Department of Energy
Field Office, Albuquerque
Los Alamos Area Office
Los Alamos, New Mexico 87544

DEC 1994
RECEIVED
HAZARDOUS WASTE
PROGRAM

HSWA 94

Ms. Barbara Hoditschek, Program Manager
RCRA Permitting Program
Hazardous and Radioactive Materials
Bureau
New Mexico Environment Department
525 Camino de los Marquez
Santa Fe, NM 87502

TU

Dear Ms. Hoditschek:

Subject: Los Alamos National Laboratory (LANL) Hazardous Waste Operating Permit (HWOP), Class I and II Permit Modifications

This letter is written in response to your recent request for further clarifying documentation to allow continued processing of our request for Class I and II modifications to the LANL HWOP. The information consists of:

- Maps showing the location of 74 of the 76 Potential Release Sites and Solid Waste Management Units. The two Potential Release sites not addressed (10-006 and 10-001 [e]) are no longer in the system, or are in the process of being removed, and therefore need not be addressed.

- A list of items proposed for consideration for the semi-annual permit modification submittal. These are considered to be routine changes that have no effect on the operation of the permitted units at LANL.

If you or your staff should have any questions concerning this submittal, please feel free to contact either Jon Mack at (505) 665-5026, or me at (505) 665-5027.

Sincerely,

for Joseph C. Vozella
Acting Asst. Area Manager
Office of Environment and Projects

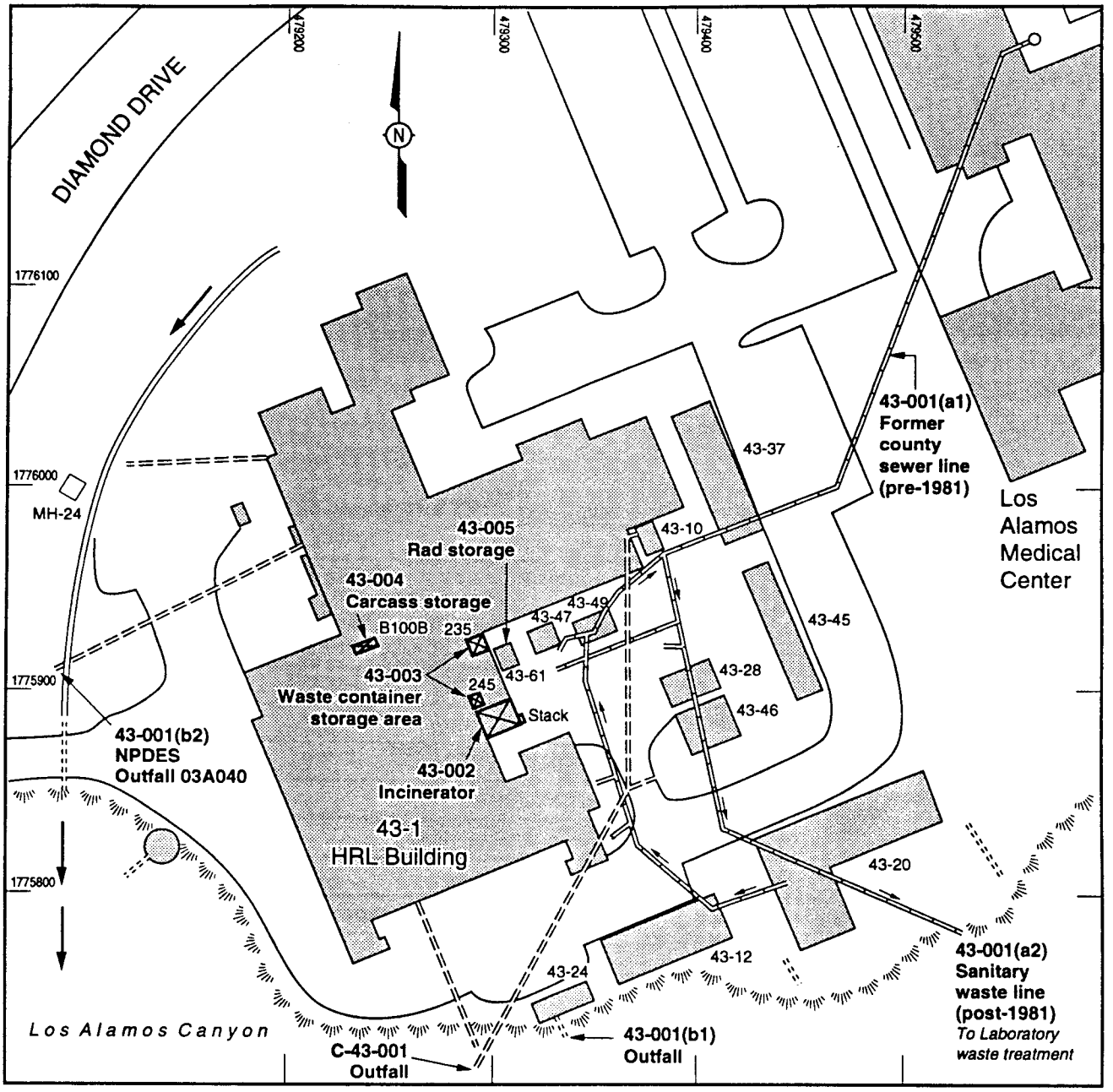
LAAMEP:2JM-021

Enclosure

cc:
See page 2

15412

cc w/o enclosure:
Jon Mack, AAMEP, LAAO
Ted Taylor, AAMEP, LAAO
Jody Plum, Scientech, LAAO
Jack Ellvinger, ESH-19, LANL,
MS-K498
Patricia Shanley, ESH-19, LANL,
MS-K498
James White, ESH-19, LANL,
MS-K498



Sources: LASL 1968, ENG-C 27975, Sh. 2, Rev. 1
FIMAD 1/21/93, G100910
LANL 1992, orthophoto 774618-1
Modified by: cARTography by A. Kron 5/12/94

Building or structure
Room with PRS
Road/edge of asphalt
Canyon rim
Storm drain (LASL ENG-C 27975)
Storm drain (1992 Orthophoto)
Sewer line (FIMAD G100910)
Drainage ditch
Direction of drainage

0 25 50 75 100 ft

Figure 1-3. Locations of PRSs in TA-43.

TABLE 6.8-2

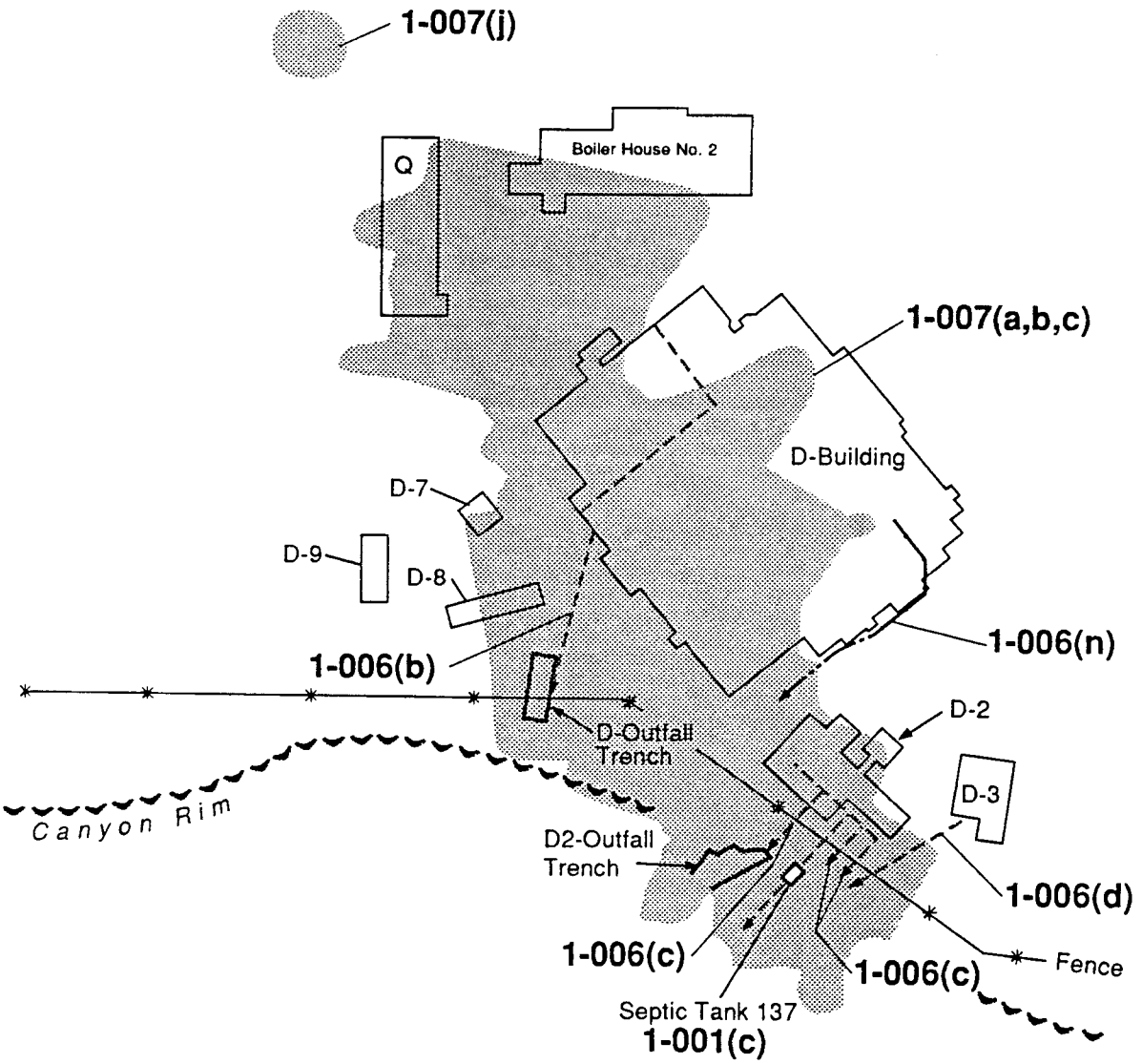
1974–1976 Radiological Survey Results
Hillside 138

Area of Contamination	Maximum Gross Alpha (pCi/g) Found	Remaining	Principal Contaminant
Septic Tank 138 (TA-1-138)	190	100	Pu, ^{137}Cs
Canyon rim at Septic Tank 138 (DOE property)	1,100	1,100	Pu, ^{137}Cs
Upper hillside below Septic Tank 138 (DOE property)	3,600	3,600	Pu, ^{137}Cs
Lower hillside below Septic Tank 138 (DOE property)	8,900	8,900	Pu, ^{137}Cs

6.9 Hillside 137 SWMU Aggregate G

•Septic Tank 137	SWMU 1-001 (c)
•TA-1-6 Drain line and Outfall	SWMU 1-006 (b)
•TA-1-8 Drain line and Outfall	SWMU 1-006 (c)
•TA-1-9 Drain line and Outfall	SWMU 1-006 (d)
•TA-1-6 Storm Drain and Outfall	SWMU 1-006 (n)
•Suspected Subsurface Soil Contamination	SWMU 1-007 (a)
•Suspected Subsurface Soil Contamination	SWMU 1-007 (b)
•Suspected Subsurface Soil Contamination	SWMU 1-007 (c)
•Suspected Subsurface Soil Contamination (two sites)	SWMU 1-007 (j)

Note: Sub-SWMU numbers 1-006 (b-d, n) and 1-007 (a-c) were derived from the February 1991 TA-1 work plan maps and are not identified as such in the November 1990 SWMU Report. SWMU 1-001 (c) is as identified in the November 1990 SWMU Report.



