09.03 07/15/92-00165

On July 15, 1992 the second Technical Review Committee (TRC) Meeting was held in support of the Installation Restoration (IR) Program at Naval Station Roosevelt Roads.

The list of the attendees is presented as enclosure (A).

The objectives of the TRC meeting was as follows:

(1) Present a summary of data collected to date for site 3 and site 8 prepared by Versar, Inc.
(2) Present the Remedial Investigation/Feasibility Study (RI/FS) for sites 15 and 16 prepared by Versar, Inc.
(3) Present the RI/FS work plan for sites 1, 2, 5, 6, 7, 10, 13, 14, 18 and 21, prepared by Baker Environmental, Inc.
(4) Present the overall community relations program for the IR Program, prepared by Baker Environmental, Inc.

The meeting was split into two presentations by both Navy's contractors, Versar, Inc. and Baker Environmental, Inc., with Versar giving the first presentation. Enclosures (B) and (C) are copies of the presentations given by both Versar and Baker. Included within each enclosure are questions received and responses given to the TRC.

The follow are the highlights of the TRC meeting.

•Navy recommended that IR sites 3 and 8 be dropped from any further consideration based upon site summaries performed by Versar.

•The RI/FS for the soils operable unit at sites 15 and 16 has been completed and the risk are above the allowable limits. The Navy will be moving the ahead with an Interim Remedial Action for the soils operable unit, both sites are scheduled for cleanup in 1993.

•Additional investigation is recommended at site 16 for the cooling water tunnel and outfall at Puerca Bay.

•The Navy is scheduled to start field efforts for sites 1, 2, 5, 6, 7, 10, 13, 14, 18 and 21 by middle to late September 1992.

•It was announced that James Szykman would be replacing Maritza Montesinos-Gross as the Atlantic Division Remedial Project Manager for the Installation Restoration Program at Naval Station Roosevelt Roads.

The meeting was concluded with a question and answer period for the Committee. The questions and answers are summarized within the enclosures (B) and (C). No date was set for the next TRC.

Enclosure (1)

TECHNICAL REVIEW COMMITTEE MEETING
15 JULY 1992
ATTENDANCE SHEET

NAME	AGENCY	TELEPHONE
1. Felix H. Lopez	U.S. Fish + Wildlife Service	809 851-7292
2. Jose C. Font	U.S. EPA	(809) 729-6951
3. James Szykman	LANTDIV	804 445-9897
4. Melissa C. Davidson	Baker Environmental	(412) 269-6000
5. Eileen C. Villafane	Environmental Quality Board	(809) 767-8071
6. Neil Simmons via Fon-ye	Versar, Inc	(703) 642-6747
7. Donald C. Shields	Baker Environmental	(412) 269-6000
8. John Barowe	Baker Environmental	412.269.6000
9. Laurie Boucher	Atlantic Division	804-445-1814
10. CDR Gregg Welstead	XO, NAVSTA Roosevelt Roads	(809) 865-4242
11. Jose R. Negron PE	Director Env. Eng. Div.	(809) 865-4429
12. Sindulfo Castillo	U.S.N.S. / PWD / EED	(809) 865-4488
13. Arturo Torres	U.S. Geological Survey	(809) 749-4417
14. Robert Graves	U.S. Geological Survey	(809) 749-4417
15. Maritza Montesinos-Gross	Atlantic Division (Lantdiv)	(804) 445-9897
16.		
17.		
18.		
19.		
20.		

ENCLOSURE (A)

QUESTIONS FOLLOWING VERSAR'S PRESENTATION
TO THE TECHNICAL REVIEW COMMITTEE FOR THE
INSTALLATION RESTORATION PROGRAM
AT NAVAL STATION ROOSEVELT ROADS

JULY 15, 1992

During the TRC meeting, Versar received two questions.

Commander Greg Welstead (XO Naval Station) questioned whether the proposed building decontamination activities would occur at the same time as the soil removal. Noel Simmons (Versar) responded that this was somewhat up to the discretion of the remedial contractor, but that is was more than likely that the two activities would be conducted concurrently. In addition Mr. Simmons added that typically, the wash water from power washing is treated by pumping it through GAC canisters, and the canisters are then disposed of along with the PCB contaminated soil.

Sr. Felix Lopez (U.S. Fish and Wildlife Service) questioned whether sediment samples would be collected at the mouths of the cooling water tunnel in Ensenda Honda and Puerca Bay during the Phase II Remedial Investigation (RI). Noel Simmons (Versar) responded that Versar's contract would be completed by then and another Navy contractor would be preparing any work plans for a Phase II RI. However Mr. Simmons noted that based on the surface water data collected by Versar from the tunnel, he recommended sediment sampling, and believed that the Navy concurs. In addition Mr. Simmons added that it was the intention of the sampling effort to collect sediment samples from the tunnel manways during the RI, but no sediments were present in the tunnel immediately below the area of soil contamination.

Enclosure (B)

Versar INC.

SITE SUMMARY FOR IRFNA/MAF-4 DISPOSAL SITE, VIEQUES ISLAND (SITE NO. 3)

Prepared for:

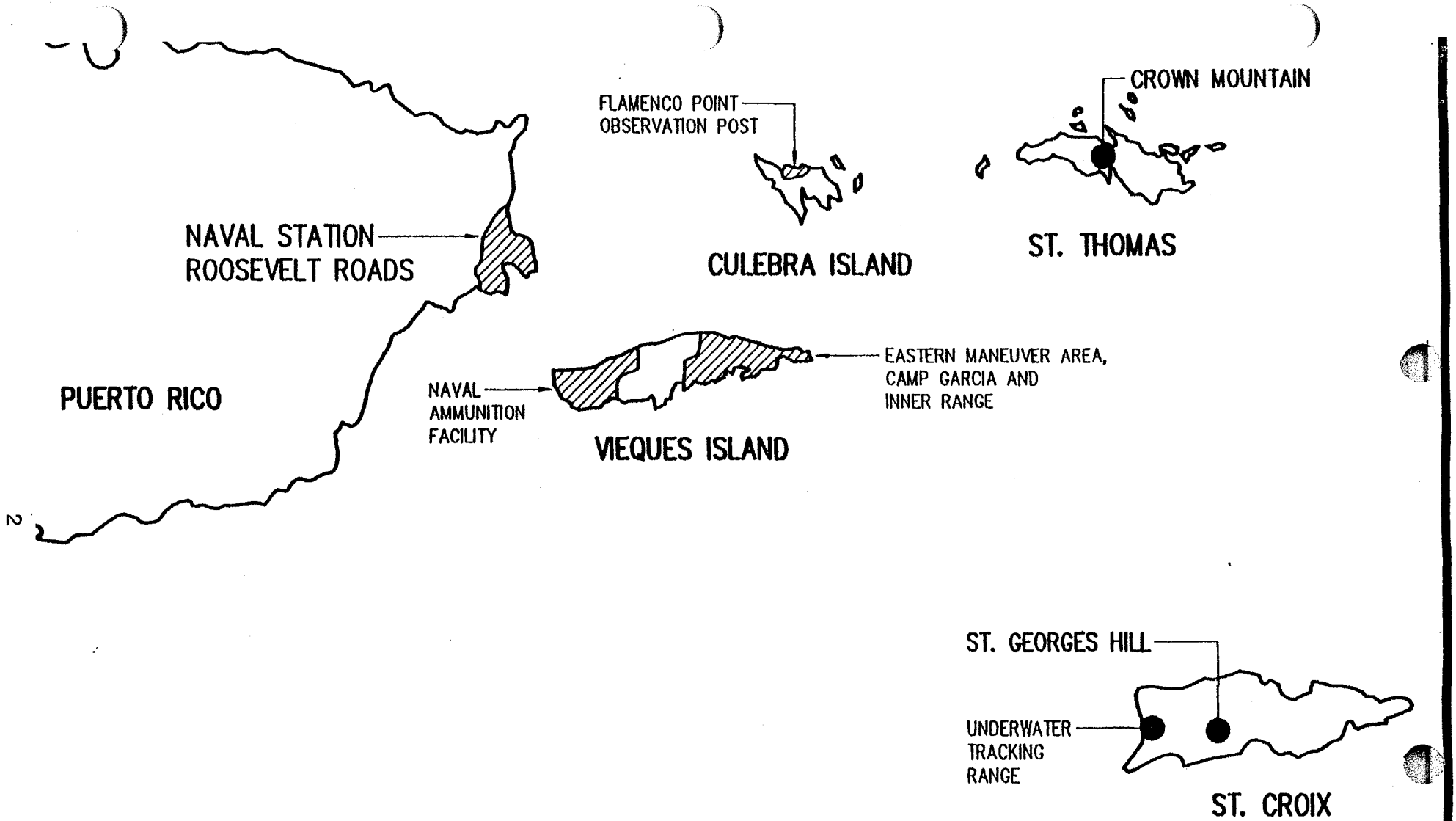
Atlantic Division
Naval Facilities Engineering Comman
Norfolk, Virginia 23511

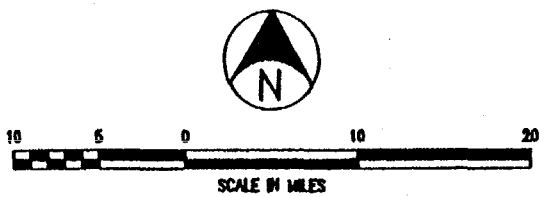
Prepared by:

Versar, Inc.
6800 Versar Center
Springfield, Virginia 22151

Versar Job No. 5295.3

July 25, 1991





LEGEND

- CITIES
- U.S. NAVAL FACILITIES

NAVAL STATION ROOSEVELT ROADS

DESIGNED FLOWERS	DATE 12/13/90	FIGURE 1 LOCATION OF ROOSEVELT ROADS NAVAL STATION
DRAWN CAROLINO	12/14/90	
CHECKED		

Versar INC.
6850 VERSAR CENTER
SPRINGFIELD, VIRGINIA 22151
(703) 750-3000

APPROVAL	DATE
PROJECT NO. 5295.001.01	SCALE: AS NOTED
DRAWING NO. FIG1.DWG	FIGURE 1

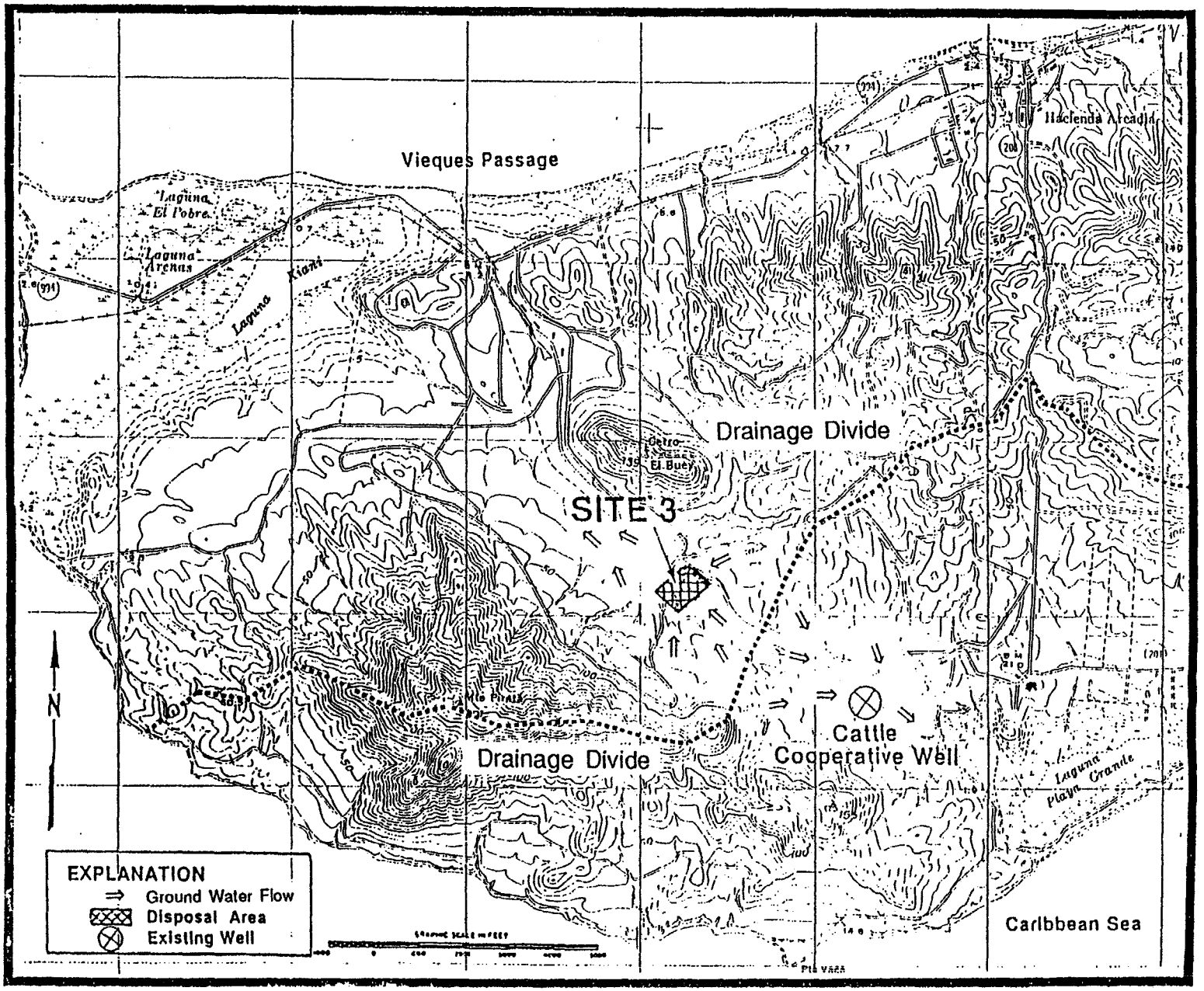


FIGURE 2
LOCATION OF SITE 3, THE IRFNA/MAF-4
DISPOSAL SITE, VIEQUES ISLAND

Versar INC

SITE SUMMARY FOR DRONE WASHDOWN AREA, ROOSEVELT ROADS (SITE NO. 8)

