CAFB 05

State of New Mexico
ENVIRONMENT DEPARTMENT
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Telephone (505) 428-2500
Fax (505) 428-2567
www.nmenv.state.nm.us

BILL RICHARDSON
GOVERNOR

RON CURRY
SECRETARY

DERRITH WATCHMAN-MOORE
DEPUTY SECRETARY

December 28, 2005

SUBJECT: NOTICE OF PUBLIC COMMENT PERIOD AND INTENT TO APPROVE A CLASS 3 PERMIT MODIFICATION TO RCRA PERMIT FOR CANNON AIR FORCE BASE

Dear Interested Citizen:

Enclosed is a **Public Notice** regarding the intent to approve a proposed Class 3 permit modification to the United States Air Force/Cannon Air Force Base's **(Permittee)** Resource Conservation and Recovery Act Permit. The U.S. Air Force is owner and operator of Cannon Air Force Base. The Permittee is located at the following addresses: Cannon Air Force Base, 100 D.L. Ingram Boulevard, Cannon Air Force Base, New Mexico 88103-5214.

The enclosed Public Notice provides locations where the administrative record, including the Permit Modification Request, Fact Sheet/Statement of Basis, and related documents for this action can be reviewed, and provides procedures for submitting comments and requesting a Public Hearing. Comments and requests for Public Hearing will be received through **5:00 p.m.** on **February 13, 2006.**

Any person seeking additional information regarding this notice may contact:

Mr. John E. Kieling, Program Manager
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
RE: CAFB – NFAs (December 28, 2005)

E-mail: john.kieling@state.nm.us
Telephone: (505) 428-2500
Fax: (505) 428-2567

Sincerely,

John E. Kieling
Program Manager
Permits Management Program
Hazardous Waste Bureau

State of New Mexico
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DEPUTY SECRETARY

PUBLIC NOTICE NO. 05-17

NEW MEXICO ENVIRONMENT DEPARTMENT
HAZARDOUS WASTE BUREAU
Santa Fe, New Mexico
December 28, 2005

NOTICE OF PUBLIC COMMENT PERIOD AND INTENT TO APPROVE A PERMIT MODIFICATION TO THE UNITED STATES AIR FORCE/CANNON AIR FORCE BASE'S RCRA PERMIT

Under authority of the New Mexico Hazardous Waste Act (Section 74-4-1 et seq., NMSA 1978, as amended, 1992) and the New Mexico Hazardous Waste Management Regulations (20.4.1 NMAC), the New Mexico Environment Department (NMED) can approve or deny hazardous waste permits, closure plans, permit modifications, and amendments. Under this authority, NMED intends to approve, pending public input into this decision, a modification to the RCRA permit issued to the United States Air Force/Cannon Air Force Base (Permittee), New Mexico, EPA ID# NM7572124454.

Cannon Air Force Base (CAFB) is located in Curry County, New Mexico, approximately seven mile west of the City of Clovis and 15 miles north of the City of Portales. CAFB covers approximately 4,320 acres of land in the Southern High Plains Physiographic Province. No streams exist on or near CAFB. Running Water Draw and Frio Draw, located approximately 10 and 20 miles north of CABF, respectively, are the nearest streams. The majority of land surrounding CAFB is irrigated farmland and grazing land for beef and dairy cattle. CAFB dates to 1929, when Portair Field, a civilian passenger terminal, was established. In 1942, the Army Air Corps took control of the airfield and it became Clovis Army Air Base. In 1957, the Base became a permanent installation and was renamed Cannon Air Force Base. The primary mission of CABF has remained unchanged since 1965; to develop and maintain an F-111 tactical fighter wing capable of day, night, and all-weather combat operations and to provide replacement training of combat aircrews for tactical operations worldwide.

CAFB was issued a Resource Conservation and Recovery Act (RCRA) permit, which incorporated corrective action requirements, on December 17, 1989 by Region 6 of the U.S. Environmental Protection Agency. The RCRA permit was renewed in October 2003 as a Corrective Action-only permit.

The Permittee is located at the following address: Cannon Air Force Base, 100 D.L. Ingram Boulevard, Cannon Air Force Base, New Mexico 88103-5214. The Permittee's primary contact for the action is: Colonel John D. Posner, Commander 27th Fighter Wing, 100 D.L. Ingram Boulevard, Cannon Air Force Base, New Mexico 88103-5214.

If approved, the proposed modification would grant No-Further-Action (NFA) status for thirty-two (32) SWMUs/AOCs (see list below). Table 1 in Attachment 1 of CAFB's RCRA Permit, lists SWMUs at the CAFB facility where corrective action may be necessary to characterize and/or remediate past releases of hazardous wastes or hazardous waste constituents. If this modification is approved by NMED, the 32 SWMUs/AOCs would be transferred from Table 1 in Attachment 1 to Table 2 of Attachment 1 as SWMUs/AOCs that do not currently requiring corrective action.

NMED's approval of the SWMUs/AOCs proposed for NFA by the Permittee is on the basis that they have been characterized or remediated in accordance with current applicable state and/or federal regulations, and the available data indicate that contaminants pose an acceptable level of risk under current and projected future land use (Criterion 5).

The following SWMUs and AOCs are the subject regarding this action:
1) SWMU 1, Oil/Water Separator No. 119; 2) SWMU 3, Oil Water Separator No. 103; 3) SWMU 5, Oil/Water Separator No. 121; 4) SWMU 7, Oil/Water Separator No. 129; 5) SWMU 8, Oil/Water Separator No. 165; 6) SWMU 9, Aircraft Washrack Drain System; 7) SWMU 11, Oil/Water Separator No. 107: 8) SWMU 16, Oil/Water Separator No. 680; 9) SWMU 32A, Oil/Water Separator No. 186 (#1 - East); 10) SWMU 33B, Oil/Water Separator No. 186 (#2 - West); 11) SWMU 38, Oil/Water Separator No. 194: 12) SWMU 39, Oil/Water Separator No. 195; 13) SWMU 46, Oil/Water Separator No. 196; 14) SWMU 47, Oil/Water Separator No. 494; 15) SWMU 48B, Aboveground Overflow Capacity Tank; 16) SWMU 51, Oil/Water Separator No. 375; 17) SWMU 55, Lead Acid Battery Accumulation Point; 18) SWMU 57, Oil/Water Separator No. 379; 19) SWMUs 61, 62, and 63, Sand Trap 5077A and 5077B, and Oil/Water Separator 5077C; 20) SWMU 74, Landfill No. 1; 21) SWMU 76, Sludge Weathering Pit (WP-14); 22) SWMU 83, Sump; 23) SWMU 92, Oil/Water Separator No. 5120; 24) SWMU 93, Oil/Water Separator No. 5121; 25) SWMU 94, Oil/Water Separator No. 5144; 26) SWMU 113, Landfill 5; 27) AOC D, Asbestos Burial Pit; 28) AOC E, Runway Rubble Pile; 29) AOC F, Calibration Target Berm; 30) AOC G, Disturbed Area-North Housing Site; 31) AOC H, Disturbed Area-South Housing Site; and 32) DP-33, Drum Disposal Pit.

PUBLIC REVIEW OF THE ADMINISTRATIVE RECORD

The Administrative Record for this proposed action consists of the CAFB Permit Modification Request, Fact Sheet/Statement of Basis, this Public Notice, the October 2003 Permit that consists of the Tables 1 and 2, and the referenced supporting documentation. The Administrative Record may be reviewed at the following location during the public comment period:

NMED – Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
(505) 428-2500
Monday - Friday from 8:00 a.m. to 5:00 p.m.

The CAFB Permit Modification Request, the Fact Sheet / Statement of Basis, the Public Notice, and the draft Permit may be reviewed at the following locations during the public comment period:

NMED – Hazardous Waste Bureau
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Clovis-Carver Public Library
701 North Main Street
Clovis, New Mexico 88101
Phone 505-769-7840
library@cityofclovis.org

A copy of the Fact Sheet/Statement of Basis, the Public Notice, and the October 2003 Permit that contains Tables 1 and 2 in Attachment 1 are also available electronically on the NMED website at: www.nmenv.state.nm.us/HWB/kafbperm.html under No Further Actions. To obtain a copy of the Administrative Record or a portion thereof, in addition to further information please contact Ms. Pam Allen at (505) 428-2531, or at the address given above. NMED will provide copies, or portions thereof, of the administrative record at a cost to the requestor.

NMED issues this public notice on **December 28, 2005,** to announce the beginning of a 45-day comment period that will end at **5:00 p.m., Monday, February 13, 2006**. Any person who wishes to comment on this action or request a public hearing should submit written or electronic mail (e-mail) comment(s) with the commenter's name and address to the respective address below. Only comments and/or requests received on or before **5:00 p.m., February 13, 2006,** will be considered.

John E. Kieling, Program Manager
Hazardous Waste Bureau - New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303
Or via e-mail: john.kieling@state.nm.us
Ref: CAFB – NFAs (December 28, 2005)

Written comments must be based on the administrative record. Documents in the administrative record need not be re-submitted if expressly referenced by the commenter. Requests for a public hearing shall provide: (1) a clear and concise factual statement of the nature and scope of the interest of the person requesting the hearing; (2) the name and address of all persons whom the requestor represents; (3) a statement of any objections to the proposed action, including specific references; and (4) a statement of the issues which such persons proposes to raise for consideration at the hearing. Written comment and requests for Public Hearing must be filed with Mr. John Kieling on or before **5:00 p.m., February 13, 2006**. The NMED will provide a thirty (30) day notice of a public hearing, if scheduled.

The NMED must ensure that the approved final Permit is consistent with the New Mexico Hazardous Waste Management Regulations. All written comments submitted on the draft Permit will become part of the administrative record, will be considered in formulating a final decision, and may cause the draft Permit to be modified. NMED will respond in writing to all significant public comment. The response will specify which provisions, if any, of the draft Permit have been changed in the final Permit decision, and the reasons for the change. This response will also be posted on the NMED website in addition to NMED notifying all persons providing written comments.

After consideration of all written public comments received, NMED will issue, or modify and issue, the Permit. If NMED modifies and issues the Permit, the Permittee shall be provided by mail a copy of the modified Permit and a detailed written statement of reasons for the modifications. The NMED Secretary will make the final Permit decision publicly available and shall notify the Permittee by certified mail. The Secretary's decision shall constitute a final agency decision and may be appealed as provided by the Hazardous Waste Act. All persons on the mailing list, or that provided written comments, or who requested notification in writing, will be notified of the final decision by mail.

The final decision will become effective thirty days after service of the decision, unless a later date is specified or review is requested under the New Mexico Hazardous Waste Management Regulations, 20.4.1 NMAC, Section 901.E., *Hearings*.

ARRANGEMENTS FOR PERSONS WITH DISABILITIES

Persons having a disability and requiring assistance or auxiliary aid to participate in this process should contact Judy Bentley at the New Mexico Environment Department, Personnel Services Bureau, P.O. Box 26110, 1190 St. Francis Drive, Santa Fe, New Mexico, 87502, telephone 505-827-9872. TDY users please access her number via the New Mexico Relay Network at 1-800-659-8331.

New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

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Pamela Allen
NMED - HWB
2905 Rodeo Park Dr. East, Bldg 1
Santa Fe, NM 87505

87505+6313-01 C063

A copy of the Fact Sheet/Statement of Basis, the Public Notice, and the October 2003 Permit that contains Tables 1 and 2 in Attachment 1 are also available electronically on the NMED website at: www.nmenv.state.nm.us/HWB/kafbperm.html under No Further Actions. To obtain a copy of the Administrative Record or a portion thereof, in addition to further information please contact Ms. Pam Allen at (505) 428-2531, or at the address given above. NMED will provide copies, or portions thereof, of the administrative record at a cost to the requestor.

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John E. Kieling, Program Manager
Hazardous Waste Bureau - New Mexico Environment Department
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The NMED must ensure that the approved final Permit is consistent with the New Mexico Hazardous Waste Management Regulations. All written comments submitted on the draft Permit will become part of the administrative record, will be considered in formulating a final decision, and may cause the draft Permit to be modified. NMED will respond in writing to all significant public comment. The response will specify which provisions, if any, of the draft Permit have been changed in the final Permit decision, and the reasons for the change. This response will also be posted on the NMED website in addition to NMED notifying all persons providing written comments.

After consideration of all written public comments received, NMED will issue, or modify and issue, the Permit. If NMED modifies and issues the Permit, the Permittee shall be provided by mail a copy of the modified Permit and a detailed written statement of reasons for the modifications. The NMED Secretary will make the final Permit decision publicly available and shall notify the Permittee by certified mail. The Secretary's decision shall constitute a final agency decision and may be appealed as provided by the Hazardous Waste Act. All persons on the mailing list, or that provided written comments, or who requested notification in writing, will be notified of the final decision by mail.

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Clovis, New Mexico 88101
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library@cityofclovis.org

TABLE 2
LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUS) AND AREAS OF CONCERN (AOCS) NOT CURRENTLY REQUIREING CORRECTIVE ACTION

SWMU/AOC	DESCRIPTION	DATRE OF NFA APPROVAL	COMMENT
AOC NN	POL Storage Tank No. 2302		
AOC OO	POL Storage Tank No. 2307		
AOC PP	POL Storage Tank No. 2309		
AOC QQ	POL Storage Tank No. 2313		
AOC RR	POL Storage Tank No. 2321		
AOC SS	POL Storage Tank No. 2327		
AOC TT	POL Storage Tank No. 2328		
AOC UU	POL Storage Tank No. 2330		
AOC VV	POL Storage Tank No. 3117		
AOC WW	POL Storage Tank No. 3118		
AOC XX	POL Storage Tank No. 3121a		
AOC YY	POL Storage Tank No. 3121b		

NOTE:
1. Unit underwent Corrective Action, was approved for No Further Action, and is limited by Institutional Controls.
2. Unit is a Permitted Hazardous Waste Management Unit.
3. Based on the results of EPA's RFA Report of July 29, 1987, it was determined that additional investigation at this SWMU/AOC was not warranted.

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PUBLIC NOTICE NO. 05-17

NEW MEXICO ENVIRONMENT DEPARTMENT
HAZARDOUS WASTE BUREAU
Santa Fe, New Mexico
December 28, 2005

NOTICE OF PUBLIC COMMENT PERIOD AND INTENT TO APPROVE A PERMIT MODIFICATION TO THE UNITED STATES AIR FORCE/CANNON AIR FORCE BASE'S RCRA PERMIT

Under authority of the New Mexico Hazardous Waste Act (Section 74-4-1 et seq., NMSA 1978, as amended, 1992) and the New Mexico Hazardous Waste Management Regulations (20.4.1 NMAC), the New Mexico Environment Department (NMED) can approve or deny hazardous waste permits, closure plans, permit modifications, and amendments. Under this authority, NMED intends to approve, pending public input into this decision, a modification to the RCRA permit issued to the United States Air Force/Cannon Air Force Base (Permittee), New Mexico, EPA ID# NM7572124454.

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The Permittee is located at the following address: Cannon Air Force Base, 100 D.L. Ingram Boulevard, Cannon Air Force Base, New Mexico 88103-5214. The Permittee's primary contact for the action is: Colonel John D. Posner, Commander 27th Fighter Wing, 100 D.L. Ingram Boulevard, Cannon Air Force Base, New Mexico 88103-5214.

If approved, the proposed modification would grant No-Further-Action (NFA) status for thirty-two (32) SWMUs/AOCs (see list below). Table 1 in Attachment 1 of CAFB's RCRA Permit, lists SWMUs at the

TABLE 2
LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUS) AND AREAS OF CONCERN (AOCS) NOT CURRENTLY REQUIREING CORRECTIVE ACTION

SWMU/AOC	DESCRIPTION	DATRE OF NFA APPROVAL	COMMENT
AOC O*	POL Storage Tank No. 368b		
AOC P*	POL Storage Tank No. 368c		
AOC Q*	POL Storage Tank No. 368d		
AOC R*	POL Storage Tank No. 374		
AOC S*	POL Storage Tank No. 376		
AOC T*	POL Storage Tank No. 377		
AOC U*	POL Storage Tank No. 378		
AOC V*	POL Storage Tank No. 392a		
AOC W*	POL Storage Tank No. 392b		
AOC X*	POL Storage Tank No. 392c		
AOC Y*	POL Storage Tank No. 392d		
AOC Z*	POL Storage Tank No. 394		
AOC AA*	POL Storage Tank No. 395		
AOC BB*	POL Storage Tank No. 396		
AOC CC*	POL Storage Tank No. 420		
AOC DD*	Inactive POL Storage Tank No. 443		
AOC EE*	POL Storage Tank No. 444		
AOC FF*	POL Storage Tank No. 728		
AOC GG*	POL Storage Tank No. 1400		
AOC HH*	POL Storage Tank No. 2110		
AOC II*	POL Storage Tank No. 2160		
AOC JJ	POL Storage Tank No. 2276		
AOC KK	POL Storage Tank No. 2280		
AOC LL	POL Storage Tank No. 2285		
AOC MM	POL Storage Tank No. 2300		

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SWMU/AOC	DESCRIPTION	DATRE OF NFA APPROVAL	COMMENT
SWMU 93	Oil/Water Separator No. 5121		
SWMU 94	Oil/Water Separator No. 5144		
SWMU 99	Wastewater treatment system bar screen		3
SWMU 100	Wastewater treatment system		3
SWMU 113	Landfill No. 5 Cell 3		
SWMU121	Containers for clean and dirty Speedydry		3
SWMU 122	Sanitary dumpsters		3
SWMU123	Dirty rag disposal can		3
AOC D	Asbestos Burial Pit		
AOC E	Runway disposal pile		
AOC F	Gunsight target berm		
AOC G	North Housing Site		
AOC H	South Housing Site		
AOC D*	Aircraft washrack holding tank		AOCs D* through YY* were originally designated AOCs D through YY in the 1987 RFA. However, during the 1999 Annual Unit Audit, new AOCs D through I were designated.
AOC E*	POL Storage Tank No. 140		
AOC F*	POL Storage Tank No. 163		
AOC G*	POL Storage Tank No. 181		
AOC H*	POL Storage Tank No. 182-A		
AOC I*	POL Storage Tank No. 183-B		
AOC J*	POL Storage Tank No. 184		
AOC K*	POL Storage Tank No. 185		
AOC L*	POL Storage Tank No. 187		
AOC M*	New entomology building product storage area		
AOC N*	POL Storage Tank No. 368a		

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SWMU/AOC	DESCRIPTION	DATRE OF NFA APPROVAL	COMMENT
	drum storage		
SWMU 55	Lead acid battery accumulation point		
SWMU 56	Lead acid battery storage area		3
SWMU 57	Oil/Water Separator No. 379		
SWMU 58	Special purpose vehicle maintenance shop PD-680 dip tank		3
SWMU 59	Civil engineering paint shop		3
SWMU 60	Civil engineering paint shop waste containers		3
SWMU 61	Sand trap No. 5077A		
SWMU 62	Sand Trap No. 5077B		
SWMU 63	Oil/Water Separator No. 5077C		
SWMU 64	Civil engineering open yard PCB storage		3
SWMU 65	Former interim status hazardous waste storage facility		3
SWMU 67	DPDO PCB storage facility		3
SWMU 68	Civil engineering department PCB storage facility		3
SWMU 69	New entomology mixing room, sink, and floor drains		3
SWMU 74	Landfill No. 1		
SWMU 76	Sludge Weathering Pit		
SWMU 80	Drum storage area		Not observed during RFI
SWMU 83	Sump		
SWMU 84	Waste oil and product storage area		3
SWMU 92	Oil/Water Separator No. 5120		

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LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUS) AND AREAS OF CONCERN (AOCS) NOT CURRENTLY REQUIREING CORRECTIVE ACTION

SWMU/AOC	DESCRIPTION	DATRE OF NFA APPROVAL	COMMENT
SWMU 27	Lead acid battery shop neutralization tank		3
SWMU 28	Used battery casings storage area		3
SWMU 29	NiCad Battery Rinse sink		3
SWMU 30	AGE drainage ditch		3
SWMU 32A	Oil/Water Separator No. 186 (#1 – East)		
SWMU 32B	Oil/Water Separator No. 186 (#2 – West)		
SWMU 35	Aircraft drip pans		3
SWMU 37	Wheel and tire shop cold stripper dip tank		3
SWMU 38	Oil/Water Separator No. 194		
SWMU 39	Oil/Water Separator No. 195		
SWMU 40	Corrosion control shop drum storage area		
SWMU 41	Corrosion control shop dumpster		3
SWMU 42	Corrosion control shop water holding tank		3
SWMU 43	Fuel systems repair shop bowser		3
SWMU 44	Corrosion control shop parts stripper Building 196		3
SWMU 45	Paint spray booth air purifiers		3
SWMU 46	Oil/Water Separator No. 196		
SWMU 46	Oil/Water Separator No. 494		
SWMU 48B	Aboveground Overflow Capacity Tank		
SWMU 51	Oil/Water Separator No. 375		
SWMU 52	Waste oil and hydraulic fluid bowser		3
SWMU 53	Special purpose vehicle maintenance shop floor drains		
SWMU 54	Special purpose vehicle maintenance shop		

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SWMU/AOC	DESCRIPTION	DATRE OF NFA APPROVAL	COMMENT
SWMU 66	Hazardous Waste Storage Facility at Building 226		Certified closed on September 18, 2003
SWMU 1	Oil/Water Separator No. 119		
SWMU 3	Oil/Water Separator No. 108		
SWMU 5	Oil/Water Separator No. 121		
SWMU 7	Oil/Water Separator No. 129		
SWMU 8	Oil/Water Separator No. 165		
SWMU 9	Aircraft Washrack Drain System		
SWMU 11	Oil/Water Separator No. 170		
SWMU 12	Jet engine shop dip tank		3
SWMU 13	Jet engine shop indoor washrack		3
SWMU 14	Pneudraulics shop PD-680 dip tank		3
SWMU 15	Pneudraulics shop former drum storage		3
SWMU 16	Oil/Water Separator No. 680		
SWMU 17	Bearing cleaner tank		3
SWMU 18	Bearing cleaner and carbon remover		3
SWMU 19	Container accumulation area No. 681		3
SWMU 20	Armament recording lab floor drains		3
SWMU 21	NDI lab dip tank		3
SWMU 22a,b	NDI lab developer tank		3
SWMU 23a,b	NDI lab emulsifier processing tank		3
SWMU 24a,b	NDI lab silver recovery tank		3
SWMU 25	NDI lab drum storage area		3
SWMU 26	NDI lab fixer processing tank		3

TABLE 1
LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) AND AREAS OF CONCERN (AOCs) REQUIRING CORRECTIVE ACTION

SWMU/AOC	DESCRIPTION	COMMENTS
AOC B	JP-4 Fuel Spill	Site of JP-4 fuel spill.
AOC C	Blown Capacitor Site	Site of PCB spill

TABLE 1
LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) AND AREAS OF CONCERN (AOCs) REQUIRING CORRECTIVE ACTION

SWMU/AOC	DESCRIPTION	COMMENTS
SWMU 111	Unlined Pit	Unlined pit used to collect runoff from SWMU 109.
SWMU 112	Oil/Water Separator No. 2336	Underground Storage Tank used to recover JP-4 fuel from runoff derived during fire training exercises.
~~SWMU 113~~	~~Landfill 5 Cell 3~~	~~Active landfill (30 acres) which receives general construction debris, domestic and industrial solid waste, including waste oils and solvents, paints, paint removers, paint thinners, pesticides, cans, and drums.~~
SWMU 124	Inactive Underground Storage Tank 1	Underground storage tank used to store diesel oil. Reported to have been filled with sand.
SWMU 125	Inactive Underground Storage Tank 2	Underground storage tank used to store diesel oil.
SWMU 126	Inactive Underground Storage Tank 3	Underground storage tank used to store diesel oil.
SWMU 127	Oil/Water Separator Near Tank 4095 (#1) & Leach field	Underground storage tank used to recover washdown materials.
SWMU 128	Oil/Water Separator Near Tank 4095 (#2) & Leach Field	Underground storage tank used to recover washdown materials.
SWMU 129	Waste Oil Storage Facility 244	Formerly known as AOC "I"
AOC A	MOGAS Spill Site	Site of two automobile gasoline spills.

TABLE 1
LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) AND AREAS OF CONCERN (AOCs) REQUIRING CORRECTIVE ACTION

SWMU/AOC	DESCRIPTION	COMMENTS
	Lagoons	
SWMU 102	Wastewater Treatment Effluent Discharge	Discharge pipe from wastewater treatment unit.
SWMU 103	Wastewater Playa Lake	Natural land depression (13 acres) which receives stormwater discharge and waste solvents from SWMU 9.
SWMU 104	Landfill No. 4	Inactive, unlined landfill (7 acres); when active it received domestic and industrial sold waste, including waste oils and solvents, paints, paint strippers, paint thinners, pesticides, cans, and drums.
SWMU 105	Landfill No. 3	Inactive, unlined landfill (7 acres); when active it received domestic and industrial sold waste, including waste oils and solvents, paints, paint strippers, paint thinners, pesticides, cans, and drums.
SWMU 106	Fire Department Training Area No. 2	Inactive, unlined fire training area (100 ft in diameter) used during fire training exercises.
SWMU 107	Fire Department Training Area No. 3	Inactive, unlined fire training area (100 ft in diameter) used during fire training exercises.
SWMU 108	Explosive Ordinance Disposal Activities Area	Active Unit (1800 ft in diameter) used for ammunition disposal training operations.
SWMU 109	Fire Department Training Area No. 4	Inactive, unlined fire training area (400 ft in diameter) used during fire training exercises. Previously, this site was
SWMU 110	Underground Waste Oil Tank No. 2336	Active Underground Storage Tank (2000 gallon) used to store recovered JP-4 fuel for fire training exercises.

TABLE 1
LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) AND AREAS OF CONCERN (AOCs) REQUIRING CORRECTIVE ACTION

SWMU/AOC	DESCRIPTION	COMMENTS
SWMU 88	Former Leaching Field	Leaching field (10,000 SF) that receiv
SWMU 89	Evaporation Pond	Active Concrete impoundment (60 ft by 60 ft) used to evaporate washwater.
SWMU 90	Oil/Water Separator No. 5114	Underground storage tank (100 gallon) used to recover JP-4 fuel.
SWMU 91	Recovered Fuel Tank No. 5114	Active aboveground storage tank (5000 gallon) used to collect recovered JP-4 from SWMU 90.
~~SWMU 92~~	~~Oil/Water Separator No. 5120~~	~~Active underground storage tank (100 gallon) used to recover washdown material.~~
~~SWMU 93~~	~~Oil/Water Separator No. 5121~~	~~Active underground storage tank (100 gallon) used to recover washdown materials.~~
~~SWMU 94~~	~~Oil/Water Separator No. 5144~~	~~Active underground storage tank (100 gallon) used to recover washdown materials.~~
SWMU 95	NE Stormwater Drainage Area	Open field which receives water from oil/water separators (SWMUs 38, 39, & 46) and runoff water from the runways and storm water drains.
SWMU 96	Old Entomology Rinse Area	Inactive open pit (3 ft by 3 ft by 2 ft deep) which received decon rinse waters from pesticide sprayers and containers.
SWMU 97	Concrete Rubble Pile (Landfill 25)	Rubble pile of concrete blocks.
SWMU 98	Sanitary Sewage Line	Active sewer used to collect sanitary and industrial wastewater.
SWMU 101	Wastewater Treatment System -	Two unlined wastewater treatment unit (WWTU) surface impoundments (32 acres).

TABLE 1
LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) AND AREAS OF CONCERN (AOCs) REQUIRING CORRECTIVE ACTION

SWMU/AOC	DESCRIPTION	COMMENTS
	Separator 390	
~~SWMU 74~~	~~Landfill No. 1~~	~~Inactive 4 acre landfill which when in operation, received domestic solid wastes and shop wastes including oils and solvents, paint strippers and thinners, paint, pesticide containers, cans, and drums. Inactive since 1946.~~
SWMU 75	Sanitary Sewage Lift Station Overflow Pit	Unlined surface impoundment (100 ft by 600 ft by 3 ft) and when in use, served to contain sewage overflow.
~~SWMU 76~~	~~Sludge Weathering Pit~~	~~Unlined, shallow surface impoundment (25 ft by 25 ft) used to weather fuel~~
SWMU 77	Civil Engineering Container Storage Area	Contain storage area (100 ft by 200 ft) which was used to store 55-gallon drums; waste materials stored in drums are unknown. Presently Implementing Corrective Measures
SWMU 78	Fire Department Training Area No. 1	Unlined open burning area (100 ft in diameter) used during fire fighting training exercises. Inactive since 1968.
SWMU 79	Underground Tank	Underground storage tank (2000 gallon) used to collect and store recovered JP-4.
SWMU 81	Solvent Disposal Site	Inactive surface impoundment believed to have been used to dispose of TCE.
SWMU 82	Landfill No. 2	Unlined, inactive landfill (4 acres) which received domestic and industrial solid waste, including waste oils and solvents, paints, paint strippers, paint thinners, pesticide containers, cans, and drums.
~~SWMU 83~~	~~Sump~~	~~Concrete sump (7 ft by 8 inches by 5 inches).~~
SWMU 85	Stormwater Collection Point	Playa used as surface impoundment (9 acres) used to receive stormwater runoff and fuel spills.
SWMU 86	Engine Test Cell	Enclosed tank (50 ft by 10 ft by 20 ft tall) used to collect washdown material.
SWMU 87	Former Overflow Pit	Unlined surface impoundment (6-8 ft in diameter) which collected wash water.

TABLE 1
LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) AND AREAS OF CONCERN (AOCs) REQUIRING CORRECTIVE ACTION

SWMU/AOC	DESCRIPTION	COMMENTS
	~~Overflow Capacity Tank~~	~~adjacent UST (SWMU 48a).~~
SWMU 49	Inactive POL Storage Tank No. 4028a	Underground storage tank (20,000 gallon) which held used oil. Inactive since 1985.
SWMU 50	Inactive POL Storage Tank No. 4028b	Underground storage tank (20,000 gallon) which held used oil.
~~SWMU 51~~	~~Oil/Water Separator 375~~	~~Tank of unknown capacity and history.~~
~~SWMU 55~~	~~Lead Acid Battery Accumulation Point~~	~~Storage area for batteries.~~
~~SWMU 57~~	~~Oil/Water Separator 379~~	~~Underground storage tank (5000 gallon) which is used to recover oil from~~
~~SWMU 61~~	~~Oil/Water Separator 5077a~~	~~Underground storage tank (760 gallon) which is used to recover washdown material.~~
~~SWMU 62~~	~~Oil/Water Separator 5077b~~	~~Underground storage tank (760 gallon) which is used to recover washdown material.~~
~~SWMU 63~~	~~Oil/Water Separator 5077c~~	~~Underground storage tank (1,675 gallon) which is used to recover washdown materials.~~
SWMU 70	Oil/Water Separator and Leach Field 326	Underground storage tank (20,000 gallon) which is used to recover oily material prior to discharge to a leaching field.
SWMU 71	Recovered JP-4 Fuel Tank No. 390	Underground storage tank (2000 gallon) which is used to collect recovered JP-4 from SWMU 72.
SWMU 72	Oil/Water	Underground storage tank (2000 gallon) which is used to recover waste JP-4.

TABLE 1
LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) AND AREAS OF CONCERN (AOCs) REQUIRING CORRECTIVE ACTION

SWMU/AOC	DESCRIPTION	COMMENTS
~~SWMU 16~~	~~Oil/Water Separator 680~~	~~Underground storage tank (500 gallon) used to recover washdown from aircraft cleaning operations.~~
SWMU 31	AGE Maintenance Shop Pad	Concrete apron (25 ft by 500 ft) which is exposed to washdown water and spilled oil and lubricants.
~~SWMU 32~~	~~Oil/Water Separator 186 (#1)~~	~~Underground storage tank (600 gallon) used to recover washdown material.~~
~~SWMU 33~~	~~Oil/Water Separator 186 (#2)~~	~~Underground storage tank (600 gallon) used to recover washdown material.~~
SWMU 34	AGE Drainage Ditch	Unlined drainage ditch (12 ft by 1 ft by 1200 ft) which receives runoff from SWMU 31.
SWMU 36	MWR Auto Body Shop	This is a possible disposal pit found near the current MWR Outdoor Recreation Center (Building 214) which was originally the MWR auto hobby shop. This pit could be a remnant of the old Auto Hobby Shop or a disposal site for fluids coming from an aircraft engine maintenance shop in the early 1950s.
~~SWMU 38~~	~~Oil/Water Separator 194~~	~~Underground storage tank (200 gallon) used to recover washdown material.~~
~~SWMU 39~~	~~Oil/Water Separator 195~~	~~Underground storage tank (200 gallon) used to recover washdown material.~~
~~SWMU 46~~	~~Oil/Water Separator 196~~	~~Underground storage tank (200 gallon) used to recover washdown material.~~
~~SWMU 47~~	~~Oil/Water Separator 494~~	~~Underground storage tank (unknown capacity).~~
SWMU 48a	Underground Waste Oil Tank	Underground storage tank (20,000 gallon) which was historically used to store waste oils, spent solvents, paint thinners, recovered fuels, engine oil, PD-680 (Type II), hydraulic fluid and Turco cold stripper. Inactive since 1984.
~~SWMU 48b~~	~~Above Ground~~	~~Aboveground storage tank (2000 gallon) which provided overflow capacity for the~~

ATTACHMENT 1

SOLID WASTE MANAGEMENT UNIT SUMMARY

TABLE 1
LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) AND AREAS OF CONCERN (AOCs) REQUIRING CORRECTIVE ACTION

SWMU/AOC	DESCRIPTION	COMMENTS
~~SWMU 1~~	~~Oil/Water Separator 119~~	~~Underground storage tank (375-gallon) used to recover oily wash generated by aircraft maintenance operations.~~
SWMU 2	Recovered Tank No. 108	Underground storage tank (2000-gallon) used to collect recovered diesel fuel from SWMU 3.
~~SWMU 3~~	~~Oil/Water Separator 108~~	~~Underground storage tank (500 gallon) used to recover diesel fuel from washdown operations.~~
SWMU 4	Recovered Tank No. 121	Underground storage tank (2000 gallon) used to collect recovered diesel fuel from SWMU 5.
~~SWMU 5~~	~~Oil/Water Separator 121~~	~~Underground storage tank (500 gallon) used to recover diesel fuel from washdown operations.~~
SWMU 6	POL Tank No. 129	Underground storage tank (2000 gallon) used to collect recovered diesel fuel form SWMU 7.
~~SWMU 7~~	~~Oil/Water Separator 129~~	~~Underground storage tank (500 gallon) used to recover diesel fuel from washdown operations.~~
~~SWMU 8~~	~~Oil/Water Separator 165~~	~~Underground storage tank (600 gallon) used to recover Mirachem from aircraft cleaning operations.~~
~~SWMU 9~~	~~Aircraft Washrack Drain system~~	~~Concrete washrack used in aircraft cleaning operations.~~
SWMU 10	POL Tank No. 170	Underground storage tank (2000 gallon) used to collect recovered diesel fuel from SWMU 11.
~~SWMU 11~~	~~Oil/Water Separator 170~~	~~Underground storage tank (500 gallon) used to recover diesel fuel from washdown operations.~~

ATTACHMENT

Solid Waste Management Units Proposed for No Further Action (Corrective Action Complete)

	SWMU/AOC ID Number	Site Name	SWMU/AOC Name
1	10-7-A	ST-204	Sediment Trap Bldg. 333,
		ST-205	Oil/Water Separator Bldg. 333
2	10-7-B	ST-206	Oil/Water Separator Bldg. 336
		ST-207	Oil/Water Separator Bldg. 336
		ST-208	Oil/Water Separator Bldg. 336
		ST-209	Catch Basin Bldg. 336
3	10-7-C	ST-212	Oil/Water Separator Bldg. 381
		ST-213	Area Drain Bldg. 381
4	10-7-D	ST-217	Oil/Water Separator Bldg. 481
5	10-7-E	ST-218	Oil/Water Separator Bldg. 482
6	10-7-F	ST-222	Oil/Water Separator Bldg. 1031
		ST-223	Sewage Ejector Unit Bldg. 1031
		ST-224	Holding Tank Bldg. 101
		ST-225	Oil/Water Separator Bldg. 1037
7	10-7-G	ST-226	Holding Tank Bldg. 1037
		ST-227	Area Drain Bldg. 1040
8	10-7-H	ST-228	Sewage Ejector Unit Bldg. 1043
9	10-7-I	ST-229	Oil/Water Separator Bldg. 1046
10	10-7-J	ST-230	Holding Tank Bldg. 1046
		ST-231	Sewage Ejector Unit Bldg. 1046
		ST-232	Area Drain Bldg. 1046
		ST-233	Oil/Water Separator Bldg. 1051
11	10-7-K	ST-234	Oil/Water Separator Bldg. 1051
		ST-235	Oil/Water Separator Bldg. 1051
		ST-236	Area Drain Bldg. 1056
		ST-237	Oil/Water Separator Bldg. 1056
12	10-7-L	ST-238	Oil/Water Separator Bldg. 1056
		ST-239	Holding Tank Bldg. 1058
13	10-7-M	ST-240	Oil/Water Separator Bldg. 1061
14	10-7-N	ST-241	Oil/Water Separator Bldg. 1063
15	10-7-O	ST-244	Oil/Water Separator Bldg. 1064
		ST-245	Holding Tank Bldg. 1064
16	10-7-P	ST-246	Oil/Water Separator Bldg. 1070
17	10-7-Q	ST-254	Oil/Water Separator Bldg. 20365
18	10-7-R	ST-255	Oil/Water Separator Bldg. 20375
		ST-256	Oil/Water Separator Bldg. 20375
		ST-257	Oil/Water Separator Bldg. 20375
19	10-7-S	ST-259	Oil/Water Separator Bldg. 20422
20	10-7-T	ST-263	Oil/Water Separator Bldg. 23226
21	10-7-U	ST-264	Oil/Water Separator Bldg. 30142

FACT SHEET / STATEMENT OF BASIS

Cannon Air Force Base

Request for No Further Action Status for Thirty-two Solid Waste Management Units and Areas of Concern

RCRA Permit No. NM7572124454

December 28, 2005

FACT SHEET / STATEMENT OF BASIS

Proposals For No Further Action for 32 Sites at Cannon AFB

RCRA Permit No. NM7572124454

Under authority of the New Mexico Hazardous Waste Act (Section 74-4-1 et seq., NMSA 1978, as amended, 1992) and the New Mexico Hazardous Waste Management Regulations (20.4.1 NMAC), the New Mexico Environment Department (NMED) intends, pending public input, to approve a October 2004 permit modification request received from the U.S. Department of the Air Force, Cannon Air Force Base (CAFB) for no further action (NFA) status for twenty-seven (27) Solid Waste Management Units (SWMU) and five (5) Areas of Concern (AOC) listed in CAFB's Resource Conservation and Recovery Act (RCRA) Part B Permit pursuant to 40 CFR 270.42 (c) of the Hazardous and Solid Waste Amendments of 1984.

