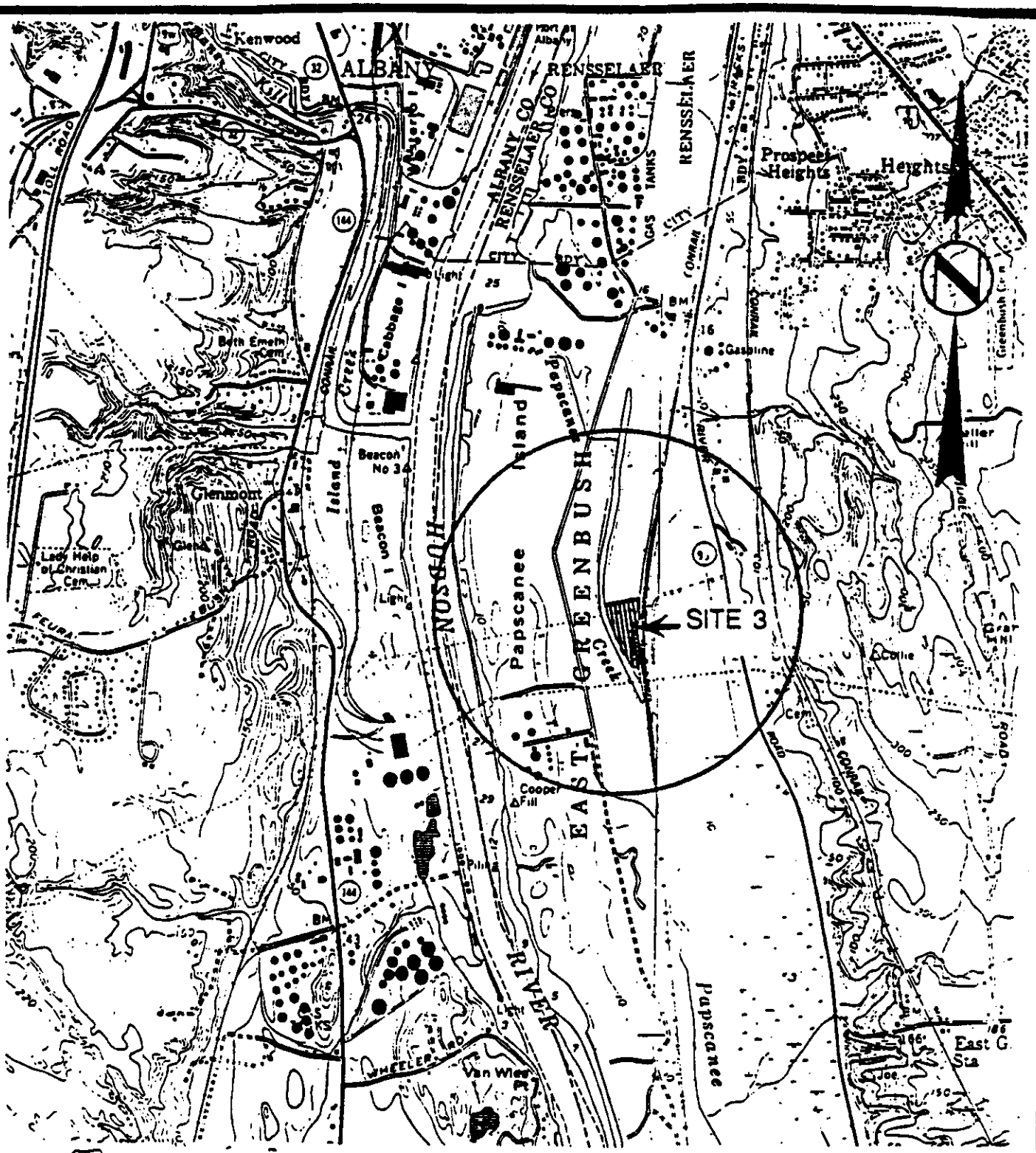
APPENDIX A

FIGURES AND TABLES

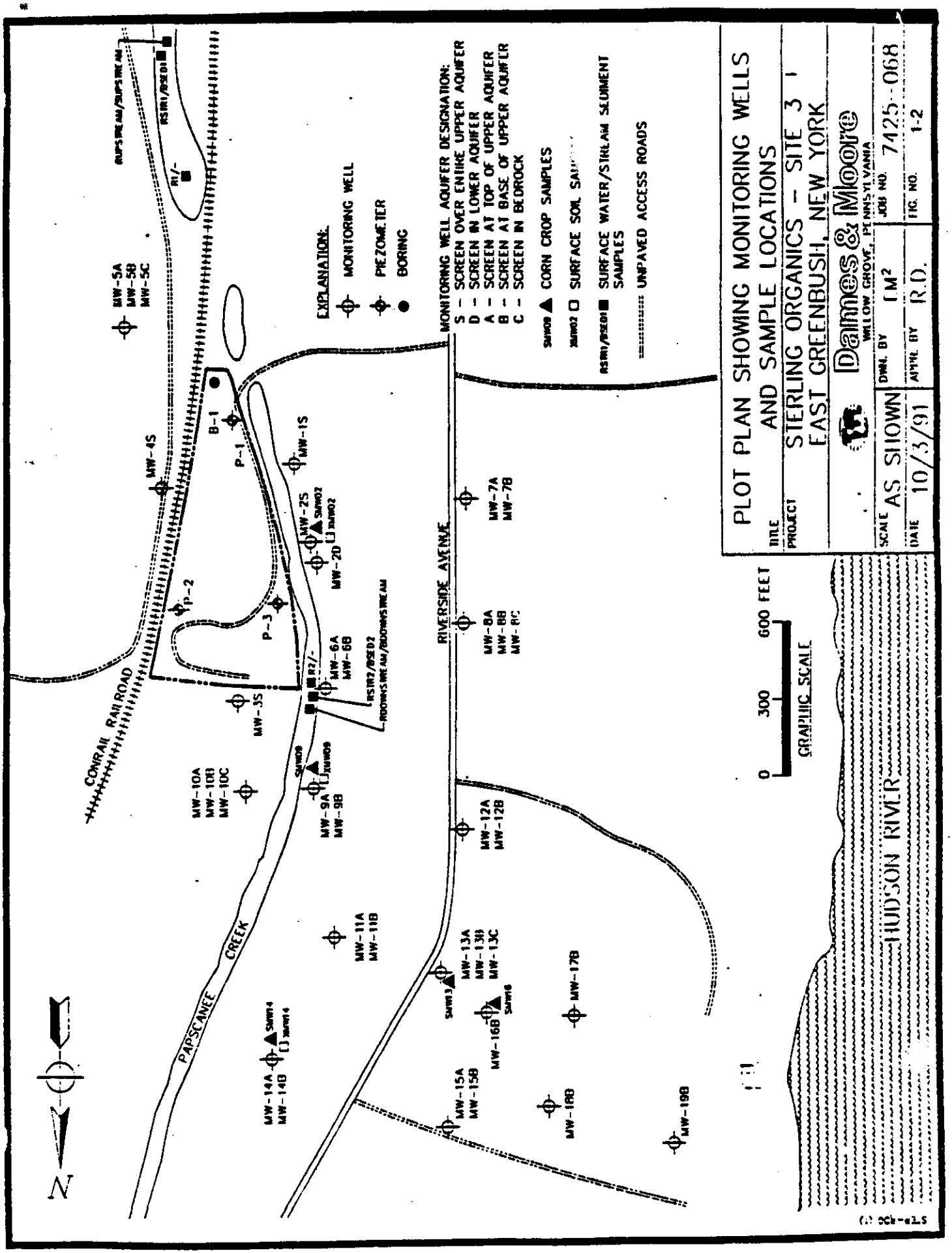