Prepared for:

Atlantic Division
Naval Facilities Engineering Command
Norfolk, Virginia 23511

Prepared by:

Versar, Inc.
6850 Versar Center
Springfield, Virginia 22151

Versar Job No. 5295.4

April 29, 1991

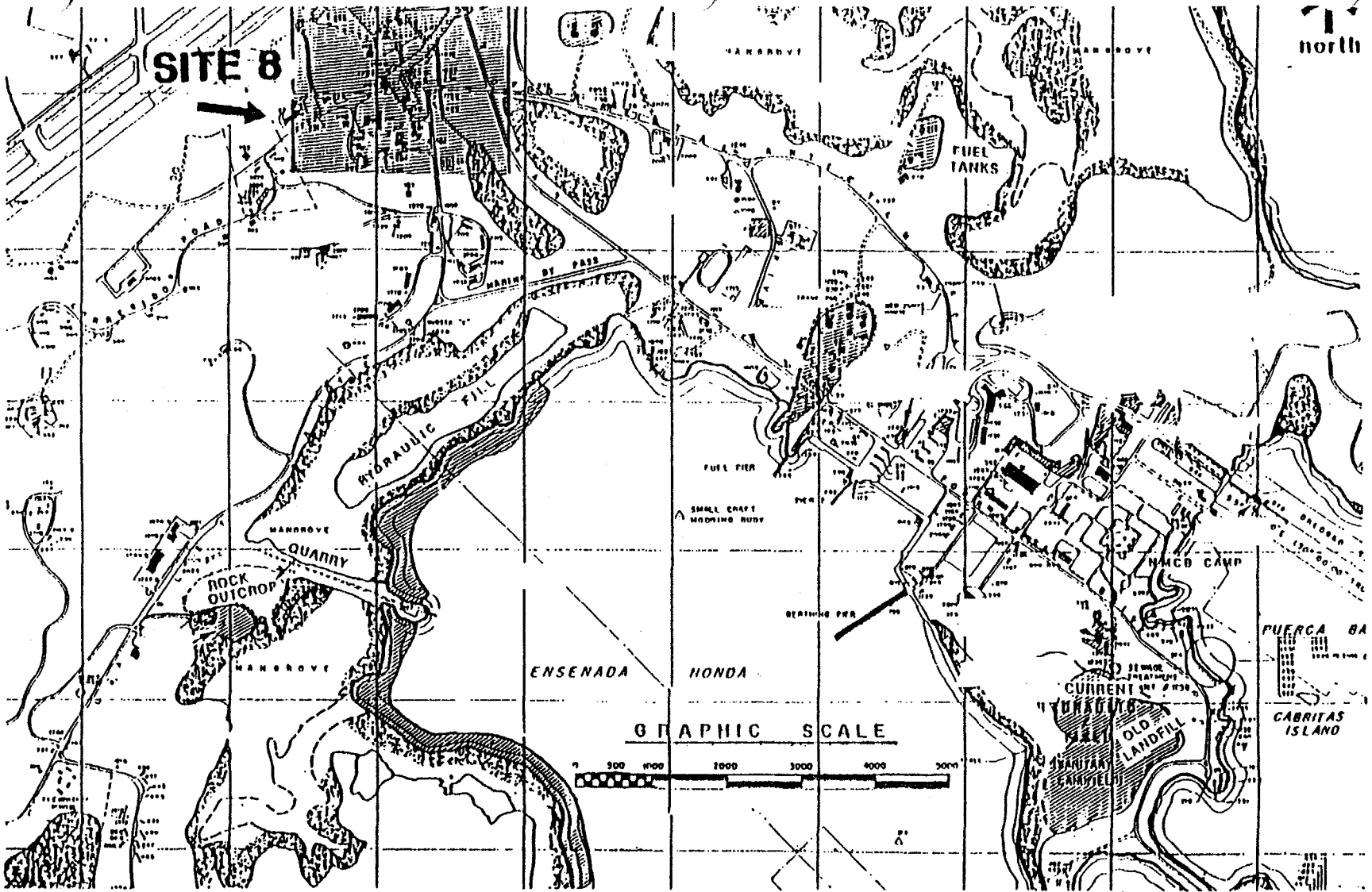
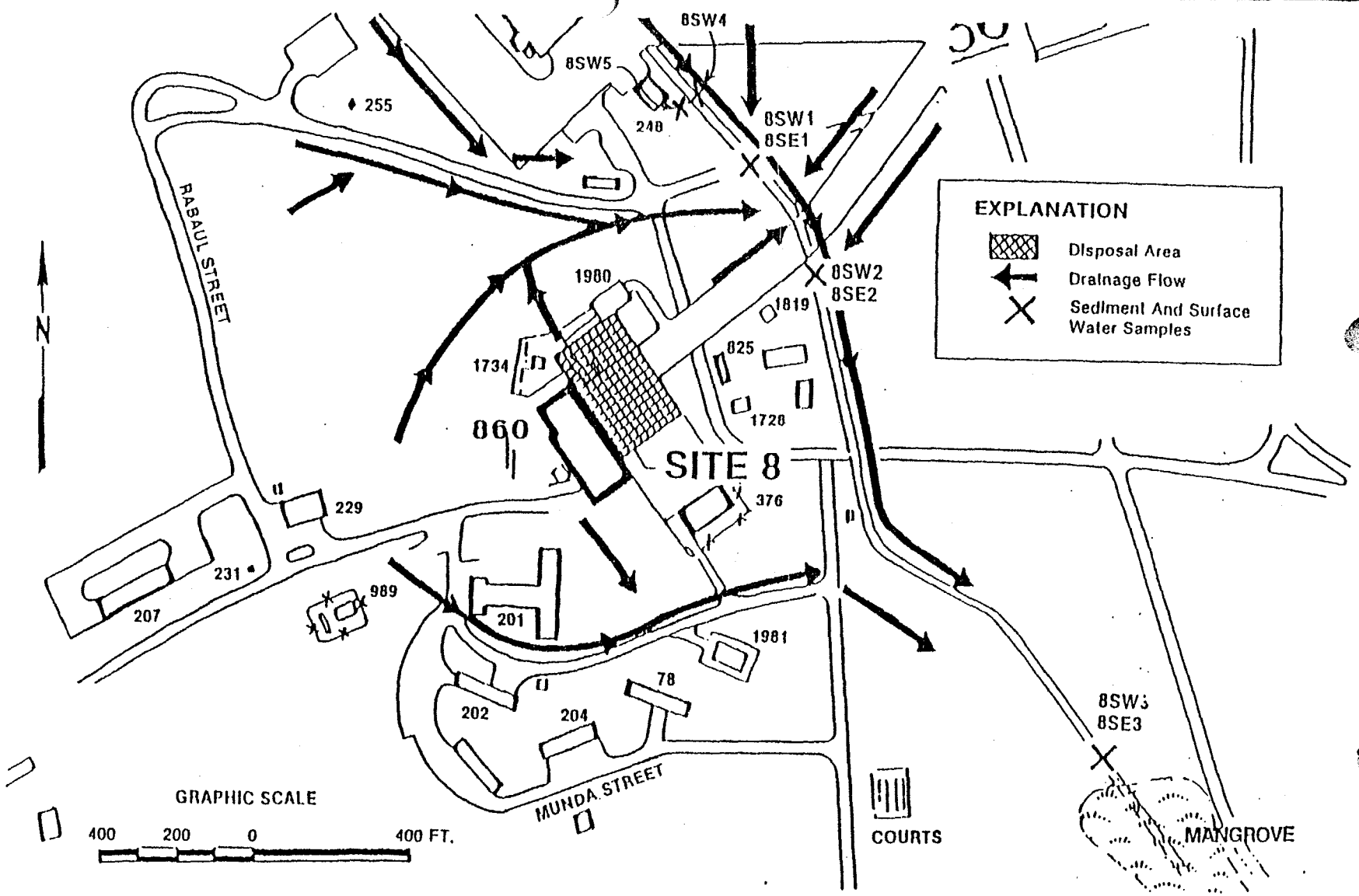


FIGURE 1
LOCATION OF SITE 8, DRONE WASHDOWN AREA

U.S. NAVAL COMPLEX
PUERTO RICO



SOURCES: NEESA, 1984b; ESE, 1985.

FIGURE 2
ROUNDS 1 AND 2 SAMPLING LOCATIONS AT SITE 8, DRONE WASHDOWN

CONFIRMATION STUDY
U.S. NAVAL COMPLEX
PUERTO RICO

NAVSTA ROOSEVELT ROADS CONFIRMATION STUDY, ROUNDS 1 AND 2 SEDIMENT SOIL, AND SURFACE WATER SAMPLING RESULTS, SITE 8, DRONE WASHDOWN

	Round 1			Round 2			Chemical Toxicity Parameter: Toxicity Data	AIC mg/kg/day	Designated levels in a solid (ug/g)	Threshhold Limit Concentrations (ug/g)	Element Concentration Ranges in Soils (ug/g)
SEDIMENT											
Sample Number:	8SE1	8SE2	8SE3	8SE01	8SE02	8SE03					
Lead (ug/g, dry)	28.8	--	43.4	14.0	14.6	26.1	Oral TDLo (wmn) = 450 mg/kg/6y	0.001400	500	1000	<10 - 700
Oil & Grease (mg/kg)	4740	787	1670	247	69	306	NR	NR	NR	NR	NR
SOIL											
Sample Number:	8S1A										
Lead (ug/g, dry)	6.70						Oral TDLo (wmn) = 450 mg/kg/6y	0.001400	500	1000	<10 - 700
Oil & Grease (mg/kg)	8.21						NR	NR	NR	NR	NR

-- = Not Detected.
N/A = Not Analyzed
NR = Not Reported
TDLo = Toxic Dose Low
wmn = Woman
AIC = Chronic Acceptable Intake values for noncarcinogenic effects.
Designated Levels in a Solid = Designated levels in a solid to protect ground water at an average site in California.
Threshold Limit Concentrations = Hazardous Waste Total Threshold Limit Concentrations. Disposal of wastes exceeding these values is restricted in California.

Constituent	Round 1 Concentrations			Round 2 Concentrations					Chemical Toxicity Parameters: Toxicity Data	AIC mg/kg/day	RCRA MCL (ug/L)	MCL (ug/L)	AWQC (ug/L)	PRDOH MCL (ug/L)
SURFACE WATER														
Sample Number:	8SW1	8SW2	8SW3	8SW01	8SW02	8SW03	8SW04	8SW05						
Oil & Grease (ug/L)	5	102	98	--	--	--	--	--	NR	NR	NR	NR	NR	NR
Benzene (ug/L)	--	--	--	1.1	--	--	--	--	Oral LD50 (rat) = 2800 ug/kg	NR	NR	NR	0.66	5.0
Trichloroethene (ug/L)	--	--	--	1.1	--	--	--	--	Oral LD50 (mus) = 2402 mg/kg	NR	NR	NR	NR	NR
Trichlorofluoromethane (ug/L)	--	--	--	3.6	--	--	--	--	INH. TC50 (hmn) = 50000 ppm/30M	NR	NR	NR	NR	NR

-- = Not Detected.
NR = Not Reported.
LD50 = Lethal Dose Fifty
TC50 = Toxic Concentration Fifty
hmn = Human
mus = Mouse
INH = Inhalation
AIC = Chronic Acceptable Intake values for noncarcinogenic effects.
RCRA MCL = RCRA Maximum Concentration Limits.
MCL = Maximum Contaminant Levels of National Primary Drinking Water Standards; (s) = National Secondary Drinking Water Standards.
AWQC = Ambient Water Quality Criteria is associated with 10-6 cancer risks; (FCC) Fresh Chronic Criteria; (+) Hardness Dependent - 100 mg/L used.
PRDOH MCL = Puerto Rico Department of Health Maximum Contaminant Levels for drinking water.

