3870	3000	3810
Arsenic	3.6	5.1	2.3
Barium	32.7 B	55.9	24.1 B
Cadmium	1.2 B	0.29 B	0.32 B
Calcium	12500	68200	17800
Chromium	143	1080	32.0
Copper	42.4	71.2	25.8
Iron	15700	50100	11000
Lead	100	138	73.6
Magnesium	2800	9080	2610
Manganese	1930	20100	886
Nickel	28.8	250	15.3
Potassium	908 B	410	766
Silver	0.09 B	0.13 B	ND
Sodium	364 B	285 B	370 B
Vanadium	17.5	151	14.4
Zinc	111	56.3	39.6
EP TOXIC METALS (mg/l)			
Barium (100 mg/l)	0.421	0.168 B	0.110 B
Chromium (5 mg/l)	0.044	ND	0.010
Lead (5 mg/l)	0.007	0.017	0.006