FIGURE 1

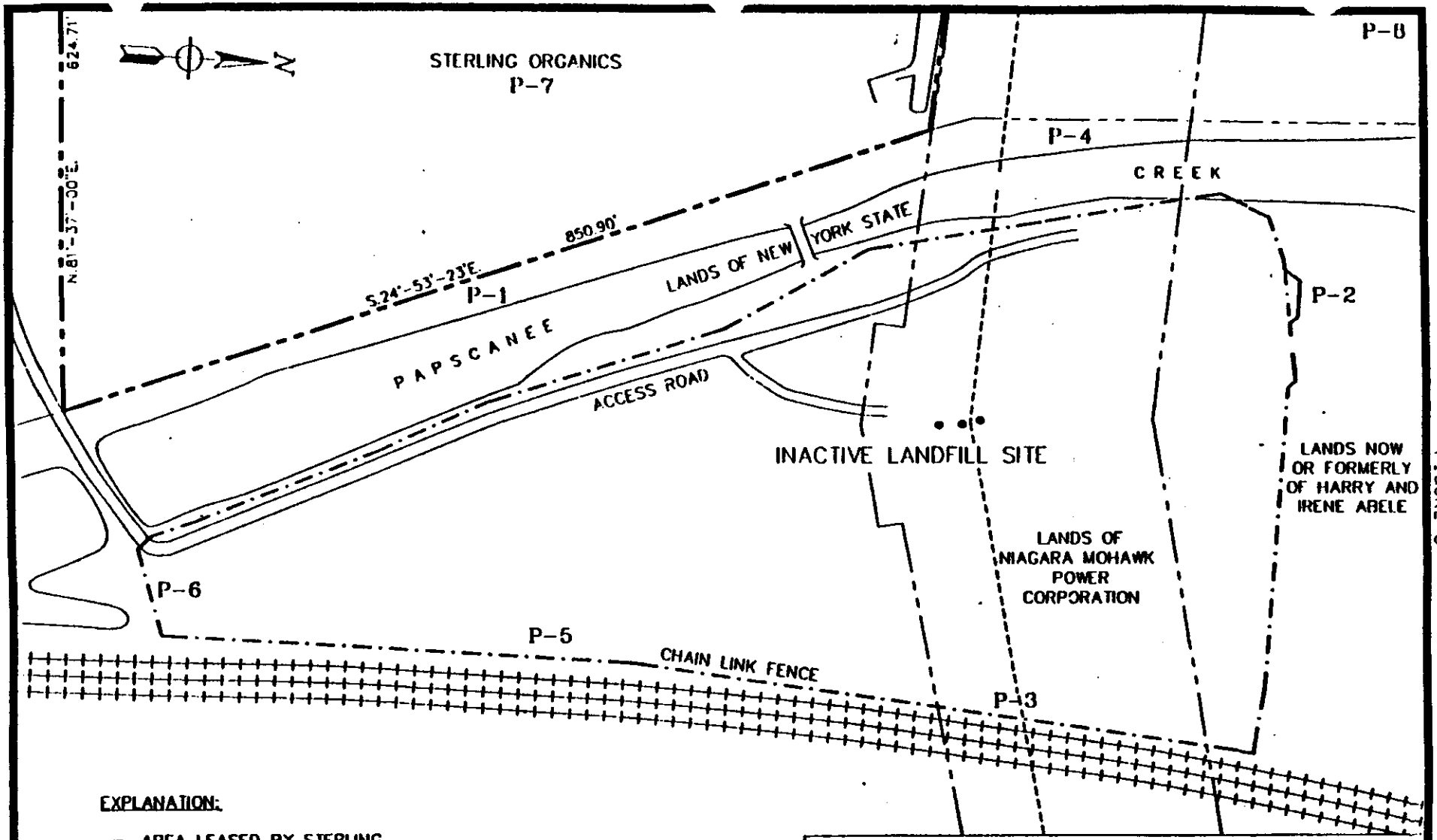


REFERENCE:
BASE MAP PREPARED FROM PORTIONS OF USGS 7.5 MINUTE QUADRANGLES: E. GREENBUSH, N.Y.; DELMAR, N.Y.; ALBANY, N.Y.; TROY SOUTH, N.Y. 1953, PHOTOREVISED 1980