Source: ESE, 1988

Remedial Investigation/ Feasibility Study for Site 15 Naval Station Roosevelt Roads Puerto Rico

Prepared for

Atlantic Division
Naval Facilities Engineering Command
Norfolk, Virginia

Prepared by

Versar INC.

MAY 15, 1992

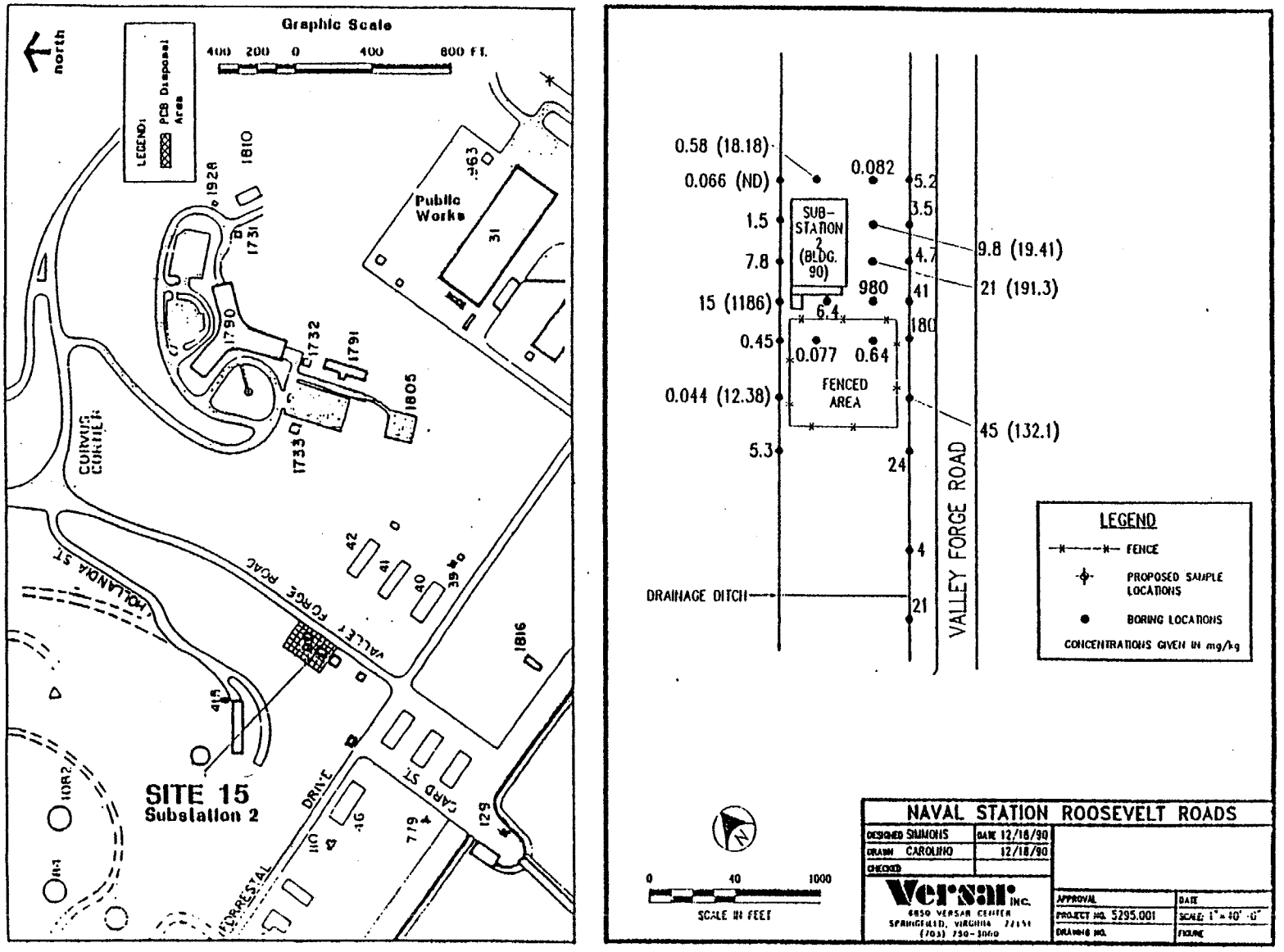


FIGURE 3
LOCATION AND CONFIRMATION STUDY SAMPLING LOCATIONS FOR
SITE 15: SUBSTATION NO. 2, BUILDING 90,
NAVSTA ROOSEVELT ROADS, PUERTO RICO