If approved, the proposed modification would grant NFA status for twenty-seven (27) SWMUs and five (5) AOCs. Table 1 (List of SWMUs and AOCs Requiring Corrective Action) of Attachment 1 of CAFB's RCRA Permit lists SWMUs and AOCs at the facility where corrective action may be necessary to characterize and/or remediated past releases of hazardous wastes or hazardous constituents. NMED will initiate a permit modification to adjust Attachment 1 of CAFB's permit to include three corrective action tables. Attachment 1 of CAFB's Permit will be modified to include Table 1 – Corrective Action Required, Table 2 - Corrective Action Complete Without Controls, and Table 3 – Corrective Action Complete With Controls. If NFA status is approved for SWMUs and/or AOCs where all constituents detected in the soil were below residential NMSSLs, then those SWMUs and AOCs will be transferred to Table 2 – Corrective Action Complete Without Controls. If NFA status is approved for SWMUs and/or AOCs where one or more constituents detected in the soil were above residential NMSSLs but below industrial/occupational NMSSLs, then those SWMUs and AOCs will be transferred to Table 3 – Corrective Action Complete With Controls. Table 1 – Corrective Action Required will contain the remainder of the SWMUs and AOCs that still require site investigations, clean up activities, or monitoring.

A. Facility Description

CAFB is located in Curry County, New Mexico, approximately 7 miles west of the City of Clovis. The Base is situated on approximately 4,320 acres of land. CAFB is situated in a nearly flat plain sloping gently (10 to 15 feet per mile) to the east and southeast. Elevations in the vicinity of CAFB range from 4,250 feet to 4,350 feet above mean sea level (msl).

CAFB dates to 1929, when Portair Field was established on the site as a civilian passenger terminal for early commercial transcontinental flights. In 1942 the Army Air Corps took control of the civilian airfield and it became known as the Clovis Army Air Base. In early 1945, the Base was renamed Clovis Army Air Field, where flying, bombing, and gunnery classes

continued until the Base was de-activated in May, 1947. The Base was reassigned to the Tactical Air Command and formally reactivated as Clovis Air Force Base in 1951 and renamed as Cannon Air Force Base in 1957. Several Fighter-Bomber Groups and Tactical Fighter Wings have occupied the Base since 1951.

The Permittee is located at the following address: Commander 27th Fighter Wing, 100 D.L. Ingram Boulevard, Cannon Air Force Base, New Mexico 88103-5214. The Permittee's primary contact for this action is Colonel John D. Posner.

B. History of Investigation

The U.S. Environmental Protection Agency (EPA) issued the Hazardous and Solid Waste Amendments (HSWA) Module IV to the RCRA Operating Permit effective December 17, 1989. The HSWA module required investigation of approximately 130 environmental restoration sites, referred to as SWMUs and AOCs in the permit. In January 1996, NMED received authorization for corrective action under the HSWA and became the administrative authority for this action.

Section H below, briefly describes the location, history, evaluation of relevant information, and the bases for determination for each of the SWMUs and AOCs proposed for NFA. More detailed descriptions of the particulars for each SWMU and AOC can be found in the original NFA proposal and accompanying references constituting the Administrative Record.

This Statement of Basis describes 34 of the SWMUs and AOCs that were identified as "potentially appropriate for NFA." In summary, if CAFB's request for a permit modification is approved by NMED, these 34 units will be listed in Table 2 of Attachment 1 of CAFB's permit as being approved.

C. Administrative Record

The Administrative Record for this proposed action consists of the CAFB Permit Modification Request, the Fact Sheet / Statement of Basis, the Public Notice, and the referenced supporting documentation for each site. References for this Statement of Basis are listed in Section I. The complete Administrative Record may be reviewed at the following location during the public comment period:

NMED – Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
(505) 428-2500
Monday - Friday from 8:00 a.m. to 5:00 p.m.

The Fact Sheet / Statement of Basis, the Public Notice, and CAFB's 2003 Permit that contains Tables 1 and 2 in Attachment 1 may be reviewed at the following locations during the public comment period:

NMED – Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Phone 505-428-2500
Monday - Friday from 8:00 a.m. to 5:00 p.m.

Clovis-Carver Public Library
701 North Main Street
Clovis, New Mexico 88101
Phone 505-769-7840
library@cityofclovis.org

D. NFA Criteria

During investigation of SWMUs and AOCs at CAFB, it was determined that RCRA solid or hazardous wastes and/or constituents or other Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) hazardous substances were never managed (generated, treated, stored, or disposed of) at some sites identified as SWMUs or AOCs. Other SWMUs and AOCs could not be located, did not exist, were duplicates of other SWMUs or AOCs, or were included in investigations of other SWMUs. Additionally, some SWMUs and AOCs never had a release to the environment and future releases were determined to be unlikely. Finally, some SWMUs and AOCs were characterized and remediated in accordance with current applicable state and/or federal regulations, and confirmatory sampling data indicate that the remaining contaminant concentrations do not pose unacceptable levels of risk to human health or the environment under current and projected future land uses.

The criteria to propose a SWMU for NFA are:

1. The SWMU cannot be located, does not exist, or is a duplicate SWMU.

2. The SWMU/AOC has never been used for the management (that is, generation, treatment, storage, or disposal) of RCRA solid or hazardous wastes and/or constituents or other CERCLA hazardous substances.

3. No release to the environment has occurred or is likely to occur in the future from the SWMU.

4. There was a release from the SWMU to the environment but the site was characterized and/or remediated under another authority that adequately addressed corrective action, and documentation such as a closure letter is available.

5. The SWMU has been characterized or remediated in accordance with current applicable state and/or federal regulations, and the available data indicate that contaminants pose an acceptable level of risk under current and projected future land use.

E. Public Participation

A public meeting arranged by CAFB was held on April 28, 2005 in Portales in accordance with 20.4.1.901 NMAC. Subsequent to the meeting, no written comments were submitted to the NMED.

NMED issued a public notice on **December 28, 2005,** to announce the beginning of a 45-day comment period that will end at **5:00 p.m., Monday, February 13, 2006**. Any person who wishes to comment on this action or request a public hearing should submit written or electronic mail (e-mail) comment(s) with the commenter's name and address to the respective address below. Only comments and/or requests received on or before **5:00 p.m., February 13, 2006** will be considered.

John E. Kieling, Program Manager
Hazardous Waste Bureau - New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303
or e-mail: john.kieling@state.nm.us
RE: CAFB – NFAs (December 28, 2005)

Written comments must be based on the administrative record. Documents in the administrative record need not be re-submitted if expressly referenced by the commenter. Requests for a public hearing shall provide: (1) a clear and concise factual statement of the nature and scope of the interest of the person requesting the hearing; (2) the name and address of all persons whom the requestor represents; (3) a statement of any objections to the proposed action, including specific references; and (4) a statement of the issues which such persons proposes to raise for consideration at the hearing. Written comment and requests for Public Hearing must be filed with Mr. John Kieling on or before 5:00 p.m., **February 13, 2006** at NMED Hazardous Waste Bureau, 2905 Rodeo Park Drive East, Building 1, Santa Fe, New Mexico, 87505-6303. The NMED will provide a thirty (30) day notice of a public hearing, if scheduled.

F. Next Steps

The NMED will notify CAFB and each person on the public comment mailing list of the final decision. The final decision will become effective 30 days after service of the decision unless a later date is specified or unless review is required under New Mexico Hazardous Waste Regulations, 20 New Mexico Administrative Code (NMAC) 4.1. Subpart IX.

G. Contact Person for Additional Information

For additional information, contact the following individual:

Mr. John Kieling
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1

TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS

ACM	Asbestos-containing Material
AFB	Air Force Base
AOC	Area of Concern
AST	Aboveground Storage Tank
bgs	below ground surface
BRA	Baseline Risk Assessment
BTEX	benzene, toluene, ethylbenzene, and xylenes
CAFB	Cannon Air Force Base
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CMS	Corrective Measure Study
COC	Chemical of Concern
COPCs	Contaminants of Potential Concern
CRQL	Contract Required Quantitation Limit
DDE	dichlorodiphenyldichloroethylene
DDT	dichlorodiphenyltrichloroethane
DPDO	Defense Property Disposal Office
DRO	Diesel-range Organics
ECP	Environmental Compliance Program
EOD	Explosives Ordnance Disposal
EP	Extraction Procedure
EPA	U.S. Environmental Protection Agency
ER	Environmental Restoration
ERP	Environmental Restoration Program
ft	foot/feet
GPS	Global Positioning System
GRO	Gasoline-range Organics
GS	Gas Chromatograph
GWQB	Ground Water Quality Bureau
HELP	Hydrologic Evaluation of Landfill Performance (model)
HI	Hazard Index
HSWA	Hazardous and Solid Waste Amendments
HWB	Hazardous Waste Bureau
IRP	Installation Restoration Program

LDL	Laboratory Detection Limit
MCL	Maximum Contaminant Limit
MCPP	2-(2-methyl-4-chlorophenoxy) propionic acid
mgd	million gallons per day
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MOGAS	Motor Gasoline
MSSL	Media-Specific Screening Level
MULTIMED	Multimedia Exposure Assessment Model
NFA	No Further Action
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMEID	New Mexico Environmental Improvement Division
NMSSLs	New Mexico Soil Screening Levels
NRC	Nuclear Regulatory Commission
PAH	Polyaromatic Hydrocarbons
PCB	Polychlorinated Biphenyl
PCE	tetrachlorethene
PID	Photoionization Detector
PLM	Polarized Light Microscopy
POL	Petroleum, Oils, and Lubricants
PVC	Polyvinyl Chloride
OVA	Organic Vapor Analyzer
OWS	Oil Water Separator
QAPP	Quality Assurance Project Plan
RBC	Risk-based Concentration
RBCA	Risk-based Corrective Action
RCRA	Resource Conservation and Recovery Act
RCRA Metals	arsenic, barium, cadmium, chromium, mercury, lead, selenium, and silver
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RI	Remedial Investigation
RL	Reporting Limit
RME	Reasonable Maximum Exposure
RSI	Request for Supplemental Information
SI	Site Inspection
SSL	Soil Screening Level
SSTL	Site-specific Target Level

SVOC	Semivolatile Organic Compound
SWMU	Solid Waste Management Unit
TAL	Target Analyte List
TCE	trichloroethylene
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
TOC	Total Organic Carbon
TPH	Total Petroleum Hydrocarbons
TRPH	Total Recoverable Petroleum Hydrocarbons
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
USACE	Unites States Army Corps of Engineers
USAF	U.S. Air Force
UST	Underground Storage Tank
UTL	Upper Tolerance Limit
VCM	Voluntary Corrective Measure
VOC	Volatile Organic Compound
W-C	Woodward-Clyde
WQCC	New Mexico Water Quality Control Commission
WWTP	Wastewater Treatment Plan

Santa Fe, NM 87505-6303
Telephone: (505) 428-2500
Fax: (505) 428-2567
E-mail: john.kieling@state.nm.us

H. Description of SWMUs Proposed for NFA

1. SWMU 1, Oil/Water Separator No. 119

Location

SWMU 1, OWS No. 119, was located at the southwest corner of Building 119 at Cannon AFB. The OWS measured approximately 12 feet by 6 feet and extended approximately 10 feet below the paved surface.

History/Current and Anticipated Future Land Use

SWMU 1 was active from approximately 1963 until the unit was partially removed in 1996. The OWS was an underground concrete unit, which consisted of two compartments, a 700-gallon main compartment and a 260-gallon oil storage compartment. The unit reportedly received waste wash water generated from aircraft maintenance operations in Building 119, an aircraft maintenance hangar. Recovered oils were stored in the 260-gallon oil storage compartment and wastewaters were discharged to storm water drainage. All wash water is now discharged to the sanitary sewer system and is treated at the Cannon AFB wastewater treatment plant (WWTP). The immediate area above the unit was paved with a layer of asphalt approximately 0.5 feet thick.

The current land use of SWMU 1 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During implementation of an RFI that included this site, three borings were drilled to depths of 10 feet in the area of SWMU 1. Soil samples were collected at the surface and from depths of 2.5, 5 and 10 feet to characterize the distribution of contaminants. All soil samples were analyzed for VOCs, BTEX, metals, and TCL constituents

Toluene, chromium, and silver were detected at concentrations below residential NMSSLs in the surface soil samples collected from the three borings. Mercury, chromium, and acetone were detected in all of the subsurface soil samples at concentrations below residential NMSSLs.

The Risk Assessment portion of the RFI report concluded that the detected concentrations of these constituents were all within or below the acceptable excess carcinogenic and noncarcinogenic risk ranges. Based on the conclusions reached in the Risk Assessment for SWMU 1, the RFI recommended that an integrity test be performed on the OWS at this SWMU. As long as the unit passed the integrity test, NFA was recommended.

A Corrective Measure Completion Report documented the partial removal of SWMU 1. The OWS at SWMU 1 was pumped dry and cleaned. It was determined that the unit would only be partially removed, due to the presence of an old high-pressure water line adjacent to the unit. The top 2 feet of the OWS were removed, and the unit's inlet and discharge pipes were disconnected and capped. The partial removal of the OWS effectively rendered the RFI's recommendation for an integrity test moot.

After partial removal of the OWS, one soil sample was collected approximately 2 feet beneath both the inlet and discharge pipes, one soil sample was collected from both the east and the west walls of the excavation, and two soil samples were collected from borings drilled through the bottom of the unit each at an approximate depth of 11 feet. These soil samples were analyzed in the field for the presence of TPH and total BTEX using immunoassay Method 4030. Duplicates of two field soil samples were submitted for laboratory analysis to correlate field findings with laboratory findings. Field analysis indicated that TPH in all soil samples was below 100 ppm and total BTEX was below 50 ppm. The results for the duplicate samples analyzed in the laboratory confirmed field findings that TPH values were significantly below NMED standards. BTEX constituents were not detected in the duplicate samples.

A seventh, confirmatory sample was also collected from the bottom of the excavation, at approximately 11 feet. This soil sample was analyzed for VOCs, SVOCs, metals, TPH and BTEX. Concentrations of barium, chromium, lead, and di-n-butylpthalate detected in the soil at SWMU 1 were below residential NMSSLs. The report concluded that no unacceptable human health risks due to chemical releases were expected at this SWMU. Based on this, the Corrective Measure Completion Report recommended NFA for SWMU 1.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than NMSSLs beneath SWMU 1.

Basis of Determination

SWMU 1 has been determined to be suitable for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use. The area above SWMU 1 has been covered with a layer of asphalt, reducing potential exposure to human and ecological receptors.

2. SWMU 3, Oil/Water Separator No. 108

Location

SWMU 3, OWS No. 108, was located to the west of former Hangar 125 at Cannon AFB. The precise location of the unit is unknown, but it is believed to have been located approximately 8 feet west and 96 feet south of the northwest corner of what is now Building 108.

History/Current and Anticipated Future Land Use

SWMU 3 was active until approximately 1990 when the unit was removed during the demolition of Hangar 125. The size and construction of the OWS is unknown. In fact, it is unknown whether this unit was an OWS or a grease trap. However, because the unit was referred to as an OWS in previous reports, it will also be referred to as an OWS herein. The unit reportedly received wastewater from Building 102 and waste wash water generated from aircraft maintenance operations in Hangar 121. Wastewaters from the unit were discharged to a sanitary sewer line. The OWS at SWMU 3 has been removed and no longer receives wastewaters. The suspected former location of this OWS is currently covered with asphalt.

The current land use of SWMU 3 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During the Phase I RFI that addressed Appendix II sites, three borings were drilled to depths of 10 feet in the area of SWMU 3. Soil samples were collected from each boring at the ground surface and from depths of 2.5, 5, and 10 feet. All soil samples were analyzed for VOCs, SVOCs, and metals.

Toluene, barium, chromium, and silver were detected at concentrations below residential NMSSLs in surface soils. Acetone, barium, mercury, and silver were detected in subsurface soil samples at concentrations below residential NMSSLs.

The Risk Assessment portion of the Phase I RFI report concluded that the detected concentrations of these chemicals were all within or below the acceptable excess carcinogenic and noncarcinogenic risk ranges. Based on the conclusions reached in the Risk Assessment for SWMU 3, the Phase I RFI recommended NFA for SWMU 3.

A Phase II RFI addressing Appendix II sites was also completed to evaluate whether a release had occurred from SWMU 3 that could pose a significant risk to human health or the environment. In addition, the Phase II included a risk screening to verify whether the recommendation for NFA based on the Phase I RFI was appropriate for SWMU 3.

Three soil borings were drilled to depths of approximately 20 feet in the vicinity of SWMU 3. The borings were drilled in a triangular pattern with each boring located approximately 15 feet from the presumed location of the SWMU. Surface soil samples were collected from all three borings. Subsurface soil samples were also collected from each boring at the 3- to 5-foot, the

8- to 10-foot, the 13- to 15-foot, and the 18- to 20-foot depth intervals. Soil samples submitted to the laboratory were analyzed for VOCs, SVOCs, TAL metals, and TRPH.

Organic compounds and metals detected in surface and subsurface soil samples were all significantly below residential NMSSLs, with the exception of arsenic. Arsenic was detected above residential NMSSLs in one surface soil sample; however, the concentration did not exceed industrial/occupation NMSSLs. Based on this investigation, the Phase II RFI recommended NFA for SWMU 3.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater that applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 3 has been determined to be suitable for a NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use. The area above SWMU 3 has been paved, further reducing exposure to human and ecological receptors.

3. SWMU 5, Oil/Water Separator No. 121

Location

SWMU 5, OWS No. 121, was formerly located west of former Hangar 121 at Cannon AFB. It is believed to have been located approximately 140 feet southwest of Building 123 and approximately 135 feet southeast of Building 112.

History/Current and Anticipated Future Land Use

SWMU 5 was active until approximately 1990 when the unit was removed during the demolition of Hangar 121. The size and construction of the OWS is unknown. In fact, it is unknown whether this unit was an OWS or a grease trap. However, because the unit was referred to as an OWS in previous reports, it will also be referred to as an OWS herein. The unit reportedly received wastewater from Buildings 102 and 125 and waste wash water generated from aircraft maintenance operations in Hangar 121. Wastewaters from the unit were discharged to a sanitary sewer line. The OWS at SWMU 5 has been removed and no longer receives wastewaters. The former location of this OWS is currently covered with asphalt.

The current land use of SWMU 5 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During the Phase I RFI that addressed Appendix II sites, three borings were drilled to depths of 10 feet in the area of SWMU 5. Soil samples were collected at the ground surface and from

depths of 2.5, 5, and 10 feet. All soil samples were analyzed for metals, VOCs, BTEX, and TCL constituents.

Organic compounds were not detected in the surface soil samples collected from the three borings. Barium was detected in surface soils at concentrations significantly below residential NMSSLs. Acetone, barium, and mercury were detected in subsurface soil samples at concentrations below residential NMSSLs.

The Risk Assessment portion of the Phase I RFI report concluded that the detected concentrations of these constituents were all within or below the acceptable excess carcinogenic and noncarcinogenic risk ranges. Based on the conclusions reached in the Risk Assessment for SWMU 5, the Phase I RFI recommended NFA for this SWMU.

During a Phase II RFI addressing Appendix II sites, three soil borings were drilled to depths of approximately 20 feet and a fourth boring was drilled to a depth of approximately 34.5 feet in the vicinity of SWMU 5. Surface soil samples were collected from the three 20-foot borings. Subsurface soil samples were also collected from each of the three 20-foot borings at the 3- to 5-foot, the 8- to 10-foot, the 13- to 15-foot, and the 18- to 20-foot depth intervals. Subsurface soil samples were collected from the 34.5-foot boring at the 28- to 29-foot and the 33- to 34.5-foot depth intervals. Soil samples submitted to the laboratory were analyzed for VOCs, SVOCs, metals, and TRPH

Acetone, methylene chloride, toluene, arsenic, barium, chromium, and lead were detected in surface and subsurface soil samples. The analysis of soils from SWMU 5 for the Phase II RFI of the Appendix II sites did not detect any constituents at concentrations above residential NMSSLs and/or EPA Region 6 Human Health Screening Levels. Based on this, the Phase II RFI recommended NFA for SWMU 5.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 5 has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use. The area above SWMU 5 has been covered with a layer of asphalt, reducing exposure to human and ecological receptors.

4. <u>SWMU 7, Oil/Water Separator No. 129</u>

Location

SWMU 7, OWS No. 129 and a grease or sand trap, that had been misidentified as an OWS, was located adjacent to the northwest side of Building 129, south of Building 116. For the purposes

of this report, this unit will be referenced herein as SWMU 7, an OWS. The OWS was an underground concrete unit that consisted of one compartment measuring approximately 5 feet by 7 feet that extended approximately 5.5 feet below the paved surface.

History/Current and Anticipated Land Use

SWMU 7 was active from approximately 1943 until the unit was removed in 1996. The unit reportedly received waste wash water generated from aircraft maintenance operations in Building 119, an aircraft maintenance hangar. Wastewaters from the unit were discharged to a storm sewer line. The OWS has been removed and no longer receives wastewater. The immediate area above the unit has been paved with a layer of asphalt approximately 0.5 feet thick.

The current land use of SWMU 7 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During the RFI that addressed Appendix II sites, three soil borings were drilled to depths of 10 feet in the area of SWMU 7. Soil samples were collected at the surface and from depths of 2.5, 5, and 10 feet to characterize the distribution of potential contaminants. Soil samples were analyzed for VOCs, BTEX, metals, and TCL constituents.

Acetone, toluene, xylene, 1,1,1-trichloroethane, arsenic, chromium, and mercury were detected in surface soils at concentrations below residential NMSSLs. Acetone, toluene, xylenes, chromium, and mercury were also detected in subsurface soils at concentrations below residential NMSSLs. Arsenic was detected in one subsurface soil sample above residential NMSSLs; however the detected concentration did not exceed industrial/occupational NMSSLs.

The Risk Assessment portion of the RFI report concluded that detected concentrations of these constituents were all within or below the acceptable excess carcinogenic and noncarcinogenic risk ranges. Based on the conclusions reached in the Risk Assessment for SWMU 7, the RFI recommended that an integrity test be performed on the OWS at this SWMU.

A Corrective Measure Completion Report documented the removal of the OWS at SWMU 7. The OWS was pumped dry and cleaned. Then the unit was excavated by hand, due to the proximity of Building 116, a high-voltage electrical facility. Neither stained soil nor fuel odors were observed during the excavation activities. The removal of the OWS effectively rendered the RFI's recommendation for an integrity test moot.

One soil sample was then collected from each of the excavation's four walls, and two soil samples were collected from the bottom of the excavation, each at an approximate depth of 8 feet. These soil samples were analyzed in the field for the presence of TPH and total BTEX using immunoassay Method 4030. Duplicates of two field soil samples were submitted for laboratory analysis to correlate field findings with laboratory findings. Field analysis indicated that TPH in all soil samples was below 20 ppm and total BTEX was below 10 ppm. The results for the duplicate samples analyzed in the laboratory confirmed field analysis that TPH values

were significantly below NMED standards. BTEX constituents were not detected in either of the duplicate soil samples.

A seventh, confirmatory sample was collected from the center of the base of the excavation, at a depth of approximately 8 feet. This soil sample was taken to the laboratory and analyzed for VOCs, SVOCs, metals, and TPH. All constituents detected in the soil at SWMU 7 were below residential NMSSLs. The report concluded that no unacceptable human health risks due to chemical releases were expected at this SWMU. Based on this, the Corrective Measure Completion Report recommended NFA for SWMU 7.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 7 was determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected land use. The area of SWMU 7 has been covered with a layer of asphalt, further reducing exposure to human and ecological receptors.

5. SWMU 8, Oil/Water Separator No. 165

Location

SWMU 8, OWS No. 165, was located to the east of Facility 165 at Cannon AFB. The OWS measured approximately 21 feet by 12 feet and extended approximately 10 feet below the surface. The top of the unit was approximately 1 foot above the surrounding ground surface.

History/Current and Anticipated Land Use

SWMU 8 was active from approximately 1963 until the unit was partially removed in 1996. The OWS was an underground concrete unit that consisted of three compartments with a 4,500-gallon main compartment and a 710-gallon oil storage compartment. The unit reportedly received waste wash water generated from an aircraft washrack. Recovered oils were stored in the 710-gallon oil storage compartment and wastewaters were discharged to a sanitary sewer line. The OWS at SWMU 8 no longer receives waste wash water.

The current land use of SWMU 8 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During an RFI that addressed Appendix II sites, three borings were drilled to depths of 10 feet in the area of SWMU 8. Soil samples were collected at the surface and from depths of 2.5, 5 and

10 feet to characterize the distribution of potential contaminants. Soil samples were analyzed for VOCs, BTEX, metals, and TCL constituents.

No constituents were detected in the surface soil samples above residential NMSSLs. Xylene, barium, and chromium were detected in subsurface soils at concentrations significantly below residential NMSSLs.

The Risk Assessment portion of the RFI report concluded that the detected concentrations of these constituents were all within or below the acceptable excess carcinogenic and noncarcinogenic risk ranges. Based on the conclusions reached in the Risk Assessment for SWMU 8, the RFI recommended that an integrity test be performed on the OWS at this SWMU.

A Corrective Measure Completion Report documented the partial removal of SWMU 8. The OWS at SWMU 8 was pumped dry and cleaned. It was determined that the unit would only be partially removed, due to its proximity to the concrete washrack slab. All of the OWS, except the concrete base, was removed, and the inlet and discharge pipes leading to and from the unit were disconnected and capped. The partial removal of the OWS effectively rendered the RFI's recommendation for an integrity test moot.

A soil sample was collected from soils located beneath both the inlet and discharge pipes. One soil sample was also collected from both the east and the west walls of the excavation. Two soil samples were collected from borings drilled through the bottom of the unit each at an approximate depth of 12 feet. These soil samples were analyzed in the field for the presence of TPH and total BTEX using immunoassay Method 4030. Duplicates of two field soil samples were submitted for laboratory analysis to correlate field test results with laboratory findings. Field analysis indicated that TPH in all soil samples was below 20 ppm and total BTEX was below 10 ppm. The results for the duplicate samples analyzed in the laboratory confirmed field analyses that TPH concentrations were significantly below NMED standards. BTEX constituents were not detected in either of the duplicate soil samples.

A seventh, confirmatory sample was also collected from the bottom of the excavation at approximately 12 feet bgs. This soil sample was submitted to the laboratory and analyzed for VOCs, SVOCs, metals, BTEX, and TPH. Barium, chromium, and lead were detected at concentrations that did not exceed residential NMSSLs. Di-n-butylpthalate was detected in the confirmatory soil sample at concentrations below residential NMSSLs and was also detected in the laboratory method blank. The report concluded that no unacceptable human health risks due to chemical releases were expected at this SWMU. Based on this, the Corrective Measure Completion Report recommended NFA for SWMU 8.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 8 has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use.

6. SWMU 9, Aircraft Washrack Drain System

Location

SWMU 9, an Aircraft Washrack Drain System is located north of the flightline and southwest of Building 170 at Cannon AFB. SWMU 9 measured approximately 5 feet by 4 feet and extended approximately 5 feet below the paved surface.

History/Current and Anticipated Future Land Use

SWMU 9 was active from approximately 1966 until the unit was removed in 1996. SWMU 9 was a drain/sandtrap located in the center of a concrete washrack pad used to clean aircrafts. The washrack pad sloped to SWMU 9, which discharged to OWS No. 165. The unit reportedly received waste wash water generated from aircraft cleaning operations at the washrack. Wastewaters from the unit were discharged to a sanitary sewer line. The Aircraft Washrack Drain System has been removed and no longer receives waste wash water.

The current land use of SWMU 9 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During the RFI addressing Appendix II sites, four borings were drilled to depths of 20 feet in the area of SWMU 9. Soil samples were collected at the surface and from depths of, 5, 10, 15 and 20 feet to characterize the distribution of potential contaminants. Field screening of soils using a PID detected organic vapors at concentrations as high as 480 ppm during this investigation, indicating the presence of contamination in all four borings. Soil samples were analyzed in the laboratory for VOCs, SVOCs, and metals.

Acetone, tetrachloroethene, toluene, xylenes, barium, and chromium were detected in surface soils at concentrations considerably below current residential NMSSLs. Acetone, barium, and chromium were detected in subsurface soils at concentrations below residential NMSSLs. The Risk Assessment portion of the RFI report concluded that the detected concentrations of these constituents were all within or below the acceptable excess carcinogenic and noncarcinogenic risk ranges. An Ecological Risk Assessment was also included in the RFI for SWMU 9. The assessment determined that the COCs did not pose an unacceptable level of risk to ecological receptors. Based on the conclusions reached in the Risk Assessment and the Ecological Risk Assessment, the RFI recommended NFA for SWMU 9.

A Corrective Measure Completion Report documented the removal of the Drain System at SWMU 9. The unit was pumped dry and cleaned in 1996. Two feet of soil surrounding the unit were excavated and the drain system was removed from the excavation in pieces. Stained soil and fuel odors were observed during the excavation activities in the area of the 8-inch pipe that connected SWMU 9 to SWMU 8.

After soil removal, one soil sample was then collected from each of the excavation's four walls, and two soil samples were collected from the bottom of the excavation, each at an approximate depth of 8 feet. Two additional samples were collected from soils located from the sand trap outlet areas, each at an approximate depth of 4 feet. These soil samples were analyzed in the field for the presence of TPH and total BTEX using immunoassay Method 4030. Duplicates of two field soil samples were submitted for laboratory analysis to correlate field test results with laboratory findings. Field analysis indicated that TPH in all soil samples was below 20 ppm and total BTEX was below 10 ppm. The results for the duplicate samples analyzed in the laboratory confirmed field analyses that neither TPH nor BTEX contamination was present above detection limits at this SWMU.

A ninth, confirmatory sample was collected from the center of the excavation's bottom. The soil sample was submitted to the laboratory and analyzed for VOCs, SVOCs, metals, and TPH. Di-n-butylpthalate, barium, chromium, and selenium were detected in the soil at SWMU 9, but at concentrations below residential NMSSLs. The report concluded that there were no unacceptable human health risks due to chemical releases at this SWMU and recommended NFA for SWMU 9.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 9 has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected land use.

7. SWMU 11, Oil/Water Separator No. 170

Location

SWMU 11, OWS No. 170, was located to the west of Building 170. The OWS measured approximately 5 feet by 7 feet and extended approximately 5.5 feet below the paved surface.

History/Current and Anticipated Future Land Use

SWMU 11 was active from approximately 1963 until approximately 1989. The OWS was an underground concrete unit consisting of three compartments. The unit reportedly received

effluent from the drains in Building 170, an aircraft maintenance hangar. Wastewaters from the unit discharged to a sanitary sewer line. The OWS at SWMU 11 was removed in 1996 and no longer receives waste wash water. The immediate area above the unit was paved with a layer of asphalt approximately 0.5 feet thick.

The current land use of SWMU 11 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During an RFI that addressed Appendix II sites, three borings were drilled to depths of 10 feet in the area of the OWS unit. Soil samples were collected at the surface and from depths of 2.5, 5 and 10 feet to characterize the distribution of potential contaminants. The soil samples were sampled for VOCs, metals, BTEX, and TCL constituents.

Methylene chloride, and toluene were detected in surface soils at concentrations significantly below residential NMSSLs. Methylene chloride and mercury were detected in subsurface soil samples at concentrations below residential NMSSLs. The Risk Assessment portion of the RFI report concluded that the detected concentrations of these constituents were all within or below the acceptable excess carcinogenic and noncarcinogenic risk ranges. Based on the conclusions reached in the Risk Assessment for SWMU 11, the RFI recommended that an integrity test be performed on the OWS at this SWMU.