TITLE: SITE VICINITY MAP		
PROJECT: STERLING ORGANICS – SITE 3 EAST GREENBUSH, NEW YORK		
Dames & Moore WILLOW GROVE, PENNSYLVANIA		
SCALE: AS SHOWN	DWN. BY: EMM	JOB NO.: 07425-038
DATE: 10/5/89	APPR. BY: FB	FIG. NO.: 1-1

FIGURE 2


PLOT PLAN SHOWING MONITORING WELLS AND SAMPLE LOCATIONS
TITLE
PROJECT
STERLING ORGANICS - SITE 3
EAST GREENBUSH, NEW YORK
Dames & Moore
WILLOW GROVE, PENNSYLVANIA
SCALE AS SHOWN
DATE 10/3/91
DWN. BY LM²
APPR. BY R.D.
JOB NO. 7425-068
FIG. NO. 1-2
EXPLANATION:
MONITORING WELL
PIEZOMETER
BORING
MONITORING WELL AQUIFER DESIGNATION:
S - SCREEN OVER ENTIRE UPPER AQUIFER
D - SCREEN IN LOWER AQUIFER
A - SCREEN AT TOP OF UPPER AQUIFER
B - SCREEN AT BASE OF UPPER AQUIFER
C - SCREEN IN BEDROCK
CORN CROP SAMPLES
SURFACE SOIL SAMPLES
SURFACE WATER/STREAM SEDIMENT SAMPLES
UNPAVED ACCESS ROADS
GRAPHIC SCALE
0
300
600 FEET
HUDSON RIVER
RIVERSIDE AVENUE
PAPSCANEE CREEK
CONRAIL RAILROAD
N
MW-1S
MW-2S
MW-2D
MW-3S
MW-4S
MW-5A
MW-5B
MW-5C
MW-6A
MW-6B
MW-7A
MW-7B
MW-8A
MW-8B
MW-8C
MW-9A
MW-9B
MW-10A
MW-10B
MW-10C
MW-11A
MW-11B
MW-12A
MW-12B
MW-13A
MW-13B
MW-13C
MW-14A
MW-14B
MW-15A
MW-15B
MW-16B
MW-17B
MW-18B
MW-19B
P-1
P-2
P-3
B-1
R1/-
R2/-
RUPSTREAM/SUPSTREAM
RSTR1/BSED1
RSTR2/BSED2
RDOWNSTREAM/BDOWNSTREAM



EXPLANATION:

— · — AREA LEASED BY STERLING DRUG, INC. FROM GRAZIANO

● TRANSMISSION POLES

P-1 AIR MONITORING LOCATION

0 50 100 150 200 FEET

GRAPHIC SCALE

REFERENCE:
RENSSELAER COUNTY CLERKS OFFICE, DRAWING FILE 1988, MAP #41, MARCH 3, 1988, MINOR 3 LOT SUBDIVISION-PROPERTY OF PENN CENTRAL TRANSPORTATION COMPANY DECEMBER 30, 1987

TITLE	IRM DRUM REMOVAL PROGRAM AIR MONITORING LOCATIONS		
PROJECT	STERLING ORGANICS EAST GREENBUSH, NEW YORK		
	Dames & Moore WILLOW GROVE, PENNSYLVANIA		
SCALE AS NOTED	DWN. BY EM²	JOB NO. 7425-068	
DATE 10/2/91	APPR. BY R.D.	FIG. NO. 1-3	