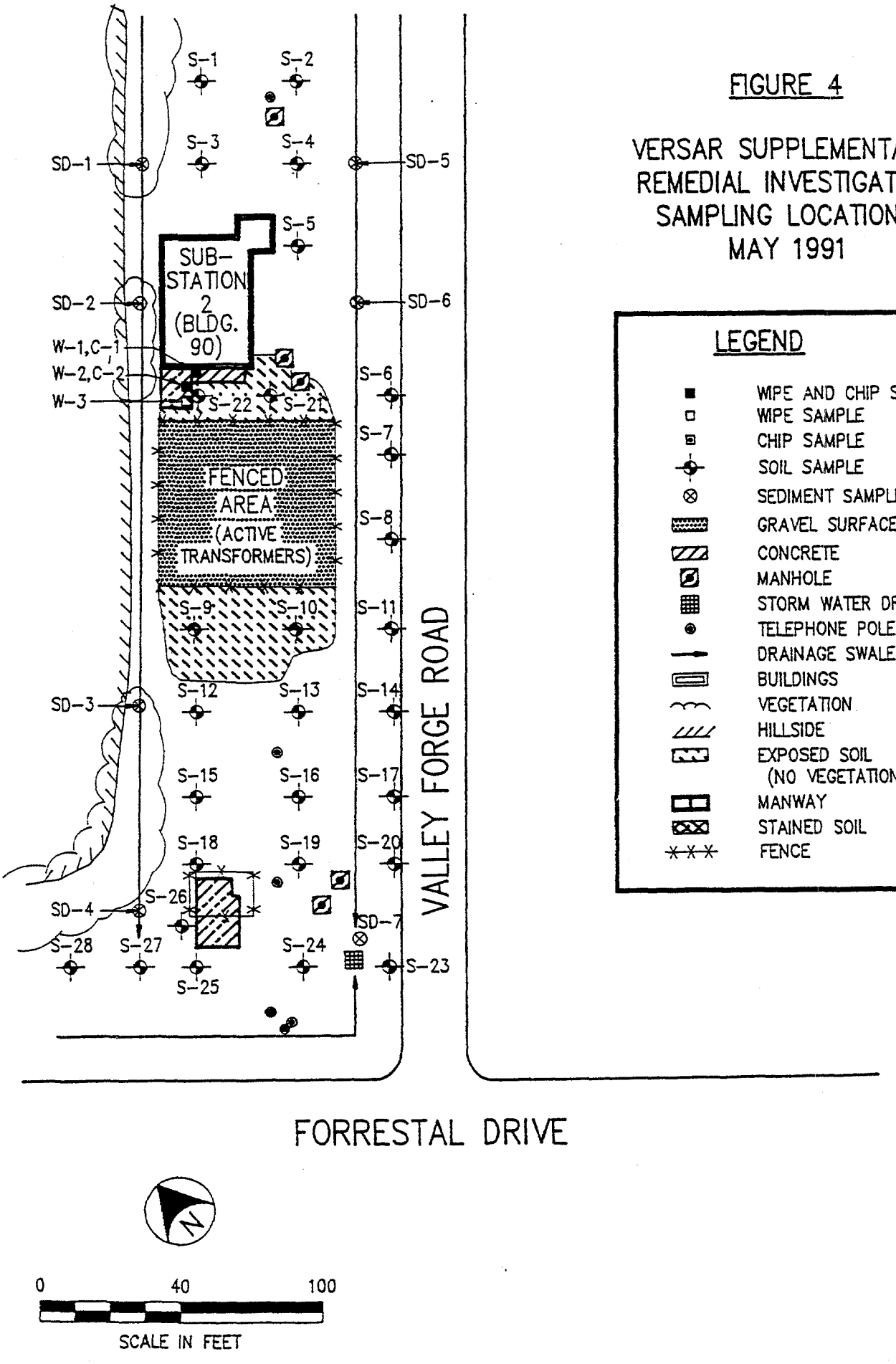


FIGURE 4

VERSAR SUPPLEMENTARY REMEDIAL INVESTIGATION SAMPLING LOCATIONS MAY 1991

D:\5295\004\FIG23A-X.DWG

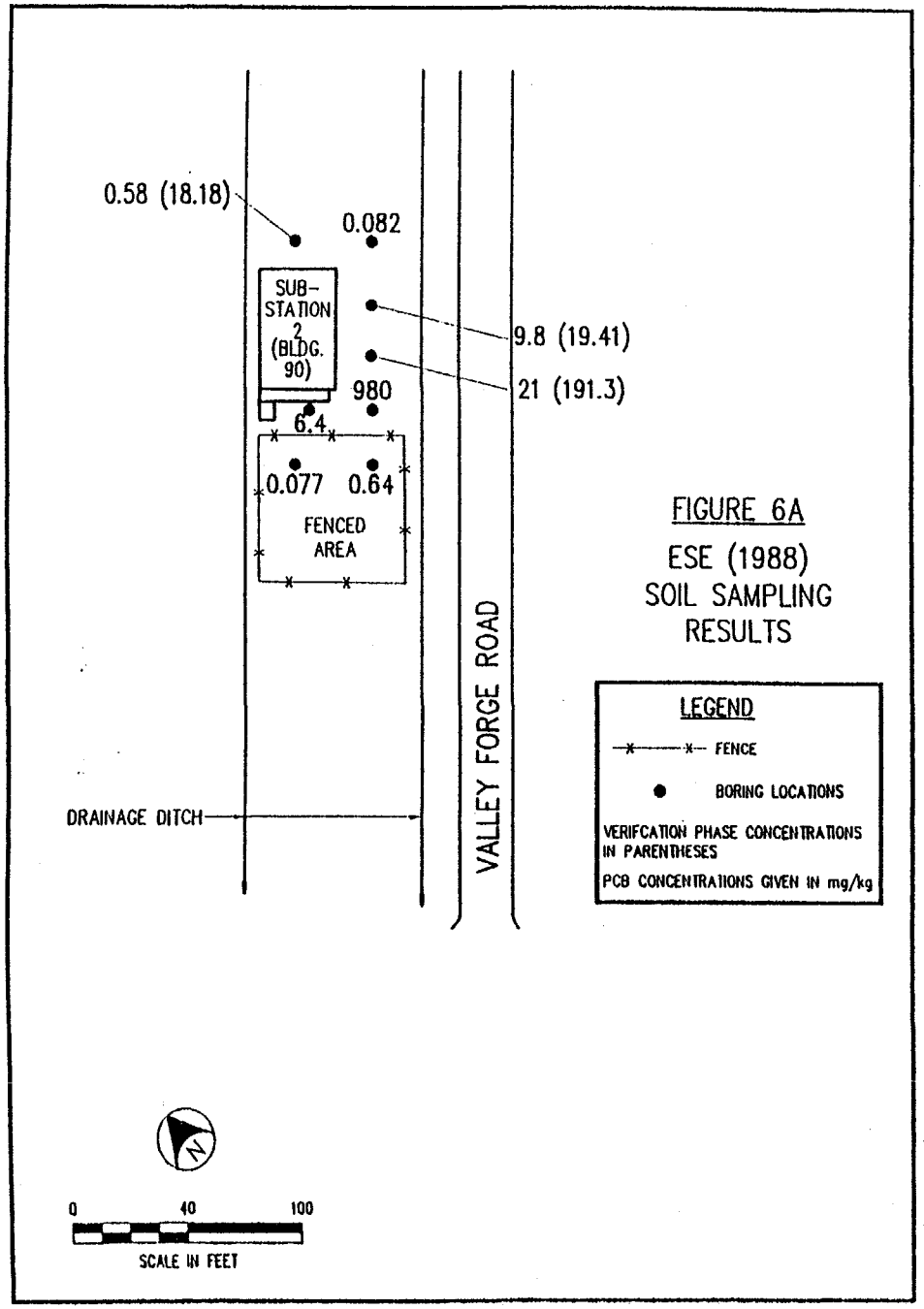


FIGURE 6A

ESE (1988) SOIL SAMPLING RESULTS

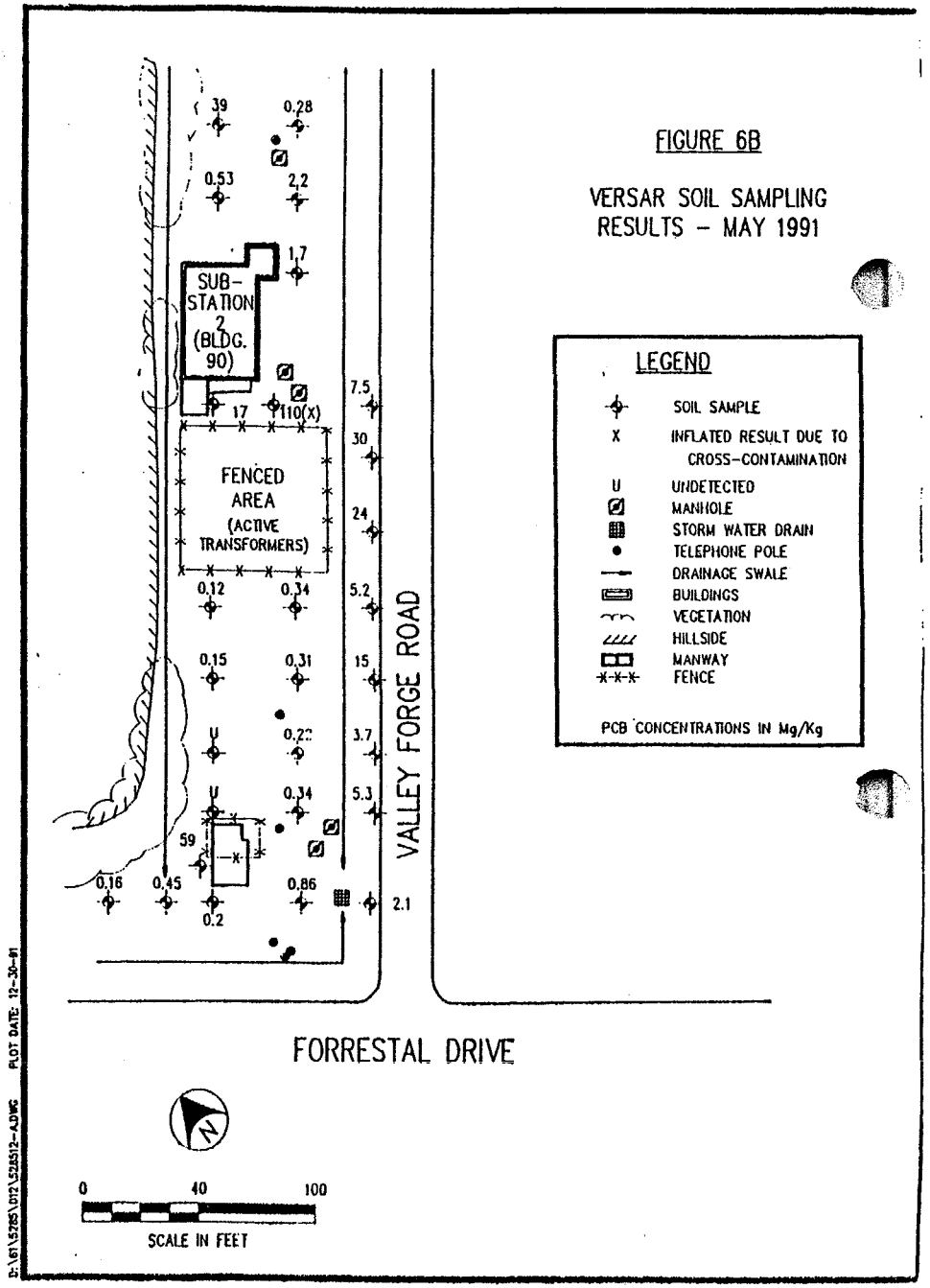


FIGURE 6B

VERSAR SOIL SAMPLING RESULTS - MAY 1991

D:\61\5285\012\525512-A.DWG PLOT DATE: 12-30-91

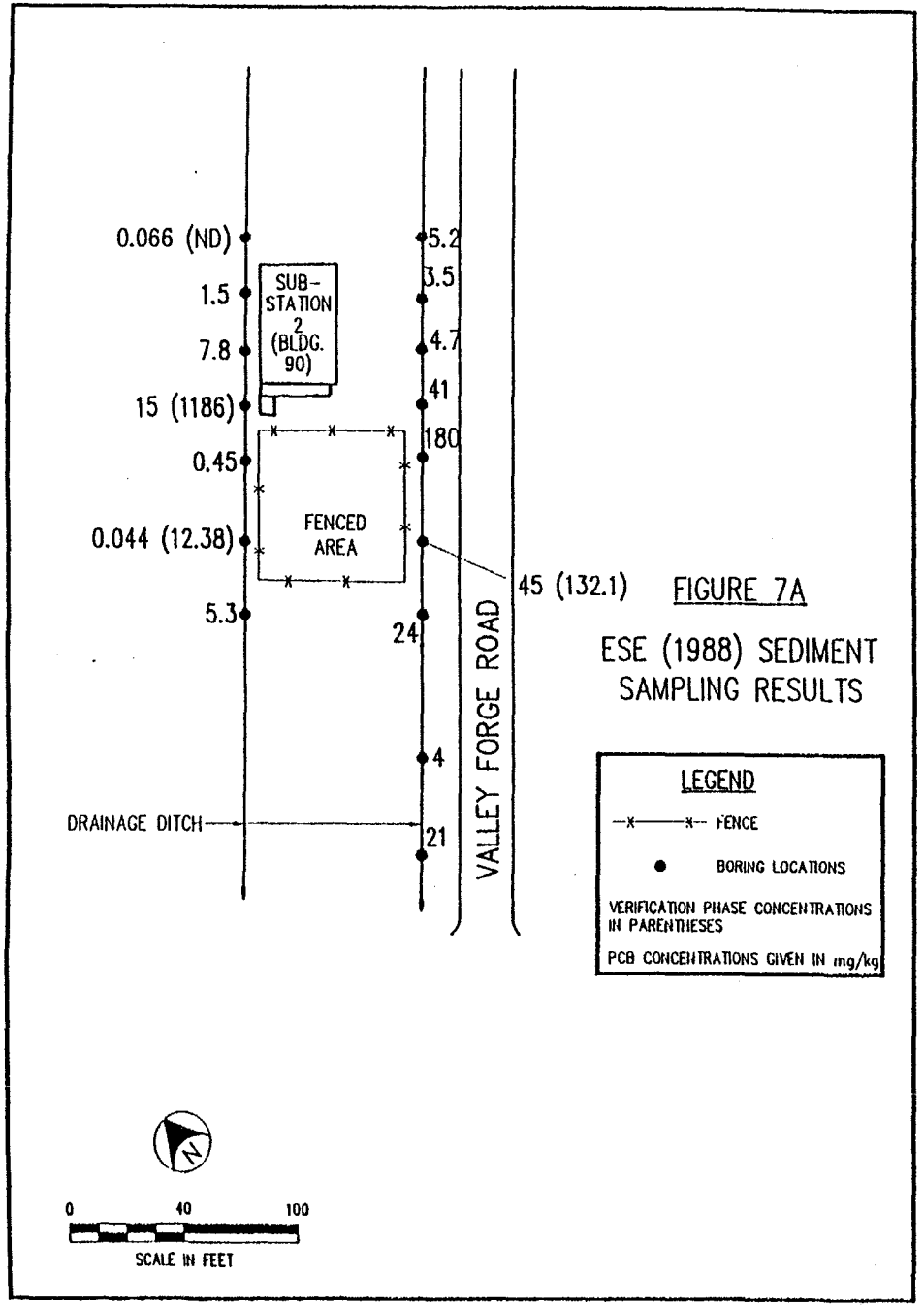


FIGURE 7A

ESE (1988) SEDIMENT SAMPLING RESULTS

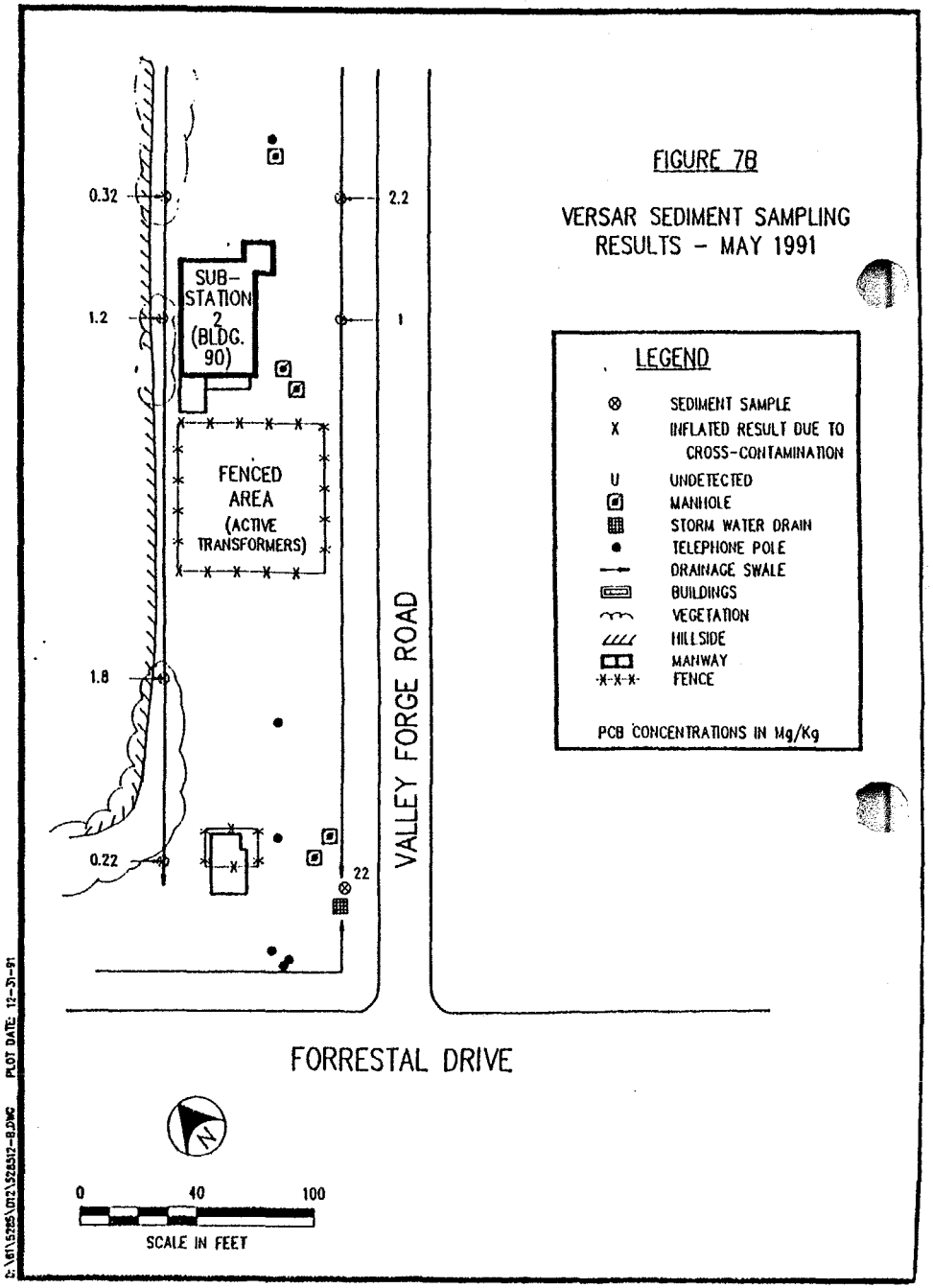


FIGURE 7B

VERSAR SEDIMENT SAMPLING RESULTS - MAY 1991

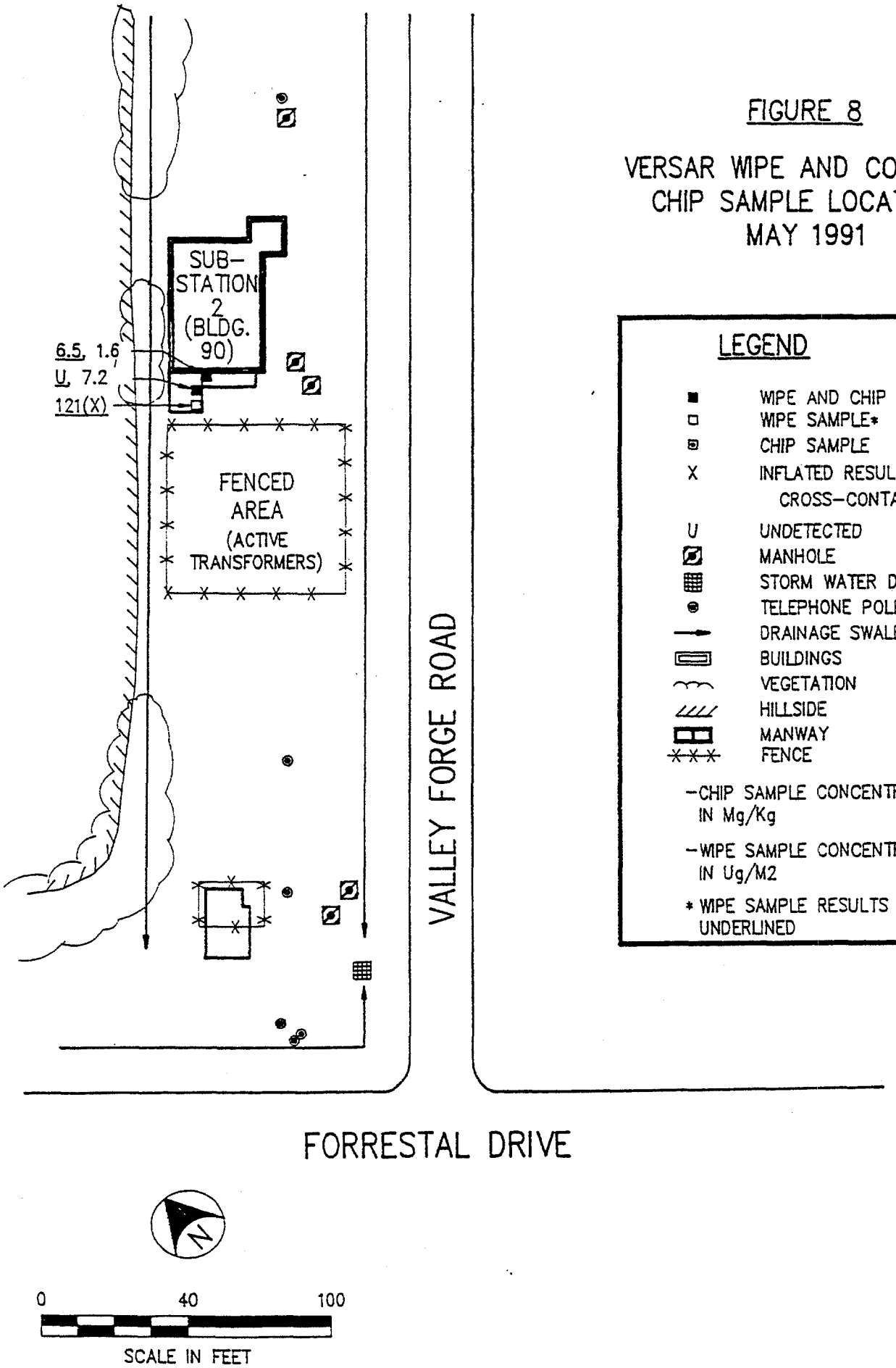


FIGURE 8

VERSAR WIPE AND CONCRETE CHIP SAMPLE LOCATIONS MAY 1991

LEGEND

- WIPE AND CHIP SAMPLE*
- WIPE SAMPLE*
- CHIP SAMPLE
- X INFLATED RESULT DUE TO CROSS-CONTAMINATION
- U UNDETECTED
- MANHOLE
- STORM WATER DRAIN
- TELEPHONE POLE
- DRAINAGE SWALE
- BUILDINGS