The Corrective Measure Completion Report documented the removal of the OWS at SWMU 11. The OWS was pumped dry and cleaned. The unit was then excavated routinely and without incident. No staining was observed on the exterior walls of the unit during the excavation activities. The removal of the OWS effectively rendered the RFI's recommendation for an integrity test moot.

One soil sample was then collected from each of the excavation's four walls, and two soil samples were collected from the bottom of the excavation, each at an approximate depth of 8 to 9 feet. These soil samples were analyzed in the field for the presence of TPH and total BTEX using immunoassay Method 4030. Duplicates of two field soil samples were submitted for laboratory analysis to correlate field results with laboratory findings. Field analysis indicated that TPH in all soil samples was below 20 ppm and total BTEX was below 50 ppm, the method detection limits. The results for the duplicate samples analyzed in the laboratory confirmed field analyses that TPH values were significantly below NMED standards. BTEX constituents were not detected in either of the duplicate soil samples.

A seventh, confirmatory sample was collected from the center of the excavation's bottom at approximately 9 feet of depth and sent for laboratory analysis. This soil sample was submitted to the laboratory and analyzed for VOCs, SVOCs, metals, and TPH. Barium, chromium, lead, and benzene were detected in the confirmatory soil sample at SWMU 11 at concentrations less than residential NMSSLs. The Corrective Measure Completion Report concluded that no chemical releases posing an unacceptable human health risk for any potential exposure pathway had occurred at this SWMU. Therefore, NFA was recommended for SWMU 11.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrated that contaminants were not present at concentrations greater than applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 11 has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use. The surface above SWMU 11 has been paved, reducing exposure to human and ecological receptors.

8. SWMU 16, Oil Water Separator No. 680

Location

SWMU 16, OWS No. 680, was formerly located near the southwest of Building 680 at Cannon AFB. The separator unit was replaced with a new OWS located approximately 15 feet east of SWMU 16.

History/Current and Anticipated Future Land Use

SWMU 16 was active from approximately 1965 until approximately 1991 when the unit was removed during building renovations. The concrete OWS was a three-compartment unit with a 584-gallon main compartment and a 140-gallon oil storage compartment. The unit reportedly received wastewater generated from aircraft washing and maintenance operations. The OWS at SWMU 16 has been removed. The site of the former OWS is presently located inside a garage and is covered with concrete.

The current land use at the location of SWMU 16 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During a Phase I RFI that addressed Appendix II sites, three borings were drilled to depths of 10 feet in the area of the former OWS unit. Soil samples were collected at the surface and from depths of 2.5, 5, and 10 feet to characterize the distribution of potential contaminants. Soil samples were analyzed for TCL constituents, VOCs, BTEX, and metals.

Nothing was detected in the surface soil samples collected from the three borings. Acetone, mercury, and lead were detected in subsurface soils at concentrations considerably below residential NMSSLs. The Risk Assessment portion of the Phase I RFI report concluded that the detected concentrations of these constituents were all within or below the acceptable risk ranges. Based on the conclusions reached in the Risk Assessment for SWMU 16, the Phase I RFI recommended NFA for this SWMU.

A Phase II RFI was planned for SWMU 16, but was not conducted because of the presence of the garage and numerous subsurface utilities in the area of the former location of this SWMU.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentration greater than applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 16 has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use. The site of the former OWS is presently located inside a garage and the area is covered with concrete, reducing exposure to human and ecological receptors.

9. SWMU 32A, Oil/Water Separator No. 186 (#1 - East)

Location

SWMU 32A, OWS No. 186 (#1 - East), was located on the east side of Building 186 adjacent to a washrack. The OWS measured approximately 6 feet by 6 feet and extended approximately 7.5 feet below the paved surface.

History/ Current and Anticipate Future Land Use

SWMU 32A was active from approximately 1971 until the unit was removed in 1997. The OWS was an underground concrete unit consisting of two compartments, each of which had a 300-gallon capacity. The unit reportedly received waste wash water generated from the aircraft washrack. Wastewaters from the unit were discharged to a sanitary sewer line. The OSW at SWMU 32A has been removed. The immediate area above the unit was paved with a layer of asphalt approximately 0.5 feet thick.

The current land use at the location of SWMU 32A is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During an RFI that addressed Appendix II sites, three borings were drilled to depths of 10 feet in the area of SWMU 32A. Soil samples were collected at the surface and from depths of 2.5, 5 and 10 feet to characterize the distribution of potential contaminants. Soil samples were analyzed for TCL constituents, VOCs, BTEX, and metals.

Xylene was detected in one surface soil sample and barium was detected in all surface soil samples at concentrations below residential NMSSLs. Acetone and the RCRA metal barium were detected at concentrations that did not exceed residential NMSSLs in subsurface soils.

The Risk Assessment portion of the RFI report concluded that the detected concentrations of these constituents were all within or below the acceptable excess carcinogenic and noncarcinogenic risk ranges. Based on the conclusions reached in the Risk Assessment for SWMU 32A, the RFI recommended that an integrity test be performed on the OWS at this SWMU.

A Corrective Measure Completion Report documented the removal of the OWS at SWMU 32A. The OWS was pumped dry and cleaned. The unit was then excavated routinely and without incident. Neither stained soil nor fuel odors were observed during the excavation activities. A new OWS was installed to replace the old unit. The removal of the OWS effectively rendered the RFI's recommendation for an integrity test moot.

One soil sample was then collected from each of the excavation's four walls, and two soil samples were collected from the bottom of the excavation, each at an approximate depth of 9 to 9.5 feet. These soil samples were analyzed in the field for the presence of TPH and total BTEX using immunoassay Method 4030. Duplicates of two field soil samples were submitted for laboratory analysis to correlate field data with laboratory results. Field analysis indicated that TPH in all soil samples was below 20 ppm and total BTEX was below 10 ppm. The results for the duplicate samples analyzed in the laboratory confirmed field analytical results that TPH values were significantly below NMED standards. BTEX constituents were not detected in either of the duplicate soil samples analyzed in the laboratory.

A seventh, confirmatory sample was collected from the center of the excavation's bottom at approximately 8 feet of depth. This soil sample was submitted to the laboratory and analyzed for VOCs, SVOCs, metals, and TPH. Barium, chromium, and lead were detected at concentrations below residential NMSSLs. The report concluded that no unacceptable human health risks due to chemical releases were expected at this SWMU. Based on this, the Corrective Measure Completion Report recommended NFA for SWMU 32A.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSls beneath the SWMU.

Basis of Determination

SWMU 32A has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use. This site is presently covered in asphalt, further reducing exposure to human and ecological receptors.

10. SWMU 33B, Oil/Water Separator No. 186 (#2 - West)

Location

SWMU 33B, OWS No. 186 (#2 - West), was located adjacent to the west side of Building 186, near the northwest corner. The OWS was an underground concrete unit consisting of two compartments, including an oil storage tank with a capacity of 140 gallons. The OWS measured approximately 6 feet by 6 feet and extended approximately 7.5 feet below the paved surface.

History/Current and Anticipated Future Land Use

SWMU 33B was active from approximately 1971 until the unit was removed in 1996. The unit reportedly received waste wash water from the drains in Building 186, an aircraft hangar. Wastewaters from the unit were discharged to a sanitary sewer line. The OSW at SWMU 33B has been removed. The immediate area above the unit has been paved with a layer of asphalt approximately 0.5 feet thick.

The current land use at the location of SWMU 33B is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During the RFI that addressed Appendix II sites, three borings were drilled to depths of 10 feet in the area of the OWS unit. Soil samples were collected at the surface and from depths of 2.5, 5 and 10 feet to characterize the distribution of potential contaminants. Soil Samples were analyzed for TCL constituents, VOCs, BTEX, and metals.

Acetone, xylene, arsenic, barium, and chromium were detected in surface soils at concentrations below residential NMSSLs. Acetone, toluene, arsenic, barium, and chromium were also detected in subsurface soils at concentrations below residential NMSSLs. The Risk Assessment portion of the RFI report concluded that the detected concentrations of these chemicals were all within or below the acceptable risk ranges. Based on the conclusions reached in the Risk Assessment for SWMU 33B, the RFI recommended that an integrity test be performed on the OWS at this SWMU.

The Corrective Measure Completion Report documented the removal of this SWMU. The OWS at SWMU 33B was pumped dry and cleaned. The unit was then excavated routinely and without incident. Some stained soil was observed during the excavation activities, indicating that the unit had leaked. The removal of the OWS effectively rendered the RFI's recommendation for an integrity test moot.

One soil sample was then collected from each of the excavation's four walls, and two soil samples were collected from the bottom of the excavation, each at an approximate depth of 8 to 9 feet. These soil samples were analyzed in the field for the presence of TPH and total BTEX using immunoassay Method 4030. Duplicates of two field soil samples were submitted for laboratory analysis to correlate field data with laboratory results. Field analysis indicated that

TPH in all soil samples was below 20 ppm and total BTEX was below 10 ppm. The results for the duplicate samples analyzed in the laboratory confirmed field analytical results that TPH values were significantly below NMED standards. No BTEX constituents were detected in either of the duplicate soil samples analyzed in the laboratory.

A seventh, confirmatory sample was collected from the center of the excavation's bottom at approximately 9 feet of depth. The soil sample submitted to the laboratory was analyzed for VOCs, SVOCs, metals, and TPH. The RCRA metals barium, cadmium, chromium, and lead were detected in the soil at concentrations below residential NMSSLs. The report concluded that no unacceptable human health risks due to chemical releases were expected at this SWMU. Based on this, the Corrective Measure Completion Report recommended NFA for SWMU 33B.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 33B has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use. The immediate area above the unit has been paved with a layer of asphalt, reducing exposure to human and ecological receptors.

11. SWMU 38, Oil/Water Separator No. 194

Location

SWMU 38, OWS No. 194, was located adjacent to the southeast corner of Building 194. The OWS measured approximately 9 feet by 7 feet and approximately 12 feet in depth. The top of the unit sat approximately 1 foot above ground surface.

History/Current and Anticipated Future Land Use

SWMU 38 was active from approximately 1971 until the unit was removed in 1996. The OWS was an underground concrete unit consisting of three compartments, including an oil storage tank with a capacity of 140 gallons. The unit reportedly received waste wash water from the drains in Building 194, an aircraft hangar. Wastewaters from the unit were discharged to a sanitary sewer line. The OSW at SWMU 38 has been removed and no longer receives waste.

The current land use of SWMU 38 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During an RFI that addressed Appendix II sites, three borings were drilled to depths of 10 feet in the area of the OWS unit. Soil samples were collected at the surface and from depths of 2.5, 5 and 10 feet to characterize the distribution of potential contaminants. Soil was analyzed for TCL constituents, VOCs, BTEX, and metals.

Acetone, 1,1,1-trichloroethane and toluene were detected in surface soils at concentrations significantly below residential NMSSLs. Acetone, 1,1,1-trichloroethane, toluene, and chromium were detected in subsurface soils at concentrations below residential NMSSLs. The Risk Assessment portion of the RFI report concluded that the detected concentrations of these chemicals were all within or below the acceptable excess carcinogenic and noncarcinogenic risk ranges. Based on the conclusions reached in the Risk Assessment for SWMU 38, the RFI recommended that an integrity test be performed on the OWS at this SWMU.

The Corrective Measure Completion Report documented the removal of the OWS at SWMU 38. The OWS was pumped dry and cleaned. The unit was then excavated without incident. Neither stained soil nor odors were observed during the excavation activities. The removal of the OWS effectively rendered the RFI's recommendation for an integrity test moot.

One soil sample was then collected from each of the excavation's four walls, and two soil samples were collected from the bottom of the excavation, each at an approximate depth of 12 to 14 feet. These soil samples were analyzed in the field for the presence of TPH and total BTEX using immunoassay Method 4030. Duplicates of two field soil samples were submitted for laboratory analysis to correlate field data with laboratory results. Field analysis indicated that TPH in all soil samples was below 100 ppm and total BTEX was below 50 ppm. The results for the duplicate samples analyzed in the laboratory confirmed field analyses that TPH values were significantly below NMED standards. BTEX constituents were not detected in either of the duplicate soil samples analyzed in the laboratory.

A seventh, confirmatory sample was collected from the center of the excavation's bottom at approximately 14 feet of depth and sent for laboratory analysis. The soil sample submitted to the laboratory was analyzed for VOCs, SVOCs, metals, and TPH. The RCRA metals barium, chromium, and lead were detected at concentrations significantly below residential NMSSLs. The Corrective Measure Completion Report concluded that no chemical releases posing an unacceptable human health risk for any potential exposure pathway had occurred at this SWMU. Therefore, NFA was recommended for SWMU 38.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 38 has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use.

12. SWMU 39, Oil/Water Separator No. 195

Location

SWMU 39, OWS No. 195, was located adjacent to the northeast corner of Building 195. The OWS measured approximately 9 feet by 7 feet and approximately 8.5 feet in depth. The immediate area above the unit was paved with a layer of asphalt approximately 0.5 feet thick.

History/Current and Anticipate Future Land Use

SWMU 39 was active from approximately 1971 until the unit was removed in 1996. The OWS was an underground concrete unit consisting of two compartments, including an oil storage tank with a capacity of 140 gallons. The unit reportedly received waste wash water from the drains in Building 194, an aircraft hangar. Wastewaters from the unit were discharged to a sanitary sewer line. The OWS at SWMU 39 no longer receives waste wash water.

The current land use of SWMU 39 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During the RFI that addressed Appendix II sites, three borings were drilled to depths of 10 feet in the area of SWMU 39. Soil samples were collected at the surface and from depths of 2.5, 5 and 10 feet to characterize the distribution of potential contaminants.

Acetone, toluene, barium, chromium, and lead were detected in surface soils at concentrations below residential NMSSLs. Acetone, toluene, barium, chromium, and lead were also detected in subsurface soils at concentrations below residential NMSSLs.

The Risk Assessment portion of the RFI report concluded that the detected concentrations of these chemicals were all within or below the acceptable excess carcinogenic and noncarcinogenic risk ranges. Based on the conclusions reached in the Risk Assessment for SWMU 39, the RFI recommended that an integrity test be performed on the OWS at this SWMU.

The Corrective Measure Completion Report documented the removal of the OWS at SWMU 39. The OWS was pumped dry and cleaned. The unit was then excavated without incident. No stained soil or odors were observed during the excavation activities. The removal of the OWS effectively rendered the RFI's recommendation for an integrity test moot.

One soil sample was then collected from each of the excavation's four walls, and two soil samples were collected from the bottom of the excavation, each at an approximate depth of 8.5 to 9 feet. These soil samples were analyzed in the field for the presence of TPH and total BTEX using immunoassay Method 4030. Duplicates of two field soil samples were submitted for laboratory analysis to correlate field data with laboratory results. Field analysis indicated that TPH in all soil samples was below 100 ppm and total BTEX was below 50 ppm. The results for the duplicate samples analyzed in the laboratory confirmed field analyses that TPH values were significantly below NMED standards. No BTEX constituents were detected in either of the duplicate soil samples analyzed in the laboratory.

A seventh, confirmatory sample was collected from the center of the excavation's bottom at approximately 9 feet of depth. The soil sample was submitted to the laboratory and analyzed for VOCs, SVOCs, metals, and TPH. Di-n-butylpthalate, chromium, barium, and lead were detected at concentrations that did not exceed residential NMSSLs. The Corrective Measure Completion Report concluded that no chemical releases posing an unacceptable human health risk for any potential exposure pathway had occurred at this SWMU. Therefore, NFA was recommended at SWMU 39.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 39 has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use. The immediate area above the unit was paved with a layer of asphalt, reducing exposure to human and ecological receptors.

13. SWMU 46, Oil/Water Separator No. 196

Location

SWMU 46, OWS No. 196, was located at the southwest corner of Building 196. The OWS measured approximately 7 feet by 9 feet in plan and extended 8.5 feet below the paved surface.

History/Current and Anticipated Future Land Use

SWMU 46 was active from approximately 1969 until the unit was partially removed in 1996. The OWS was an underground concrete unit consisting of two compartments, a 560-gallon main compartment and a 135-gallon oil storage compartment. The unit reportedly received waste wash water generated from aircraft maintenance operations in Building 196, an aircraft maintenance hangar. Recovered oils were stored in the 135-gallon oil storage compartment and wastewaters were discharged to a sanitary sewer line. The OWS at SWMU 46 has been partially removed

and no longer receives waste. The immediate area above the unit has been paved with a layer of asphalt approximately 0.5 feet thick.

The current land use of SWMU 46 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During a Phase I RFI that addressed Appendix III sites, three borings were drilled to depths of 10 feet in the area of SWMU 46. Soil samples were collected from the 0.5- to 2-foot, 2- to 4-foot, 4- to 6-foot, and 8- to 10-foot depth intervals to characterize the distribution of potential contaminants. No visual evidence of contamination was observed during this investigation. Soil samples were analyzed for VOCs, SVOCs, TPRH, and metals.

Several RCRA metals were detected, including: arsenic, barium, chromium, and lead, at concentration below residential NMSSLs. Benzo(b)fluoranthene, 1,1,1-trichloroethane, ethylbenzene, pyrene, fluoranthene, toluene, and xylene were also detected in the soils at SWMU 47; however, the concentrations were below residential NMSSLs.

A Corrective Measure Completion Report documented the partial removal of the OWS at SWMU 46. The OWS at SWMU 46 was pumped dry and cleaned. Then the determination was made that the unit would only be partially removed, due to the presence of a 12-foot-diameter light pole foundation located adjacent to and within 15 inches of the unit. Two feet of soil were excavated from outside the walls of the unit, and the top 3 feet of the OWS were removed.

One soil sample was then collected from each of the four walls of the excavation at an approximate depth of 4 feet, and two soil samples were collected from soil borings drilled through the bottom of the unit to approximate depths of 10 feet. These soil samples were analyzed in the field for the presence of TPH and total BTEX using immunoassay Method 4030. Duplicates of two field soil samples were submitted for laboratory analysis to correlate field data with laboratory results. Field analysis indicated that TPH in all soil samples was below 100 ppm and total BTEX was below 50 ppm. The results for the duplicate samples analyzed in the laboratory confirmed field analyses that TPH values were significantly below NMED standards. No BTEX constituents were detected in either of the duplicate soil samples analyzed in the laboratory.

A seventh, confirmatory sample was collected from the bottom of the excavation at approximately 10 feet and sent to a laboratory for chemical analysis. The soil sample was analyzed for VOCs, SVOCs, metals, and TPH. Chromium and lead were detected at concentrations significantly below residential NMSSLs. The Corrective Measure Completion Report concluded that no chemical releases posing an unacceptable human health risk for any potential exposure pathway had occurred at this SWMU. Therefore, no further response action was necessary at SWMU 46.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 46 has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use. The immediate area above the unit has been paved with a layer of asphalt, thus reducing potential exposure to human and ecological receptors.

14. SWMU 47, Oil/Water Separator No. 494

Location

SWMU 47, OWS No. 494, consisted of an OWS unit located beneath an asphalt drive adjacent to the northeast wall of Building 494, the Auto Hobby Shop at Cannon AFB. A large sand trap was located at the east corner of the building. The OWS measured approximately 1 foot by 2.5 feet, and was estimated to extend less than 10 feet below the surface. The sand trap measured approximately 4 feet by 5 feet and extended approximately 4 feet below the surface.

History/Current and Anticipated Future Land Use

SWMU 47 was active from approximately 1982 until its removal in 1996. The OWS was an underground concrete unit consisting of two compartments, a 50-gallon main compartment and a 50-gallon oil storage compartment. The units reportedly received waste wash water generated from personal vehicle maintenance operations by off-duty Air Force personnel in the Auto Hobby Shop. Recovered oils were stored in the 50-gallon oil storage compartment of the OWS and wastewaters were discharged to a sanitary sewer line. The OWS at SWMU 47 has been removed and no longer receives waste.

The current land use of SWMU 47 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During a Phase I RFI that addressed Appendix III sites, three borings were drilled to depths of 10 feet in the area of SWMU 47. Soil samples were collected from the 0.5- to 2-foot (0- to 0.5-foot in one boring), 2- to 4-foot, 4- to 6-foot, and 8- to 10-foot depth intervals to characterize the distribution of potential contaminants. Two borings, drilled to depths of 10 feet in the area of the sand trap unit, were also sampled during the Phase I RFI. Soil samples were collected from the 0- to 0.5-foot, 1.5- to 3.5-foot, 4- to 6-foot, and 8- to 10-foot depth intervals to characterize the distribution of potential contaminants. The soil samples were analyzed for VOCs, SVOCs, metals, and TRPH.

Arsenic, barium, chromium, lead, toluene, total xylene, pyrene, fluoranthene, and butyl benzyl phthalate were detected in surface soil samples at concentrations that did not exceed residential NMSSLs. Arsenic, barium, cadmium, chromium, lead, and silver were detected in subsurface soil samples at concentrations below residential NMSSLs.

The Corrective Measure Completion Report documented the removal of the OWS and sand trap from SWMU 47. The OWS and the sand trap at SWMU 47 were pumped dry and cleaned. Two feet of soil were excavated from outside the walls and the units were removed without incident. No staining or odors were observed during the removal activities.

One soil sample was then collected from each of the four walls of the sand trap excavation at approximate depths of 7.5 feet, and two soil samples were collected from the bottom of the excavation at approximate depths of 7.5 feet. These soil samples were analyzed in the field for the presence of TPH and total BTEX using immunoassay Method 4030. Duplicates of two field soil samples were submitted for laboratory analysis to correlate field data with laboratory results. Field analysis indicated that TPH in all soil samples was below 100 ppm and total BTEX was below 50 ppm. The results for the duplicate samples analyzed in the laboratory confirmed field analyses that TPH values were significantly below NMED standards. Benzene, toluene, and xylenes were detected in one of the duplicate soil samples analyzed in the laboratory, but at concentrations below residential NMSSLs.

A seventh, confirmatory sample was collected from the bottom of the excavation at approximately 7.5 feet and analyzed for VOCs, SVOCs, metals, and TPH. Chromium, cadmium, lead, barium, and silver were detected at concentrations significantly below residential NMSSLs. Di-n-butylpthalate was also detected in the laboratory method quality control blank. The Corrective Measure Completion Report concluded that no chemical releases posing an unacceptable human health risk for any potential exposure pathway had occurred at this SWMU. Therefore, NFA was recommended for SWMU 47.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 47 has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use.

15. <u>SWMU 48B, Aboveground Overflow Capacity Tank</u>

Location

SWMU 48B, Aboveground Overflow Capacity Tank, was a 2,000-gallon aboveground storage tank (AST) located approximately 125 feet east of the intersection of Argentina Avenue and

Torch Boulevard at Cannon AFB. This SWMU and SWMU 48A were located adjacent to each other within a fenced area measuring approximately 20 feet by 40 feet.

History/Current and Anticipated Future Land Use

The former AST at SWMU 48B was active from 1941 to 1985. Historically, the site was used as a gas station from 1941 to 1965. From 1965 to 1985 the AST served as an overflow tank for the UST (SWMU 48A), which had been used to store waste products including: waste oils, spent solvents, paint thinners, and recovered fuels. These products were removed from the tanks periodically. The AST and its associated piping were removed in 1992. The area currently is paved and used as a parking lot.

The current land use of SWMU 48B is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During a Phase I RFI that addressed Appendix II sites at SWMU 48B, two borings were advanced to a depth of 30 feet and soil samples were collected. Soil samples were analyzed for TCL constituents, VOCs, BTEX, cyanide, and TAL metals.

Acetone, xylene, methylene chloride, and barium were detected in one surface soil sample at concentrations below residential NMSSLs. Acetone, methylene chloride, and barium were detected in subsurface soils at concentrations below residential NMSSLs. The results of a limited risk assessment, performed as part of this investigation, indicated minimal or no risk to human health or the environment from SWMU 48B.

During a Phase II RFI addressing Appendix II sites, two soil borings were drilled to a depth of approximately 40 feet in the area of the former AST. Surface soil samples were collected from the 0- to 0.5-foot depth interval in one boring and from the 0.5- to 2.5-foot depth interval in the other boring. Subsurface soil samples were also collected from each boring at the 3- to 5-foot, the 8- to 10-foot, the 13- to 15-foot, the 18- to 20-foot, the 23- to 25-foot, the 28- to 30-foot, the 33- to 35-foot, and the 38- to 40-foot depth intervals. Soil samples submitted to the laboratory were analyzed for VOCs, SVOCs, TAL metals, and TRPH.

Several organic compounds and metals were detected during the Phase II RFI. Acetone, carbon disulfide, methylene chloride, toluene, bis(2-ethylhexyl)phthalate, and fluoranthrene were detected at concentrations that did not exceed residential NMSSLs. The RCRA metals arsenic, barium, chromium, and mercury were detected at concentrations below NMSSLs. Because there were no unacceptable health risks associated with SWMU 48B, the Phase II RFI recommended that no further investigation was necessary for this SWMU.

The area of SWMU 48B has been covered with asphalt pavement and is being used as a parking lot. Based on this, SWMU 48B did not contain any significant ecological component such that a formal ecological risk assessment was warranted. However, the results of a limited risk assessment, performed as part of Phase I RFI, indicated minimal or no risk to the environment from SWMU 48B.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 48B has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use. The area is currently paved and used as a parking lot, thus reducing exposure to human and ecological receptors.

16. SWMU 51, Oil/Water Separator No. 375

Location

SWMU 51, OWS No. 375, consisted of an OWS unit and an oil containment vault. The OWS was located beneath 0.5 feet of asphalt pavement adjacent to the northwest side of Building 375, a vehicle maintenance facility within the motorpool compound at Cannon AFB. The OWS measured approximately 5 feet square, and extended approximately 5.5 feet below the surface. The oil containment vault was located beneath and integral to the floor and the northwest foundation wall of Building 375. The oil containment vault measured approximately 2 feet by 10 feet, and extended approximately 7 feet below the surface.

History/Current and Anticipated Future Land Use

SWMU 51 was active from approximately 1968 until the separator unit was removed and the oil containment vault was abandoned in place in 1997. The units reportedly received waste wash water generated from vehicle maintenance operations. Recovered oils were stored in the oil containment vault and wastewaters were discharged to a sanitary sewer line. The OWS has been removed and the oil containment vault has been abandoned in place. The units no longer receive waste.

The current land use of SWMU 51 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During a Phase I RFI that addresses Appendix III sites, three borings were drilled to depths of 10 feet in the area SWMU 51. Soil samples were collected from the 0.5- to 2-foot, 2- to 4-foot, 4- to 6-foot, and 8- to 10-foot depth intervals to characterize the distribution of potential contaminants. The area of the oil containment vault was investigated during the Phase I RFI. Soil samples were analyzed for VOCs, SVOCs, metals, and TRPH.

Several organic compounds, including benzo(a)anthracene, benzo(b)fluoranthene, indeno(1,2,3-cdpyrene), toluene, xylenes, PCE, chrysene, carbazole, pyrene, 1,2-dichloroethane, and 1,2-dichloropropane, were detected in one surface soil sample at concentrations below residential

NMSSLs. Benzo(a)pyrene was detected in one soil sample above the residential NMSSLs; however, the concentration did not exceed the industrial/occupational NMSSLs. Lead and silver were detected in surface soils at SWMU 51; however, concentrations were below residential NMSSLs. Arsenic, barium, cadmium, chromium, lead, silver, toluene, PCE, 1,2-dichloroethane, and 1,2-dichloropropane were detected in subsurface soils at concentrations below residential NMSSLs. The TPH concentration (3,150 mg/kg) in one subsurface soil sample exceeded NMED's TPH soil screening guidelines. The Phase I RFI recommended completing a BRA for SWMU 51.

The BRA for SWMU 51 included a human health and ecological risk assessment that considered both present and future potential receptors and all appropriate exposure pathways. Based on the results of the BRA, no unacceptable human health or ecological risks due to chemical releases were anticipated for SWMU 51. Therefore, NFA was recommended for SWMU 51.

A Corrective Measure Completion Report documented the removal of the OWS at SWMU 51. The OWS was pumped dry and cleaned. More than 2 feet of soil were over excavated from outside the walls of the separator to accommodate a new unit, the old unit was then removed. Staining and odors were observed during the removal activities near the OWS's pipe outlet that led to the oil containment vault. After the old separator unit had been removed, it was replaced with a new OWS.

Borings were drilled in the bottom and side walls of the oil containment vault to collect samples of the surrounding soils. After the samples had been collected, the vault was filled with clean sand and capped with concrete. The vault was abandoned in place, not removed, in order to protect the integrity of Building 375.

Soil samples were collected from the base of the southeast and southwest walls of the OWS excavation during replacement activities at approximate depths of 9 feet. Two soil samples were collected from the bottom of the excavation, at locations northeast and northwest of the separator unit, at approximates depth of 10 feet. One sample was also collected from the base of the excavation in the area of stained soil at an approximate depth of 10 feet. A sixth sample was collected from the bottom of the excavation, beneath the footprint of the unit, at an approximate depth of 10 feet. These soil samples were analyzed in the field for the presence of TPH and total BTEX using immunoassay Method 4030. Duplicates of four field soil samples were submitted for laboratory analysis to correlate field data with laboratory results. Field analysis indicated that TPH in all soil samples was below 20 ppm and total BTEX was below 10 ppm, except for one sample (sample # 5). The results for the duplicate samples analyzed in the laboratory confirmed field findings that TPH values were significantly below NMED standards, except for one sample (sample # 5). TPH was detected at 7200 mg/kg in soil sample # 5. No BTEX constituents were detected in the duplicate soil samples analyzed at the laboratory.

Soils near the southeast side (near soil sample # 5) of the excavation pit were removed. Five additional soil samples were collected from three of the four excavation walls and the base of the oil containment vault at approximate depths of 8 feet. The fourth wall of the vault was the foundation wall of Building 375, and the previous sampling activities associated with the OWS

unit had adequately investigated the other side of this wall. A sixth, confirmatory sample was collected from the bottom of the excavation at approximately 8 feet and analyzed for VOCs, SVOCs, metals, and TPH.

Bis(2-ethylhexyl) phthalate, barium, chromium, and selenium were detected at concentrations that did not exceed residential NMSSLs. The Corrective Measure Completion Report concluded that no chemical releases posing an unacceptable human health risk for any potential exposure pathway had occurred at this SWMU. Therefore, NFA was recommended for SWMU 51.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants are not present at concentrations greater than applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 51 has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use.

17. SWMU 55, Lead Acid Battery Accumulation Point

Location

SWMU 55, the Lead Acid Battery Accumulation Point, consisted of a square of asphalt measuring approximately 8 feet by 8 feet. The SWMU was located approximately 100 feet north of the Vehicle Maintenance Shop, Building 379 at Cannon AFB. The pavement was contiguous with an asphalt parking lot and sloped slightly toward the northwest.

History/Current and Anticipated Future Land Use

SWMU 55 was active from approximately 1965 until sometime between the Phase I RFI field investigation (1993) and the Phase II RFI field investigation (1997). Used lead acid batteries were stored "wet" on pallets at the SWMU until a sufficient quantity had been accumulated to sell to a battery recycling company.

The current land use of SWMU 55 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During a Phase I RFI that addressed Appendix III sites, three borings were drilled to maximum depths of 20 feet in the area of the asphalt pad. Soil samples were collected from the 0.5- to 2-foot, 3- to 5-foot, 8- to 10-foot, 13- to 15-foot, and 18- to 20-foot depth intervals to characterize the distribution of potential contaminants. Samples were analyzed for pH and lead.

Lead was detected in all soil samples, but at concentrations significantly below residential NMSSLs.

During the Phase II RFI, three borings were drilled to depths of 20 feet in the area of SWMU 55. Soil samples were collected from the 0- to 2-foot, 3- to 5-foot, 8- to 10-foot, 13- to 15-foot, and 18- to 20-foot depth intervals. Soil samples submitted to the laboratory were analyzed for VOCs, SVOCs, TAL metals, TPH, and pH.

Barium, cadmium, chromium, and lead were detected at concentrations that do not exceed residential NMSSLs. Arsenic was detected in one soil sample at a concentration above residential NMSSLs; however, the concentration did not exceed the industrial/occupational NMSSLs. Several organic compounds were detected at concentrations below residential NMSSLs, except for benzo(a)pyrene and dibenzo(a,h)anthracene. However, the concentrations of these two organic compounds are below industrial/occupational NMSSLs. TPH concentrations in one soil sample (1650 mg/kg) exceeded NMED's TPH screening guidelines.

Because there was no evidence of a significant release in the area of SWMU 55, the Phase II RFI recommended NFA at this SWMU.

An ecological risk screening was not included as part of the Phase I RFI or the Phase II RFI, but a human health risk screening was included in these investigations. In each investigation, the screening criteria were not exceeded by detected contaminant concentrations at the to SWMU.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 55 has been to be determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use.

18. SWMU 57, Oil/Water Separator No. 379

Location

SWMU 57, OWS No. 379, was located beneath the pavement adjacent to the southwest side of Building 379 at Cannon AFB. The OWS measured approximately 6.5 feet by 5 feet and extended approximately 6 feet below the paved surface. The immediate area above the unit was paved with a layer of asphalt approximately 0.5 feet thick.

History/Current and Anticipated Future Land Use

SWMU 57 was active from approximately 1965 until the unit was removed in 1996. The OWS was an underground concrete unit consisting of three compartments. The unit reportedly received waste wash water generated from heavy vehicle maintenance operations in Building 379. Recovered oils were stored in the oil storage compartment and wastewaters were discharged to a sanitary sewer line. After SWMU 57 had been removed replaced with a new OWS unit.

The current land use of SWMU 57 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During a Phase I RFI that addressed Appendix III sites, three borings were drilled to depths of 10 feet in the area of the separator unit. Soil samples were collected from the 0.5- to 2-foot, 2- to 4-foot, 4- to 6-foot, and 8- to 10-foot depth intervals to evaluated for the presence of contaminants. Soil samples were analyzed for VOCs, SVOCs, metals, and TRPH.

Ethylbenzene, toluene, total xylenes, arsenic, barium, cadmium, chromium, lead, and silver were detected in surface soil samples at concentrations below NMSSLs. Toluene, total xylenes, and the RCRA metals arsenic, barium, cadmium, chromium, lead, and silver were detected in subsurface samples below residential NMSSLs. Because there was no evidence of a significant release in the vicinity of SWMU 57, the Phase I RFI recommended NFA at this SWMU.

A Corrective Measure Completion Report documented the removal of the OWS at SWMU 57. The OWS was pumped dry and cleaned. Two feet of soil were excavated from outside the walls of the unit and the unit was removed without incident. One soil sample was collected from each of the four walls of the excavation at an approximate depth of 8 feet, and two soil samples were collected from the bottom of the excavation at an approximate depth of 8 feet. These soil samples were analyzed in the field for the presence of TPH and total BTEX using immunoassay Method 4030. Duplicates of two field soil samples were submitted for laboratory analysis to correlate field data with laboratory results. Field analysis indicated that TPH in all soil samples was below 20 ppm and total BTEX was below 10 ppm. The results for the duplicate samples analyzed in the laboratory confirmed field analyses that TPH values were significantly below NMED standards. No BTEX constituents were detected in either of the duplicate soil samples analyzed in the laboratory.