Note: Suspected subsurface soil contamination, SWMUs 1-007 (a,b, and c) have been combined and are depicted by the large shaded area.

LEGEND

- Sanitary Sewer and Building Drain Lines
- Flow Direction of Drain Line
- Storm Drain Line
- Surface Drainage Flow associated with Storm Drain Line
- Suspected Subsurface Soil Contamination

Figure 6.9-1. Hillside 137.

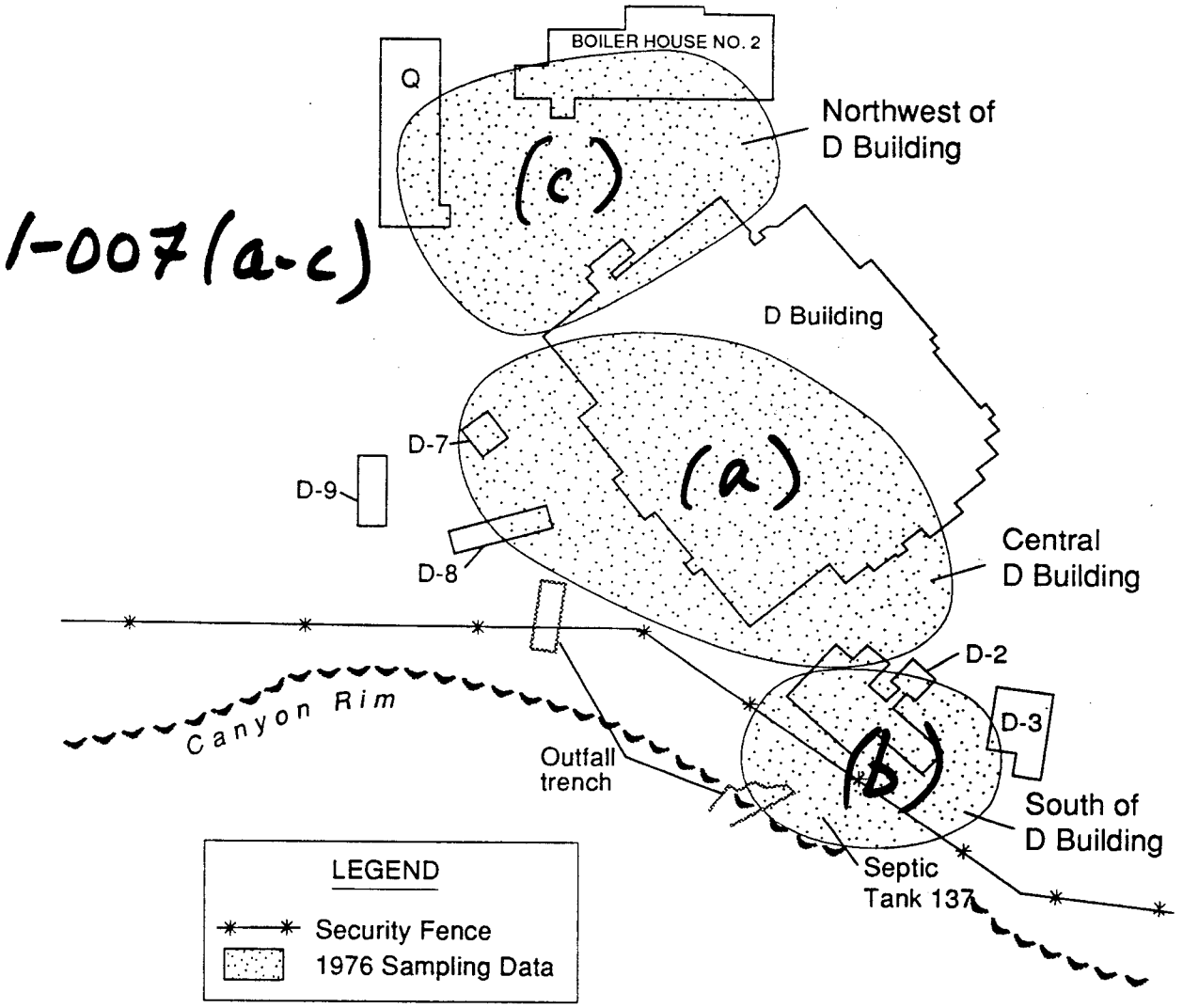


Figure 4.5-1a. Location of 1976 sampling within SWMU aggregate Hillside 137.

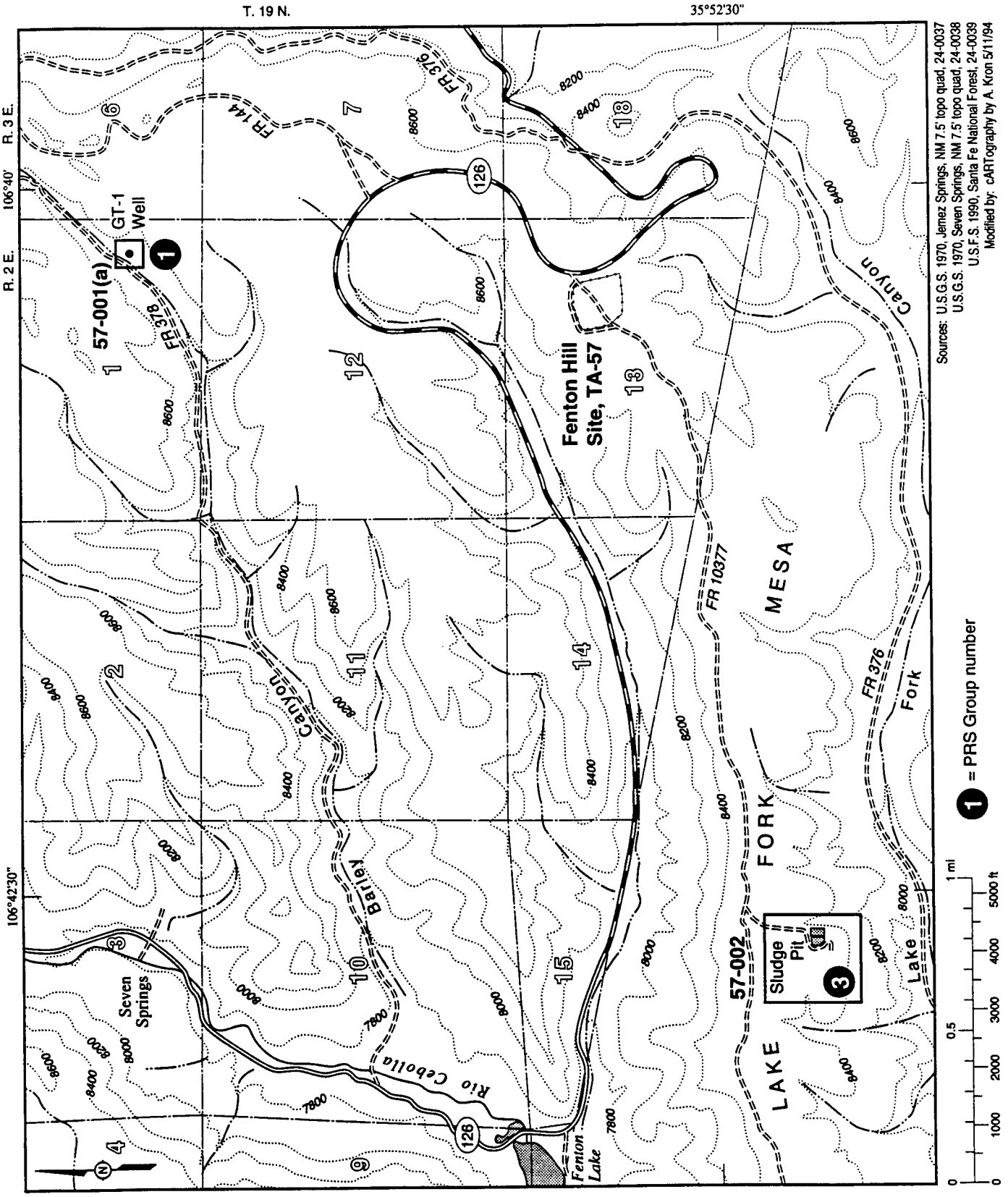


Figure 5-2. Locations of outlying Fenton Hill PRS Groups.