FIGURE 3

FIGURE 4

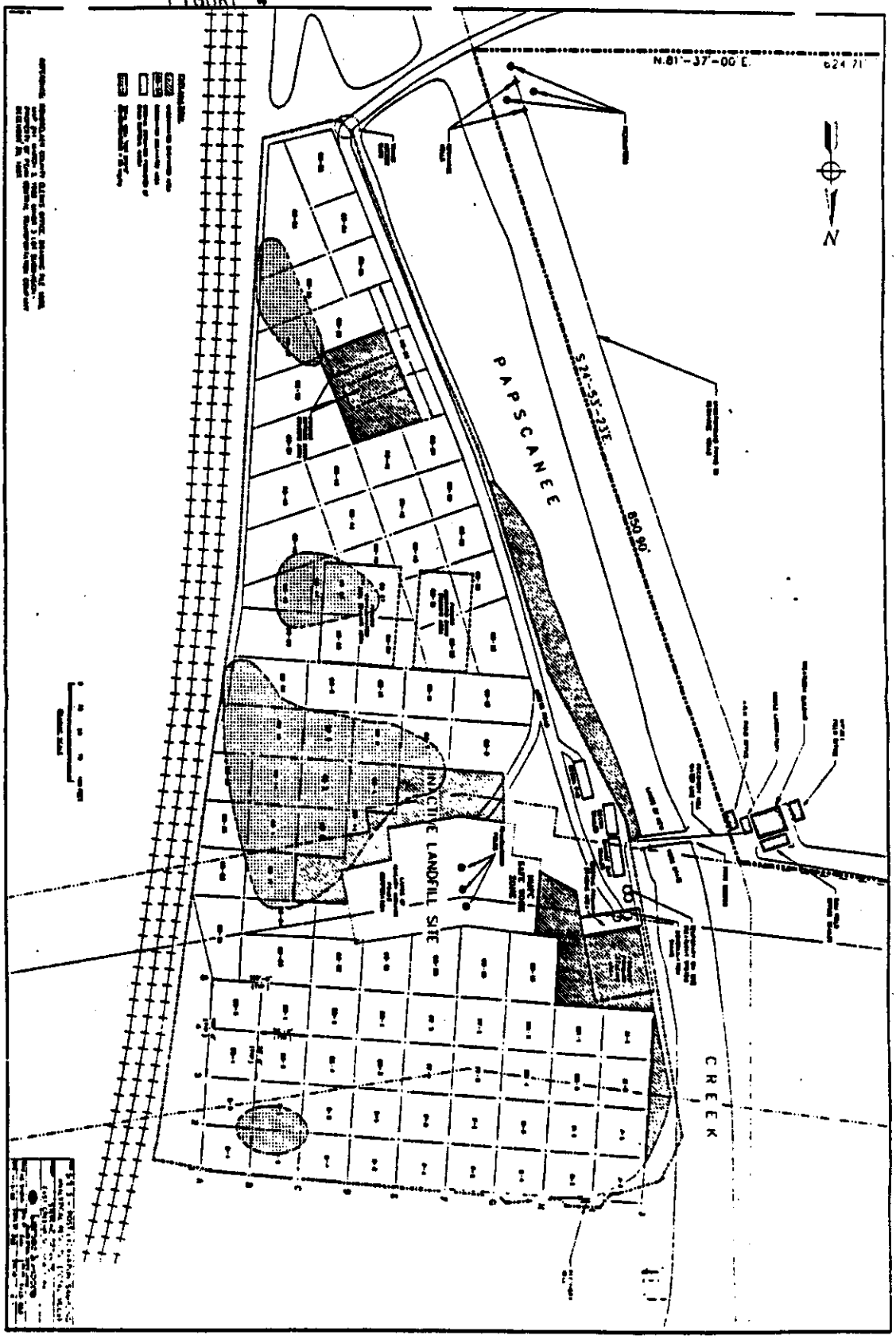