A seventh, confirmatory sample was collected from the bottom of the excavation at an approximate depth of 8 feet. Soil samples submitted to the laboratory were analyzed for VOCs, SVOCs, metals, and TPH. Barium, cadmium, chromium, and lead were detected in soils at SWMU 57, but at concentrations below residential NMSSLs. The Corrective Measure Completion Report concluded that no chemical releases posing an unacceptable human health risk for any potential exposure pathway had occurred at this SWMU. Therefore, NFA was recommended for SWMU 57.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 57 has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use. The immediate area overlying the unit was paved with a layer of asphalt, further reducing potential exposure to human and ecological receptors.

19. SWMUs 61, 62, and 63, Sand trap 5077A and 5077B, and oil/water separator 5077 C

Location

SWMU 61, 62, and 63 are within Facility 5077 located in the Civil Engineering Squadron Compound at Cannon AFB. The exact depths of the three units are not known, but none are believed to be greater than 10 feet.

History/Current and Anticipated Future Land Use

Facility 5077 is a vehicle wash rack that includes two 380-gallon sand traps (SWMUs 61 and 62) within the limits of the wash rack, and a 1,675-gallon OWS (SWMU 63). Both sand traps and the wash rack are constructed of concrete. The sand traps and the OWS reportedly received wash water generated by motor vehicle cleaning activities. SWMU 63 has been described as an OWS, but field observations noted that it was a single-compartment unit with no baffles. According to the Base Civil Engineering Office, the facility was seldom used and has been taken out of service.

The current land use at the location of SWMUs 61, 62, and 63 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

SWMUs 61, 62, and 63 have been listed as Appendix III sites. Because of their close proximity, the three SWMUs were investigated together during a Phase I RFI that addressed Appendix III sites. Six borings, two each in the vicinity of the three SWMUs, were drilled to a depth of 10 feet. Soil samples were collected from the 0.2- to 0.5-foot depth interval, the 2- to 4-foot interval, the 4- to 6-foot interval, and the 8- to 10-foot intervals at SWMUs 61 and 62, and from 1.2- to 0.5-foot depth interval, the 1.5- to 3-foot interval, the 4- to 6-foot interval, and the 8- to 10-foot interval. Soil samples were analyzed for VOCs, SVOCs, metals, and TRPH.

Arsenic, barium, cadmium, chromium, mercury, and silver were detected in soil samples collected from soil boring drilled at SWMUs 61, 62, and 62 at concentrations below residential NMSSLs. Several organic compounds were detected in soils in the area of SWMUs 61, 62, and 63. Benzo(a)pyrene was the only organic constituent detected above residential NMSSLs; however, the detected concentration was below industrial/occupational NMSSLs.

A BRA for SWMU 63 included a human health and ecological risk assessment that considered both present and future potential receptors and all appropriate exposure pathways. Based on the results of the BRA, no unacceptable human health or ecological risks due to chemical releases were expected from SWMU 63. Therefore, NFA was recommended for SWMU 63.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSLs beneath the SWMUs.

Basis of Determination

SWMUs 61, 62, and 63 have been determined to be appropriate for NFA status based on NMED NFA Criterion 5: The SWMUs have been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants do not pose an unacceptable level of risk under current and projected land use.

20. SWMU 74, Landfill No.1

Location

SWMU 74, Landfill No. 1, was an inactive landfill located in the northwest area of Cannon AFB, beneath a portion of the 14th fairway at the Whispering Winds Golf Course. The landfill was reportedly unlined, and it occupied approximately 8 acres of land. Overall, the landfill site is relatively flat and is covered by the grass of the 14th fairway. In general, surface water drains toward the east eventually discharging into a pond located east of the golf course 15th fairway.

History/Current and Anticipated Future Land Use

SWMU 74 was the original landfill at Cannon AFB. It accepted wastes from 1943 to 1946. The landfill's operation apparently consisted of placing waste in trenches and burning it prior to burial. Waste materials received at the site reportedly included domestic solid wastes and shop wastes, which included waste oils and solvents, paint strippers and thinners, outdated paint, pesticide containers, and various empty cans and drums.

The current land use at the location of SWMU 74 is recreational. The remains of SWMU 74 are currently beneath a portion of the 14th fairway at the location. Anticipated future land use is anticipated to remain recreational.

Evaluation of Relevant Information

A Phase I RFI was conducted at SWMU 74 to determine whether a release of contaminants had occurred. Two electromagnetic geophysical surveys were completed and the results of both surveys indicated the presence of landfill materials. Based on these results, a subsurface soil investigation was conducted that included drilling of 23 soil borings to depths ranging from 10 to 50 feet to delineate the extent of contamination at SWMU 74. Soil samples were analyzed for VOCs, SVOCs, cyanide, pesticides, herbicides, TAL metals, TRPH, PCBs, and total organic carbon.

Arsenic, barium, chromium, and lead were detected in subsurface soils at concentrations below residential NMSSLs. One pesticide (4,4-DDT) and one herbicide (2-[2-methyl-4-chlorophenoxy] propionic acid) were detected at concentrations below residential NMSSLs. One VOC and several SVOCs were also detected in soils at SWMU 74, but at concentrations significantly below residential NMSSLs.

A human health risk screen was performed for SWMU 74 to determine whether chemicals detected in soils at the site may pose an unacceptable risk to human health. Maximum concentrations of the chemicals were compared to USEPA Region III RBCs for residential soil ingestion to estimate if there was a potential noncarcinogenic hazard or carcinogenic risk. None of the chemicals detected above background levels exceeded the established RBCs, indicating that this SWMU did not pose an unacceptable level of risk to human health.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 74 has been determined to be appropriate for NFA based on New Mexico Environment Department (NMED) NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use.

21. <u>SWMU 76, Sludge Weathering Pit (WP-14)</u>

Location

SWMU 76, the Sludge Weathering Pit, covered approximately 200 square feet. This relatively flat SWMU was located near Building 326 and adjacent to the northern boundary of Cannon AFB.

History/Current and Anticipated Future Land Use

SWMU 76, last used in 1980, was used to weather sludge from leaded gasoline storage tanks during the 1960s and 1970s. The sludge was removed and disposed at a landfill after it was sufficiently weathered. In 1980, SWMU 76 was covered with fill material.

The current land use in the vicinity of SWMU 76 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

Four soil borings were drilled during the RI at SWMU 76. Two surface samples were collected from three of the borings at depth intervals of 0 to 0.5 feet. Additionally, nine subsurface soil samples were collected from the four borings at depth intervals ranging from 4 to 31 feet.

Ethylbenzene and xylenes were detected in one of the borings at a depth interval of 8 to 10 feet at concentrations below residential NMSSLs. Arsenic, barium, cadmium, chromium, lead, mercury, and silver were detected at SWMU 76 at concentrations below residential NMSSLs. Based on the analytical results from this investigation, the RI report recommended that NFA be proposed for SWMU 76.

A BRA, performed using the results of the RI, was included in the RI report. The BRA assessed potential adverse human health and ecological effects by comparing soil data to risk-based RFI criteria listed in the RFI Guidance, Volume I, or if these levels were exceeded, by calculating site-specific health risks. The BRA concluded that potential impacts to human health and the environment were not significant at SWMU 76.

Basis of Determination

SWMU 76 has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use.

22. <u>SWMU 83, Sump</u>

Location

SWMU 83, Sump, was located approximately 90 feet northwest of Building 120 at Cannon AFB. The depth to the former sump, which had been constructed in a 12- by 14-foot concrete pad, is unknown.

History/Current and Anticipate Future Land Use

The installation date and initial use date of SWMU 83 are unknown. The sump was removed in 1993. Historically, the sump received rainwater, wash water, and dilute waste oil runoff from

flight line operations. The sump was removed and a portion of the sump's former location is currently paved.

The current land use at the location of SWMU 83 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During a Phase I RFI, three soil borings were drilled and sampled to depths of 10 feet at SWMU 83. Soil samples were analyzed for VOCs, cyanide, TAL metals, and TRPH. TRPH was detected at the surface in all three borings, and at the 2.5-foot and 5-foot depth intervals in two of the three borings. A maximum TRPH concentration of 5,000 ppm was detected at a depth of 2.5 feet. Barium, chromium, lead, silver, and mercury were detected in surface and subsurface soils at concentrations below residential NMSSLs.

In addition to the Phase I RFI, a Phase II RFI was also performed at SWMU 83 to determine whether a release of contaminants had occurred from the sump. Two borings were advanced to depths of 25 feet below the ground surface. Soil samples were collected from the borings and analyzed for VOCs, SVOCs, TAL metals, and TRPH. Fourteen organic compounds were detected in the soil samples during the Phase II RFI; however, the concentrations of these organic compounds were below residential NMSSLs. Arsenic, barium, cadmium, chromium, and lead were detected in some of the soil samples at concentrations below residential NMSSLs.

Based on the results of the Phase II RFI at SWMU 83, the vertical extent of contamination has been adequately assessed and there is no evidence of impacts to groundwater were considered low. Because there were no unacceptable health risks associated with SWMU 83, the Phase II RFI recommended that no further investigation was necessary for this SWMU.

Basis of Determination

SWMU 83 has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use. Most of the surface at the location of SWMU 83 is currently paved, further reducing potential exposure of residential contaminants to human and ecological receptors.

23. <u>SWMU 92, Oil/Water Separator No. 5120</u>

Location

SWMU 92, OWS No. 5120 was formerly located east of Power Check Pad No. 5120 at Cannon AFB. The OWS consisted of a two-compartment underground unit with a detached 100-gallon oil storage tank. A leach well was located approximately 40 feet east of the OWS.

History/Current and Anticipate Future Land Use

SWMU 92 was active from approximately 1957 to 1988. SWMU 92 reportedly received waste wash water generated from aircraft maintenance operations at Building 5120. Recovered oils were stored in the 100-gallon tank and the wastewaters were discharged to a leach well. Use of SWMU 92 was dismantled after the demolition of Building 5120 in 1988. The OWS and the associated leach well were removed in 1996.

The current land use at the location of SWMU 92 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During a Phase I RFI that addressed Appendix III sites, five borings, two at depths of 10 feet in the area of the separator unit and three at depths of 60 feet in the area of the leach well, were drilled and sampled. Soil samples were collected from the 1.5- to 3.5-foot, 4- to 6-foot, and 8- to 10-foot depth intervals in all five borings. Additional samples were collected from the 18- to 20-foot, 28- to 30-foot, 38- to 40-foot, 48- to 50-foot, and 58- to 60-foot depth intervals in the three 60-foot borings to characterize the vertical distribution of contaminants. Soil samples were analyzed for VOCs, SVOCs, metals, and TRPH.

Several organic compounds were detected in surface and subsurface soils at concentrations below residential NMSSLs and/or EPA Region 6 Human Health Medium-Specific Screening Levels, except for benzo(a)pyrene. Benzo(a)pyrene was detected in one subsurface soil sample at a concentration above residential NMSSLs, although the concentration did not exceed industrial/occupational NMSSLs. Lead was the only RCRA metal that was detected at a concentration above residential NMSSLs, however; the detected concentration did not exceed industrial/occupational NMSSLs.

The BRA for SWMU 92 included a human health and ecological risk assessment that considered both present and future potential receptors and all appropriate exposure pathways. Based on the results of the BRA, no unacceptable human health or ecological risks due to chemical releases were expected from SWMU 63. Therefore, NFA was recommended for SWMU 92.

A Corrective Measure Completion Report documented the removal of SWMU 92. The OWS at SWMU 92 was pumped dry and cleaned, then the leach well box and the top 2 feet of cobblestone were removed from the associated leach well. Neither significant staining nor odors were observed during the removal.

Soil samples were collected from the walls of the OWS excavation at approximate depths of 9 feet. Two soil samples were collected from the bottom of the excavation at an approximate depth of 10 feet. Soil samples were also collected from the walls of the leach well excavation at an approximate depth of 11 feet. These soil samples were analyzed in the field for the presence of TPH and total BTEX using immunoassay Method 4030. Duplicates of two field soil samples were submitted for laboratory analysis to correlate field data with laboratory results. Field

analysis indicated that TPH in all soil samples was below 100 ppm and total BTEX was below 50 ppm. The results for the duplicate samples analyzed in the laboratory confirmed field data that TPH values were significantly below NMED standards. BTEX constituents were not detected in either of the duplicate soil samples analyzed in the laboratory.

An additional soil sample was collected from the bottom of the excavation at an approximate depth of 12 feet. This soil sample was submitted to a laboratory and analyzed for VOCs, SVOCs, metals, and TPH. Arsenic, barium, chromium, and lead were detected at concentrations below residential NMSSLs. Di-n-butylpthalate was also detected in the sample, but at a concentration below residential NMSSLs. The Corrective Measure Completion Report concluded that no chemical releases posing an unacceptable human health risk for any potential exposure pathway had occurred at this SWMU. Therefore, NFA was recommended for SWMU 92.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 92 has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data has indicated that the contaminants present do not pose an unacceptable level of risk under current and projected future land use.

24. SWMU 93, Oil/Water Separator No. 5121

Location

SWMU 93, OWS No. 5121, was formerly located beneath the hush house portion of Building 5123, a jet engine test facility. The OWS, which consisted of a two-compartment underground unit with a detached 100-gallon oil storage tank, was located on the east side of former Power Check Pad No. 5121.

History/Current and Anticipated Future Land Use

SWMU 93 was active from approximately 1957 to 1988. In 1988, the unit and the associated leach field were removed during the demolition of Building 5121. This building was then replaced with Building 5123, which was constructed atop the former location of SWMU 93. The unit received waste wash water from aircraft engine testing and maintenance operations. Recovered oils were stored in the 100-gallon tank and the wastewaters were discharged to a leach field located approximately 40 feet to the east of the OWS.

The current land use at the location of SWMU 93 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During a Phase I RFI, three 60-foot borings were advanced at locations as close as possible to the former locations of the OWS and the leach field. Soil samples were collected from the 1.5- to 3.5-foot, 4- to 6-foot, 8- to 10-foot, 18- to 20-foot, 28- to 30-foot, 38- to 40-foot, 48- to 50-foot, and 58- to 60-foot depth intervals. Soil samples were analyzed for VOCs, SVOCs, metals, and TRPH. Several organic compounds were detected at concentrations below residential NMSSLs. Arsenic, barium, cadmium, chromium, lead, selenium, and silver were also detected at concentrations below residential NMSSLs. The Phase I RFI recommended completing a BRA for SWMU 93.

The BRA for SWMU 93 included a human health and ecological risk assessment that considered both present and future potential receptors and all appropriate exposure pathways. Based on the results of the BRA, no unacceptable human health or ecological risks due to chemical releases were expected from SWMU 93. Therefore, NFA was recommended for SWMU 93.

During a Phase II RFI, three soil borings were completed at SWMU 93. One boring was drilled near the northwest corner of Building 5123, the second boring was drilled near the southeast corner of Building 5123, and the third boring was drilled immediately south of Building 5123. Each boring was drilled and sampled to a maximum depth of 10 feet. Surface soil samples were collected from all borings. All three borings were also sampled at intervals of 3 to 5 and 8 to 10 feet. The soil samples were analyzed for VOCs, SVOCs, TAL metals, and TRPH.

Several organic compounds, as well as arsenic, barium, cadmium, chromium, lead and silver were detected during the Phase II RFI at concentrations below residential NMSSLs. TRPH was detected at 1760 mg/kg in one surface soil sample. This TRPH concentration is above current NMED residential screening guidelines, but below NMED's industrial direct exposure values for TPH. Because there were no unacceptable health risks associated with SWMU 93, the Phase II RFI recommended that no further investigation was necessary for this SWMU.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants are not present at concentrations greater than applicable NMSSLs beneath the SWMU. This SWMU is currently located below Building 5123, further reducing exposure to human and ecological receptors.

Basis of Determination

SWMU 93 has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use.

25. SWMU 94, Oil/Water Separator No. 5144

Location

SWMU 94, OWS No. 5144, was comprised of an OWS and two sand traps that served a two-bay vehicle washrack adjacent to the Army Air Force Exchange Service (AAFES) service station, located east of the intersection of D.L. Ingram Street and Argentia Avenue at Cannon AFB. The OWS, which was located approximately 30 feet northeast of the two sand traps, was an underground concrete unit that reportedly received effluent from the neighboring sand traps. The OWS measured approximately 5 feet by 10 feet in plan, and extended approximately 9 feet below the surface. The two sand traps were each located in the approximate center of each of the two vehicle washracks. The sand traps measured approximately 3.5 feet by 8 feet and extended approximately 6.5 feet below the surface.

History/Current and Anticipated Future Land Use

SWMU 94 was active from approximately 1960 until approximately 1988. The three units were removed in 1996. Recovered oils were stored in the unit and wastewaters were discharged to a sanitary sewer line. The OWS unit was a single-compartment unit with no baffles, and as such also appeared to be a sand trap. However, because the unit was referred to as an OWS in earlier reports (including the Corrective Measure Completion Report, which documented the unit's removal), it is also referred to as an OWS herein. The sand traps reportedly received wash-down water from personal vehicle maintenance operations, and discharged effluent to the OWS. The OWS and the two sand traps were removed.

The current land use at the location of SWMU 94 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During a Phase I RFI that addressed Appendix III sites, six borings were drilled to depths of 10 feet and sampled. Soil samples were collected from the 0- to 0.5-foot, 1.5- to 3.5-foot, 4- to 6-foot, and 8- to 10-foot depth intervals from the borings drilled near the OWS. Samples were also collected from the 0.5- to 2-foot, 2- to 4-foot, 4- to 6-foot, and 8- to 10-foot depth intervals from the borings drilled near the sand traps. Some soil staining was observed in two of the borings drilled near the sand traps during this investigation. Soil samples were analyzed for VOCs, SVOCs, metals, and TRPH.

Several organic compounds were detected in the surface and subsurface soil samples at SWMU 94, although all constituents detected were at concentrations significantly below residential NMSSLs. All eight RCRA metals were detected in soil samples but at concentrations that do not exceed residential NMSSLs. TRPH was detected in one soil sample at 3600 mg/kg, which exceeds NMED's TPH screening guidelines for residential direct exposure. All other TRPH concentrations were below NMED screening levels. The Phase I RFI recommended completing a BRA for SWMU 94.

The BRA for SWMU 94 included a human health and ecological risk assessment that considered both present and future potential receptors and all appropriate exposure pathways. Based on the results of the BRA, no unacceptable human health or ecological risks due to chemical releases were expected from SWMU 94. Therefore, NFA was recommended for SWMU 94.

A Corrective Measure Completion Report documented the removal of the OWS at SWMU 94. The OWS and the two sand traps at SWMU 94 were pumped dry and cleaned. Stained soils were excavated from outside the walls of the westernmost sand trap during its removal.

Soil samples were collected from the walls of the OWS excavation at an approximate depth of 8.5 feet. Two soil samples were collected from the bottom of the excavation at an approximate depth of 9 feet and within the footprint of the former unit. These soil samples were analyzed in the field for the presence of TPH and total BTEX using immunoassay Method 4030. Duplicates of two field soil samples were submitted for laboratory analysis to correlate field data with laboratory results. Field analysis indicated that TPH in all soil samples was below 20 ppm and total BTEX was below 10 ppm. The results for the duplicate samples analyzed in the laboratory confirmed field data that TPH values were significantly below NMED standards. BTEX constituents were not detected in either of the duplicate soil samples analyzed in the laboratory.

A confirmatory sample was also collected from the bottom of the excavation. Soil samples were also collected from the walls of the east sand trap excavation at an approximate depth of 6 feet. The soil samples was submitted to a laboratory and analyzed for VOCs, SVOCs, metals, and TPH. Arsenic was the only constituent with a detected concentration that exceeded residential NMSSLs; however, the concentration of arsenic did not exceed industrial/occupational NMSSLs. The report concluded that no unacceptable human health risks due to chemical releases were expected at this SWMU. Based on this, the Corrective Measure Completion Report recommended NFA for SWMU 94.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSLs beneath the SWMU.

Basis of Determination

SWMU 94 has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use.

26. <u>SWMU 113, Landfill 5</u>

Location

SWMU 113, Landfill No. 5 is a 70-acre inactive landfill located in the southeast area of Cannon AFB. Trenching and waste disposal activities occurred across approximately 30 acres in the eastern portion of the site. A 4-foot-high, barbed-wire fence with two locked entrances

surrounds this area. The western 40 acres appear to have received only construction debris for purposes of backfilling natural depressions in the area. Overall, the landfill site has relatively flat topography and is sparsely vegetated with only a few trees. The general surface water runoff is toward the southeast, or into local surface depressions.

History/Current and Anticipated Future Land Use

SWMU 113 was active between 1968 and 1984. Waste materials received at this site reportedly included domestic solvent waste, waste oils, and solvents; paints, paint removers, and thinners; pesticide containers; and various empty drums and cans. From 1968 to 1972, the mode of operation included burning and burying waste in trenches. After 1981, the only waste received at SWMU 113 generally consisted of tree limbs and construction rubble, and standard operation at the site included direct burial of waste in trenches.

Cell #3, located within the landfill premises, is a capped unit that reportedly received hazardous waste through 1981. Wastes received at Cell #3 reportedly included waste oil and solvents in quantities estimated at 5 to 10 gallons per month. No waste was received at Cell #3 from the end of 1981 until the cell's closure in 1983. Closure activities included the installation of an impermeable clay cap and the construction of an additional security fence within the area of SWMU 113.

The current land use at SWMU 113 is considered to be industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

A Phase I Installation Restoration Program (IRP) Records Search evaluated the potential existence of contamination at SWMU 113 and stated that this site warranted further investigation; however, this records search did not include any investigative activities.

A Phase II (Stage 1) IRP investigation included the installation of four groundwater monitoring wells and the collection and analysis of groundwater samples from these wells. One well was installed hydraulically upgradient from Landfill No. 5, and the other three wells were installed downgradient from the site in order to determine the nature, extent, and migration rate of any potential contaminants originating from this SWMU. The Phase II (Stage 1) IRP investigation did not detect groundwater contamination attributable to past or ongoing activities at SWMU 113.

A Preliminary Review/Visual Site Inspection RCRA Facility Assessment (RFA) recommended additional groundwater and vadose zone monitoring to determine if contaminants from Cell #3 have migrated beneath SWMU 113; however, this RFA did not include any additional investigative activities.

A subsequent Remedial Investigation (RI) for 18 IRP/SWMUs at Cannon AFB included the sampling of six monitoring wells in the vicinity of SWMU 113 and an analysis for Appendix IX constituents, as listed in 40 CFR 264. Several constituents were detected in ground water but

reported concentrations were below current NMED ground water cleanup standards, except for phenol. Phenol was detected in one downgradient water sample above the current WQCC human health standards. This RI also included a Baseline Risk Assessment (BRA) that concluded potential impacts to human health and the environment from SWMU 113 were not significant.

A Phase I RFI, completed at SWMU 113 in 1995, included site topographic surveying and mapping, surface geophysical surveying, a soil gas investigation, and a surface and subsurface soil investigation. The RFI included a human health risk screen, which indicated that no unacceptable risk to human health from the chemicals detected during this investigation was present at SWMU 113. The RFI recommended the continued monitoring of groundwater quality to assess potential impacts from Cell #3 as the only action required at SWMU 113.

Based on the results of the Phase I RFI, NMED issued a letter addressed to Col. Clary, Commander Cannon AFB, dated February 17, 1998, that stated that the RFI was technically adequate and approved the report. However, the letter stipulated that post-closure care, including groundwater monitoring, must continue at Cell #3.

Basis of Determination

SWMU 113 has been determined to be appropriate for NFA status based on NMED NFA Criterion 4: A release from the SWMU to the environment has occurred, but the SWMU was characterized under another authority (NMED's Hazardous Waste Bureau) and a closure letter is available. SWMU 113 was determined to be appropriate for NFA even though phenol was detected in one downgradient monitoring well because long-term ground water monitoring related to the closed RCRA unit is on-going and a landfill cap is currently in place.

27. <u>AOC D, Asbestos Burial Pit</u>

Location

Area of Concern (AOC) D, Asbestos Burial Pit, underlies portions of the tee box and fairway at the 7th hole of the Whispering Winds Golf Course. The site has been described as a demolition debris disposal pit, approximately 10 feet below ground surface.

History/Current and Anticipated Future Land Use

AOC D was reportedly used as a disposal site for debris derived from the demolition of numerous buildings at Cannon AFB in the 1950s. The site was discovered during a golf course expansion project when a bulldozer removed a layer of topsoil approximately 1 foot thick from the surface and exposed the chips of non-friable asbestos containing material (ACM). The potential ACM appeared to be pieces of siding from a building, each piece measuring approximately 2 inches square. The lateral extent of the debris was unknown, but the maximum depth was estimated to be 10 feet.

Other accounts from base personnel suggested that any debris present at AOC D may have simply fallen off barracks buildings that were temporarily stored in this area, not intentionally disposed of at this location.

The current land use of AOC D is recreational. AOC D is currently beneath a portion of the 7th hole of the Whispering Winds Golf Course. Anticipated future land use may change from the current land use if there is a change in the flying mission of CAFB.

Evaluation of Relevant Information

An EM-61 electromagnetic geophysical survey was conducted in the area of AOC D. This investigation found no significant metal (e.g., drums) or other debris buried at the site.

A Site Inspection (SI) of AOC D was done in an area that measured approximately 150 feet by 590 feet. During the SI, eight borings were drilled to maximum depths of 10 feet and one boring was drilled to a maximum depth of 25 feet based on the visible presence of chips of potential transite debris near the surface of this boring. Soil samples collected from the borings were analyzed for VOCs, SVOCs, TAL metals, and TRPH.

The chips of debris sent for asbestos identification using polarized light microscopy (PLM) were found to contain greater than 1 percent chrysotile asbestos. The SI recommended that the exposed chips of debris, an ACM, be removed.

No organic compounds were detected above laboratory detection limits. Arsenic, barium, chromium, and lead were detected at concentrations below residential NMSSLs.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSLs beneath the SWMU.

With the exception of the non-friable ACM found near the ground surface, no other contamination of any significance was detected in the area of this AOC. In a letter to Col. Clary, Commander Cannon AFB, on November 6, 1997, NMED approved the report.

The conclusions reached in the SI and in the NMED letter are consistent in recommending that the only action required at AOC D is the removal and proper disposal of the exposed ACM. This action has been completed, and the action will be repeated in the future if additional ACM is exposed. CAFB currently maintains the golf course fairway over the burial site, which serves as a cap that prevents the release of friable ACM.

Basis of Determination

AOC D has been determined to be appropriate for NFA status based on NMED NFA Criterion 4: A release from the AOC to the environment has occurred, but the AOC was characterized under by NMED's and a closure letter is available. As long as asbestos remains buried, the exposure pathway to the ambient air does not exist, therefore eliminating risk to human health.

28. AOC E, Runway Rubble Pile

Location

AOC E, the Runway Rubble Pile, measures approximately 1,000 feet long by 200 feet wide and has an average height of approximately 2 to 3 feet. The AOC is located approximately 120 feet east of a former runway that, in turn, is located east of the current runway. The rubble pile trends north-south, parallel to the former runway.

History/Current and Anticipated Future Land Use

AOC E was discovered in 1995 after a brush fire exposed the debris pile. An historical documents review indicated that the debris had been piled at the site sometime between 1959 and 1966. The debris is believed to have been stripped from a runway constructed during World War II during its demolition. No records were found that indicated any other past use of the site.

The site of AOC E is currently unused. Anticipated future land use is industrial.

Evaluation of Relevant Information

During the SI, eight borings drilled to maximum depths of 40 feet were sampled. Soil samples were collected from the 0- to 2-foot, 3- to 5-foot, 8- to 10-foot, 18- to 20-foot, 28- to 30-foot, and 38- to 40-foot depth intervals in these borings. Four additional borings drilled to maximum depths of 10 feet were also sampled. Soil samples were collected from the 0- to 2-foot, 3- to 5-foot, and 8- to 10-foot depth intervals in these borings. Borings were located near anomalies identified by a geophysical survey. No visual evidence of contamination was observed during this investigation. Soil samples were analyzed for VOCs, SVOCs, TAL metals, pesticides, and PCBs.

Cadmium, and chromium were detected in surface soils at concentrations below residential NMSSLs. Arsenic was detected in surface soils at concentrations above residential NMSSLs; however the highest concentration of arsenic detected was below industrial/occupational NMSSLs. Several organic compounds and pesticides were also detected in surface soils at concentrations significantly below residential NMSSLs. Arsenic was the only metal detected above residential NMSSLs in subsurface soils; however, the highest concentration of arsenic detected did not exceed industrial/occupational NMSSLs. Several organic compounds and two pesticides were detected at concentrations below residential NMSSLs.

The results of the risk evaluation found that the cumulative excess cancer risk for AOC E and the cumulative HI for noncarcinogenic health effects met USEPA acceptable levels. Based on this, the SI report recommended NFA for AOC E.

Both the estimated lifetime excess cancer risks and the estimated cumulative adverse health effects met acceptable USEPA levels for soils at AOC E. Therefore, an ecological risk assessment was not conducted at AOC E.

Groundwater at Cannon AFB is located at a depth greater than 250 feet and contaminants were not detected at concentrations greater than applicable NMSSLs beneath the site.

Basis of Determination

AOC E has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The AOC has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use.

29. AOC F, Calibration Target Berm

Location

AOC F, the Calibration Target Berm, is irregularly shaped, approximately 15 feet high, and comprised mainly of sand soil with numerous rock fragments, sparse vegetation, and some debris. A former target support, constructed of telephone poles, iron bars, and concrete, is located approximately 150 feet north of the berm. The AOC is located to the southwest of the current small arms firing range at Cannon AFB.

History/Current and Anticipated Future Land Use

AOC F was used as a backstop when sighting aircraft weaponry in the 1950s and 1960s. The site is not currently used.

The current land use at AOC F is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During a SI, nine borings were drilled to maximum depths of 4 feet from the top surface of the berm using a hand auger. The hand auger borings were completed in an approximate grid pattern over the berm. Soil samples were collected from the berm's surface and from the 1.5- to 2-foot and the 3.5- to 4-foot depth intervals in these borings. Nine other surface samples were collected from locations near the former target stand, between the stand and the berm, and around the berm at depths of 0- to 2-feet using a hand auger. All samples were sieved using a 0.25-inch mesh screen to remove debris. The soil samples were analyzed for antimony, arsenic, and lead.

Arsenic was the only metal that exceeded residential NMSSLs; however, the detected concentration did not exceed industrial/occupational NMSSLs. The SI report recommended NFA for AOC F. The risk evaluation found that no unacceptable adverse health effects were anticipated due to arsenic or lead concentrations in soil at AOC F.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants are not present at concentrations greater than applicable NMSSLs beneath the AOC.

Basis of Determination

AOC F has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The AOC has been characterized in accordance with the current applicable state and federal regulations, and the available data has indicated that the contaminants present did not pose an unacceptable level of risk under current and projected future land use.

30. AOC G, Disturbed Area-North Housing Site

Location

AOC G, the Disturbed Area - North Housing Site, measured approximately 735 feet long by 320 feet wide and was located in the northwest corner of Cannon AFB housing area. At least five housing units are located within the area of the disturbance.

History/Current and Anticipated Future Land Use

AOC G was identified in 1959 historical aerial photographs. The site appeared inactive in 1966 historical aerial photographs. The reason for the disturbance is unknown. Portions of AOC G are covered by housing units, are paved by streets and driveways, or are landscaped.

The current land use at the location of AOC G is residential. Anticipated future land use remains residential.

Evaluation of Relevant Information

During the SI, eight borings were drilled to maximum depths of 40 feet. Soil samples were collected from the 0- to 2-foot, 3- to 5-foot, 8- to 10-foot, 18- to 20-foot, 28- to 30-foot, and 38- to 40-foot depth intervals. A uniform grid pattern was not possible due to the presence of buildings and utilities at the site, and neither the historical aerial photographs nor the EM-61 data suggested the need for specific boring placements. No visual evidence of contamination was observed during this investigation. Soil samples were analyzed for VOCs, SVOCs, TPH, TAL metals, herbicides, pesticides, and PCBs.

Methyl ethyl ketone, methyl isobutyl ketone, and toluene were detected in the surface soils at concentrations significantly below residential NMSSLs. All metals detected in the surface soils were at concentrations below residential NMSSLs. Several organic compounds were detected in the subsurface soils at concentrations below residential NMSSLs. Arsenic, barium, cadmium, chromium, and lead were also detected in subsurface soils at concentrations that did not exceed residential NMSSLs.

Based on the results of the risk evaluation, no unacceptable human health risks due to chemical releases were expected from this AOC. Therefore, NFA was recommended for AOC G. A human health risk screening was conducted and the estimated lifetime excess cancer risks and the estimated cumulative adverse health effects met acceptable USEPA levels for soils at AOC G.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants are not present at concentrations greater than applicable NMSSLs beneath the AOC.

Basis of Determination

AOC G has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The AOC has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use.

31. AOC H, Disturbed Area-South Housing Site

Location

AOC H, the Disturbed Area - South Housing Site, was an irregularly shaped area that measured several hundred feet long by approximately 350 feet across. It was located in the northwest corner of Cannon AFB housing area, south of AOC G-North Housing Site.

History/Current and Anticipated Future Land Use

AOC H was identified as a blowout in 1951 historical aerial photographs, and the site appeared to contain a disturbance in 1954 historical aerial photographs. The reason for the disturbance is unknown. At least five housing units are located within the area of the disturbance. Portions of AOC H are covered by housing units, are paved by streets and driveways, or are landscaped.

The current land use of AOC H is residential. Anticipated future land use remains residential.

Evaluation of Relevant Information

During the SI, six borings were drilled to a maximum depth of 40 feet. Soil samples were collected from the 0- to 2-foot, 3- to 5-foot, 8- to 10-foot, 18- to 20-foot, 28- to 30-foot, and 38- to 40-foot depth intervals in these borings. No visual evidence of contamination was observed during this investigation. Soil samples were analyzed for VOCs, SVOCs, TPH, TAL metals, pesticides, herbicides, and PCBs.

Three organic compounds were detected in the surface soils at concentrations below residential NMSSLs and/or EPA Region 6 Human Health Screening Levels. Two pesticides, DDE, and DDT, were detected at concentrations below residential NMSSLs. All metals detected in the surface soils were at concentrations below residential NMSSLs. A number of organic compounds were detected in the subsurface soils at concentrations below residential NMSSLs and/or EPA Region 6 Human Health Screening Levels. One pesticide was also detected at concentrations below NMSSLs. Arsenic, barium, cadmium, chromium, mercury, and lead were also detected in subsurface soils at concentrations below residential NMSSLs.

Based on the results of the risk evaluation no unacceptable human health risks due to chemical releases were expected from this AOC. Therefore, NFA was recommended for AOC H.

An ecological risk screening was not included as part of the SI, but a human health risk screening was conducted. Both the estimated lifetime excess cancer risks and the estimated cumulative adverse health effects met acceptable USEPA levels for soils at AOC H.