- VEGETATION
- HILLSIDE
- MANWAY
- FENCE

-CHIP SAMPLE CONCENTRATIONS IN Mg/Kg

-WIPE SAMPLE CONCENTRATIONS IN Ug/M2

* WIPE SAMPLE RESULTS ARE UNDERLINED

D:\61\5285\012\528512-C.DWG PLOT DATE: 11-11-91

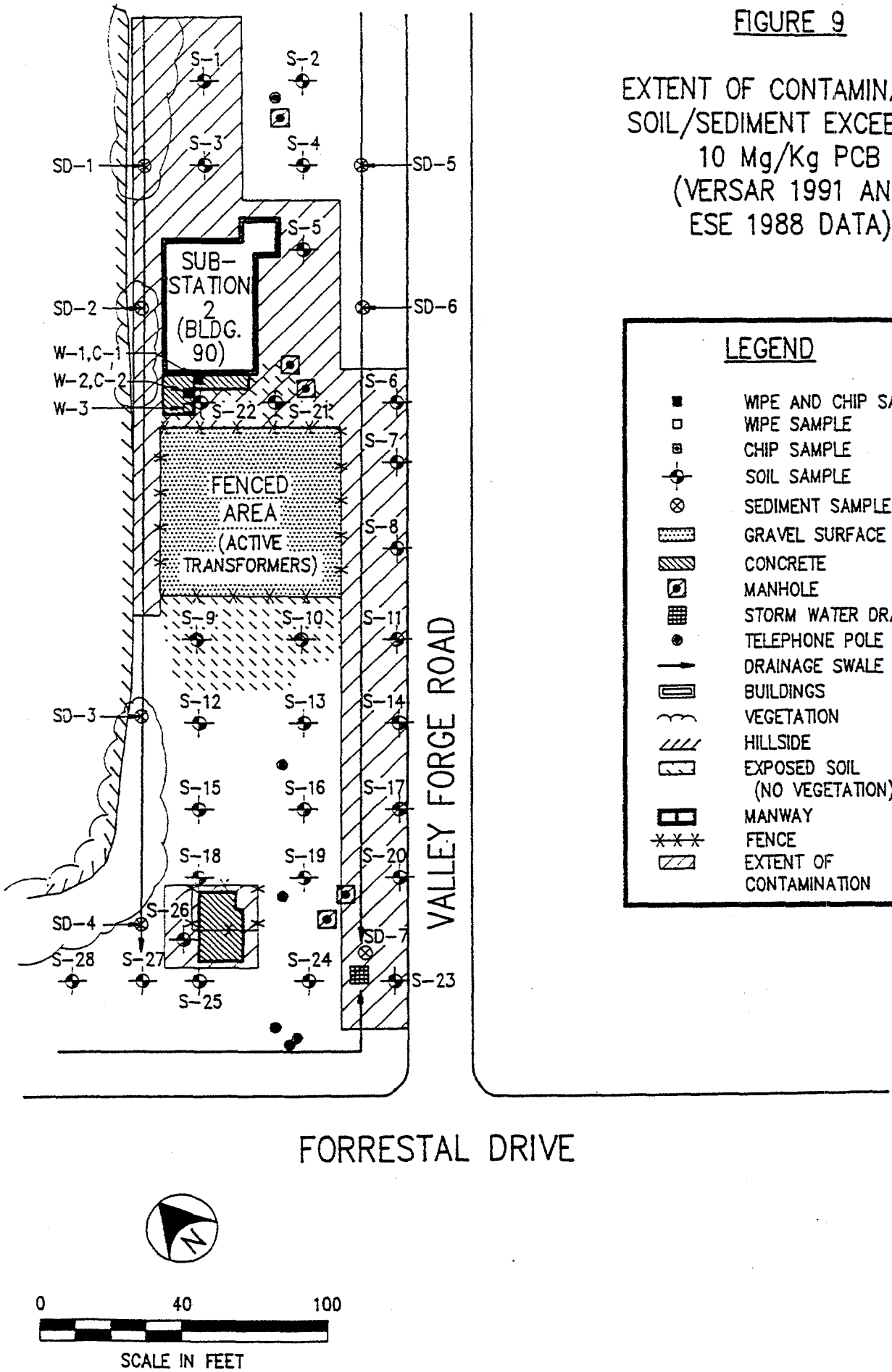


FIGURE 9

EXTENT OF CONTAMINATION SOIL/SEDIMENT EXCEEDING 10 Mg/Kg PCB (VERSAR 1991 AND ESE 1988 DATA)

LEGEND

- WIPE AND CHIP SAMPLE
- WIPE SAMPLE
- CHIP SAMPLE
- SOIL SAMPLE
- SEDIMENT SAMPLE
- GRAVEL SURFACE
- CONCRETE
- MANHOLE
- STORM WATER DRAIN
- TELEPHONE POLE
- DRAINAGE SWALE
- BUILDINGS
- VEGETATION
- HILLSIDE
- EXPOSED SOIL (NO VEGETATION)
- MANWAY
- FENCE
- EXTENT OF CONTAMINATION

D:\5295\004\FIG23A-X.DWG

Remedial Investigation/ Feasibility Study for Site 16 Naval Station Roosevelt Roads Puerto Rico

Prepared for

Atlantic Division
Naval Facilities Engineering Command
Norfolk, Virginia

Prepared by

Versar INC.