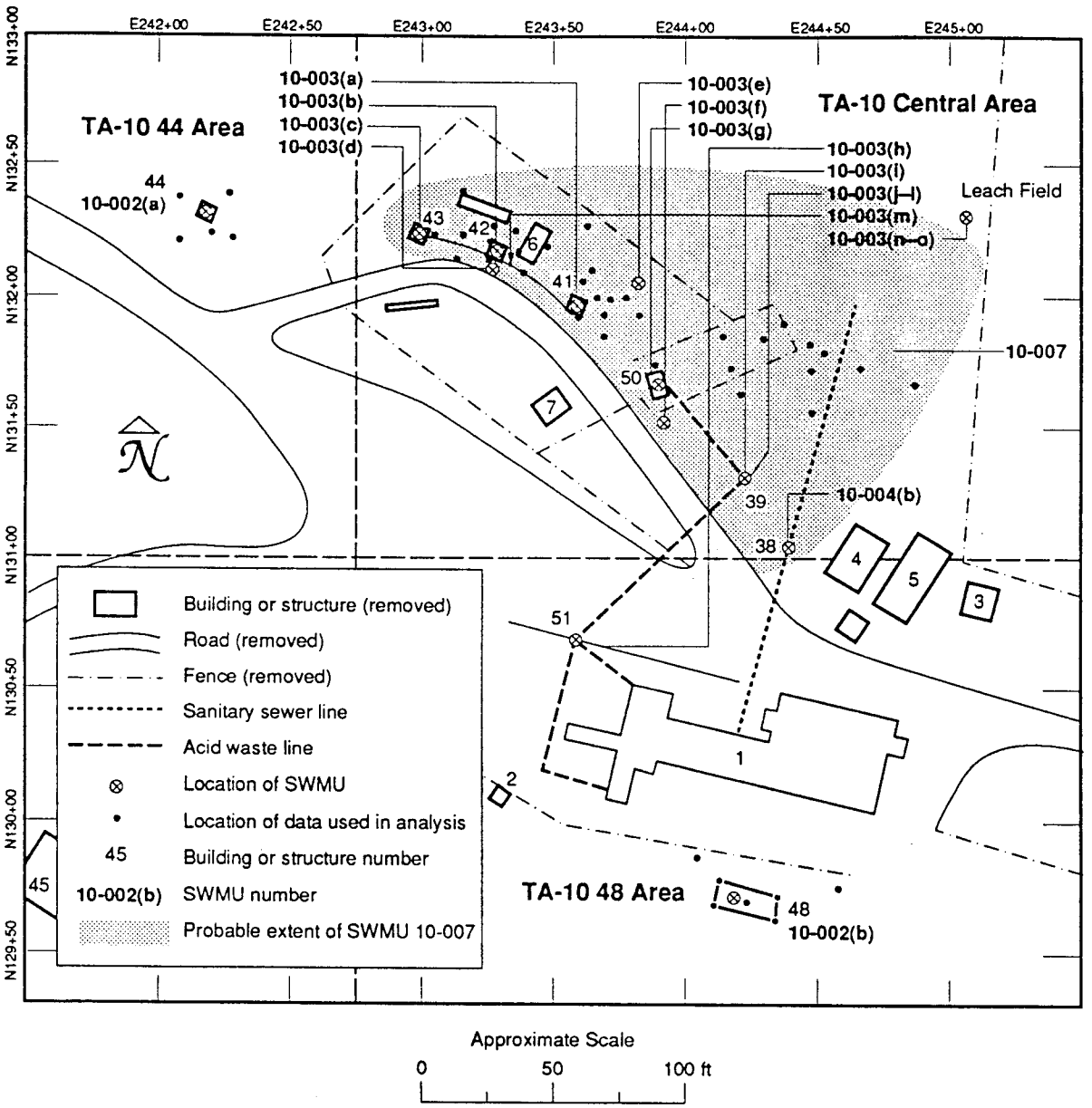
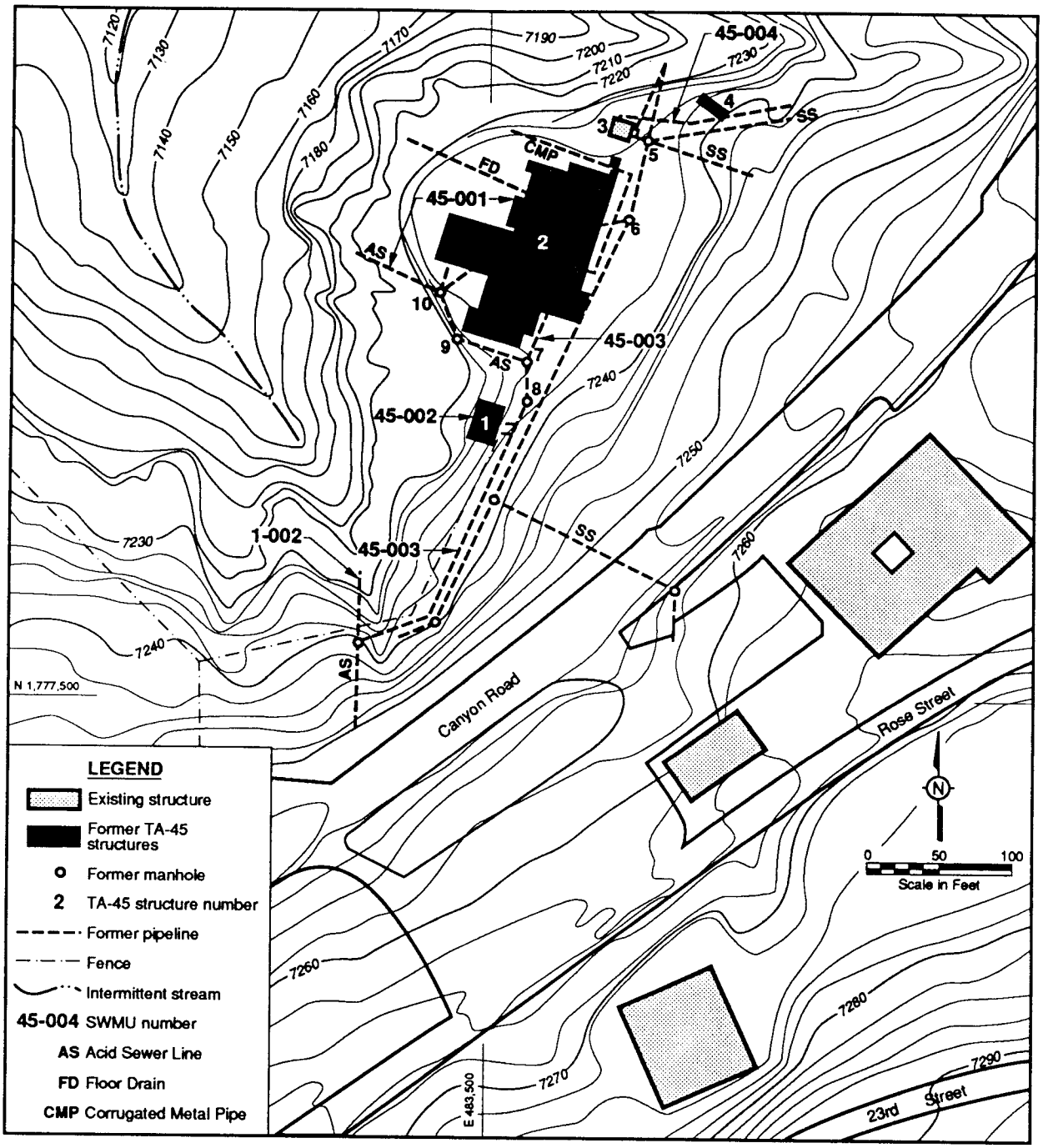


Figure 3.1-14. Location of Subsurface Disposal SWMU Aggregate and samples used in data analysis (modified from Mayfield et al. 1979, 06-0041; LANL 1990, 0145).



301215.10.02.02 A47

Figure 1.3-5. TA-45 Site Map and Associated SWMU Locations (modified from LANL 1990, 0145; AEC 1963, 06-0036; Los Alamos County 1986, 06-0059; Los Alamos County 1986, 06-0060; LASL 1961, 06-0051; LASL 1955, 06-0052; LASL 1962, 06-0053).

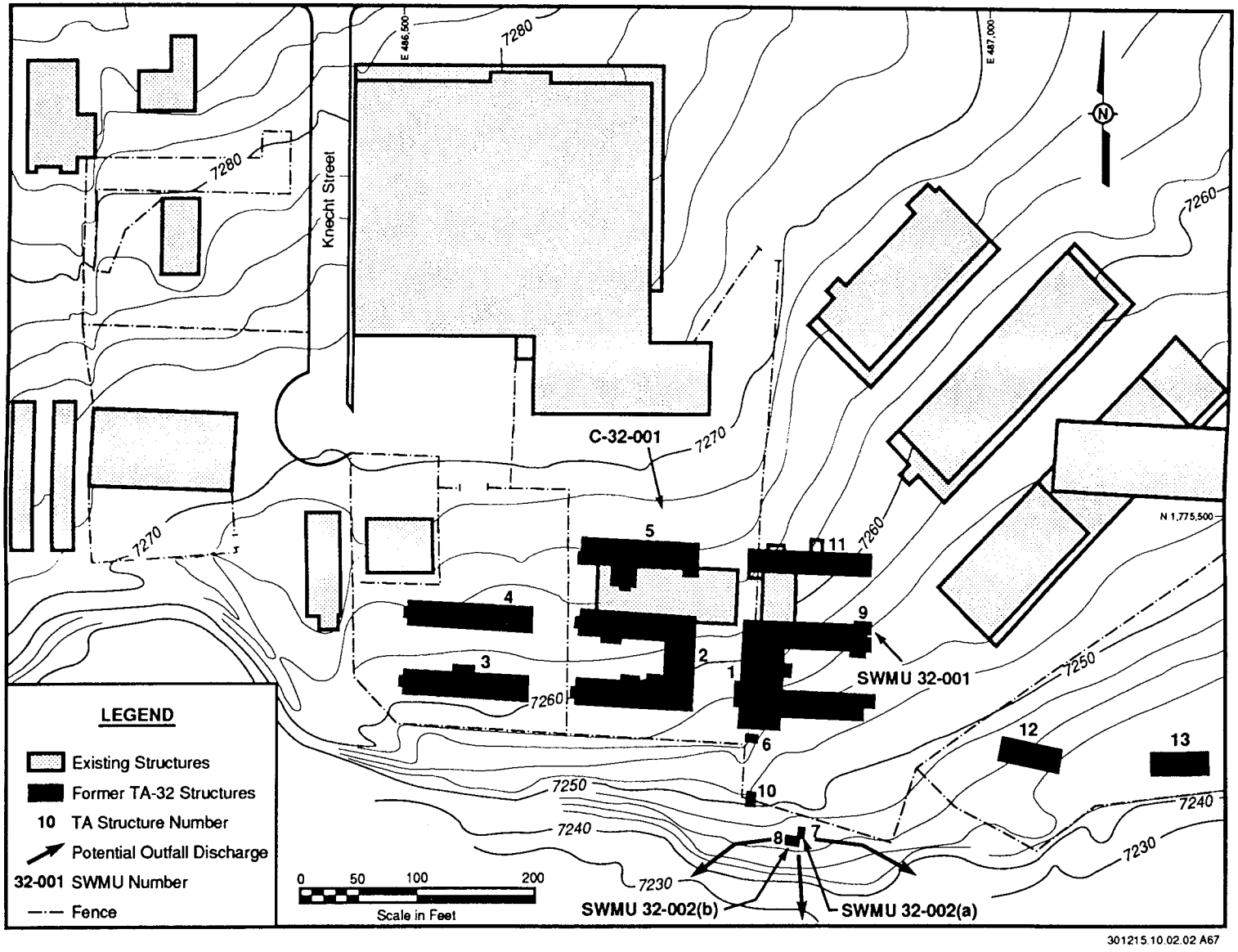


Figure 3.3-1. TA-32 site map and associated SWMU locations (modified from LANL 1990, 0145; AEC 1963, 06-0032; AEC 1963, 06-0031; Los Alamos County 1986, 06-0062; Los Alamos County 1986, 06-0063; LASL 1953, 06-0055).