The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants are not present at concentrations greater than applicable NMSSLs beneath the AOC. This area is currently either covered by buildings, asphalt and landscaping, further reducing risk to human and ecological receptors.

Basis of Determination

AOC H has been determined to be appropriate for NFA based on NMED NFA Criterion 5: The SWMU/AOC has been characterized in accordance with the current applicable state and federal regulations, and the available data indicates that the contaminants present do not pose an unacceptable level of risk under current and projected future land use.

32. DP-33, Drum Disposal Pit

Location

DP-33 was a drum disposal pit discovered in 1991 during earthwork operations, and was located in the northeast portion of Cannon AFB near Engineers Way Road. Corrective action included soil and drum removal, resulting in an excavation measuring approximately 70 feet by 90 feet and 8 feet deep.

History/Current and Anticipated Future Land Use

DP-33 reportedly was the historical location of an aircraft hangar. The hangar was demolished in the mid-1960s. Buried drums were first discovered at DP-33 during earthwork operations in 1991. DP-33 was the site of a Rapid Response Corrective Action, which removed buried drums containing what appeared to be waste petroleum liquids. The location of DP-33 is currently used as an electrical equipment storage yard.

The current land use of DP-33 is industrial. Anticipated future land use remains industrial.

Evaluation of Relevant Information

During earthwork operations in 1991, a buried drum was excavated and its contents spilled onto surrounding soils. IT Corporation performed a Rapid Response Corrective Action at the site, and an estimated 25 drums and approximately 610 cubic yards of soils were excavated from the area of DP-33.

Ten confirmation samples were collected from the limits of the excavation (two samples each from the floor and the four walls). Two composite samples were collected from each of the two stockpiles of excavated soil (one composed of soils removed from the immediate vicinity of the drums and the other composed of visually impacted soils from the excavation). Soil samples were analyzed for VOCs, SVOCs, metals, pesticides, and TPH.

One organic compound, xylene, was detected in the confirmation samples at a concentration below residential NMSSLs. The pesticides endosulfan, DDT, and DDE were also detected in the confirmation samples, but at concentrations below residential NMSSLs. All metals detected were at concentrations that did not exceed residential NMSSLs.

TRPH was detected at 1380 mg/kg in one of the confirmation samples collected from the floor of the excavation. However, an additional sample was collected from a location proximate to this sample at a depth 3 feet below the level of the floor of the excavation and analyzed for total TRPH. TRPH was not detected above the laboratory detection limit in this sample, demonstrating that concentrations of TRPH diminish within a few feet below the limits of the excavation. No other COPCs were detected in any of the confirmation samples.

Two disposal profile samples were collected from the contaminated soil stockpiles. Although TRPH and 11 metals were detected in the two disposal profile samples using TCLP methods, none of these analytes were detected at hazardous concentrations. Two additional disposal profile samples were later collected from the contaminated soil stockpiles and also analyzed for TRPH. TRPH was not detected at hazardous concentrations in these samples.

Nine samples were collected from the residual liquids found in the excavated drums. A field hazard categorization was performed on each sample. None of the nine residual liquid samples collected from the excavated drums exhibited hazardous characteristics when they were tested in the field.

The Rapid Response Corrective Action included a risk evaluation. Two exploratory trenches (one extending approximately 60 feet west of the main excavation and the other extending approximately 90 feet east of the main excavation) were also dug to further assess the potential presence of buried drums. No drums were encountered outside the main excavation.

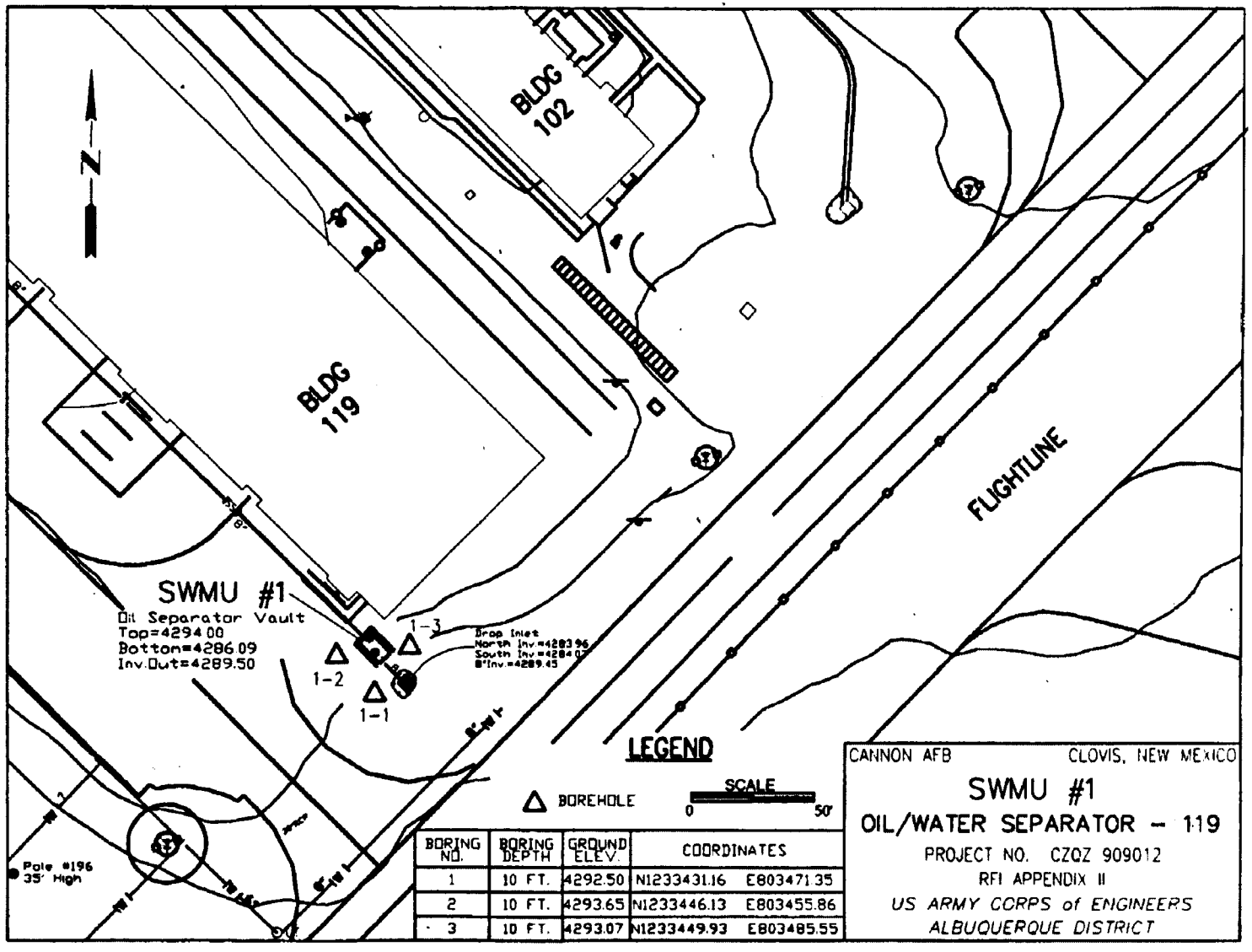
The potential for groundwater contamination was considered minimal since the depth to groundwater is greater than 250 feet, and the soil sampling results demonstrate that contaminants were not present at concentrations greater than applicable NMSSLs beneath DP-33.

In a letter to Col. W.P. Ard, Commander 27th Support Group, dated December 12, 1996, NMED stated the corrective action was consistent with applicable regulations and protective of both human health and the environment. Therefore, NMED approved the Final Project Report and recommended NFA at the site.

Basis of Determination

DP-33 has been determined to be appropriate for NFA status based on NMED NFA Criterion 4: A release from the site to the environment has occurred, but the site was characterized under another authority (NMED's Ground Water Protection and Remediation Bureau) and a closure letter is available.

I. Maps and Figures



BORING NO.	BORING DEPTH	GROUND ELEV.	COORDINATES	
1	10 FT.	4292.50	N1233431.16	E803471.35
2	10 FT.	4293.65	N1233446.13	E803455.86
3	10 FT.	4293.07	N1233449.93	E803485.55

Figure 1---SWMU 1

Source: LRL Science, Inc., 1993

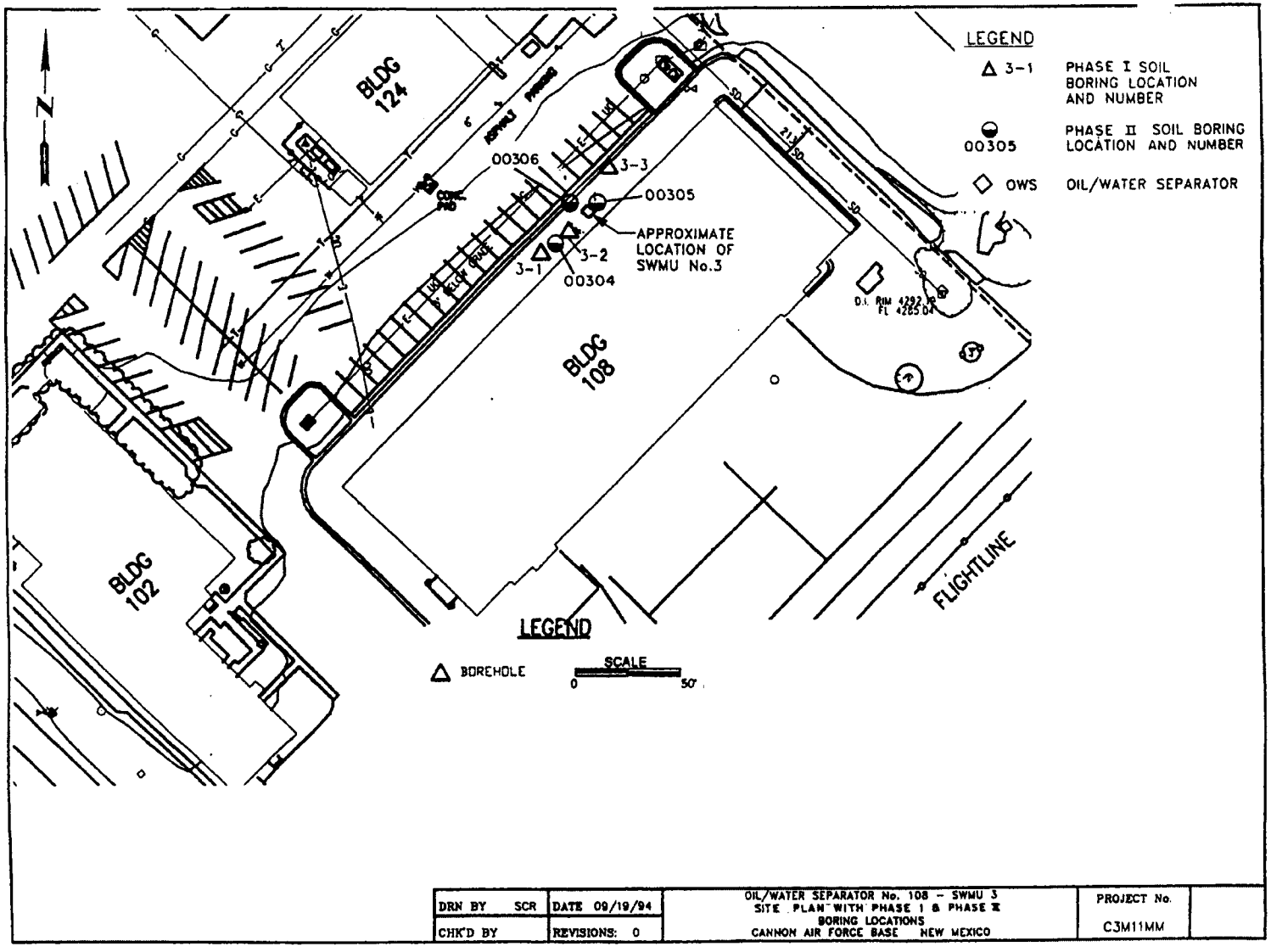


Figure 2--SWMU 3

Source: Woodward-Clyde, 1997

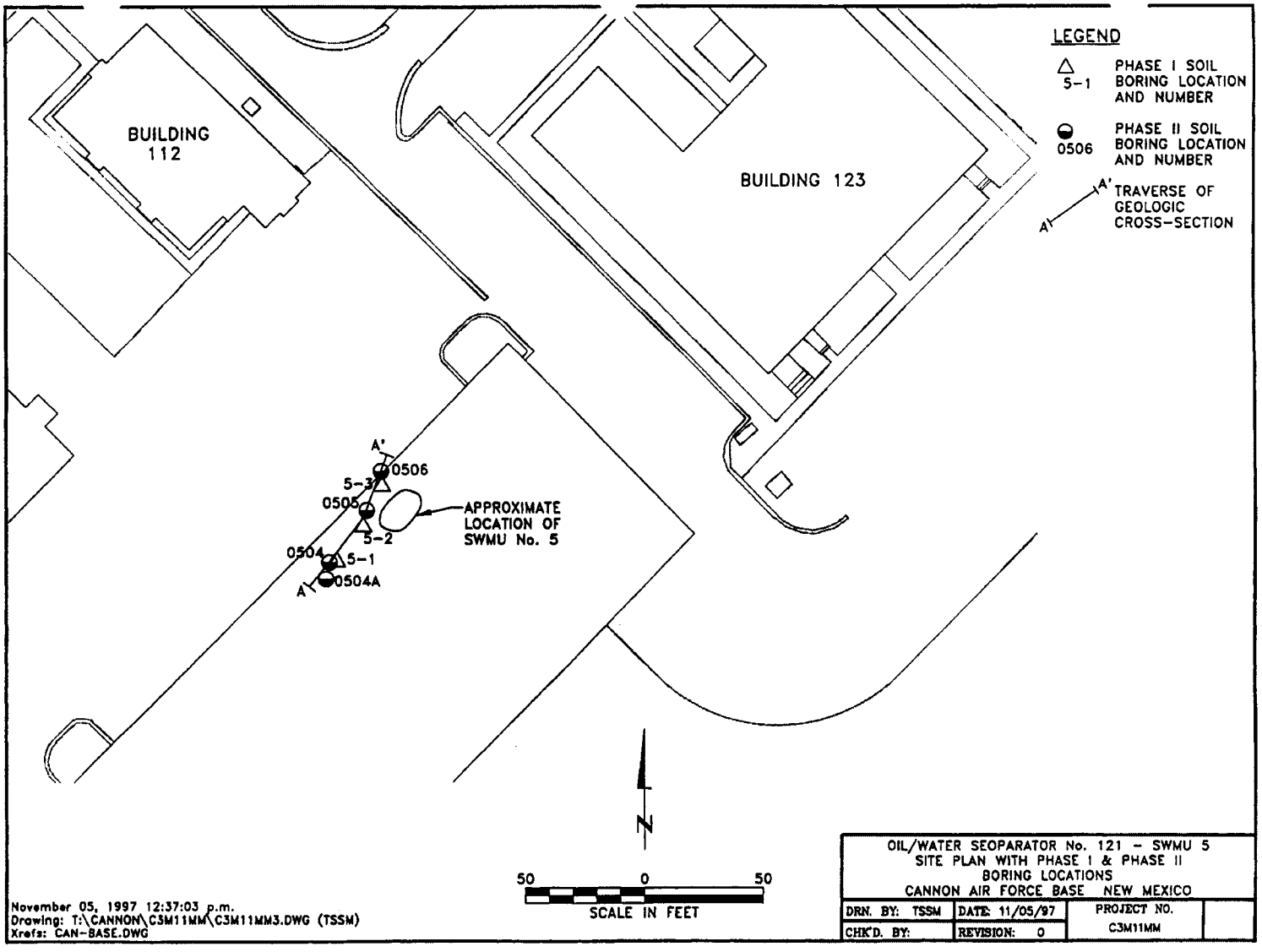
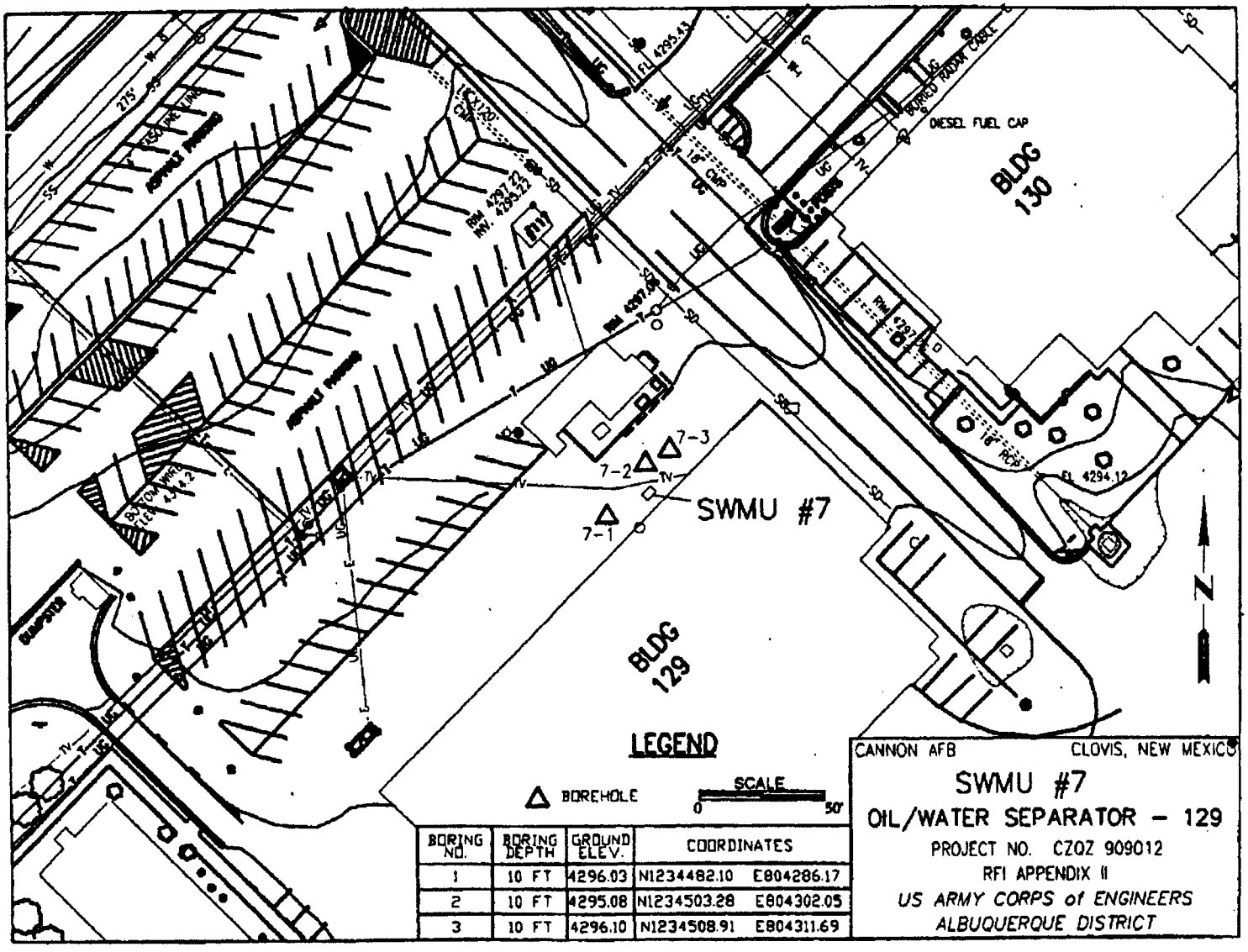


Figure 3--SWMU 5

Source: Woodward-Clyde, 1997



BORING NO.	BORING DEPTH	GROUND ELEV.	COORDINATES	
1	10 FT	4296.03	N1234482.10	E804286.17
2	10 FT	4295.08	N1234503.28	E804302.05
3	10 FT	4296.10	N1234508.91	E804311.69

Figure 4---SWMU 7

Source: LRL Sciences, Inc., 1997

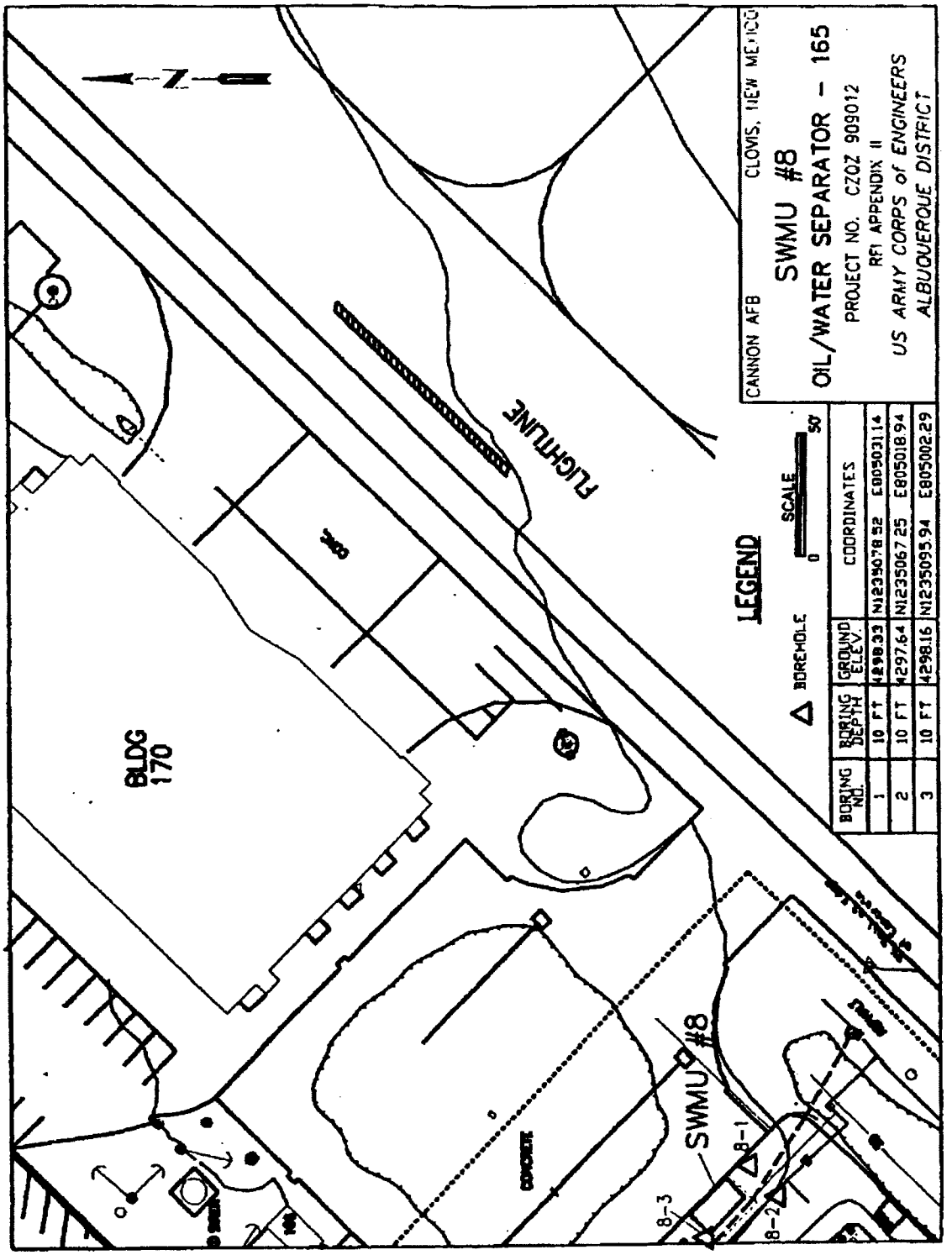
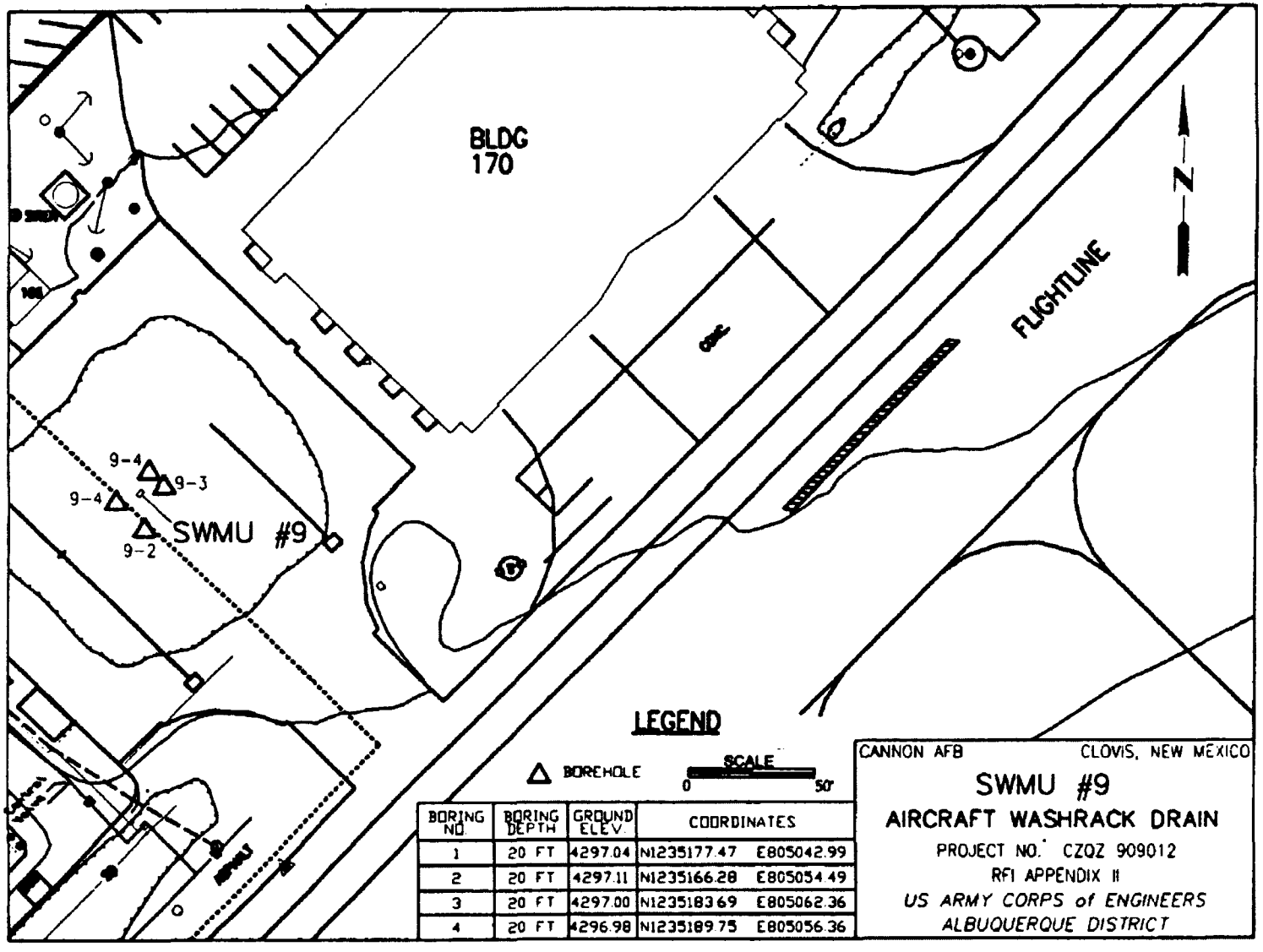


Figure 5---SWMU 8

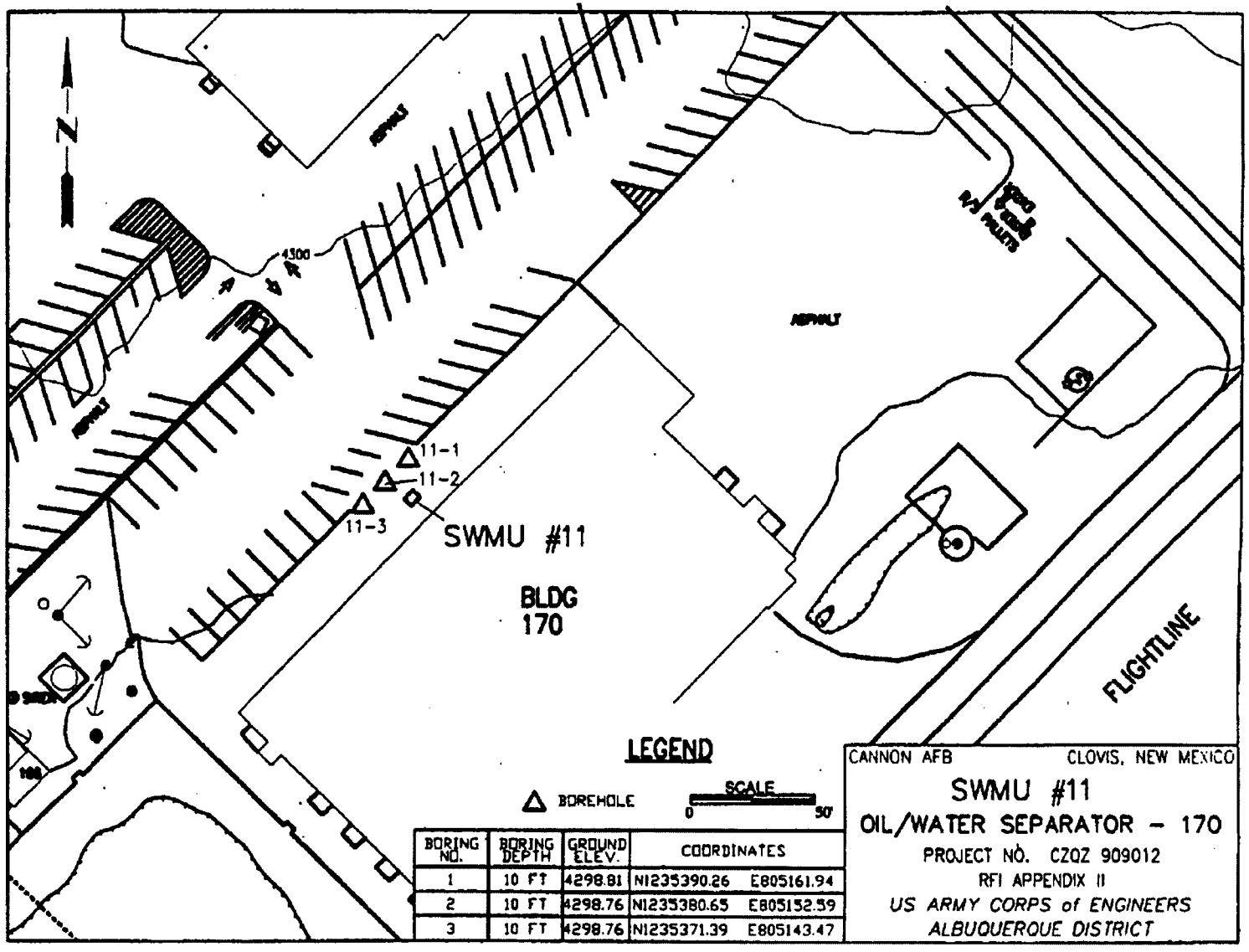
Source: LRL Sciences, Inc., 1993



BORING NO.	BORING DEPTH	GROUND ELEV.	COORDINATES	
1	20 FT	4297.04	N1235177.47	E805042.99
2	20 FT	4297.11	N1235166.28	E805054.49
3	20 FT	4297.00	N1235183.69	E805062.36
4	20 FT	4296.98	N1235189.75	E805056.36

Figure 6---SWMU 9

Source: LRL Sciences, Inc., 1993



BORING NO.	BORING DEPTH	GROUND ELEV.	COORDINATES	
1	10 FT	4298.81	N1235390.26	E805161.94
2	10 FT	4298.76	N1235380.65	E805152.59
3	10 FT	4298.76	N1235371.39	E805143.47