MAY 15, 1992

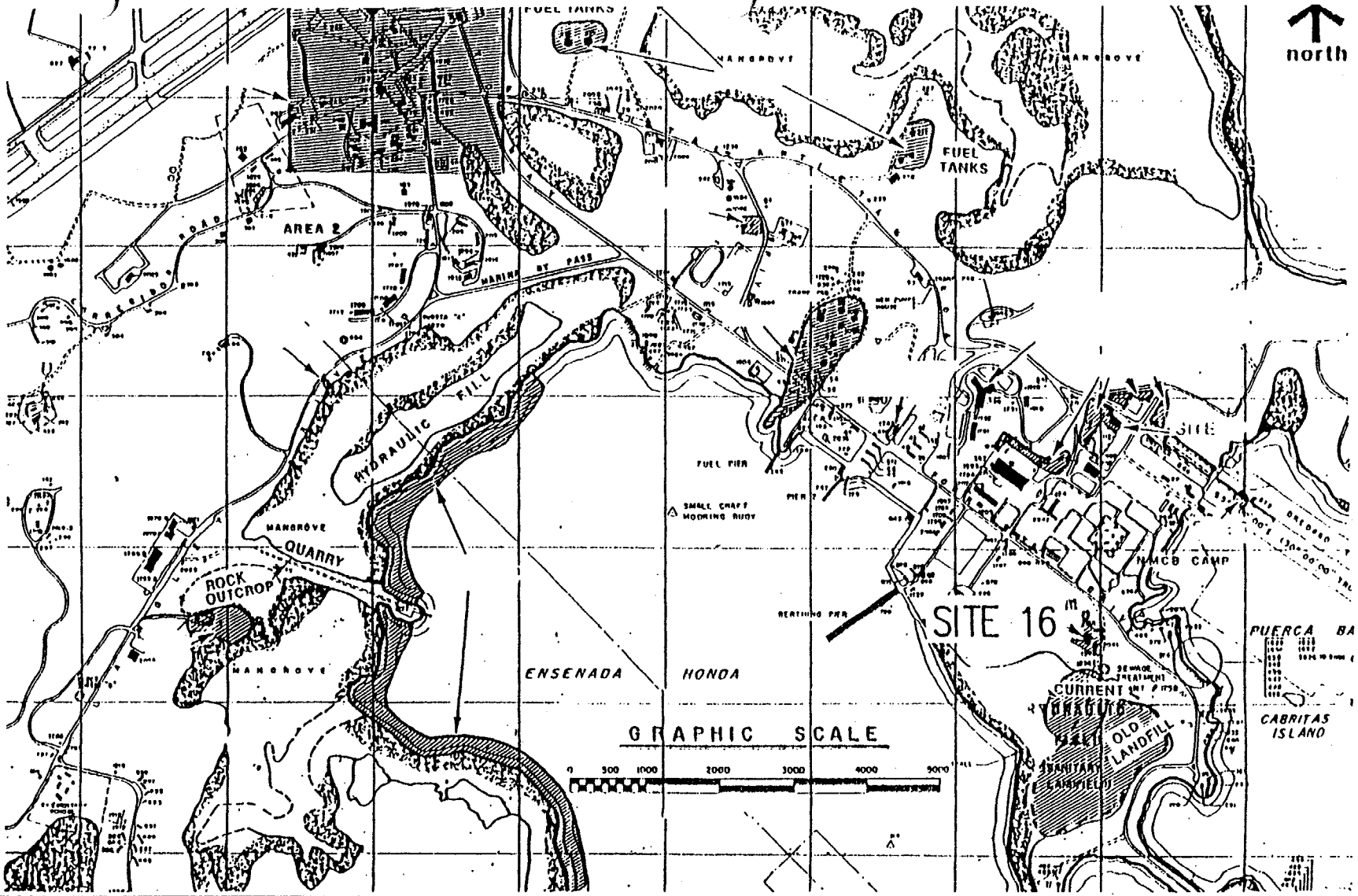


FIGURE 2
LOCATION OF SITE 16 NAVSTA ROOSEVELT ROADS

U.S. NAVAL COMPLEX
PUERTO RICO

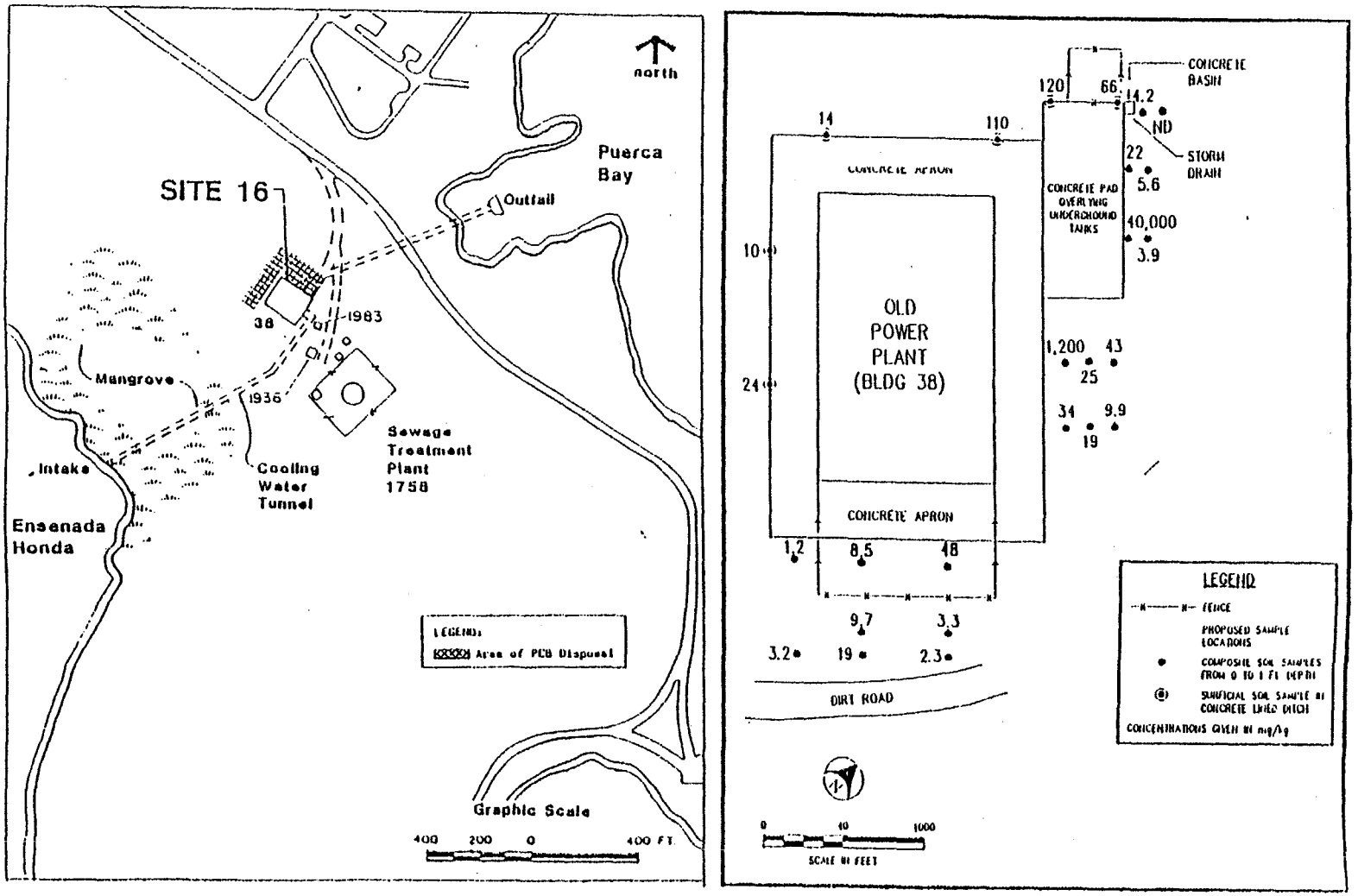


FIGURE 3

LOCATION AND CONFIRMATION STUDY SAMPLING LOCATIONS, SITE 16: OLD POWER PLANT, BUILDING 38

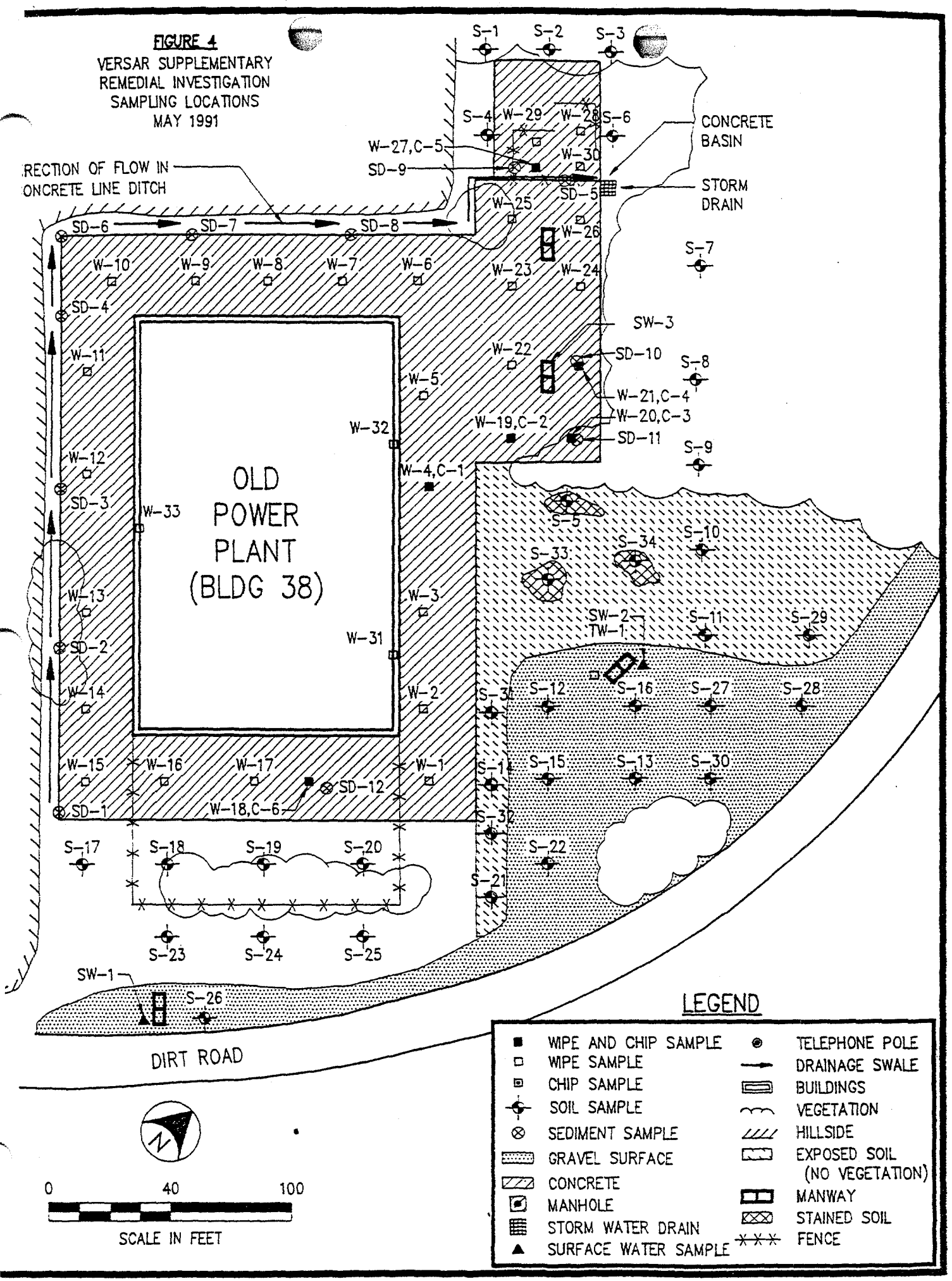


FIGURE 4
VERSAR SUPPLEMENTARY
REMEDIAL INVESTIGATION
SAMPLING LOCATIONS
MAY 1991
DIRECTION OF FLOW IN
CONCRETE LINE DITCH
CONCRETE
BASIN
STORM
DRAIN
OLD
POWER
PLANT
(BLDG 38)
DIRT ROAD
LEGEND
WIPE AND CHIP SAMPLE
WIPE SAMPLE
CHIP SAMPLE
SOIL SAMPLE
SEDIMENT SAMPLE
GRAVEL SURFACE
CONCRETE
MANHOLE
STORM WATER DRAIN
SURFACE WATER SAMPLE
TELEPHONE POLE
DRAINAGE SWALE
BUILDINGS
VEGETATION
HILLSIDE
EXPOSED SOIL
(NO VEGETATION)
MANWAY
STAINED SOIL
FENCE
0
40
100
SCALE IN FEET

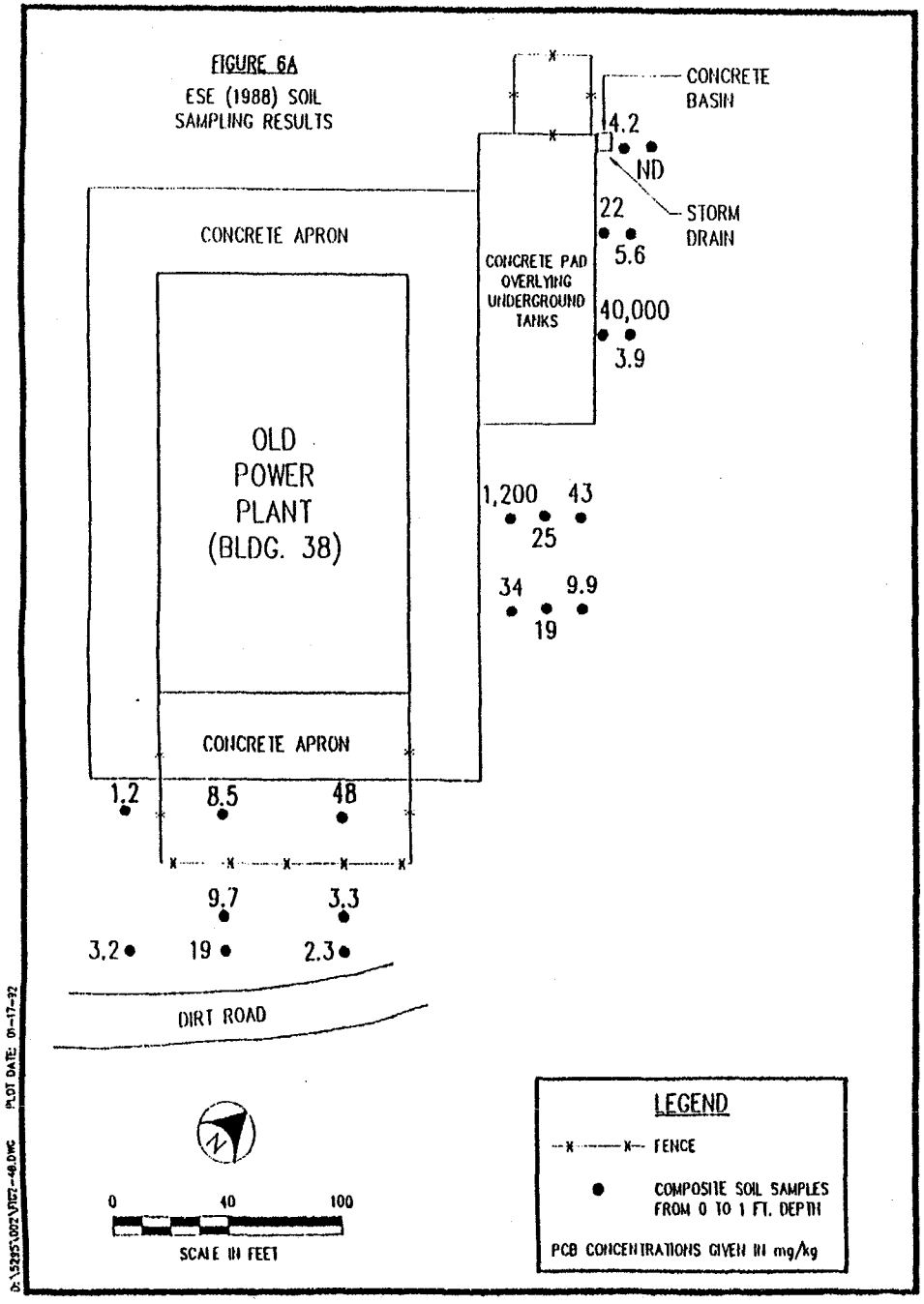


FIGURE 6A
ESE (1988) SOIL
SAMPLING RESULTS
CONCRETE BASIN
14.2
ND
STORM DRAIN
22
5.6
40,000
3.9
CONCRETE APRON
CONCRETE PAD OVERLYING UNDERGROUND TANKS
OLD POWER PLANT (BLDG. 38)
1,200
43
25
34
9.9
19
CONCRETE APRON
1.2
8.5
48
9.7
3.3
3.2
19
2.3
DIRT ROAD
0
40
100
SCALE IN FEET
LEGEND
FENCE
COMPOSITE SOIL SAMPLES FROM 0 TO 1 FT. DEPTH
PCB CONCENTRATIONS GIVEN IN mg/kg