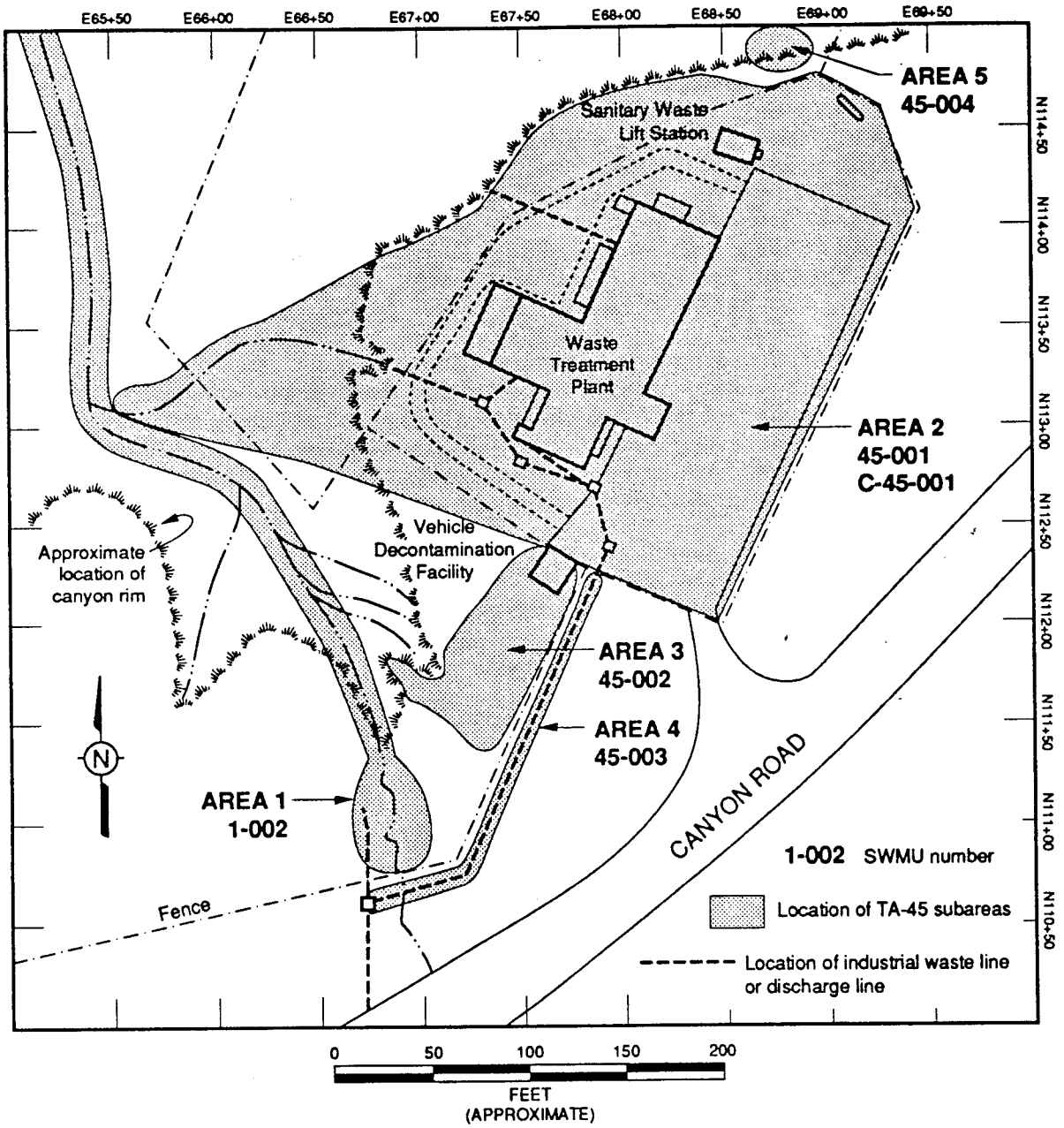


Figure 3.4-9. Location of five geographic areas and related SWMUs at TA-45 (modified from LANL 1981, 0141).

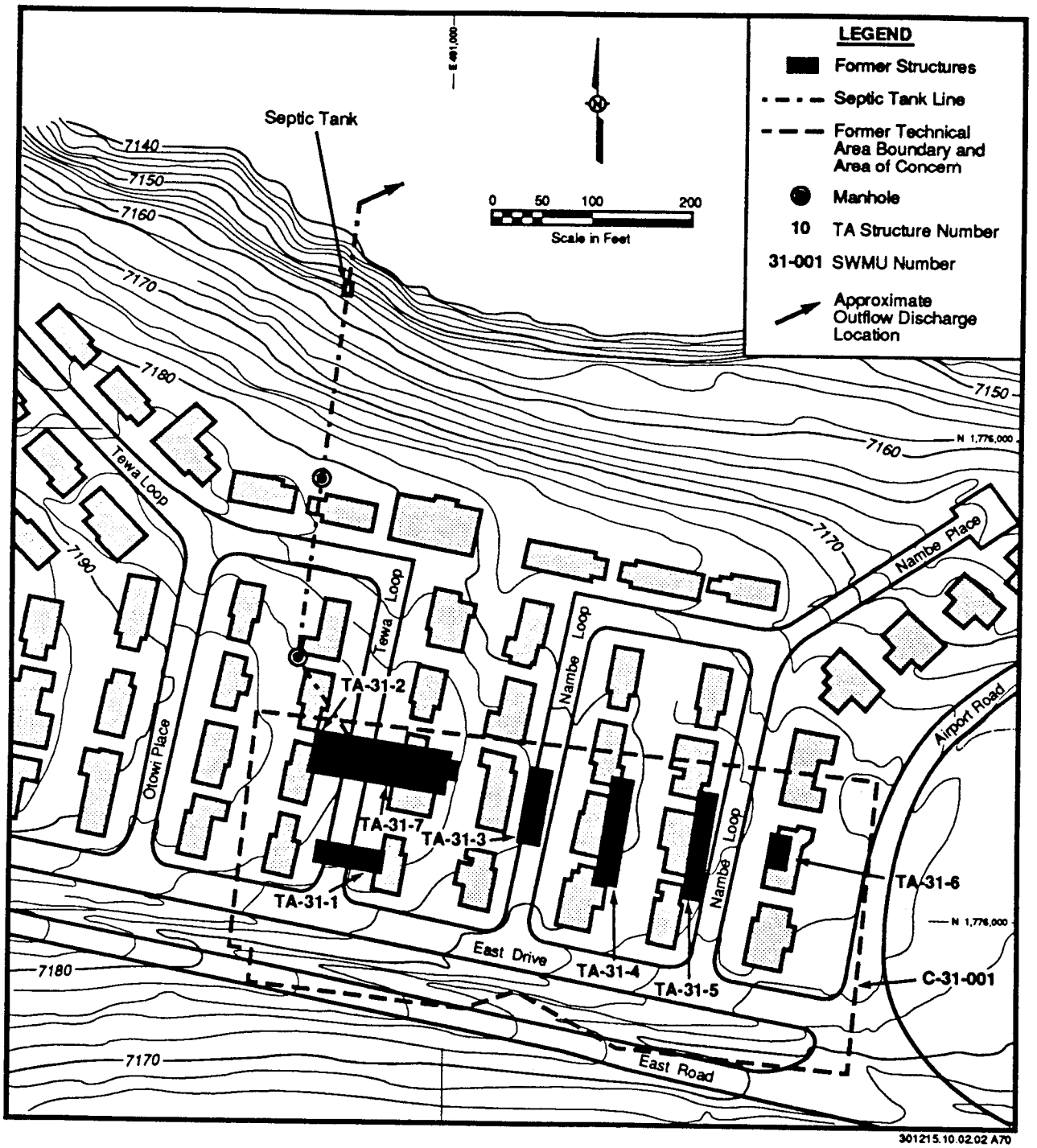
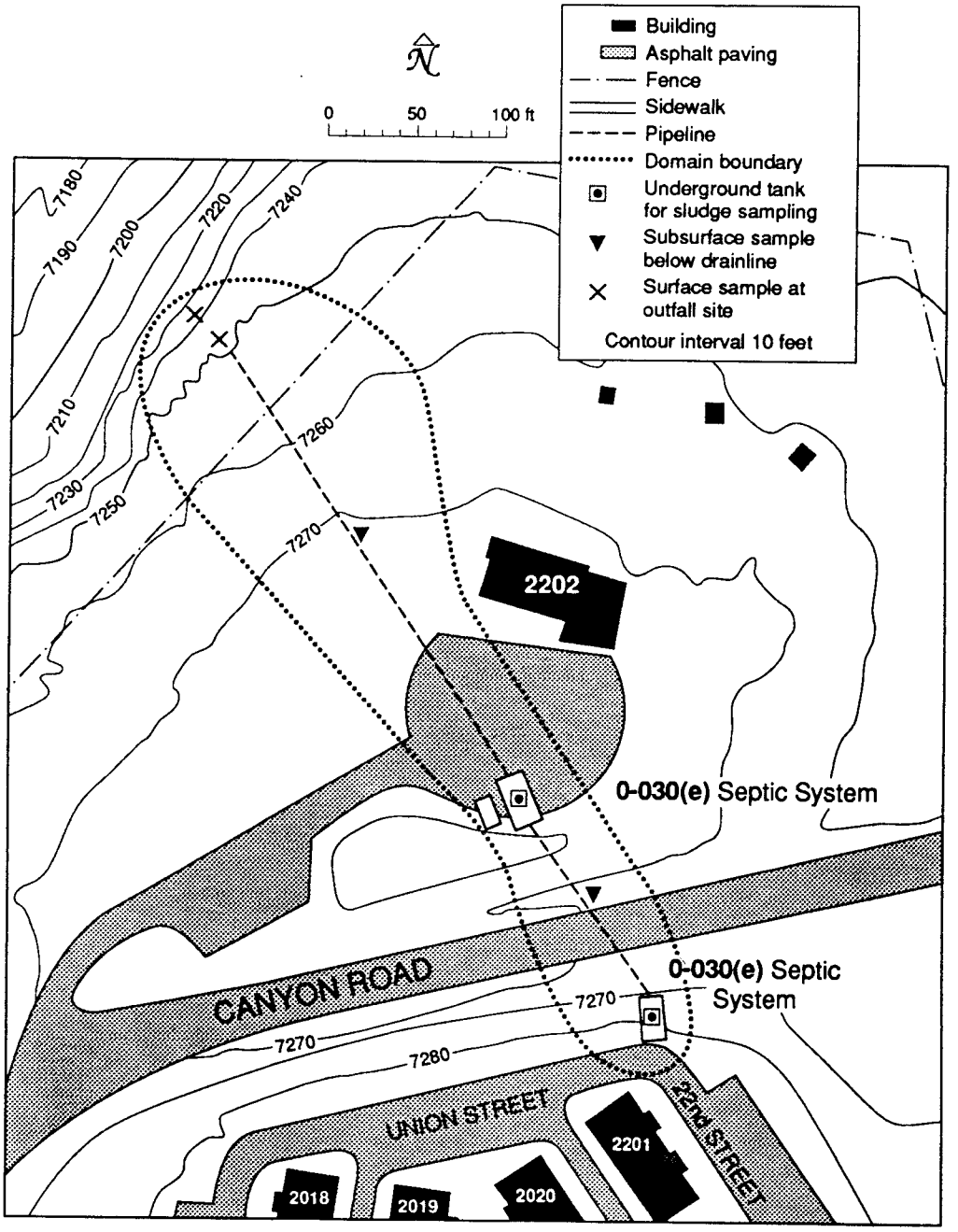