Figure 7--SWMU 11

Source: LRL Sciences, Inc., 1993

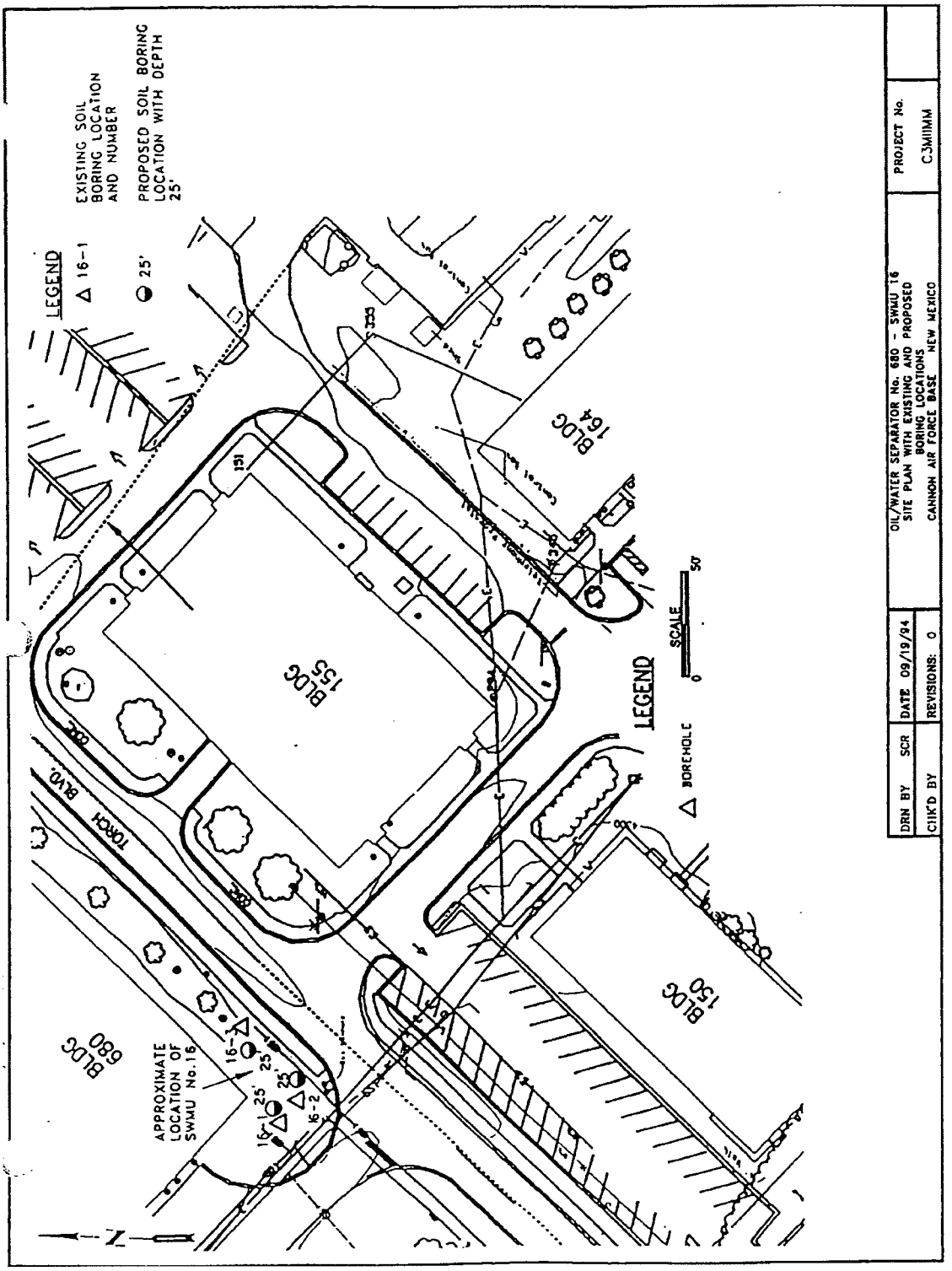
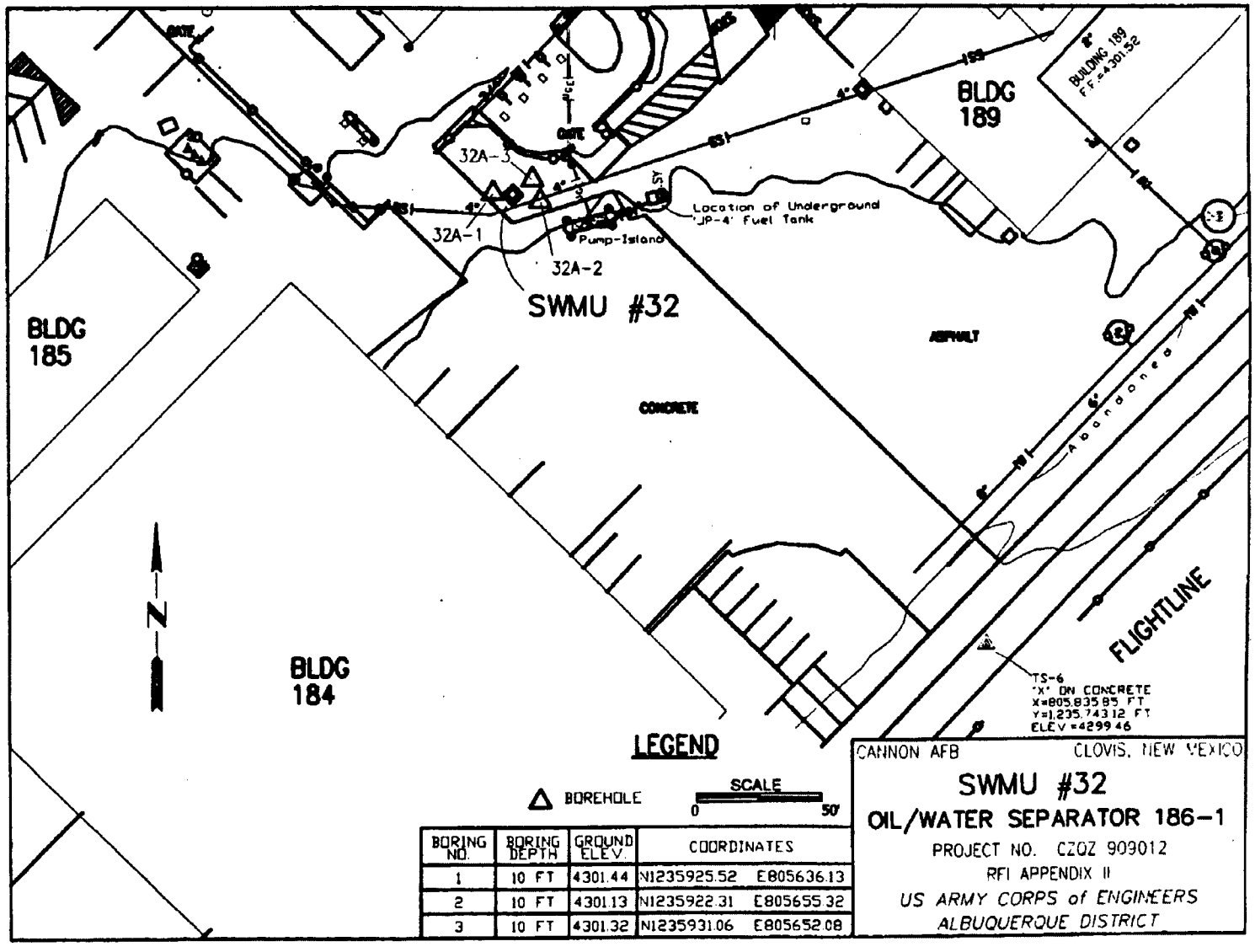


Figure 8---SWMU 16

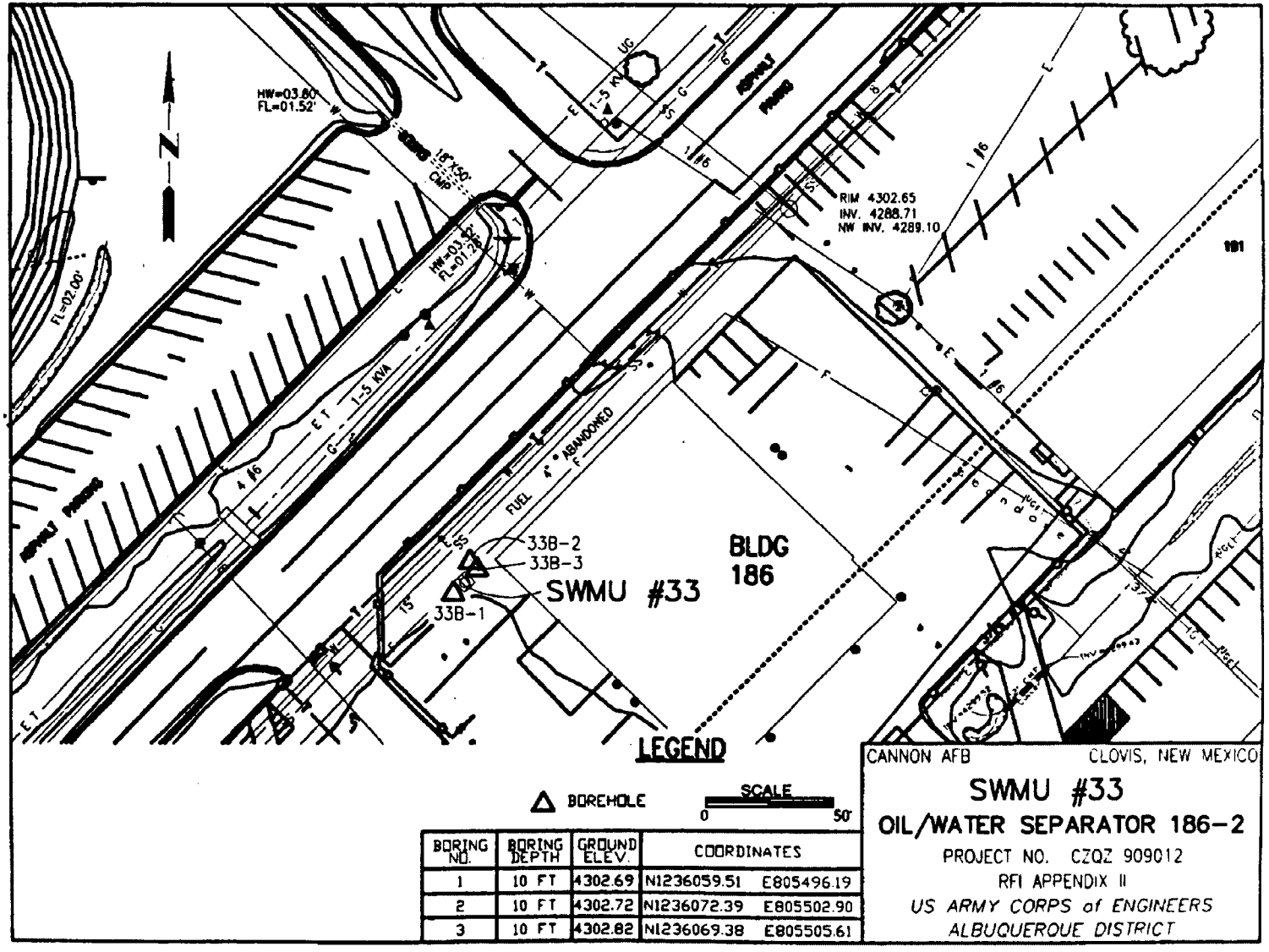
Source: Woodward-Clyde, 1997



BORING NO.	BORING DEPTH	GROUND ELEV.	COORDINATES	
1	10 FT	4301.44	N1235925.52	E805636.13
2	10 FT	4301.13	N1235922.31	E805655.32
3	10 FT	4301.32	N1235931.06	E805652.08

Figure 9--SWMU 32A

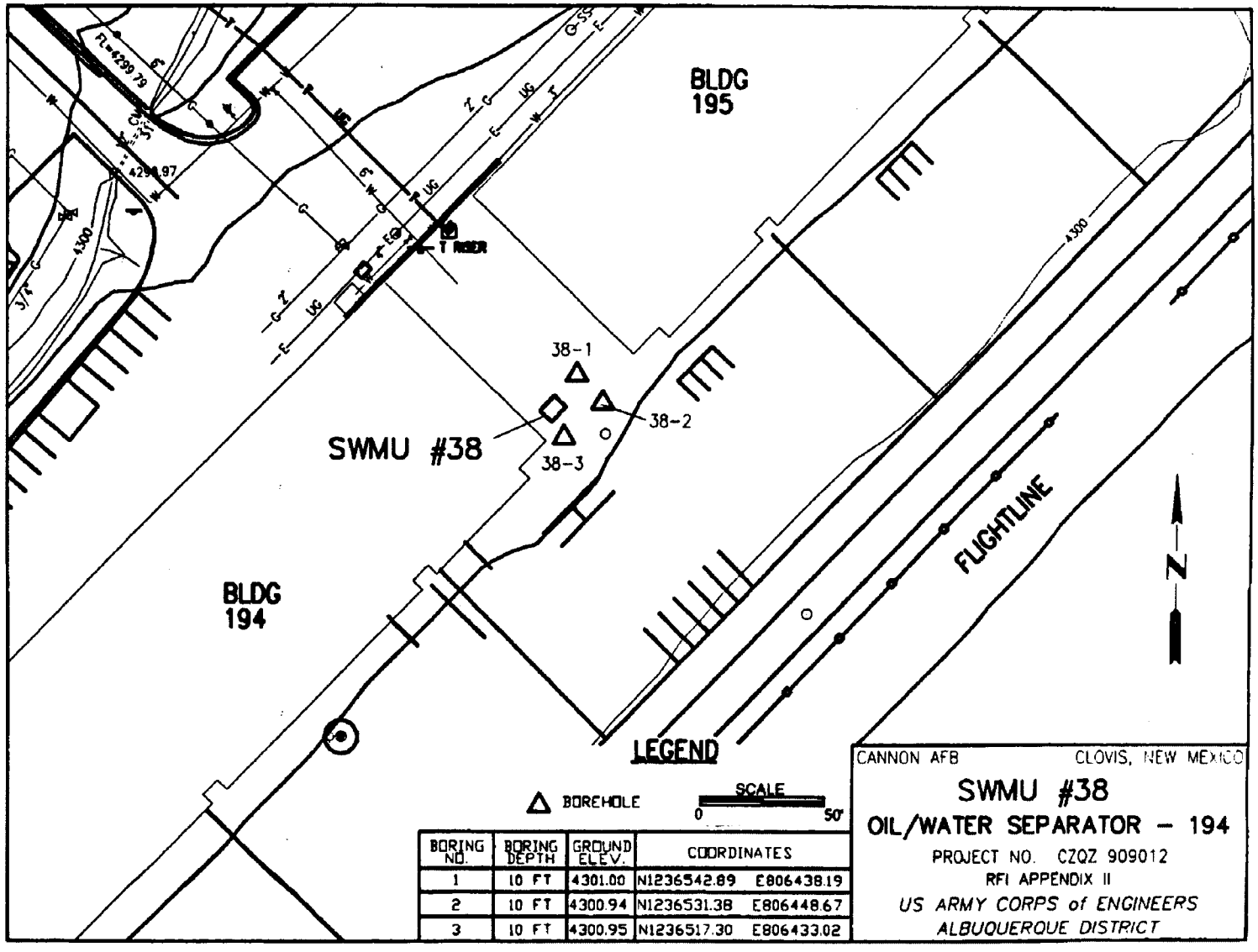
Source: LRL Sciences, Inc., 1993



BORING NO.	BORING DEPTH	GROUND ELEV.	COORDINATES	
1	10 FT	4302.69	N1236059.51	E805496.19
2	10 FT	4302.72	N1236072.39	E805502.90
3	10 FT	4302.82	N1236069.38	E805505.61

Figure 10--SWMU 33B

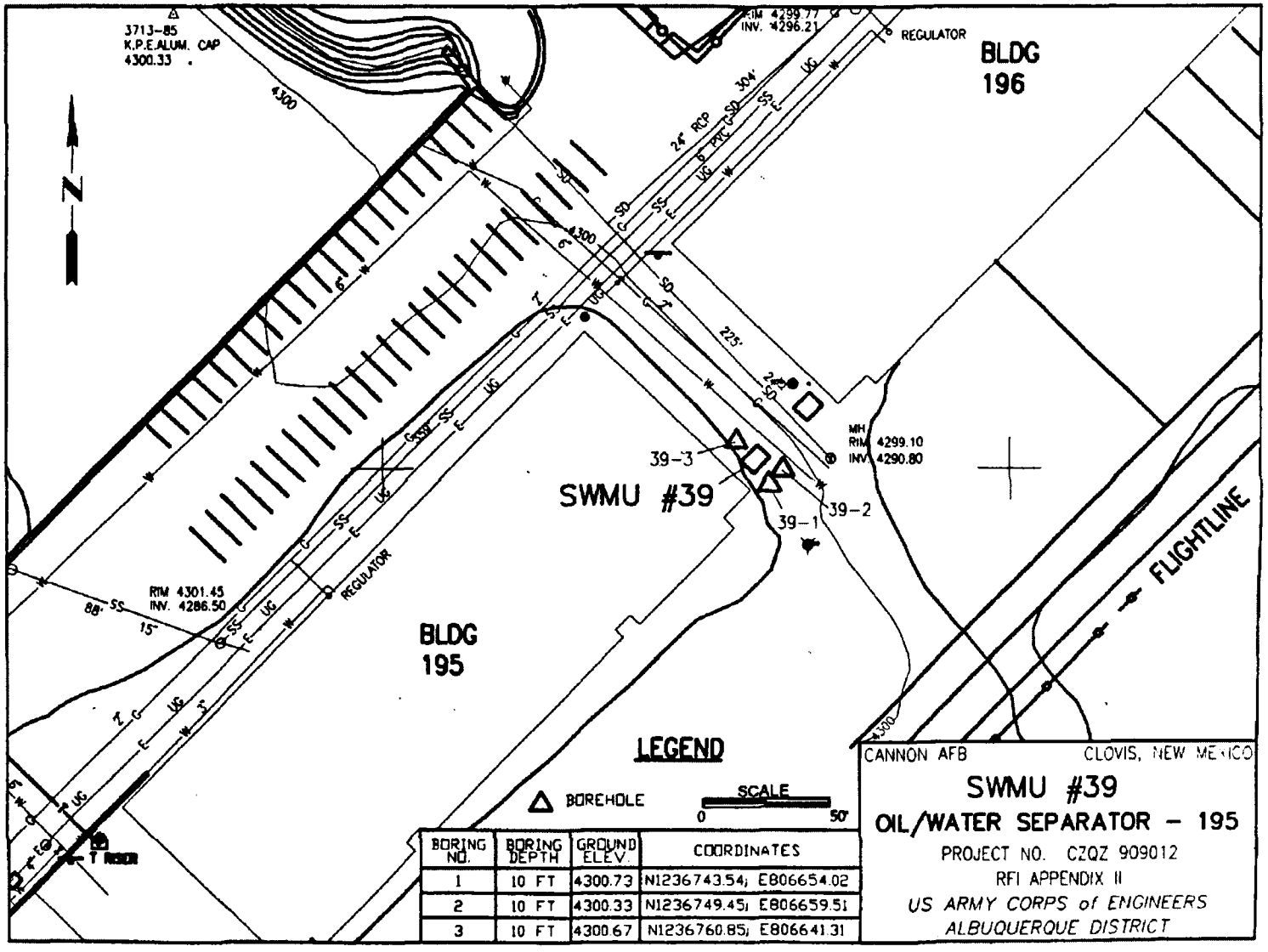
Source: LRL Sciences, Inc., 1993



BORING NO.	BORING DEPTH	GROUND ELEV.	COORDINATES	
1	10 FT	4301.00	N1236542.89	E806438.19
2	10 FT	4300.94	N1236531.38	E806448.67
3	10 FT	4300.95	N1236517.30	E806433.02

Figure 11--SWMU 38

Source: LRL Sciences, Inc., 1993



BORING NO.	BORING DEPTH	GROUND ELEV.	COORDINATES
1	10 FT	4300.73	N1236743.54; E806654.02
2	10 FT	4300.33	N1236749.45; E806659.51
3	10 FT	4300.67	N1236760.85; E806641.31