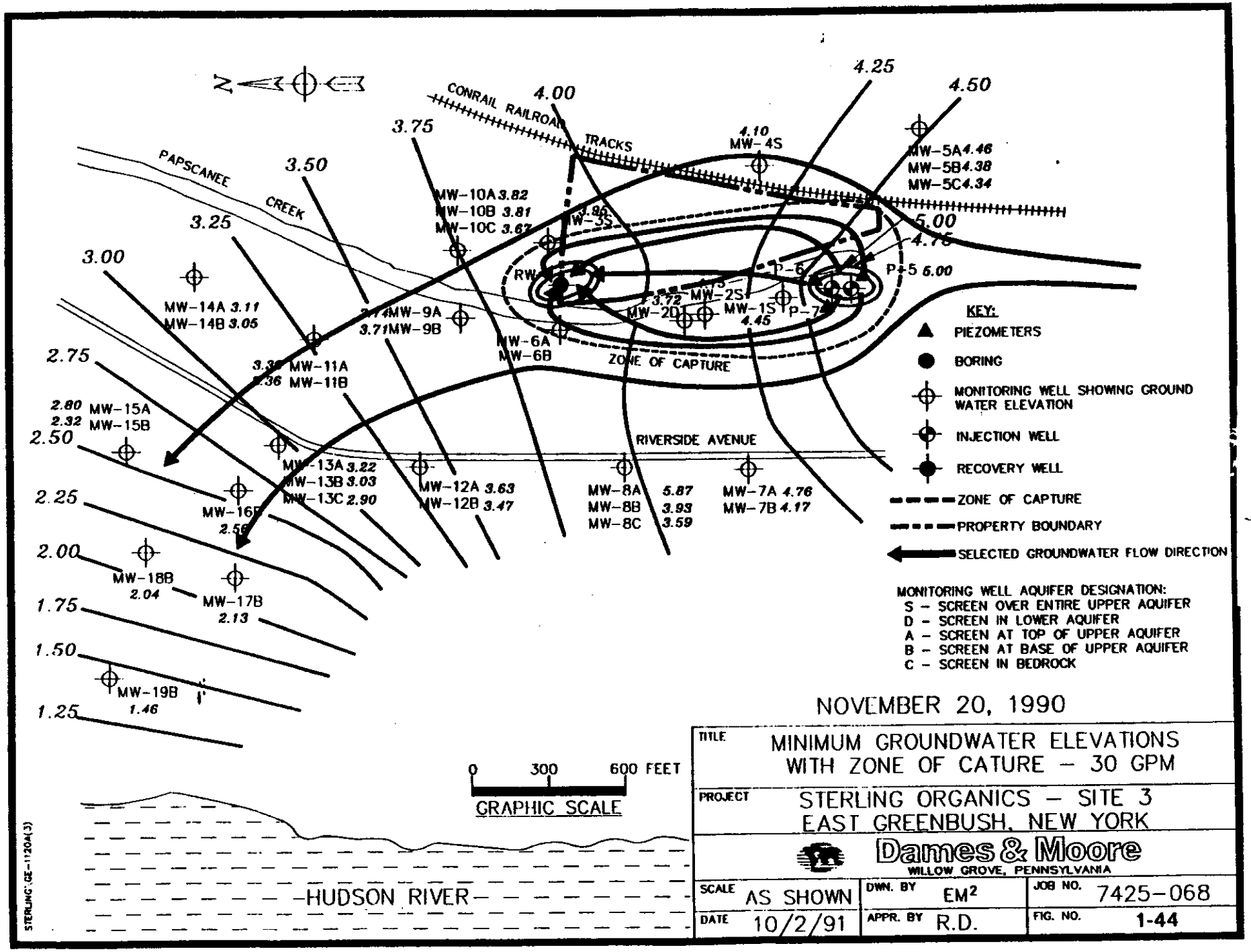