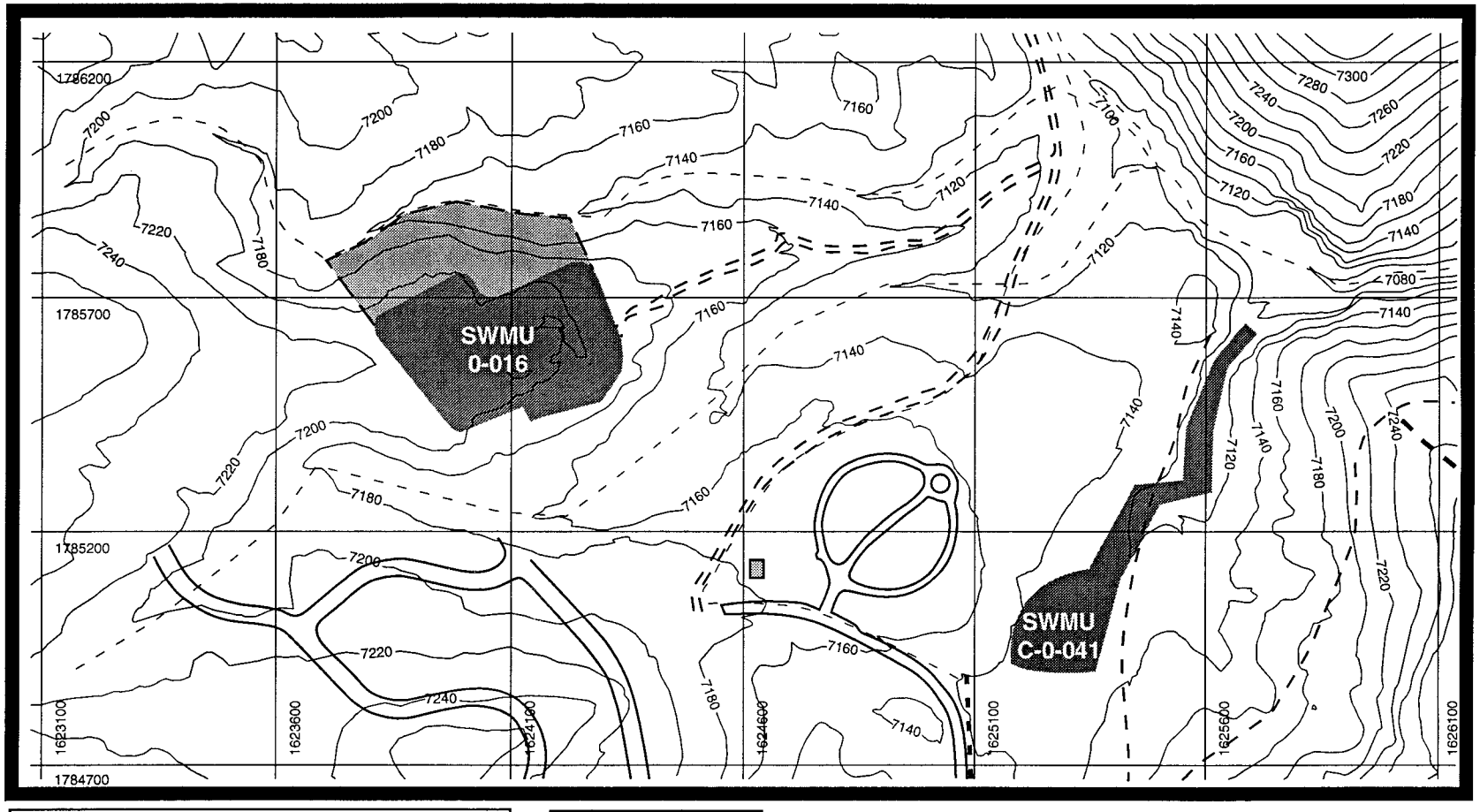
Figure 4.2-1. TA-31 site map and Area of Concern location (modified from LANL 1990, 0145; AEC 1963, 06-0016; AEC 1963, 06-0030; Los Alamos County 1986, 06-0061; LASL 1950, 06-0054).

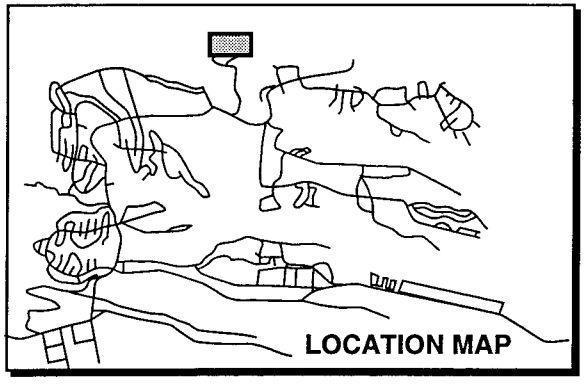


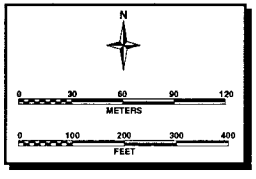
Sources: LA-FM-47 Sheet M6-SW, 1" = 100';
LA-FM-91 Sheet M5-SE-2, LA-FM-97 Sheet M5-SE-3, LA-FM-98 Sheet M6-SW-4, 1' = 50", 1963

Figure 5-42. Sampling locations for SWMU 0-030(e).

SWMUs 0-16 (Former Small-Arms Range) and AOC C-0-0411 (Tar Deposit)







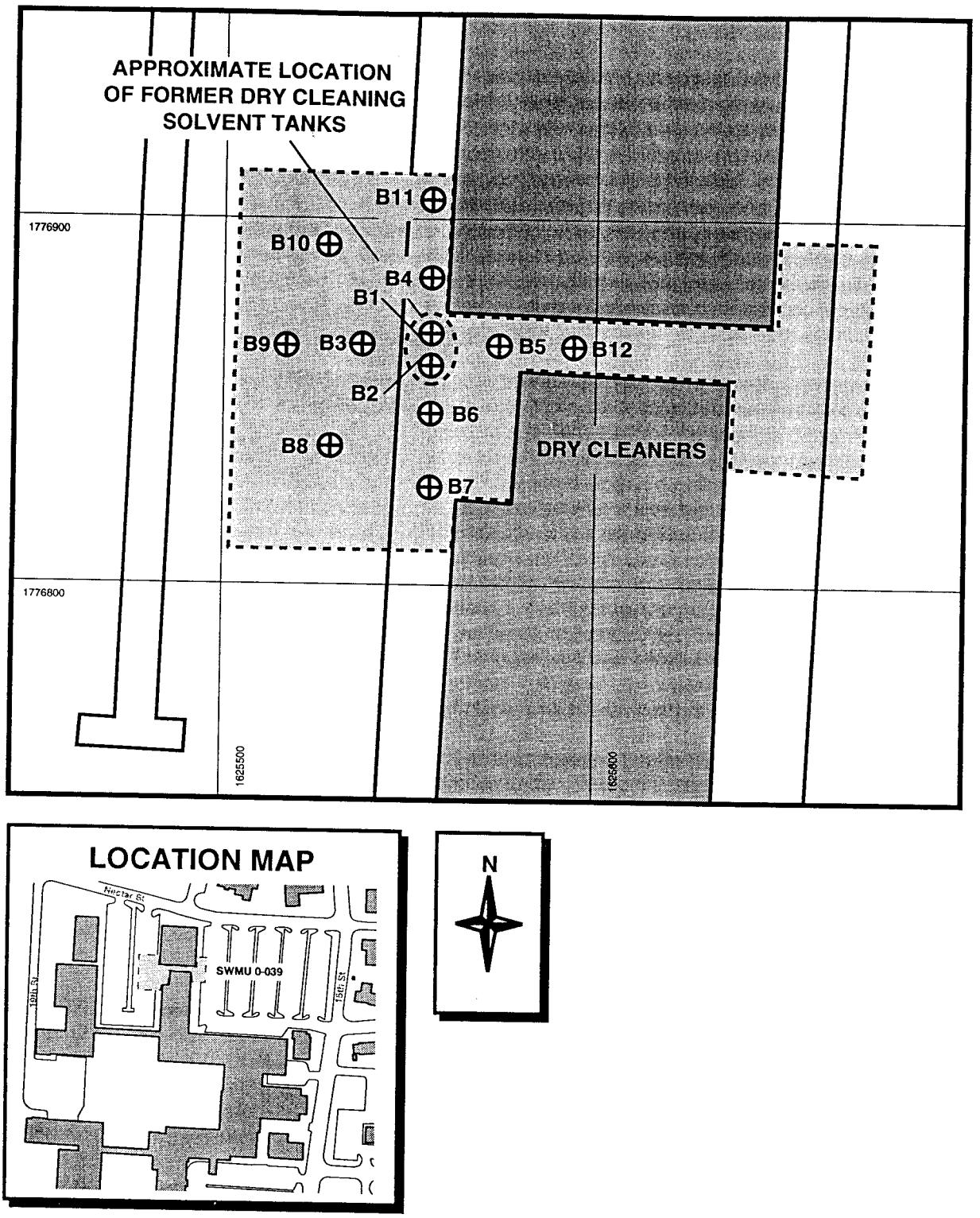
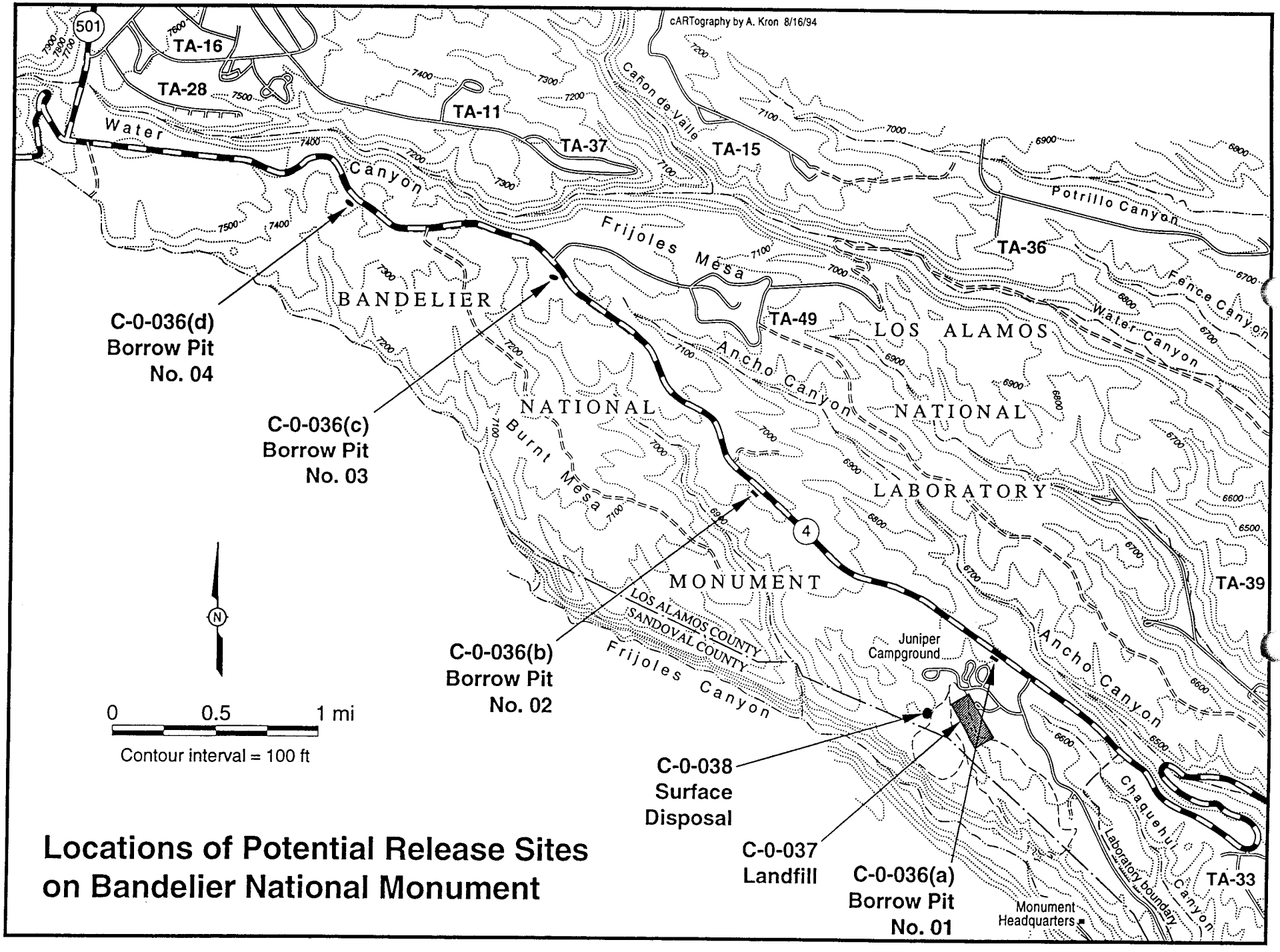