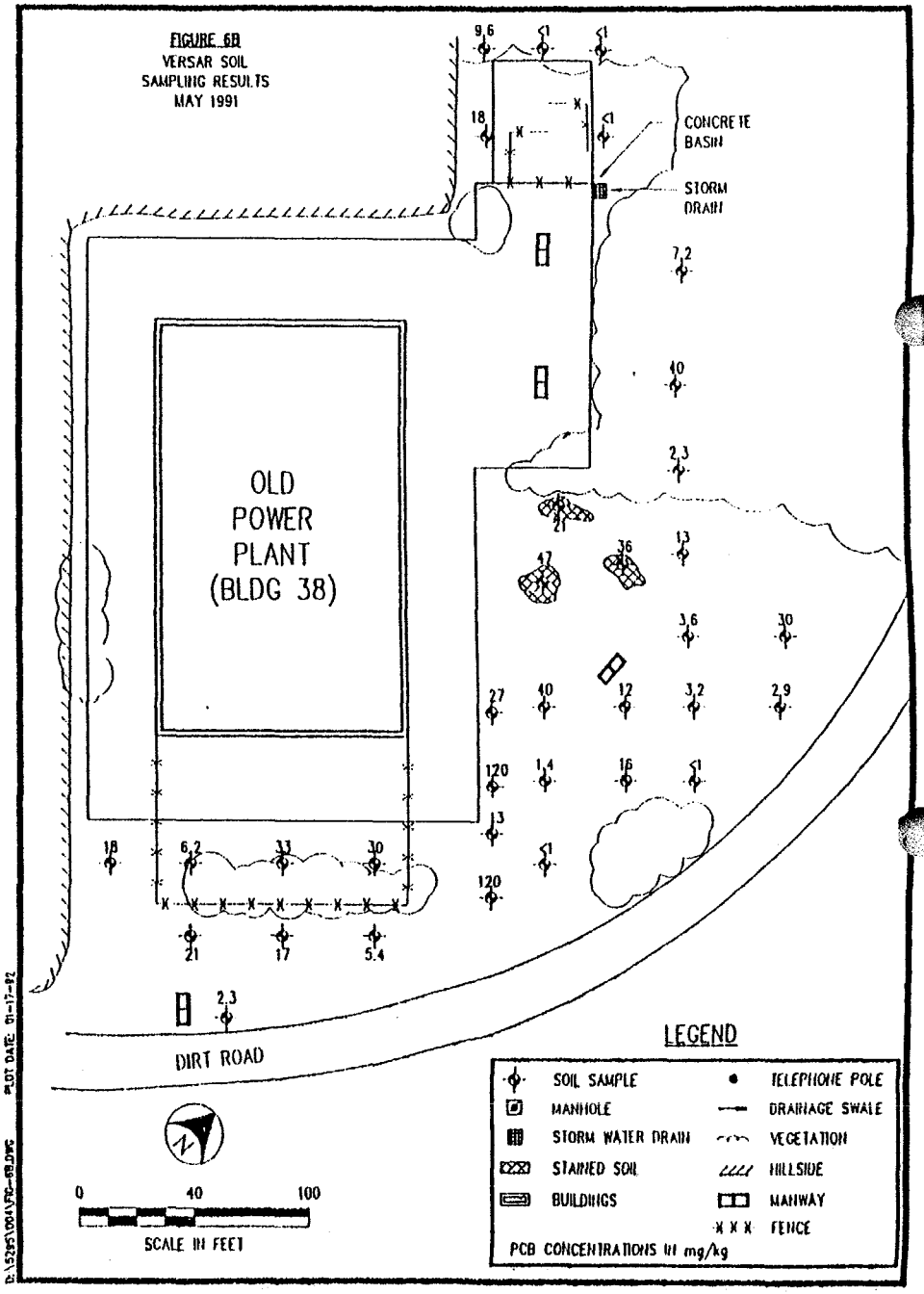


FIGURE 6B
VERSAR SOIL
SAMPLING RESULTS
MAY 1991
9.6
<1
<1
18
<1
CONCRETE BASIN
STORM DRAIN
7.2
40
2.3
21
47
36
13
3.6
30
27
40
12
3.2
2.9
120
1.4
16
<1
13
18
6.2
33
30
120
<1
21
17
5.4
OLD POWER PLANT (BLDG 38)
2.3
DIRT ROAD
0
40
100
SCALE IN FEET
LEGEND
SOIL SAMPLE
MANHOLE
STORM WATER DRAIN
STAINED SOIL
BUILDINGS
TELEPHONE POLE
DRAINAGE SWALE
VEGETATION
HILLSIDE
MANWAY
FENCE
PCB CONCENTRATIONS IN mg/kg

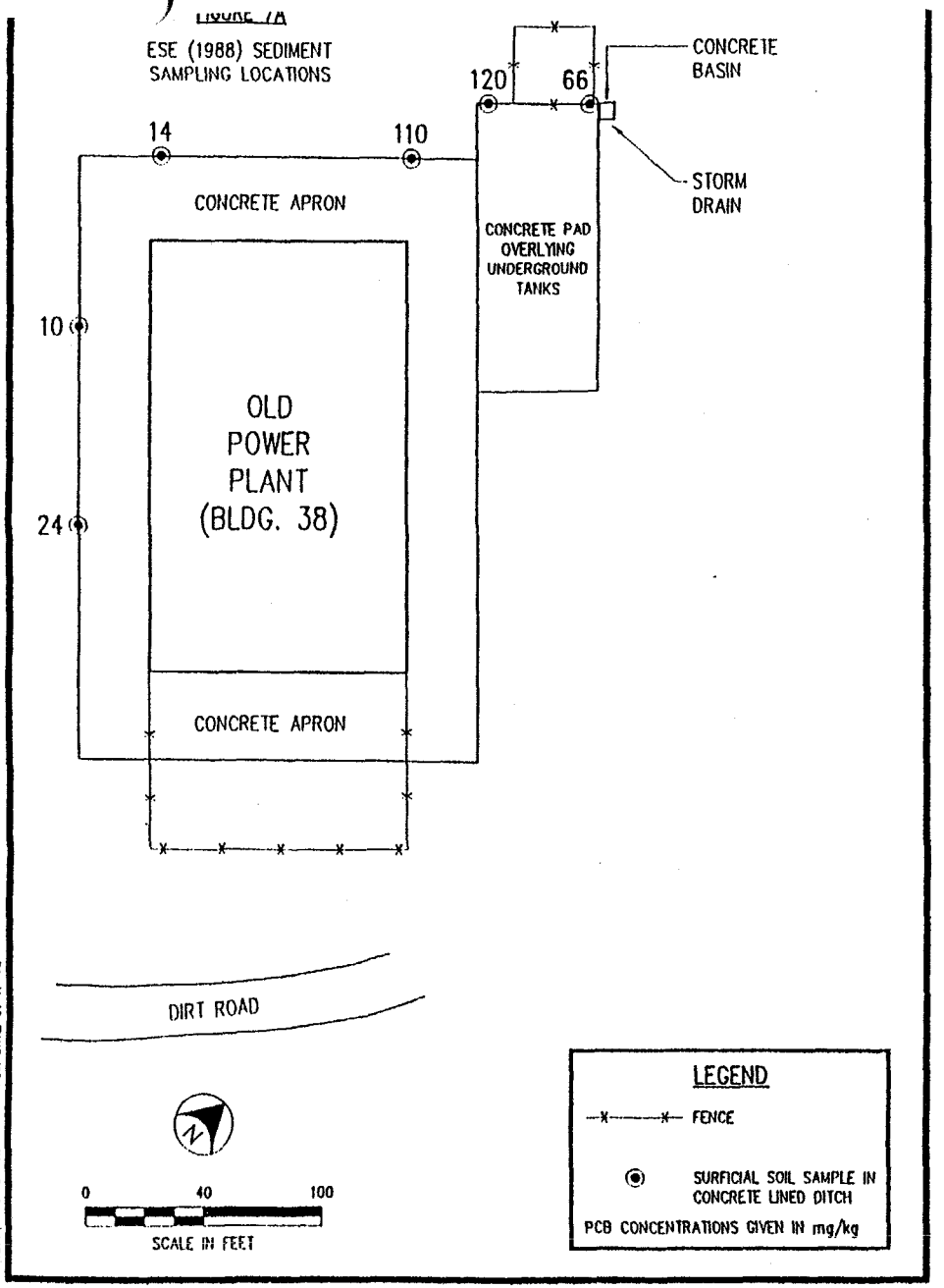


FIGURE 7A
ESE (1988) SEDIMENT SAMPLING LOCATIONS
CONCRETE BASIN
STORM DRAIN
120
66
14
110
CONCRETE APRON
CONCRETE PAD OVERLYING UNDERGROUND TANKS
10
24
OLD POWER PLANT (BLDG. 38)
CONCRETE APRON
DIRT ROAD
0
40
100
SCALE IN FEET
LEGEND
FENCE
SURFICIAL SOIL SAMPLE IN CONCRETE LINED DITCH
PCB CONCENTRATIONS GIVEN IN mg/kg
PLOT DATE: 01-17-92

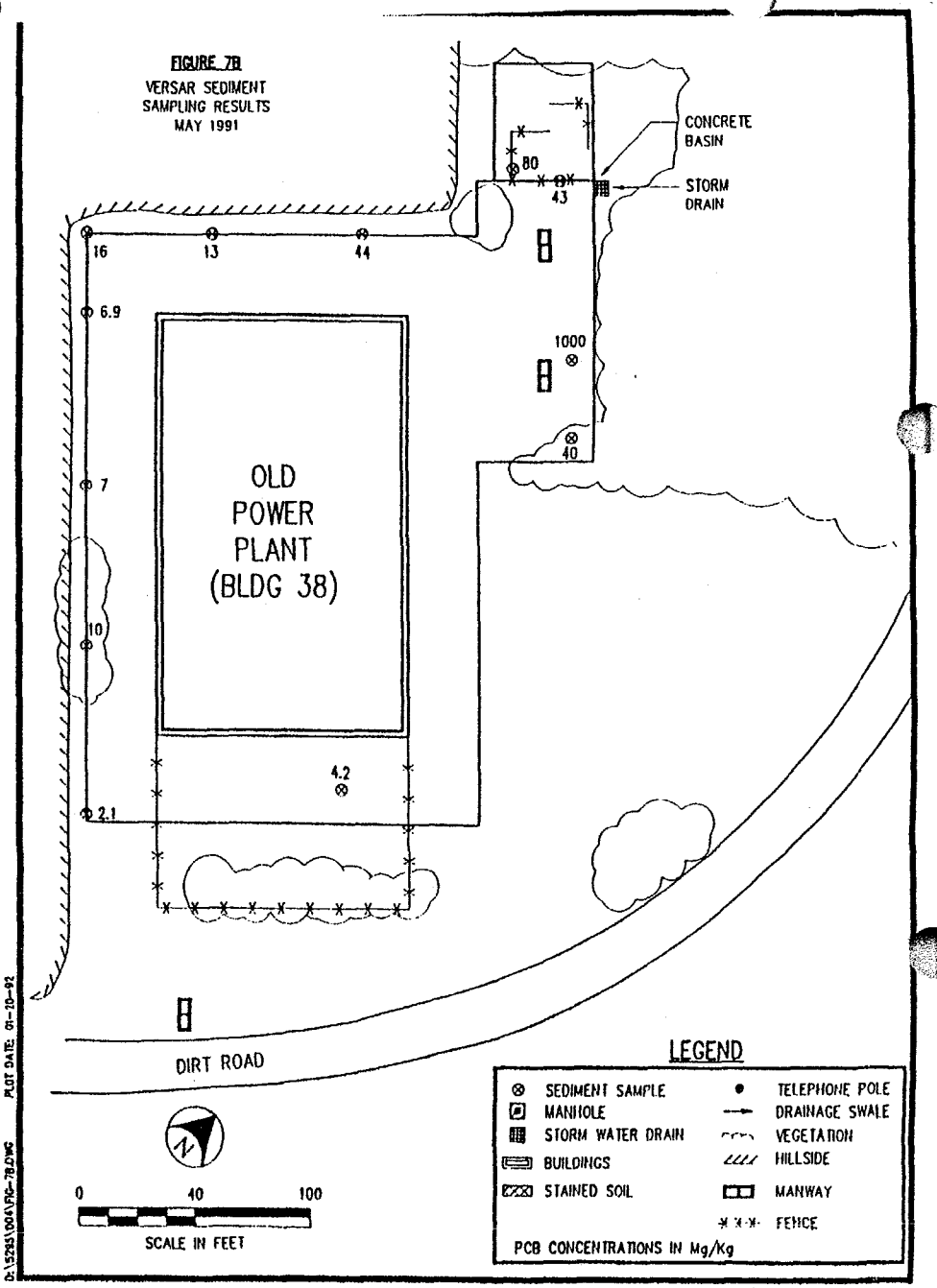


FIGURE 7B
VERSAR SEDIMENT SAMPLING RESULTS MAY 1991
CONCRETE BASIN
STORM DRAIN
80
43
16
13
44
6.9
1000
40
7
OLD POWER PLANT (BLDG 38)
10
4.2
2.1
DIRT ROAD
0
40
100
SCALE IN FEET
LEGEND
SEDIMENT SAMPLE
MANHOLE
STORM WATER DRAIN
BUILDINGS
STAINED SOIL
TELEPHONE POLE
DRAINAGE SWALE
VEGETATION
HILLSIDE
MANWAY
FENCE
PCB CONCENTRATIONS IN Mg/Kg
PLOT DATE: 01-20-92