N.81°-37'-00" E.
624.71'
N
PAPSCANEE
CREEK
INACTIVE LANDFILL SITE
S.24°-51'-23" E.
850.90'

FIGURE 5



NOVEMBER 20, 1990

TITLE	MINIMUM GROUNDWATER ELEVATIONS WITH ZONE OF CATURE – 30 GPM
PROJECT	STERLING ORGANICS – SITE 3 EAST GREENBUSH, NEW YORK
	Dames & Moore WILLOW GROVE, PENNSYLVANIA

SCALE	AS SHOWN	DWN. BY	EM²	JOB NO.	7425-068
DATE	10/2/91	APPR. BY	R.D.	FIG. NO.	1-44

Table 1

Chronological List of Major Activities

1977	Landfill closed
April 1982	Phase I Remedial Investigation Activities Commented
July 1984	Phase I Remedial Investigation Final Report Issued
July 1985	Phase II Remedial Investigation Activities Commenced
January 1987	Phase II Remedial Investigation Final Report Issued
September 1987	Groundwater Remedial Design Report Issued
May 1988	Groundwater Pilot Treatment System Design Issued
November 1989-Aug 1990	IRM Drum Removal Program
March 1991	Investigation of Clay Breach Area
May 1991	Vacuum Extraction Pilot System
October 1991	FS submitted
January 1992	FS accepted by NYSDEC

Table 2

Groundwater Results On-site
Concentrations in Parts Per Million(ppm)

Constituent	Range of conc.
Benzene	89 - 290
Toluene	1.5 - 42
Acetone	2 - 410
Methyl Thiophene	2 - 30
Ethyl Ether	ND - 8
1,2-Dichloroethane	ND - 130
Trichloroethene	ND - .81
Chloroform	ND - 2.1

Groundwater Results Off-site
Concentrations in Parts Per Million(ppm)

Constituent	Range of conc.
Benzene	ND - .250
Diethyl-ether	ND - 1.5

ND - Below the quantitation limit of the laboratory

TABLE 3

SEDIMENTS

	Frequency Found	Upstream Conc. PPb	Downstream Conc. PPb
Base Neutral Organics			
Alkane	2	1970	
Anthracene	1	703	
Benzo(b)Fluoranthene	1	530	
Benzo(k)Fluorathene	1		616
Benzo(a)Pyrene	1	950	
Chrysene	1	288	
Fluoranthene	2	798	817
Naphthalene	1	166	
Phenanthrene	1	326	
Pyrene	2	666	717
Metals			
Arsenic	2	12000	12000
Cadmium	1	360	
Chromium	2	17000	31000
Lead	2	33000	67000
Mercury	2	200	600

Table 4

Soil Results On-site
Concentrations in Parts Per Million(ppm)
Levels are the Average Concentration

	Clay Breach Area		Hotspots		Remaining Areas	
Constituent	Post-excavation	Soil/Debris	Post-excavation	Soil/Debris	Post-excavation	Soil/Debris
Benzene	556.0	259.0	79	50.7	0.454	2.94
Toluene	52.0	28.0	230.0	36.8	0.328	2.26
1,2-DCA	21.0	ND	ND	6.03	0.159	0.225
Xylenes	28.7	6.1	3.1	11.9	0.123	0.410
Chloroform	8.6	ND	ND	0.767	0.012	0.248
Phenol	2.1	10.5	8.75	1.92	0.090	0.571
4-Methylphenol	20.2	10.8	20.6	ND	0.141	ND

ND - Below laboratory quantitation limits

1,2-DCA - 1,2-Dichloroethane

TABLE 5

CONTAMINANT SPECIFIC CLEANUP GOALS

CONSTITUENT	CLEANUP GOALS LEVEL (PPM)
Benzene	0.756
Xylenes	2.16
Ethylbenzene	9.9
toluene	2.7
Tetrachloroethene	2.52
Trichloroethene	1.26
Acetone	0.198
2-Butanone	0.9
4-Methyl-2-Pentanone	1.8
1,1-Dichloroethane	0.36
1,2-Dichloroethane	0.18
1,1,2,2-Tetrachloroethane	1.08
1,2-Dichloroethene(trans)	0.54
Chlorobenzene	2.88
Chloroform	0.36
Phenanthrene	50.0
Fluoroanthene	50.0
Pyrnene	50.0
Benzo(a)pyrene	0.330 or MDL
4-Methylphenol	1.8
Naphthalene	23.40
2-Methylnaphthalene	50.0
Anthracene	50.0
bis(2-ethylhexyl)phthalate	50.0
Diethylphthalate	12.780
Chrysene	0.72
Benzo(a)anthracene	0.330 or MDL
Phenol	0.330 or MDL

MDL - Method Detection Limit