FIGURE 5-104. Boring locations at the former underground dry cleaning solvent tank site (SWMU 0-039).



Locations of Potential Release Sites on Bandelier National Monument

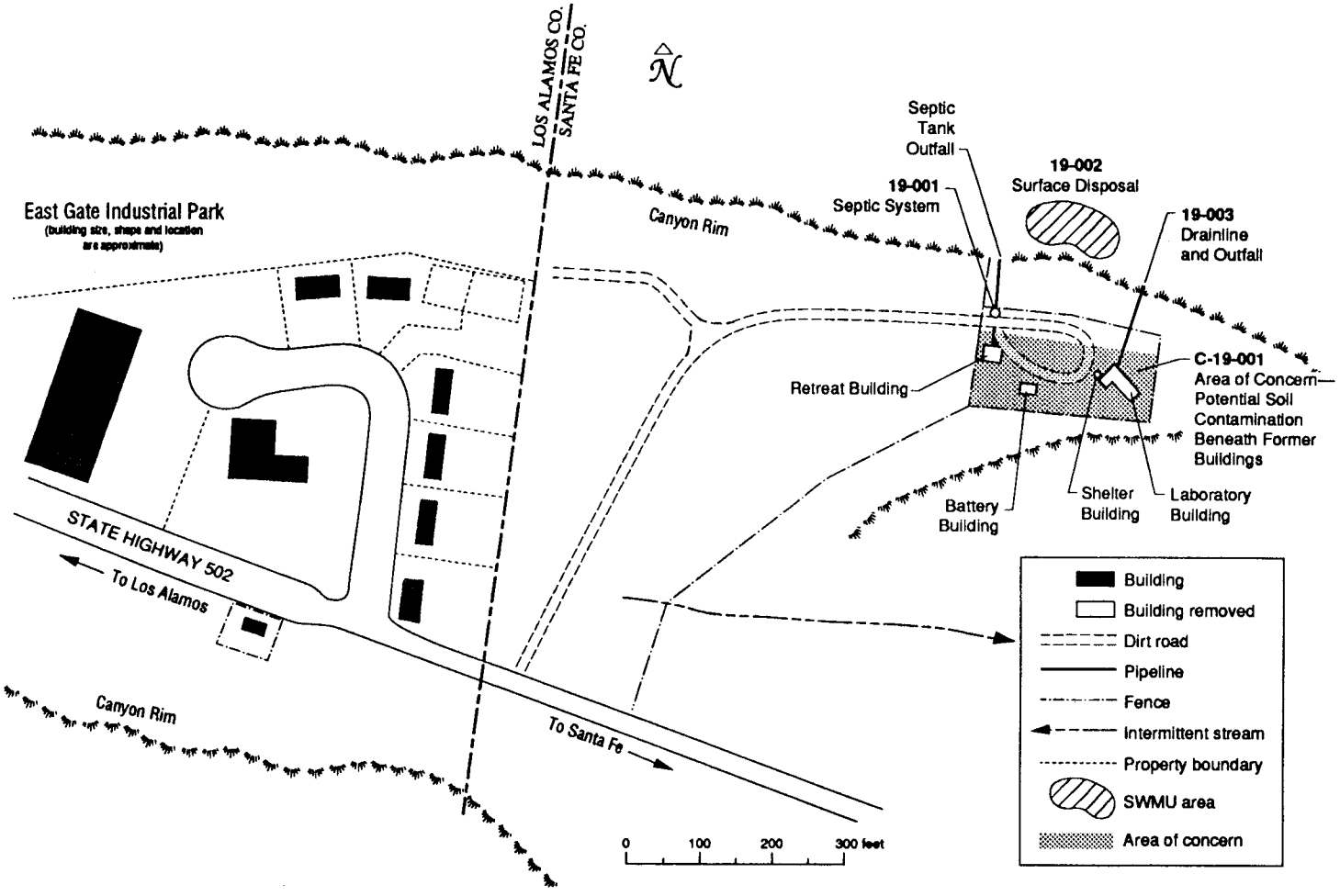


Figure 5-65. SWMU Group 19-1 (East Gate Laboratory).

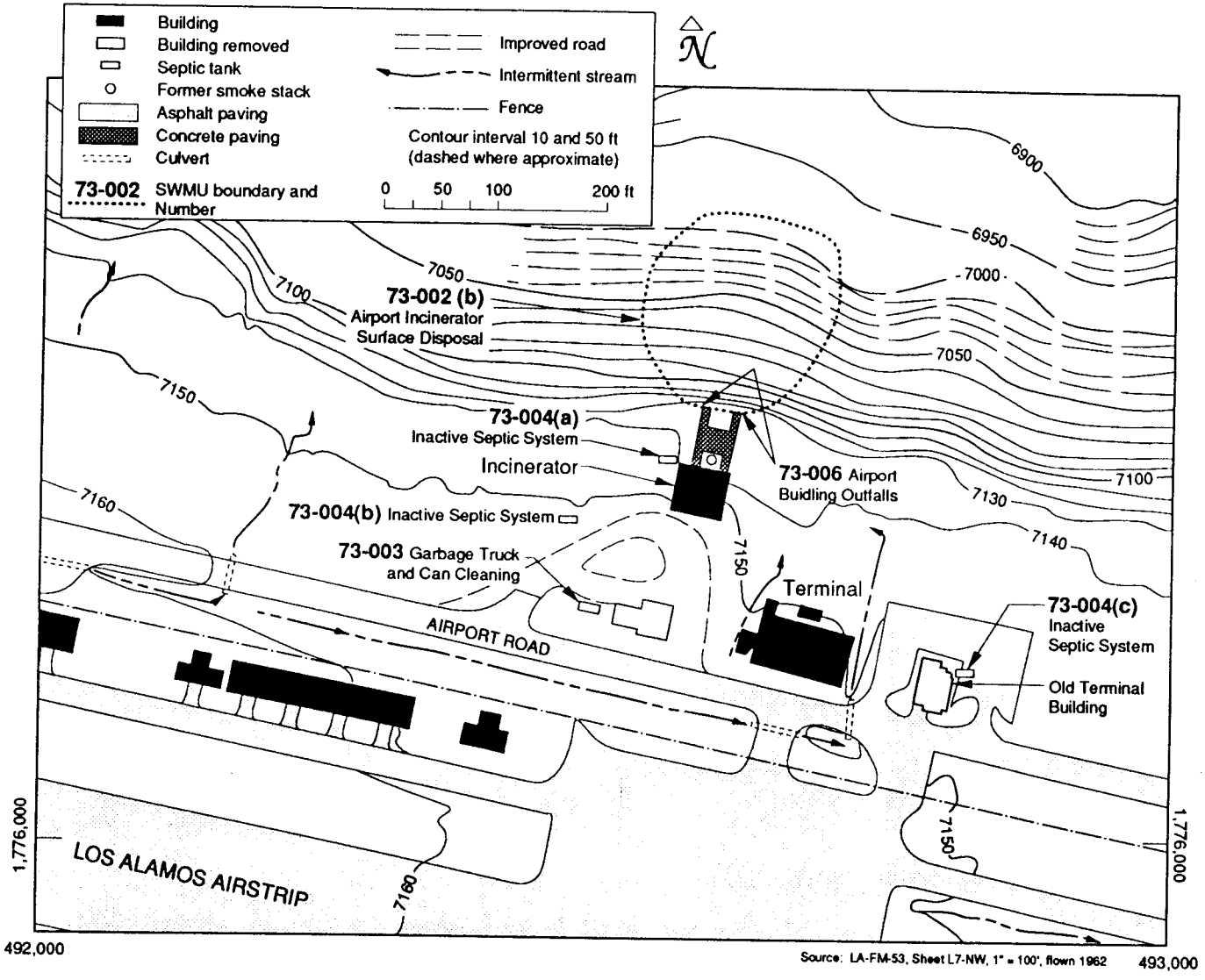


Figure 5-86. SWMU Aggregate 73-B, Los Alamos Airport (West).