Figure 12--SWMU 39

Source: LRL Sciences, Inc., 1993

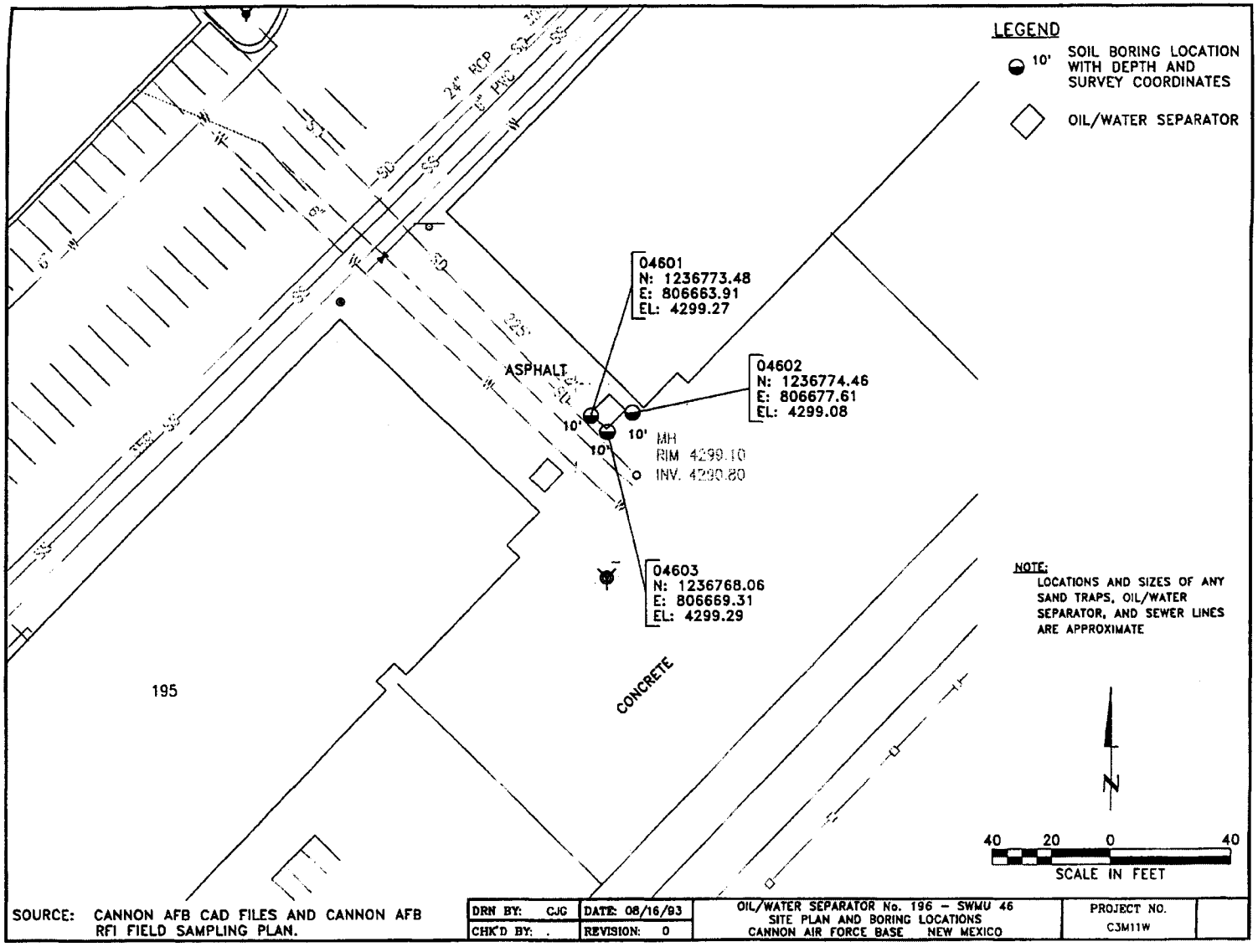


Figure 13--SWMU 46

Source: Woodward-Clyde, 1994

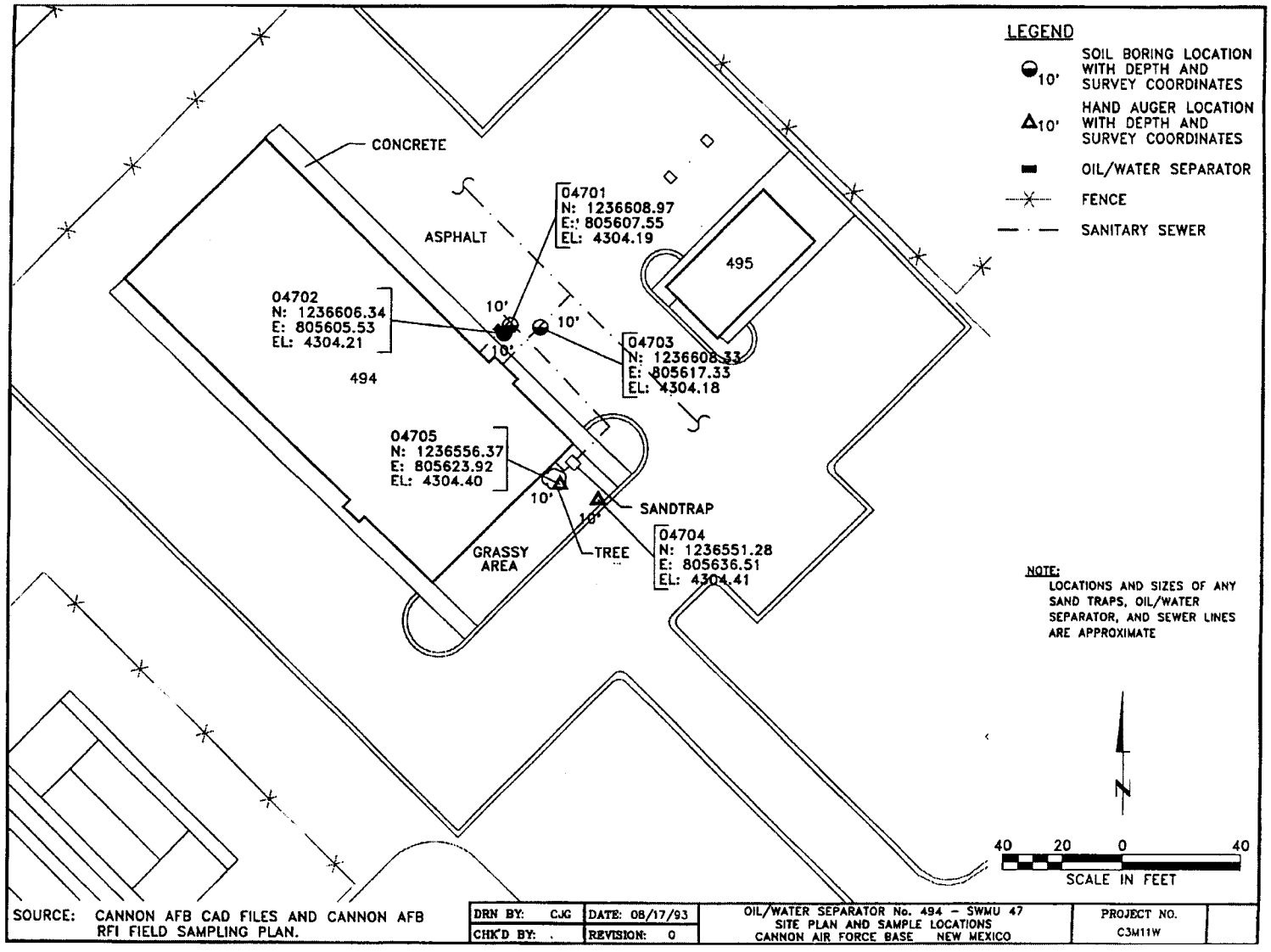


Figure 14---SWMU 47

Source: Woodward-Clyde, 1994

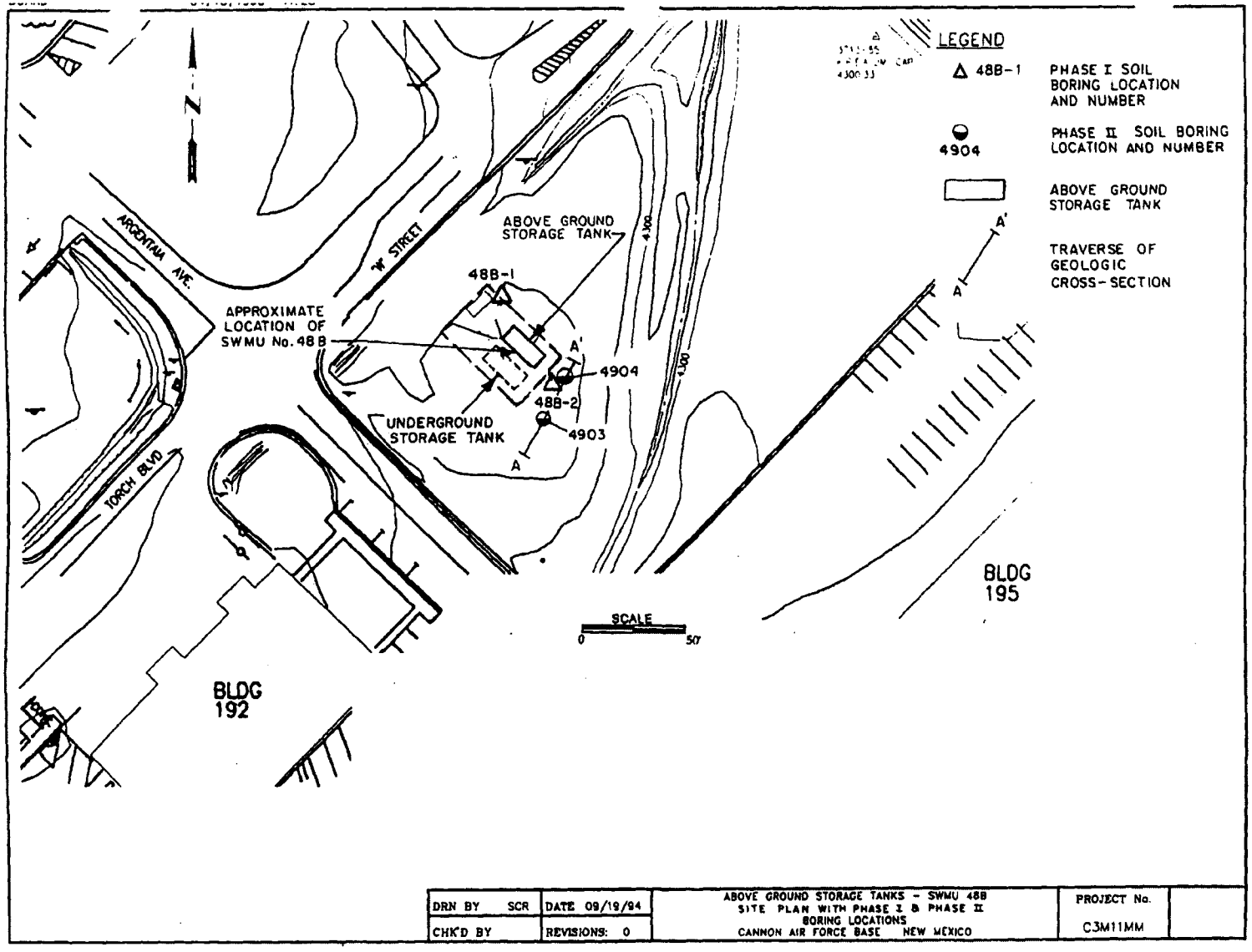


Figure 15---SWMU 48B

Source: Woodward-Clyde, 1997

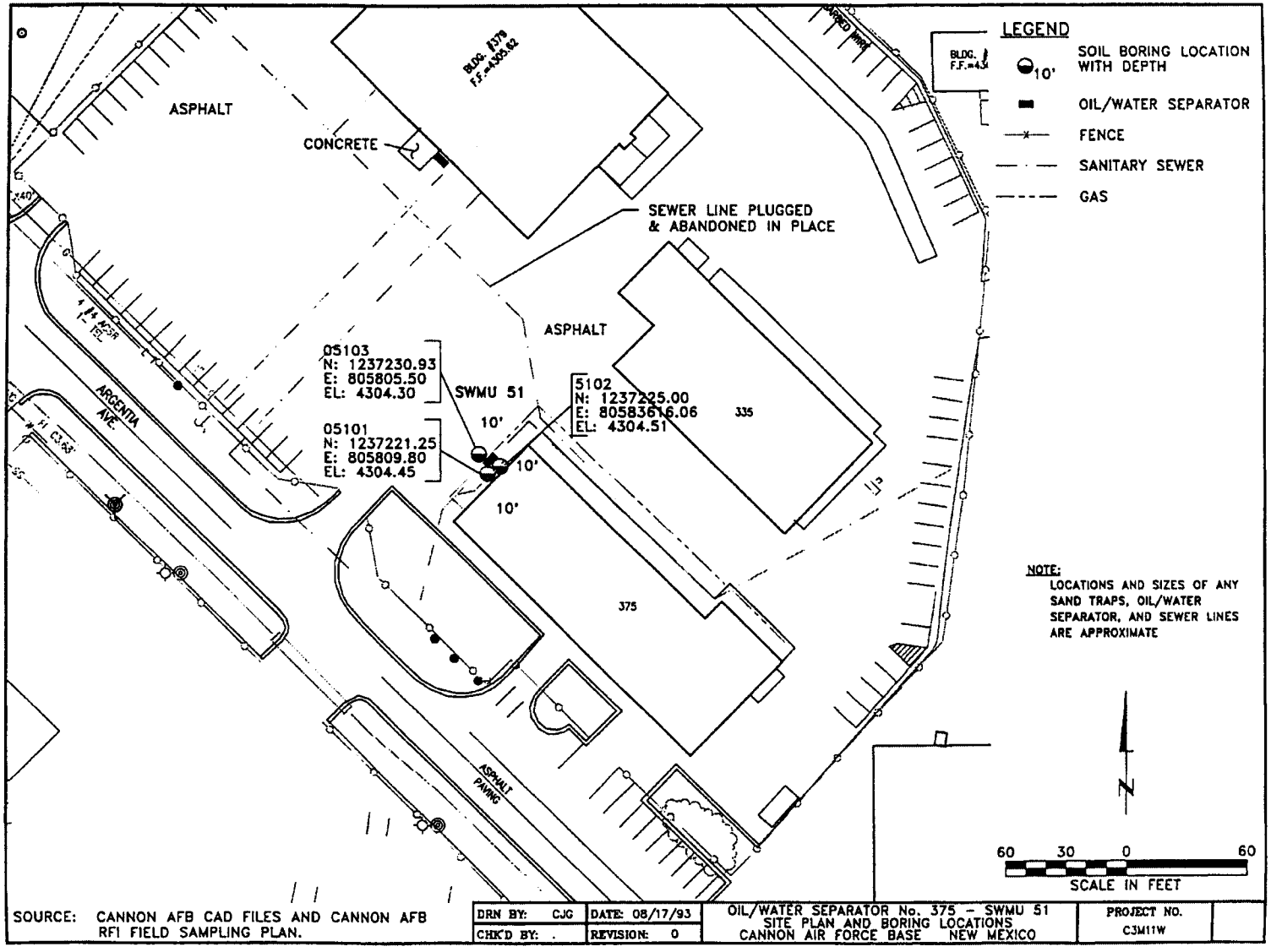


Figure 16--SWMU 51

Source: Woodward-Clyde, 1994

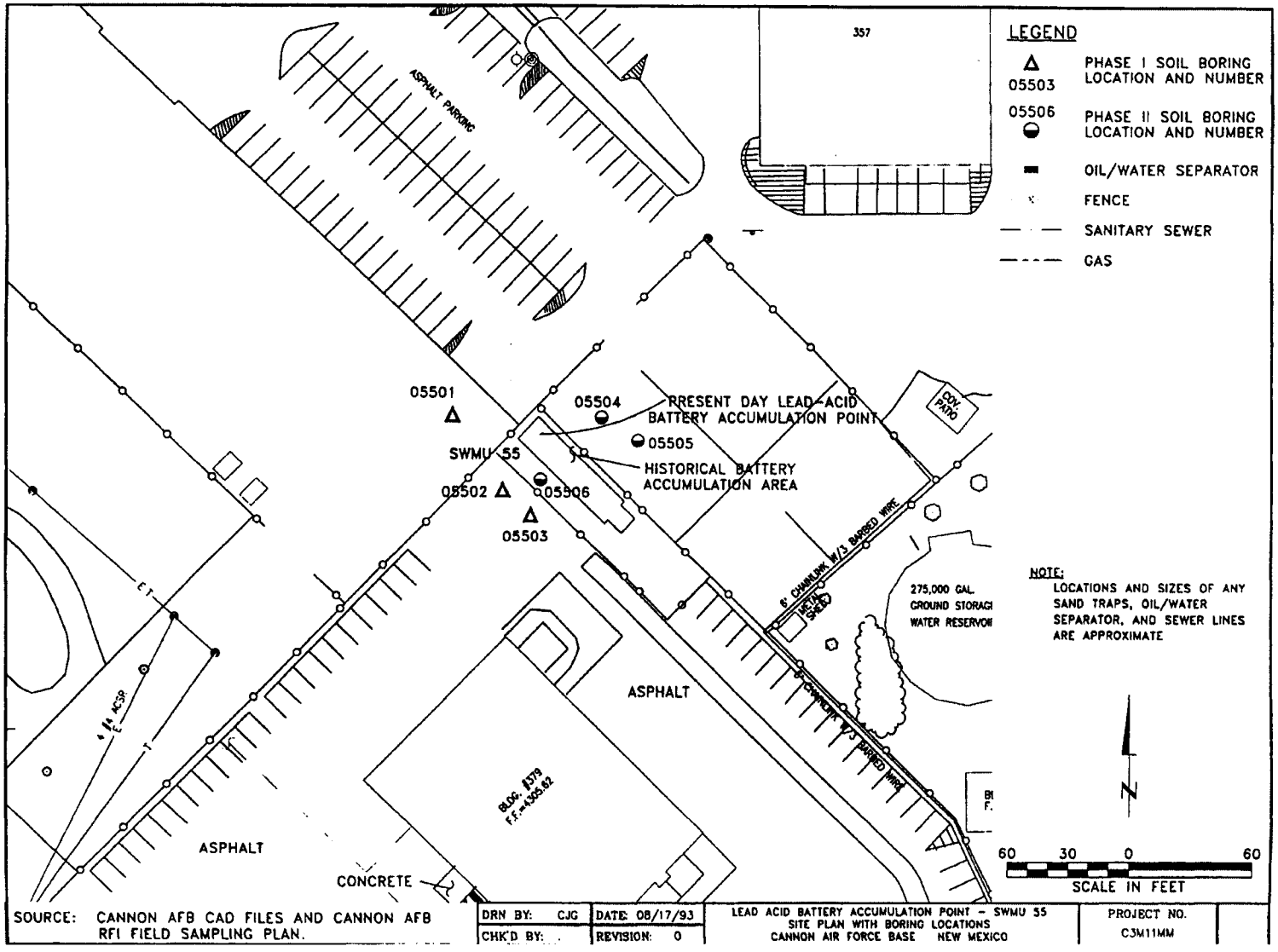


Figure 17--SWMU 55

Source: Woodward-Clyde, 1997

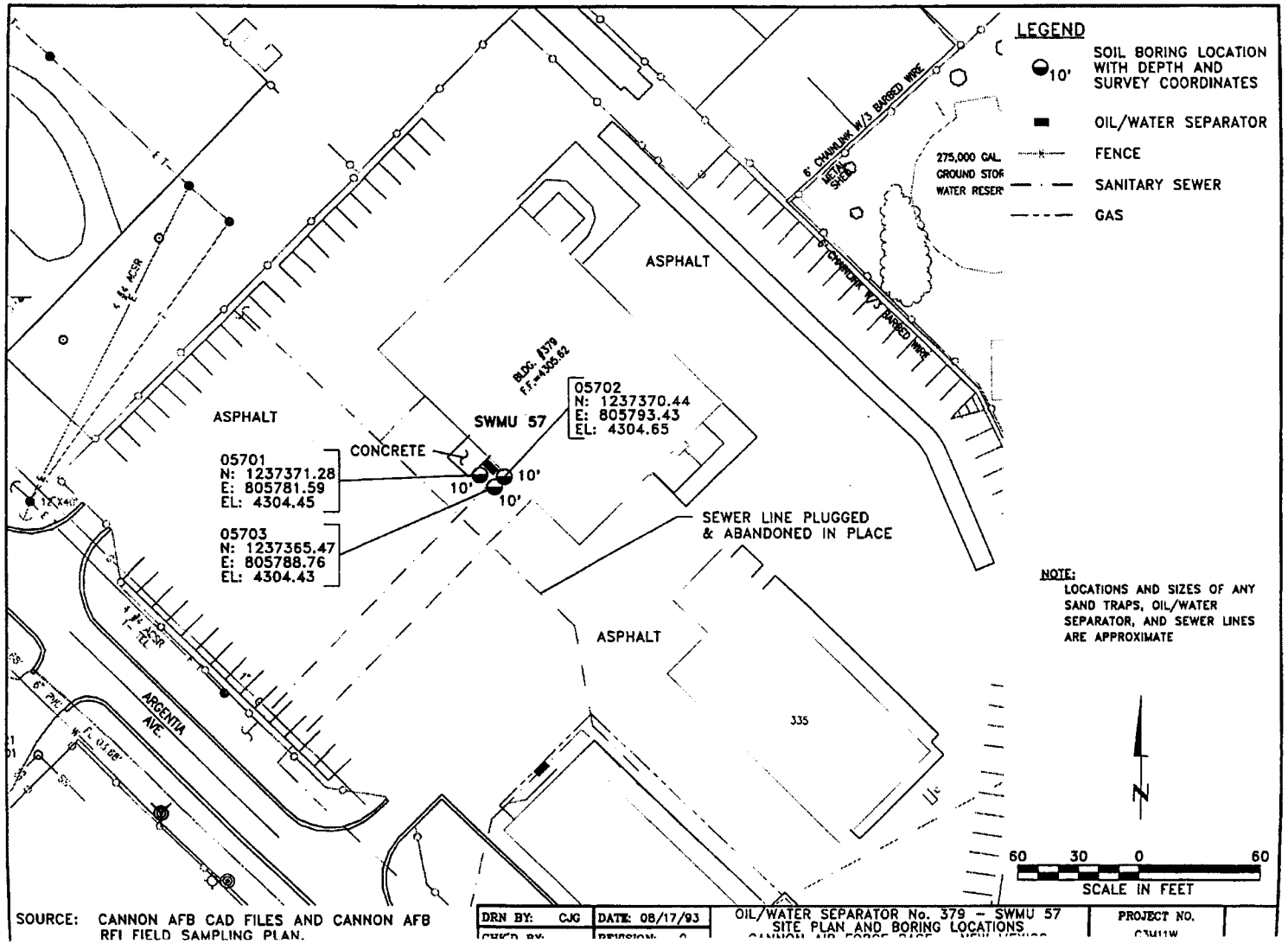


Figure 18--SWMU 57

Source: Woodward-Clyde, 1994

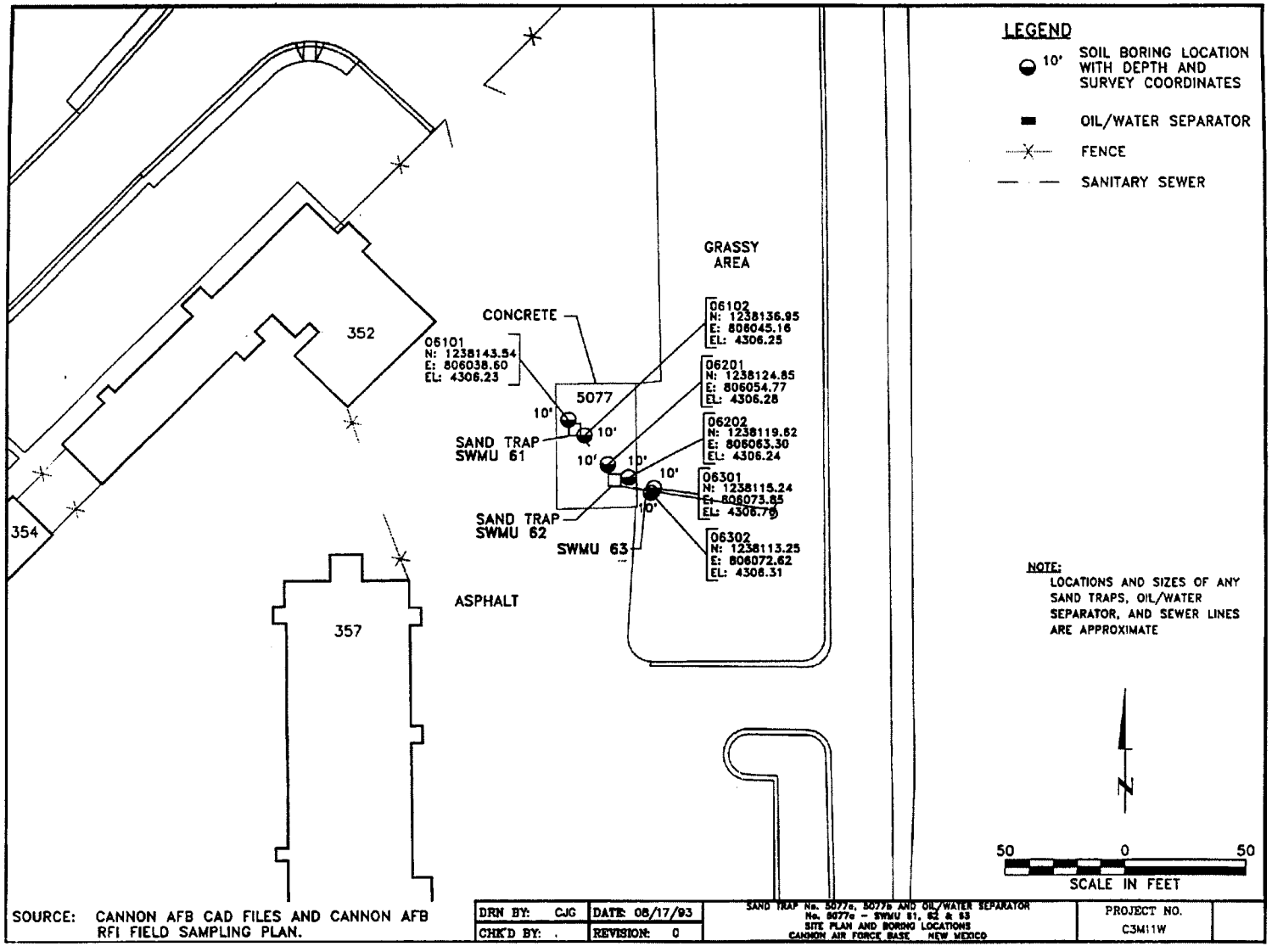


Figure 19--SWMUs 61, 62 and 63

Source: Woodward-Clyde, 1994

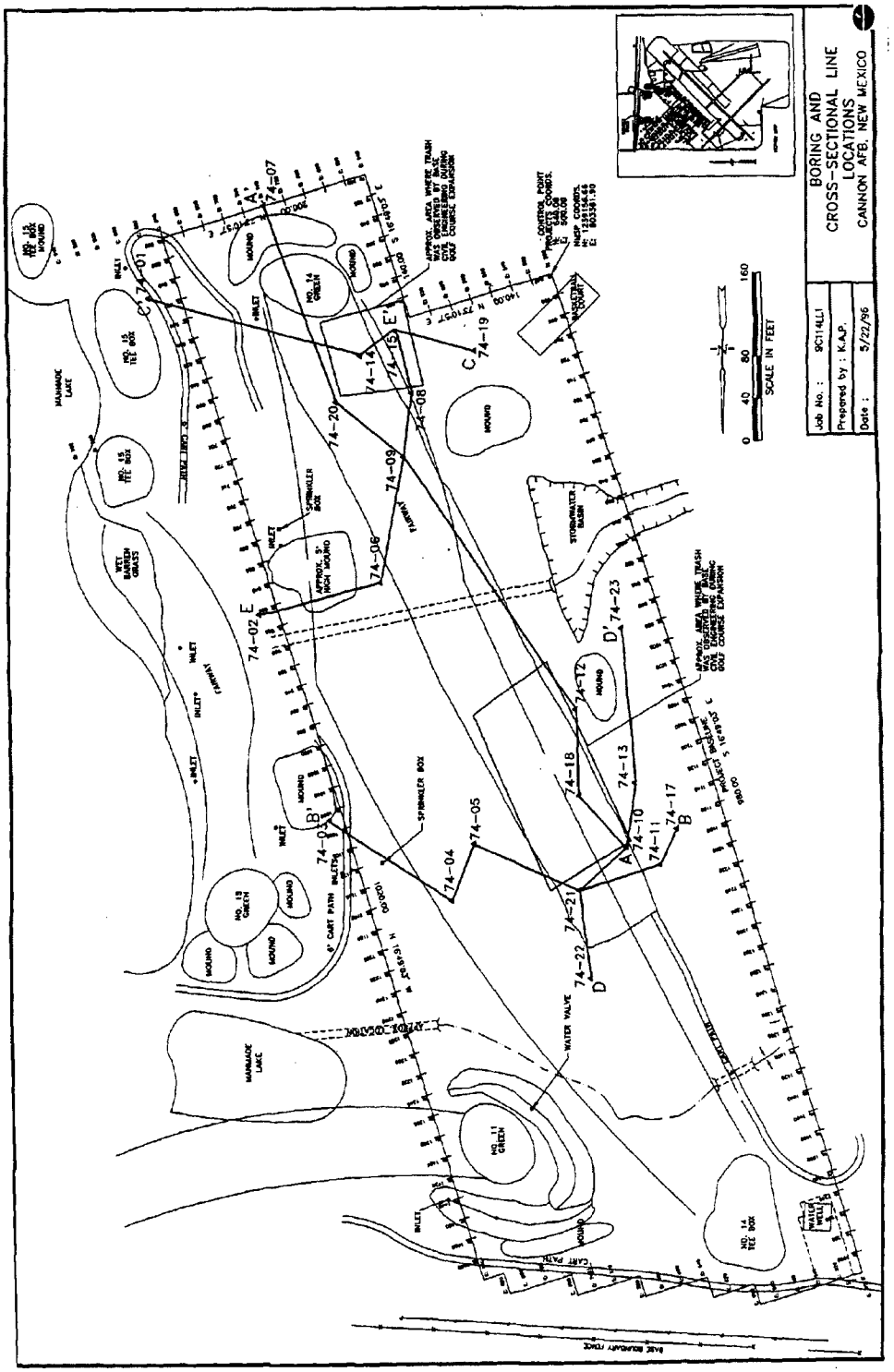


Figure 20---SWMU 74

Source: Woodward-Clyde, 1997

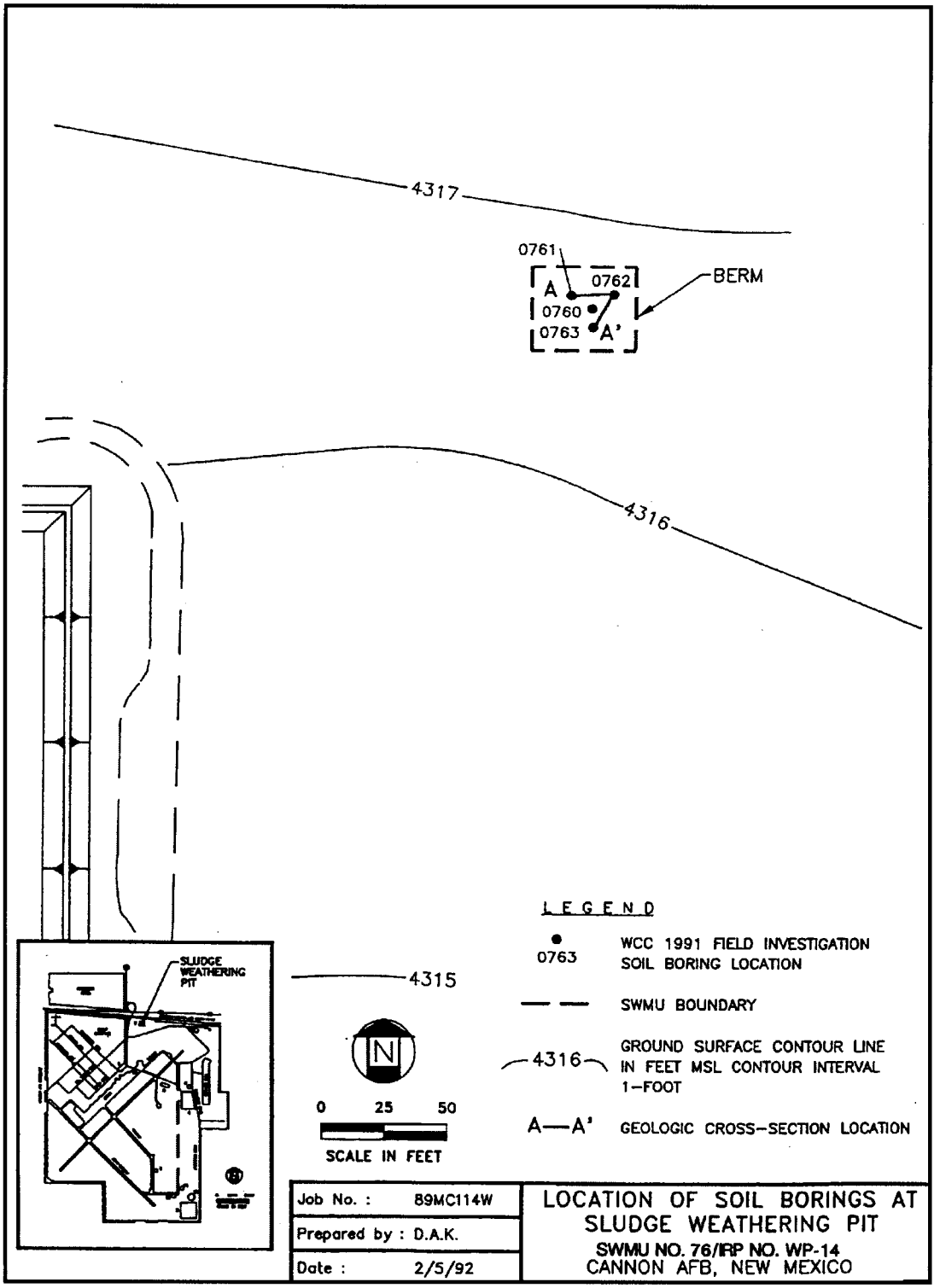


Figure 21---SWMU 76

Source: Woodward-Clyde, 1992

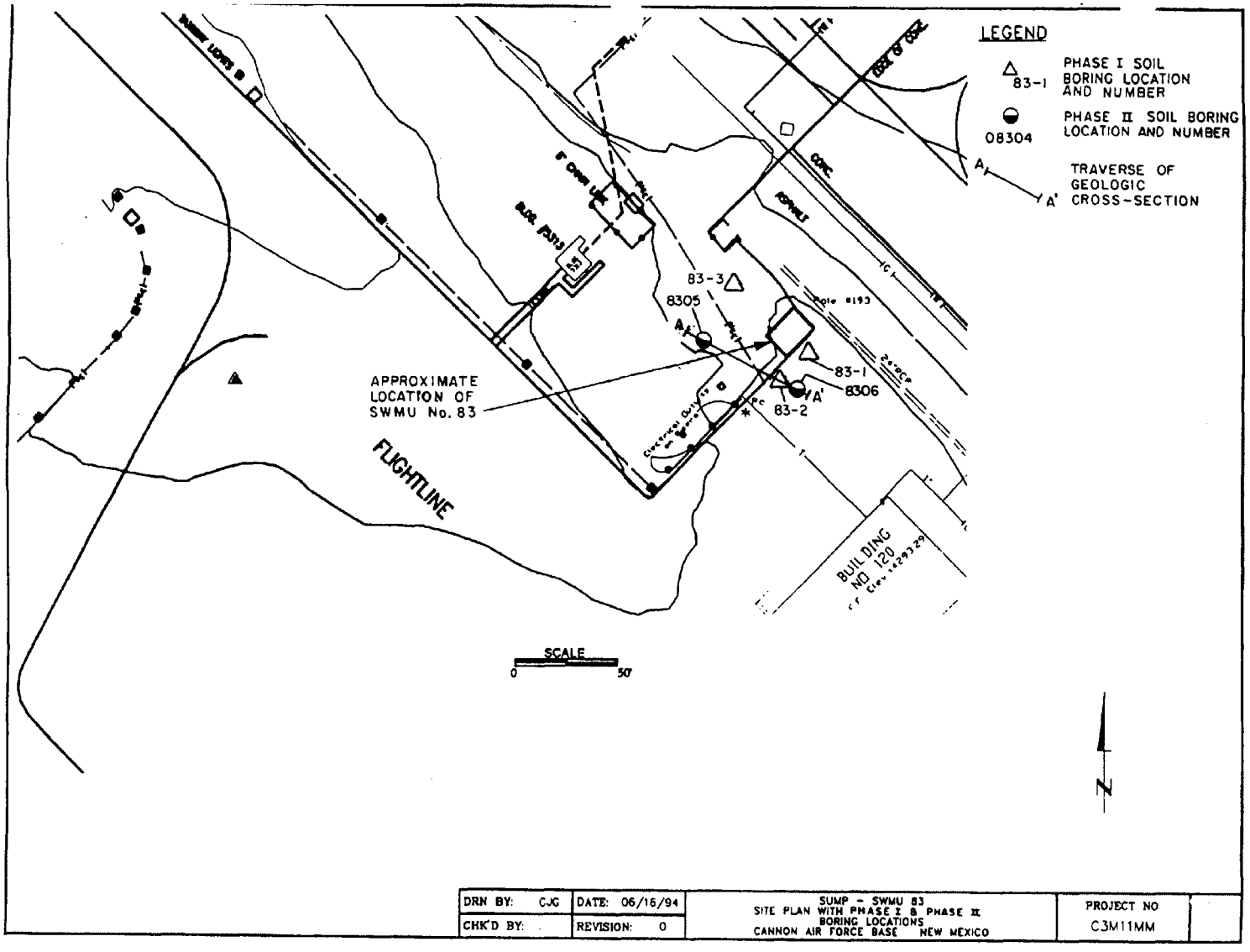


Figure 22--SWMU 83

Source: Woodward-Clyde, 1997

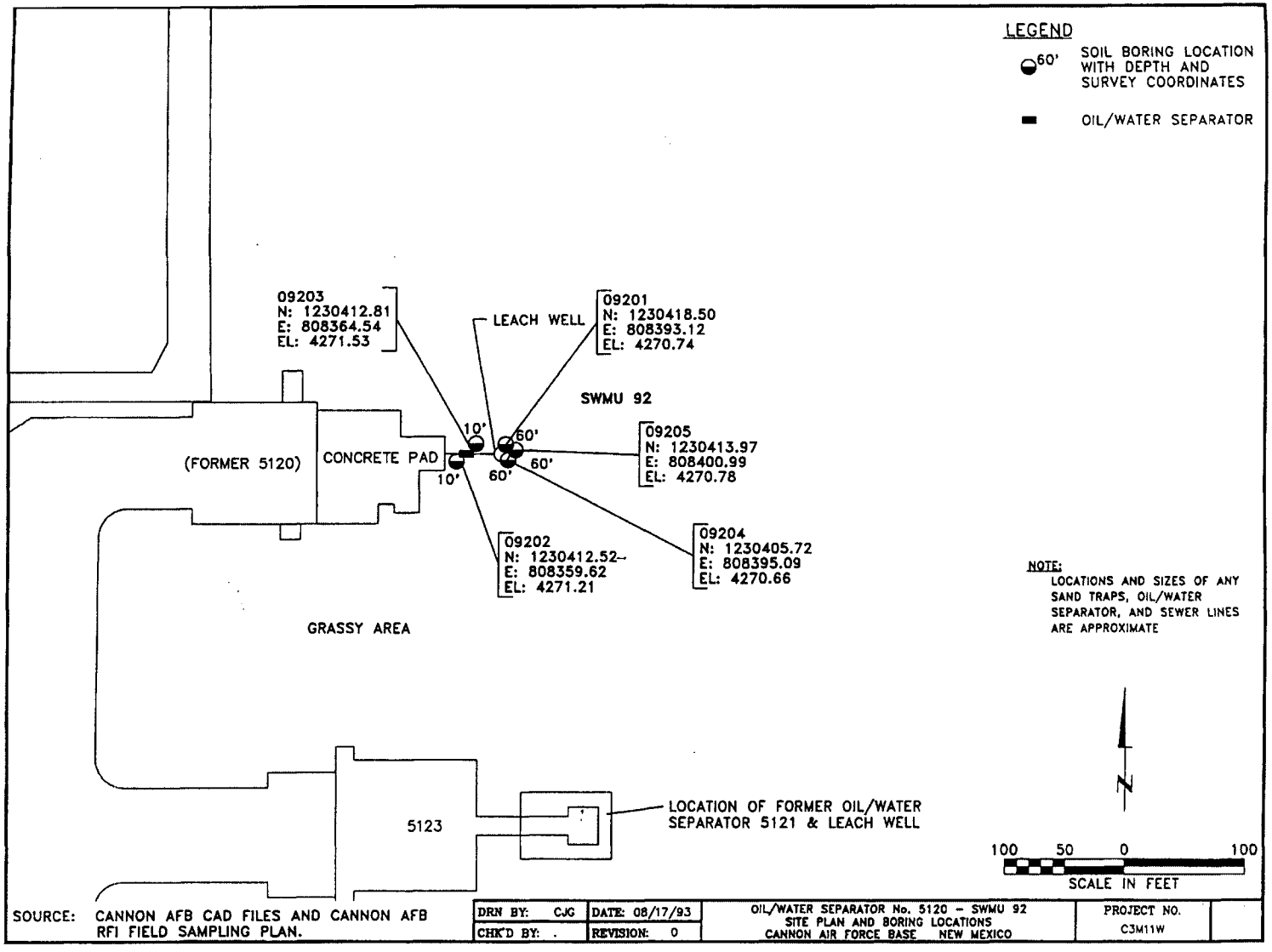


Figure 23--SWMU 92

Source: Woodward-Clyde, 1994

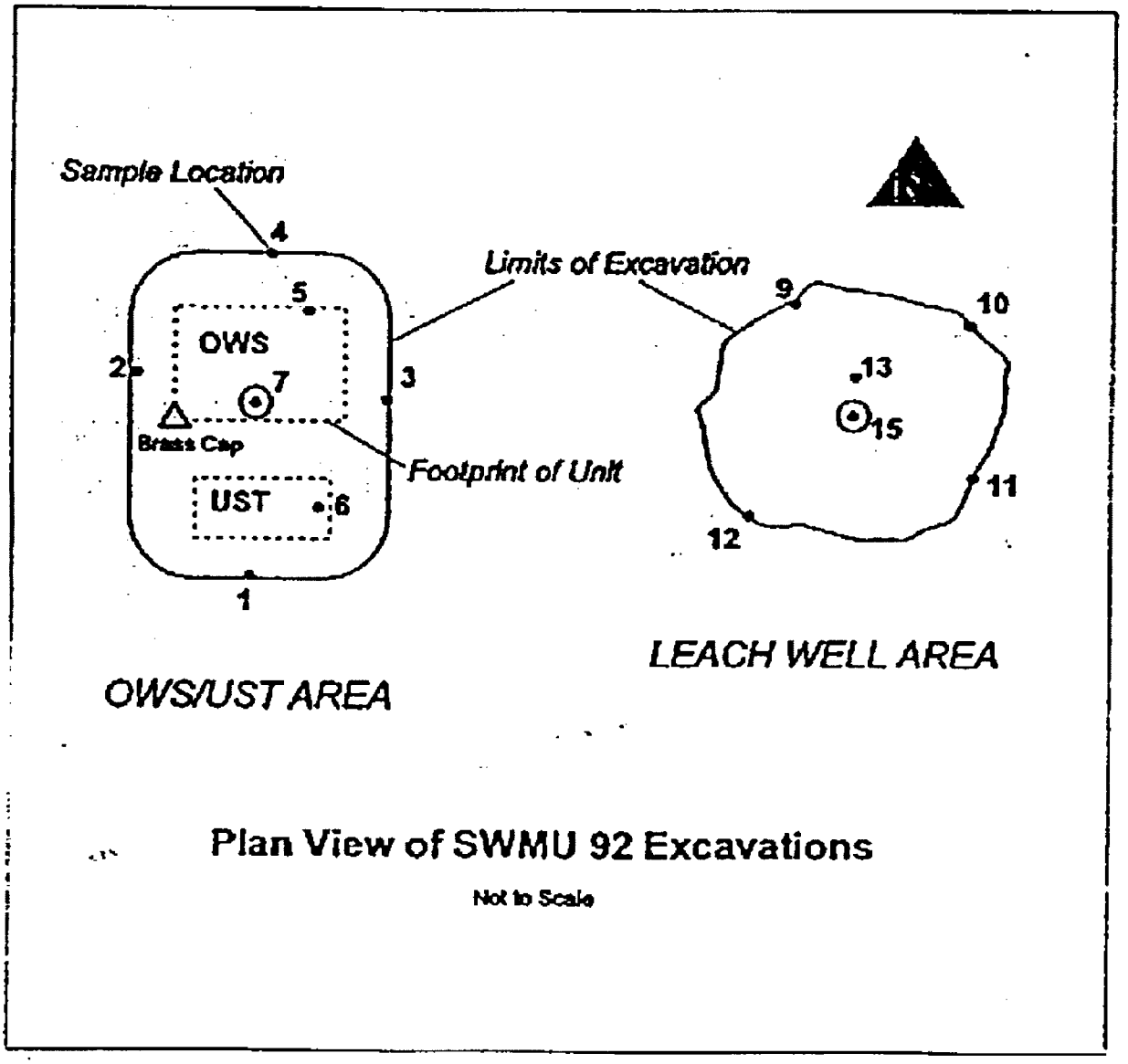


Figure 24---SWMU 92