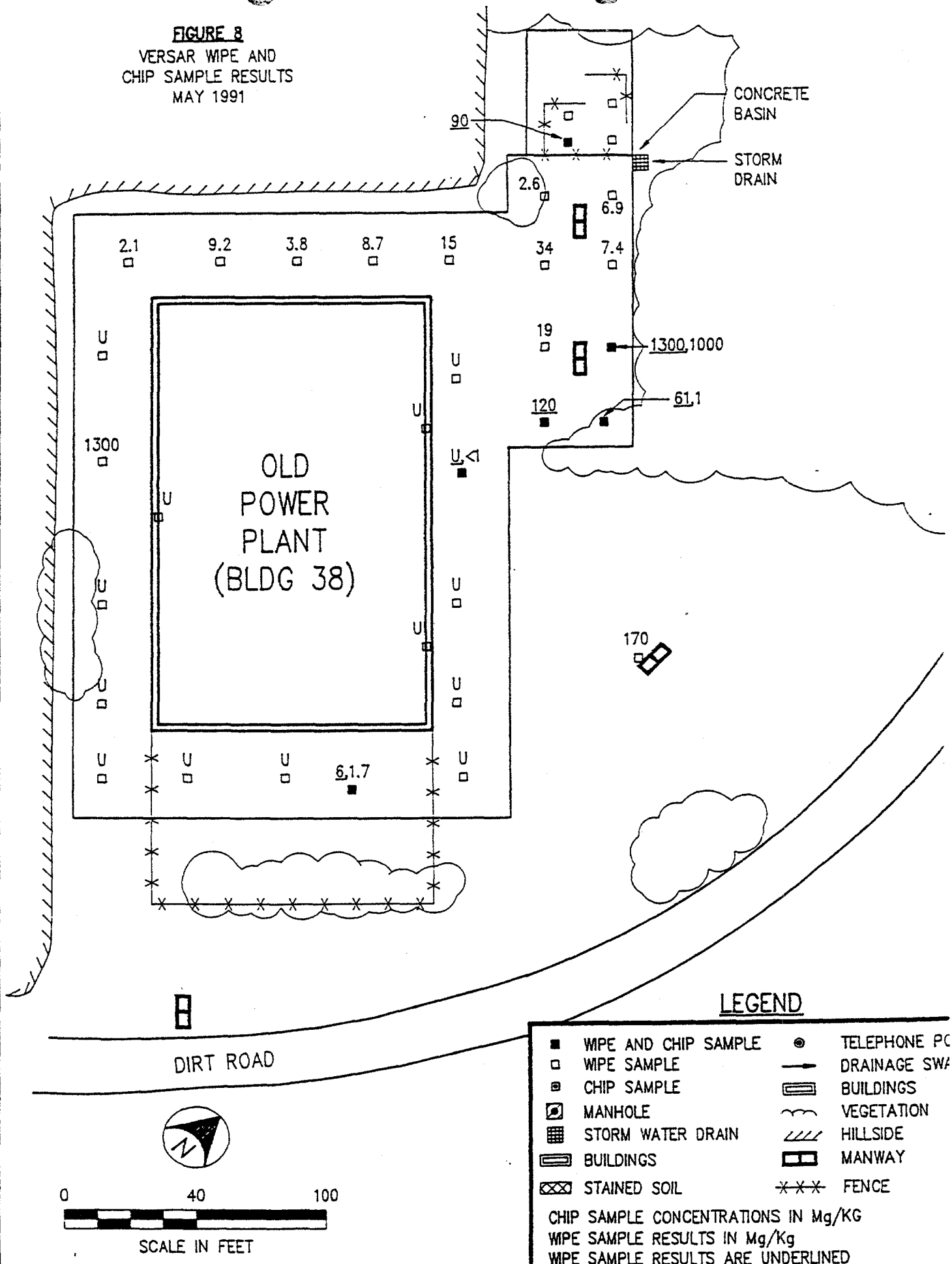
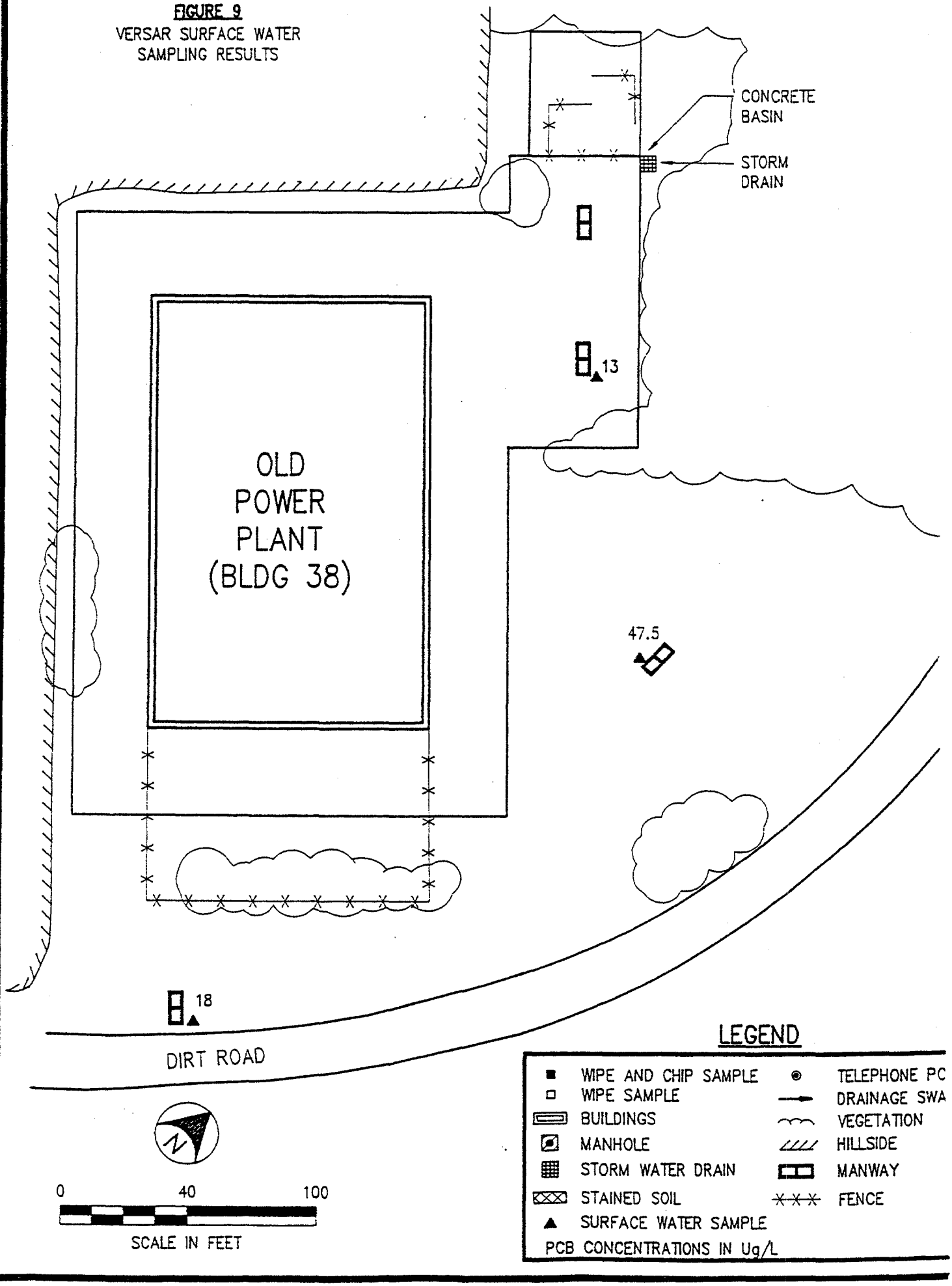


FIGURE 8
VERSAR WIPE AND
CHIP SAMPLE RESULTS
MAY 1991
CONCRETE
BASIN
STORM
DRAIN
90
2.6
6.9
2.1
9.2
3.8
8.7
15
34
7.4
19
1300,1000
120
61,1
1300
OLD
POWER
PLANT
(BLDG 38)
170
6,1.7
DIRT ROAD
LEGEND
WIPE AND CHIP SAMPLE
WIPE SAMPLE
CHIP SAMPLE
MANHOLE
STORM WATER DRAIN
BUILDINGS
STAINED SOIL
TELEPHONE PO
DRAINAGE SWA
BUILDINGS
VEGETATION
HILLSIDE
MANWAY
FENCE
CHIP SAMPLE CONCENTRATIONS IN Mg/KG
WIPE SAMPLE RESULTS IN Mg/Kg
WIPE SAMPLE RESULTS ARE UNDERLINED
0
40
100
SCALE IN FEET
PLOT DATE: 01-17-92
D:\5295\004\FIG-8.DWG

FIGURE 9
VERSAR SURFACE WATER
SAMPLING RESULTS



PLOT DATE: 01-20-92

D:\5295\004\FIG-9.DWG

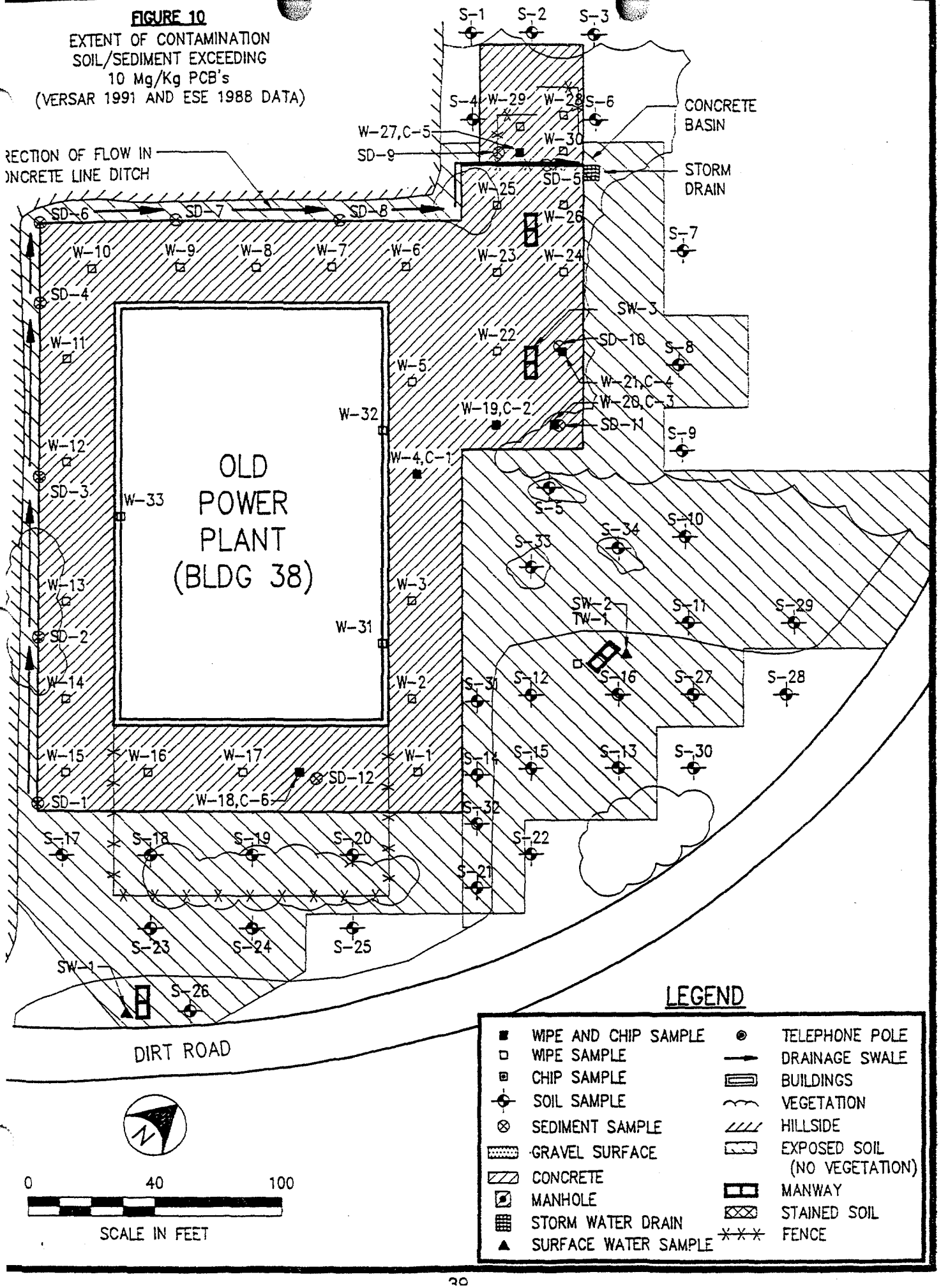



FIGURE 10
EXTENT OF CONTAMINATION
SOIL/SEDIMENT EXCEEDING
10 Mg/Kg PCB's
(VERSAR 1991 AND ESE 1988 DATA)