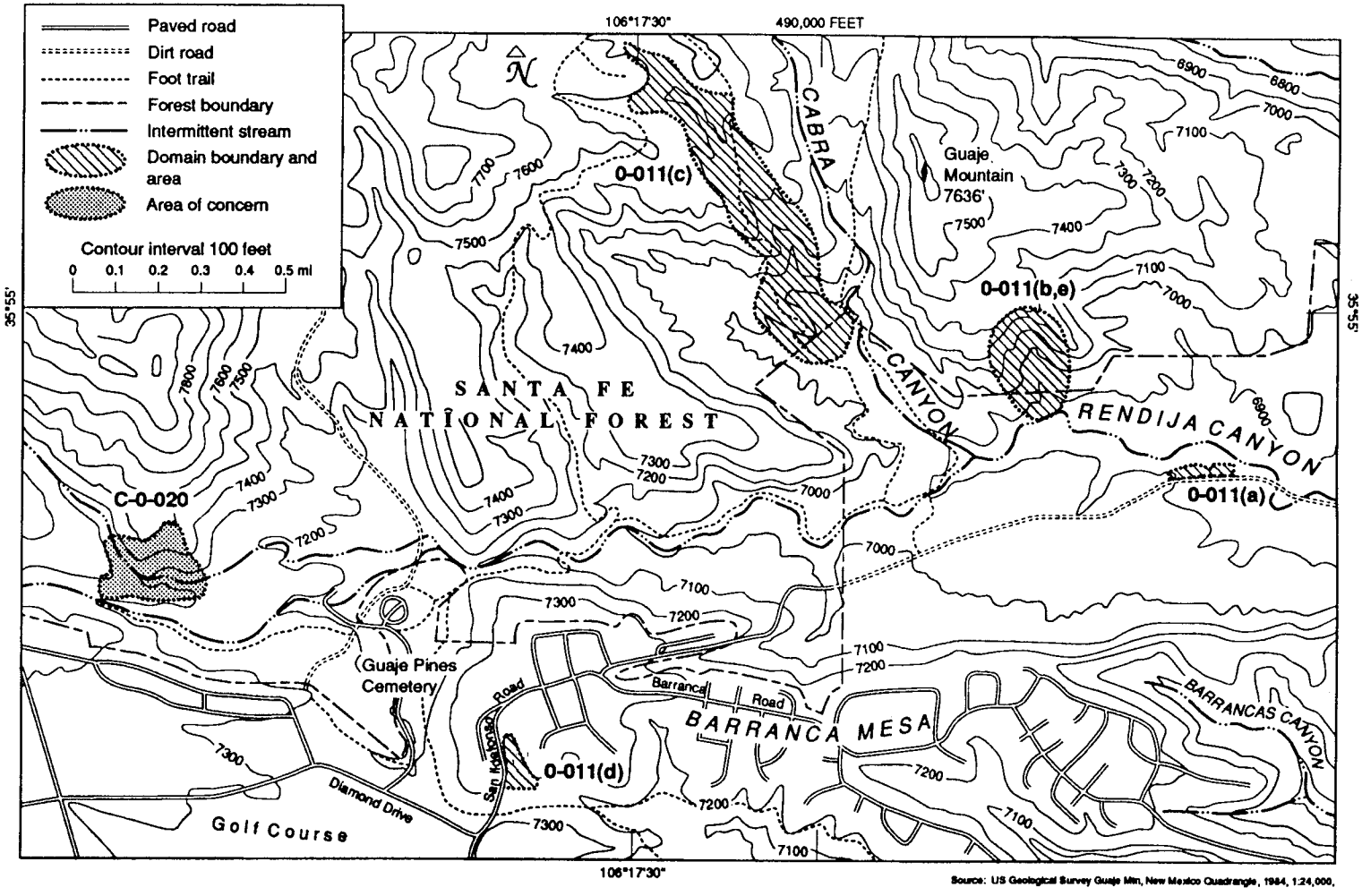
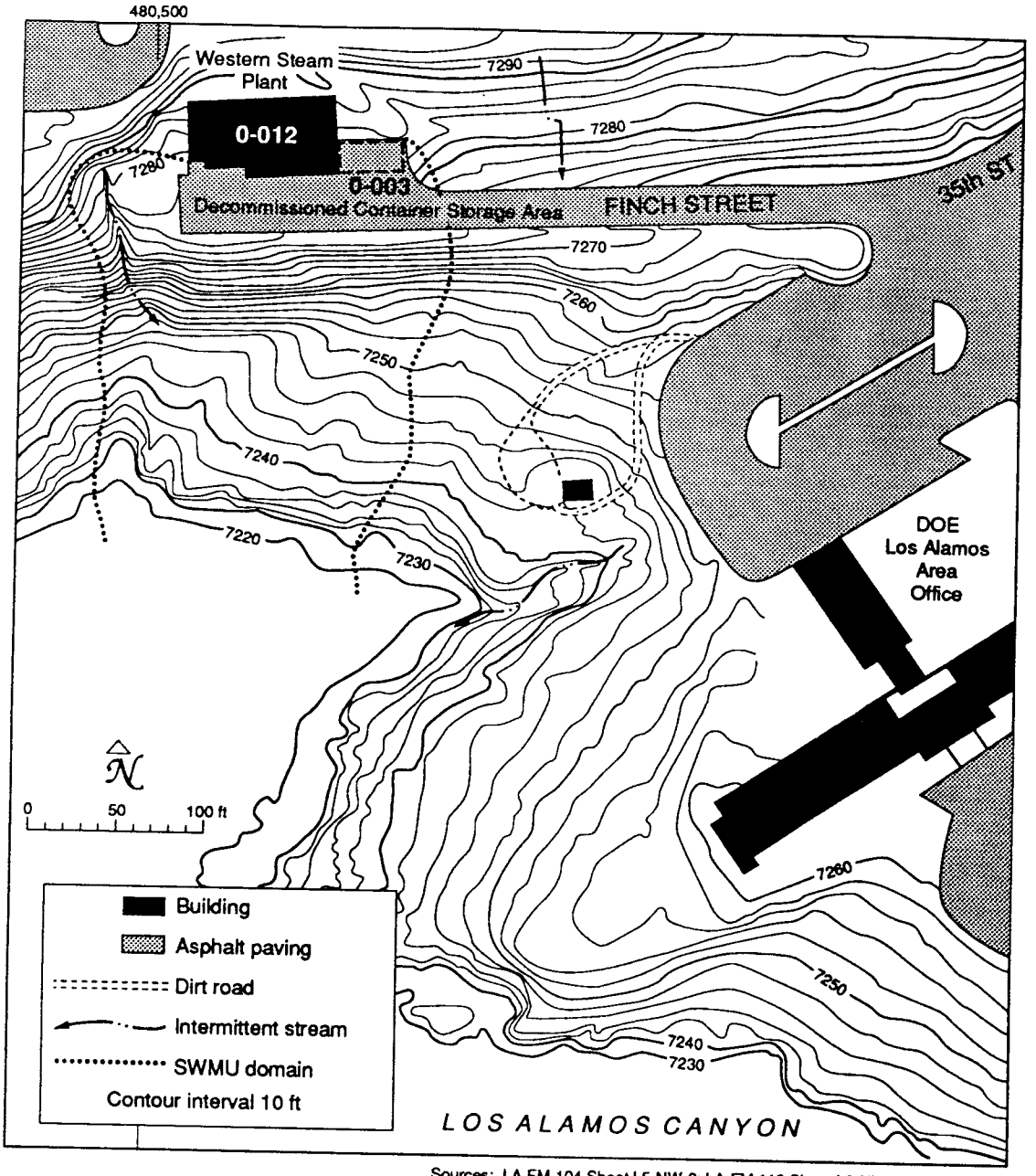
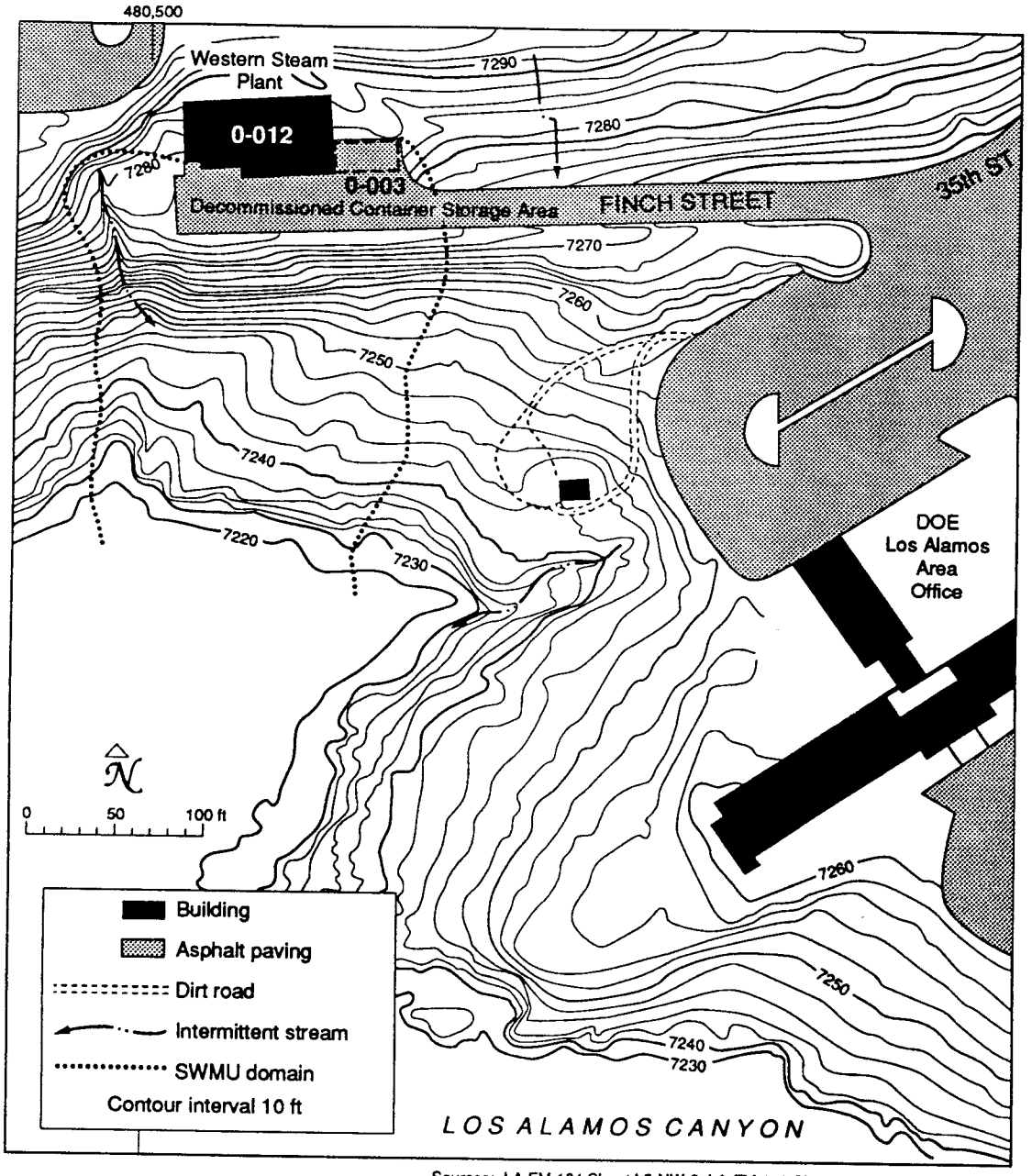