Source: U.S. Army Corps of Engineers, 1999

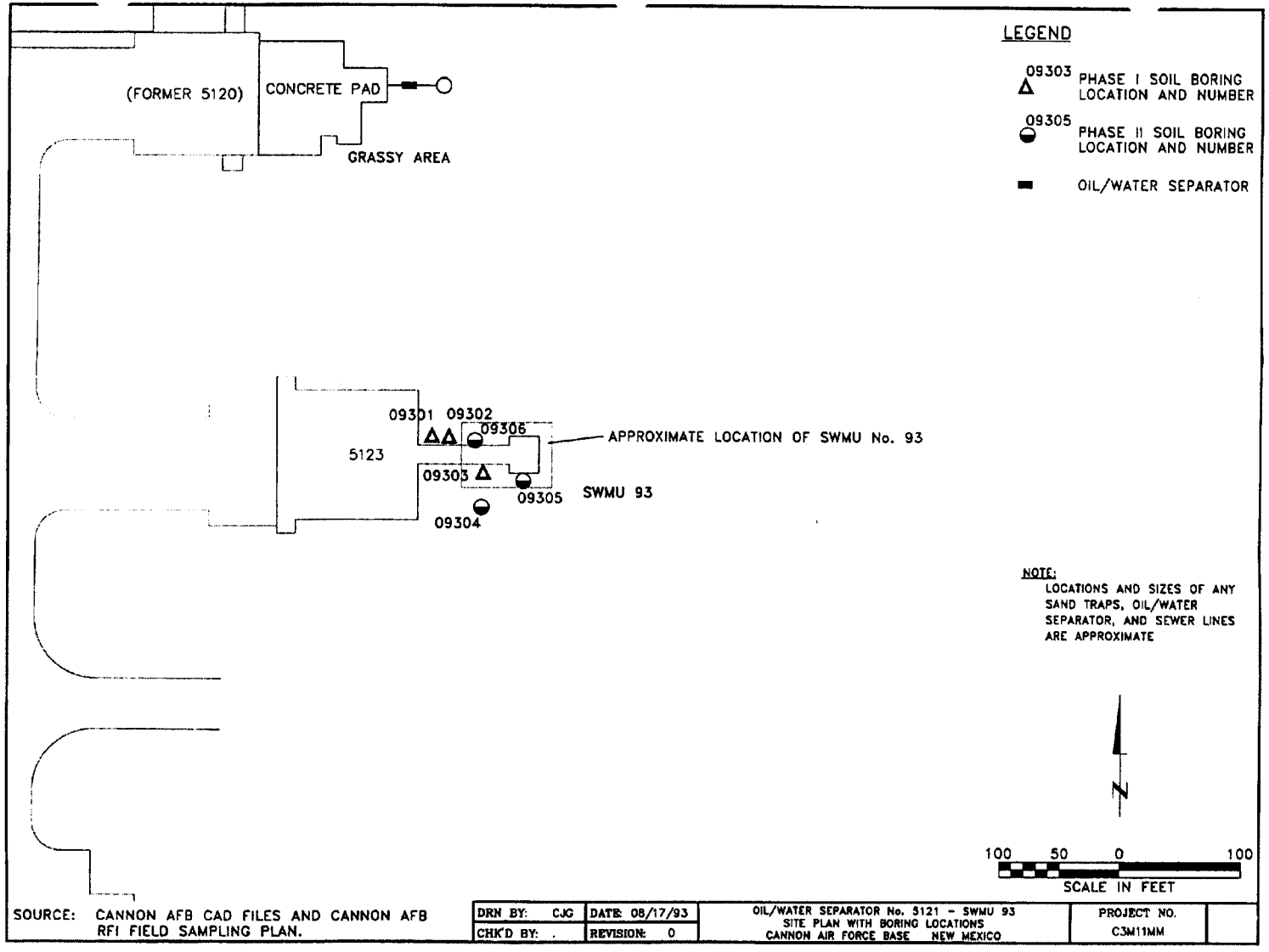


Figure 25--SWMU 93

Source: Woodward-Clyde, 1997

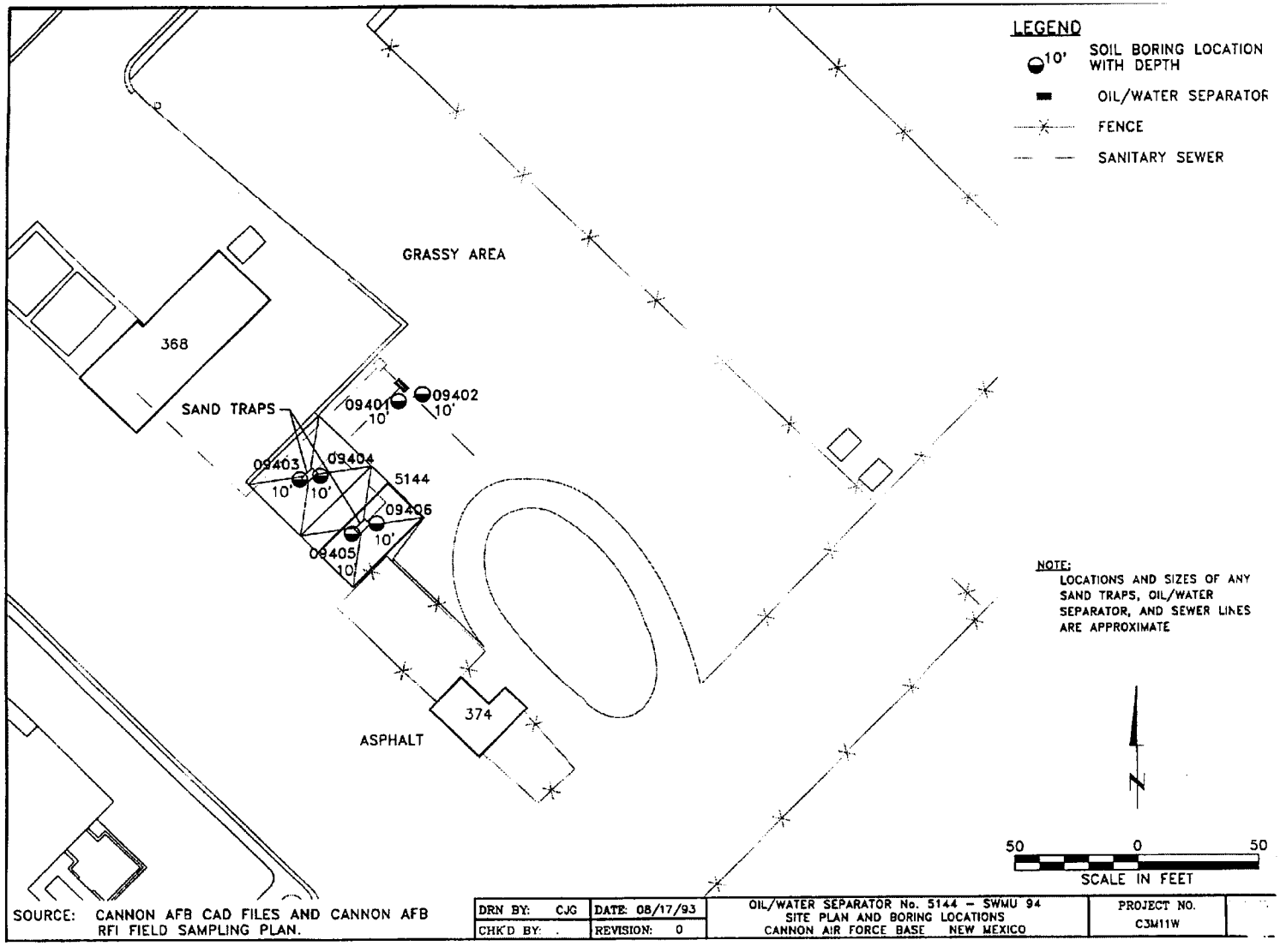


Figure 26—SWMU 94

Source: Woodward-Clyde, 1994

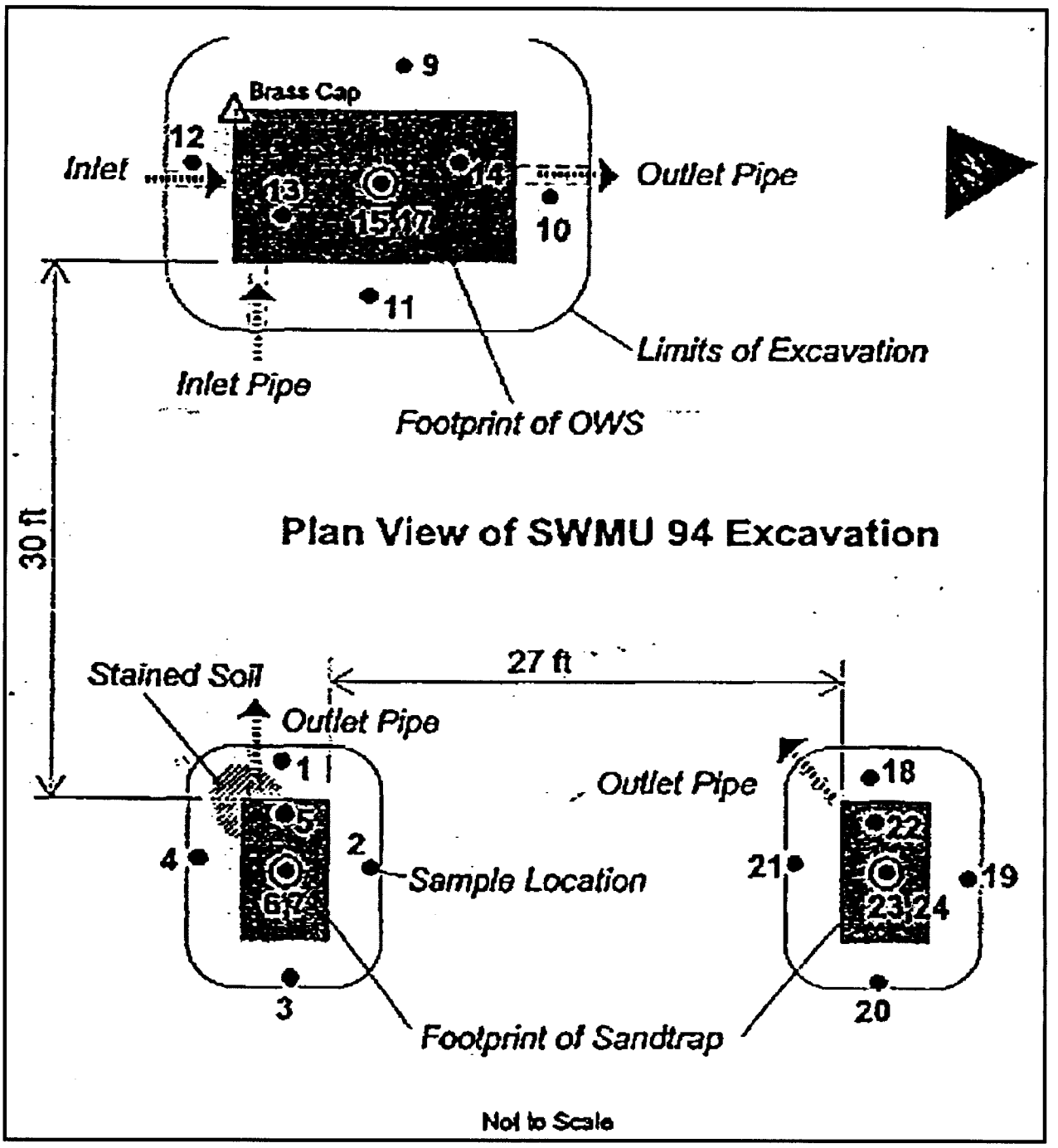


Figure 27---SWMU 94

Source: U.S. Army Corps of Engineers, 1999

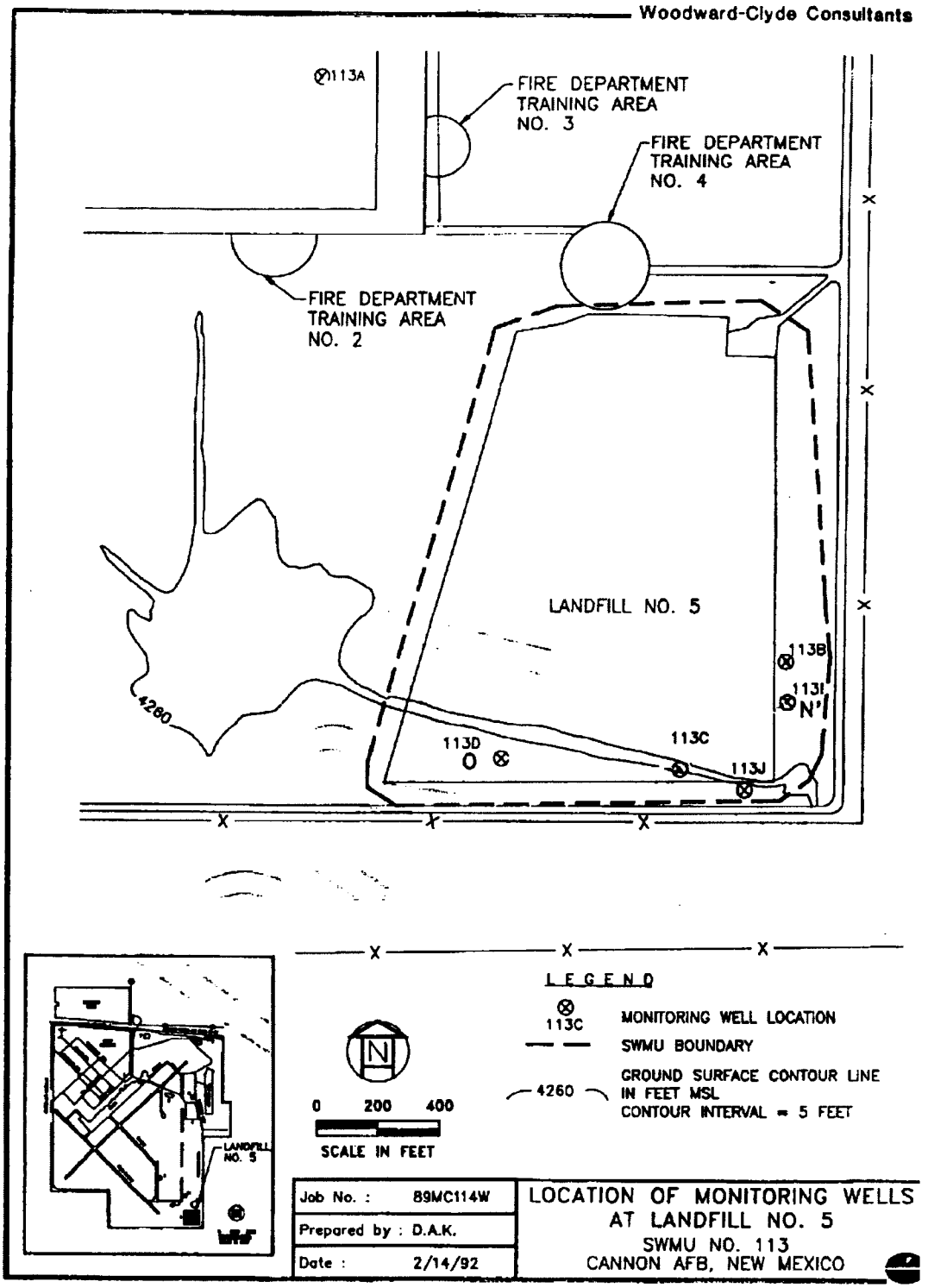


Figure 28---SWMU 113

Source: Woodward-Clyde, 1992

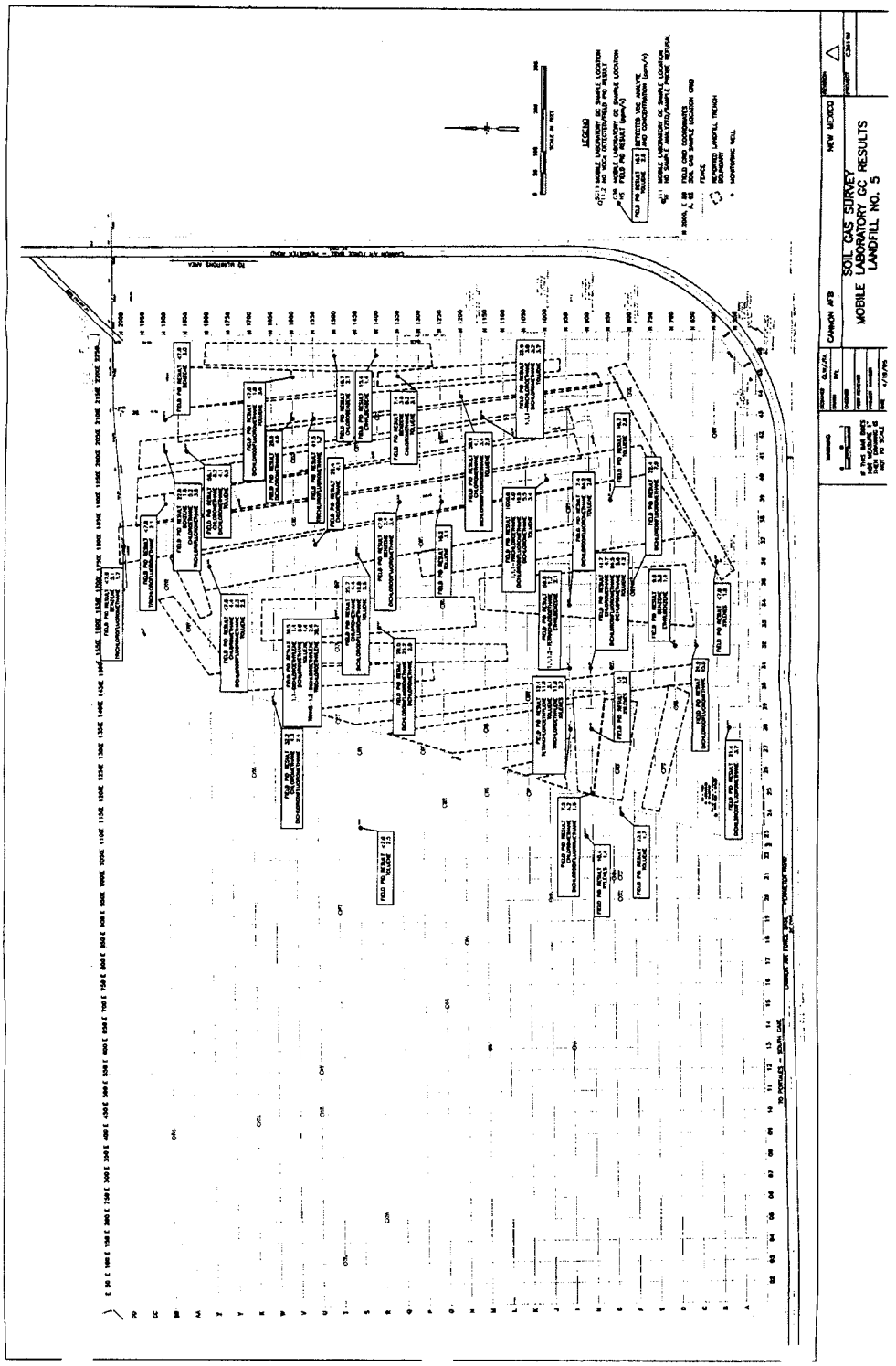


Figure 29---SWMU 113

Source: Woodward-Clyde, 1998

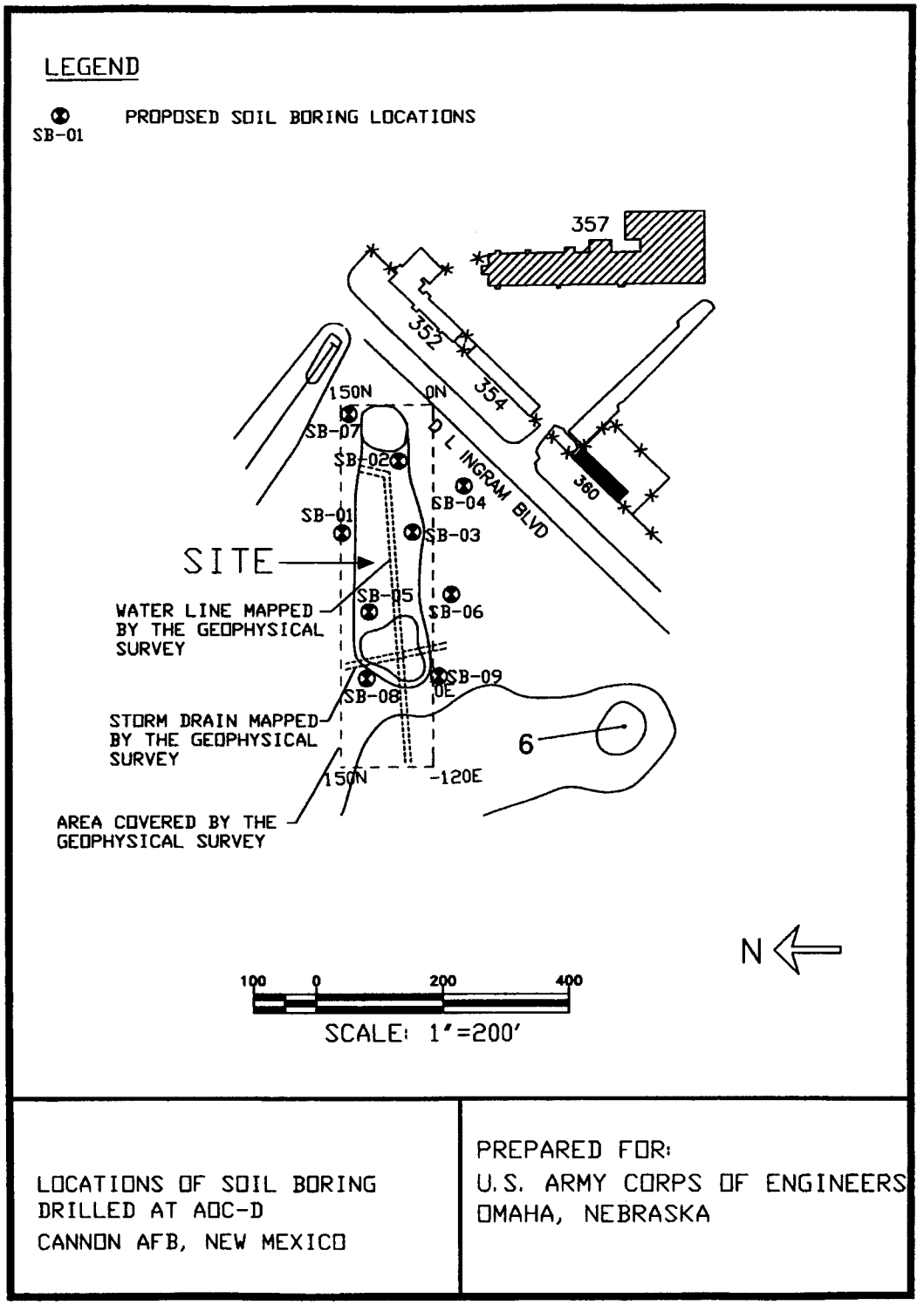


Figure 30---AOC D

Source: IMS, P.C., 1997

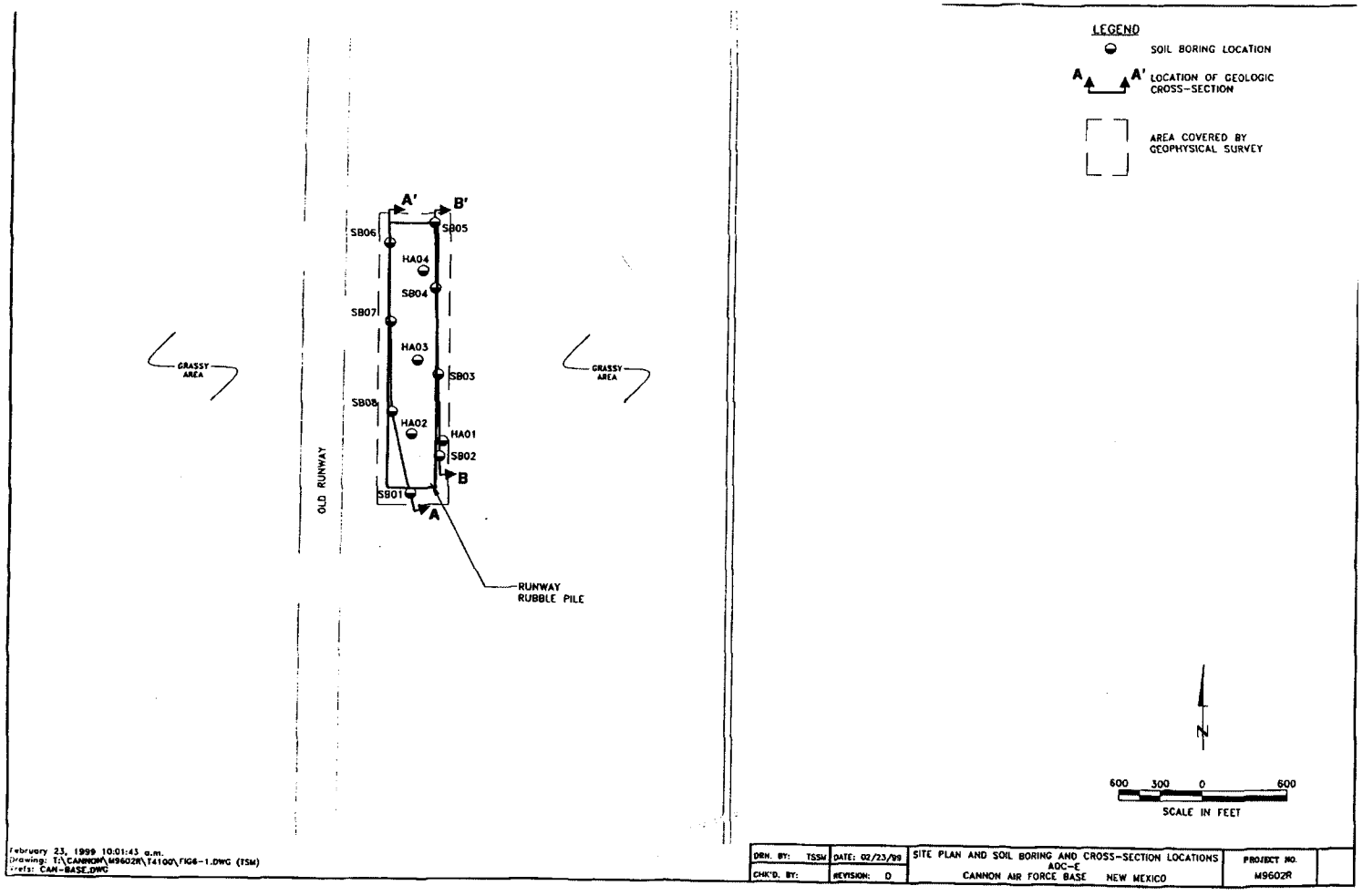


Figure 31--AOC E

Source: URS Greiner Woodward Clyde, 1999

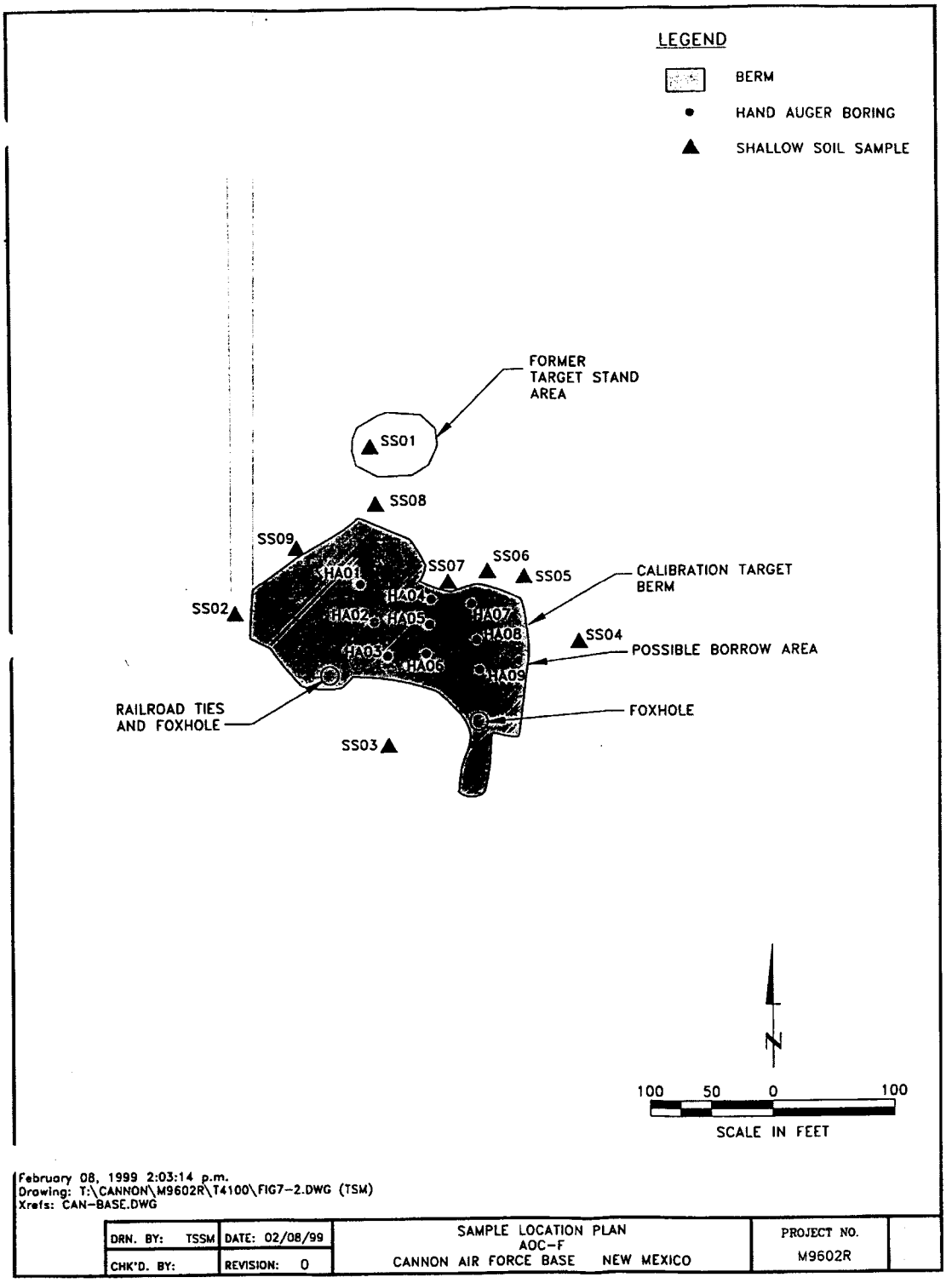


Figure 32---AOC F

Source: URS Greiner Woodward Clyde, 1999

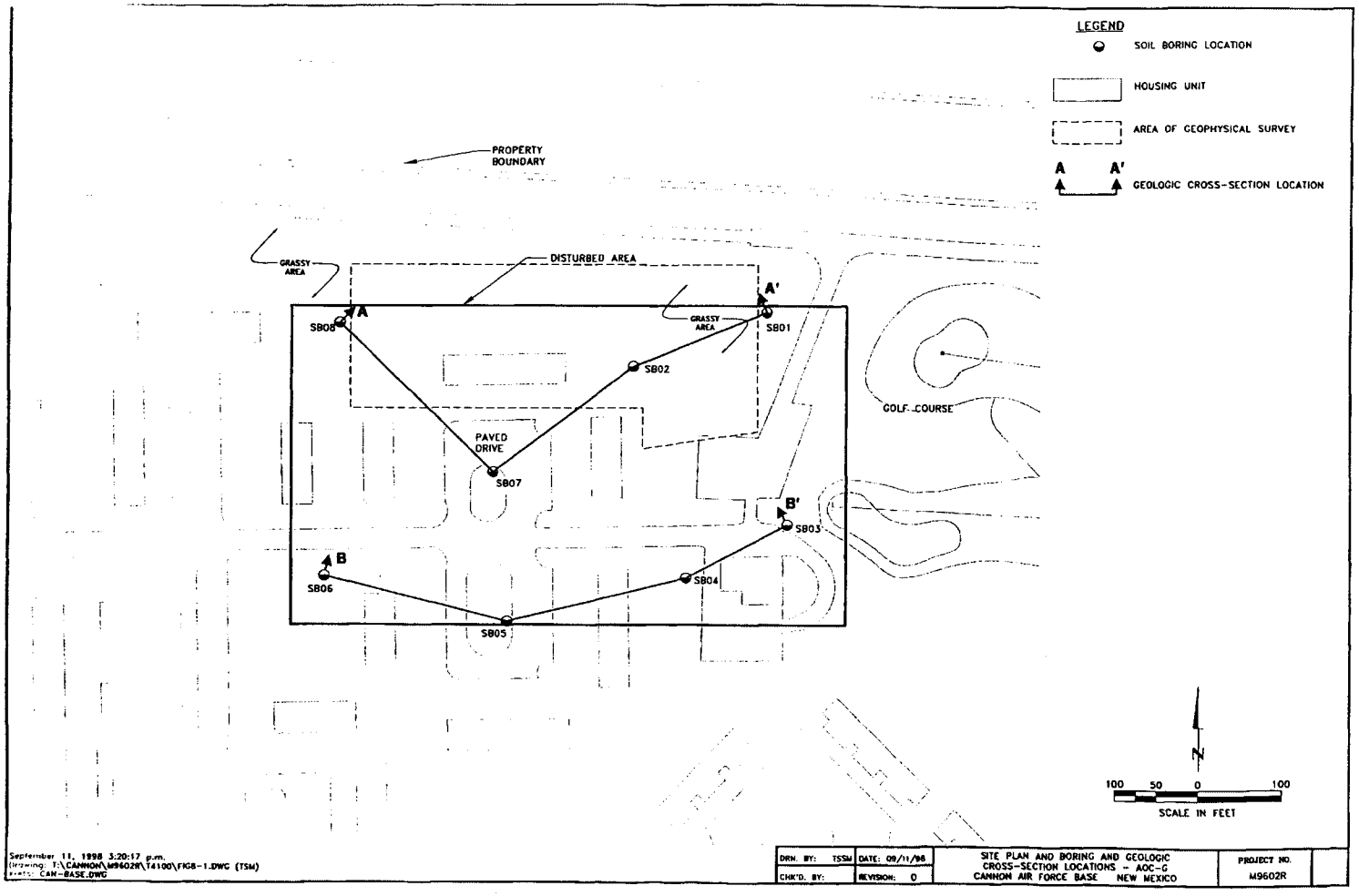


Figure 33--AOC G

Source: URS Greiner Woodward Clyde, 1999

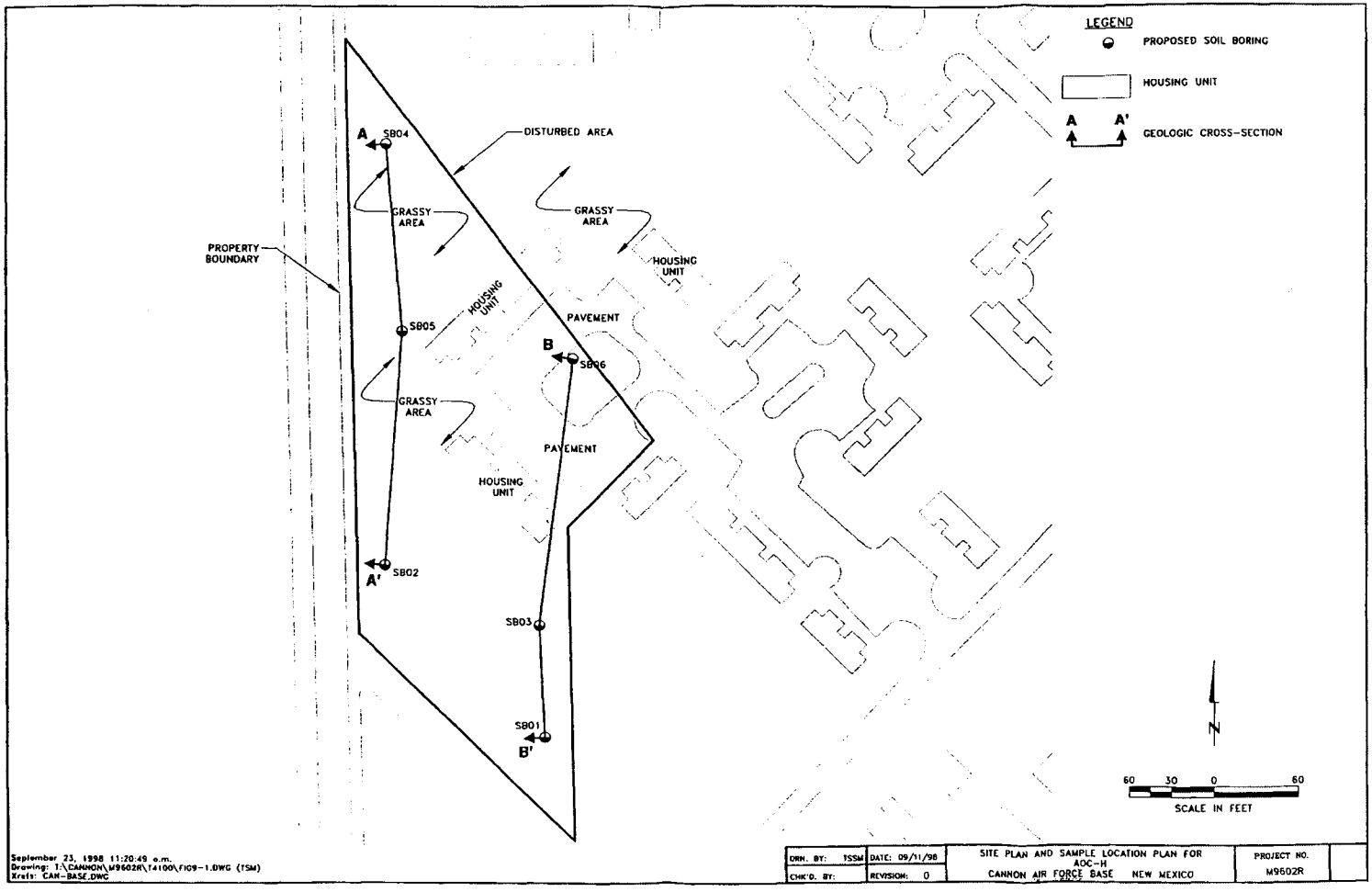


Figure 34--AOC H

Source: URS Greiner Woodward Clyde, 1999

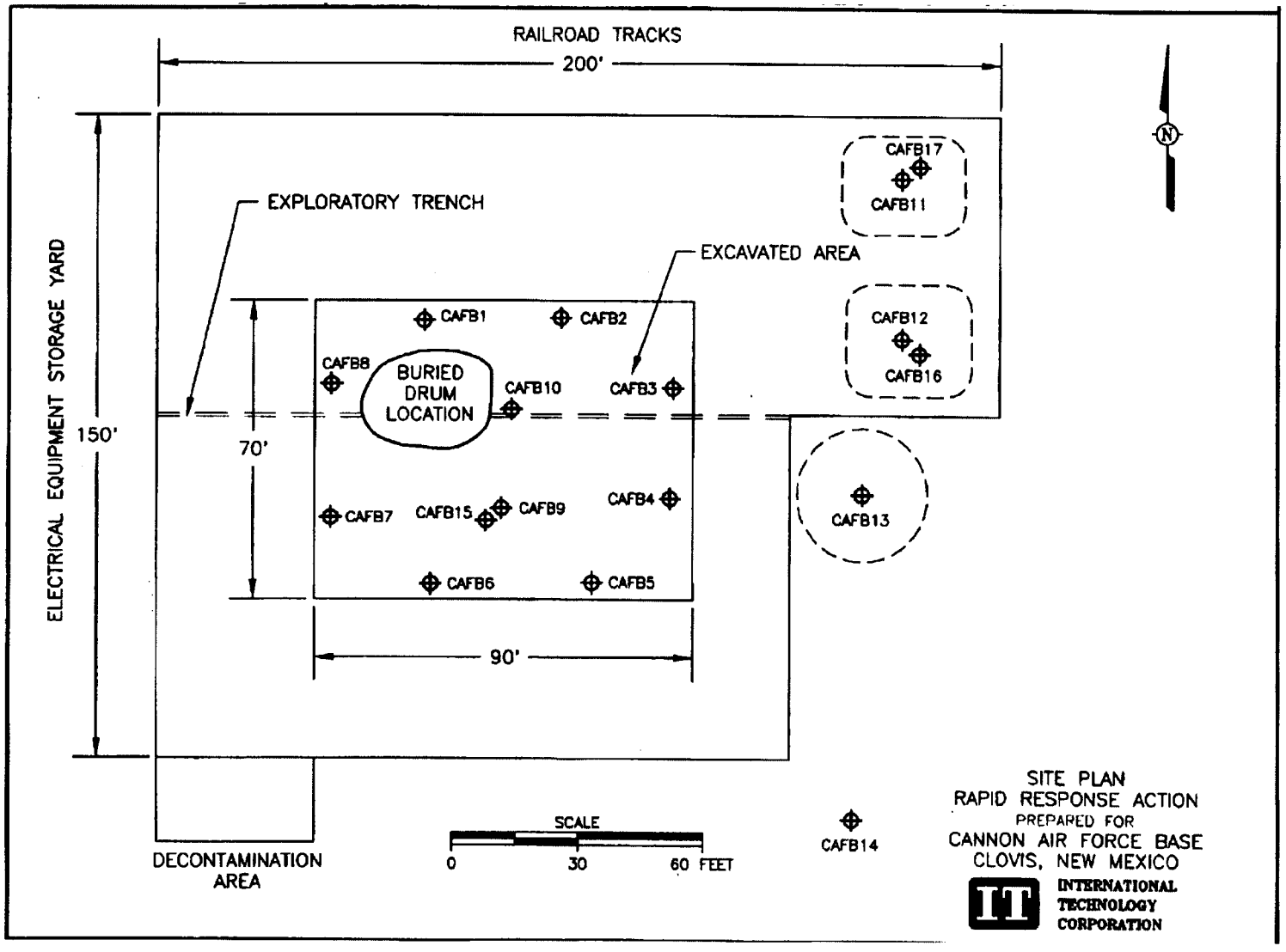


Figure 35--DP-33
Source: IT Corp., 1995

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