Figure 5-10. SWMU Aggregate 0-D (Mortar Impact Areas).



Sources: LA-FM-104 Sheet L5-NW-2; LA-FM 113 Sheet L5-NW-3, 1" = 50', 1963

Figure 5-1. SWMU Aggregate 0-A (Western Steam Plant).



Sources: LA-FM-104 Sheet L5-NW-2; LA-FM 113 Sheet L5-NW-3, 1" = 50', 1963

Figure 5-1. SWMU Aggregate 0-A (Western Steam Plant).

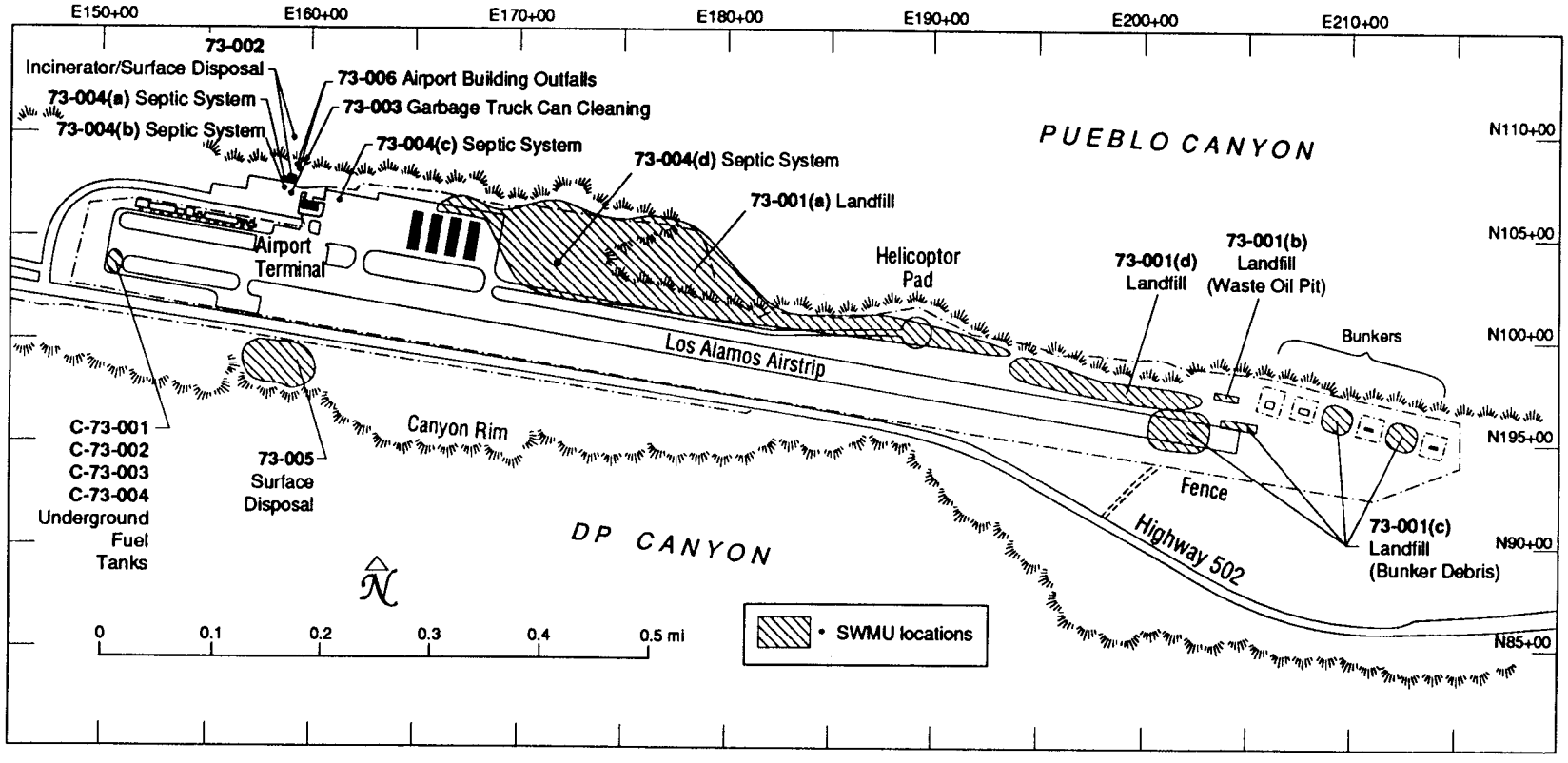
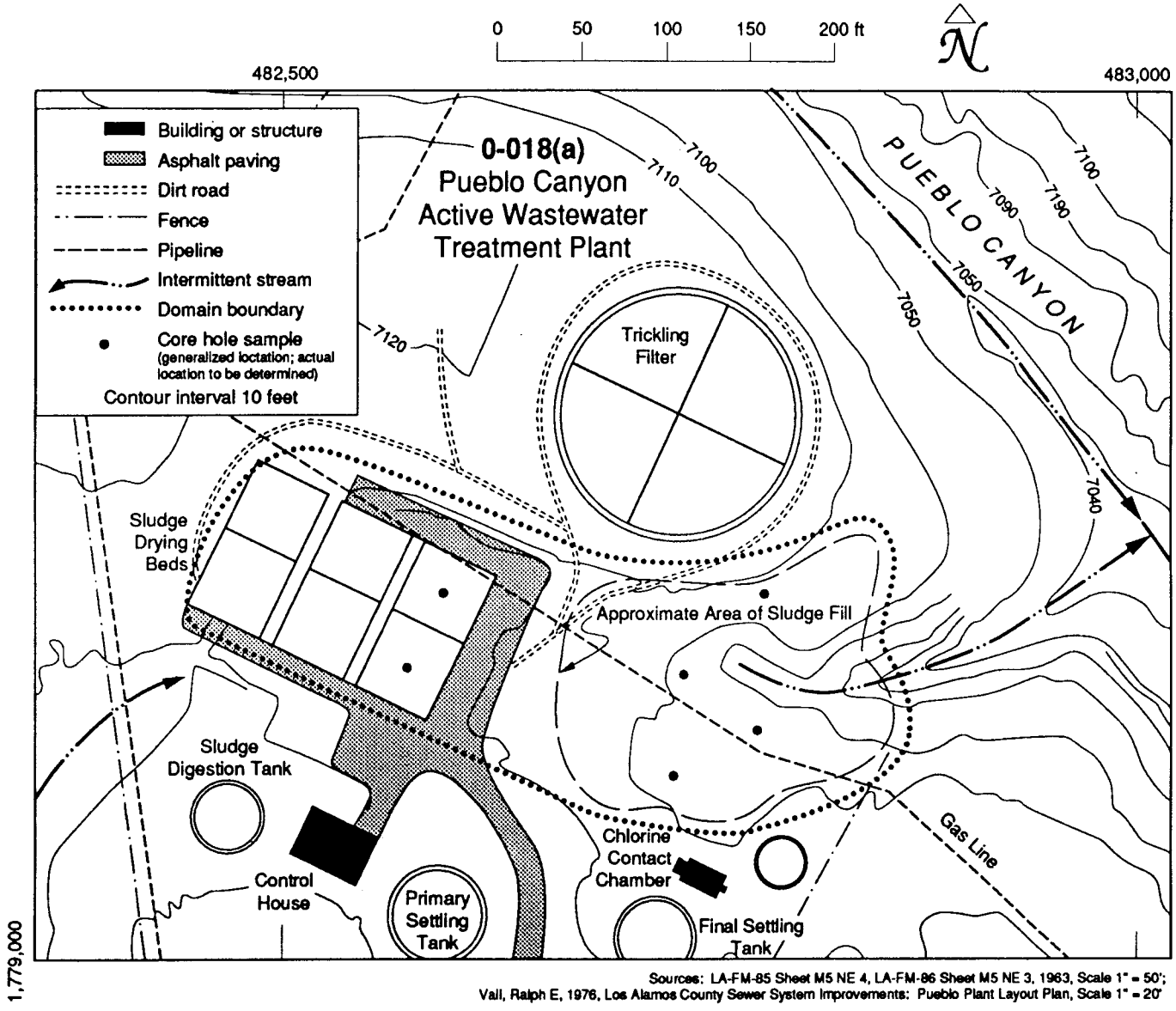


Figure 3-9. SWMU locations in TA-73, Los Alamos Airport.



Sources: LA-FM-85 Sheet M5 NE 4, LA-FM-86 Sheet M5 NE 3, 1963, Scale 1" = 50';
Vail, Ralph E, 1976, Los Alamos County Sewer System Improvements: Pueblo Plant Layout Plan, Scale 1" = 20'

Figure 5-23. Sampling locations in SWMU 0-018(a) (Pueblo Canyon Wastewater Treatment Plant).

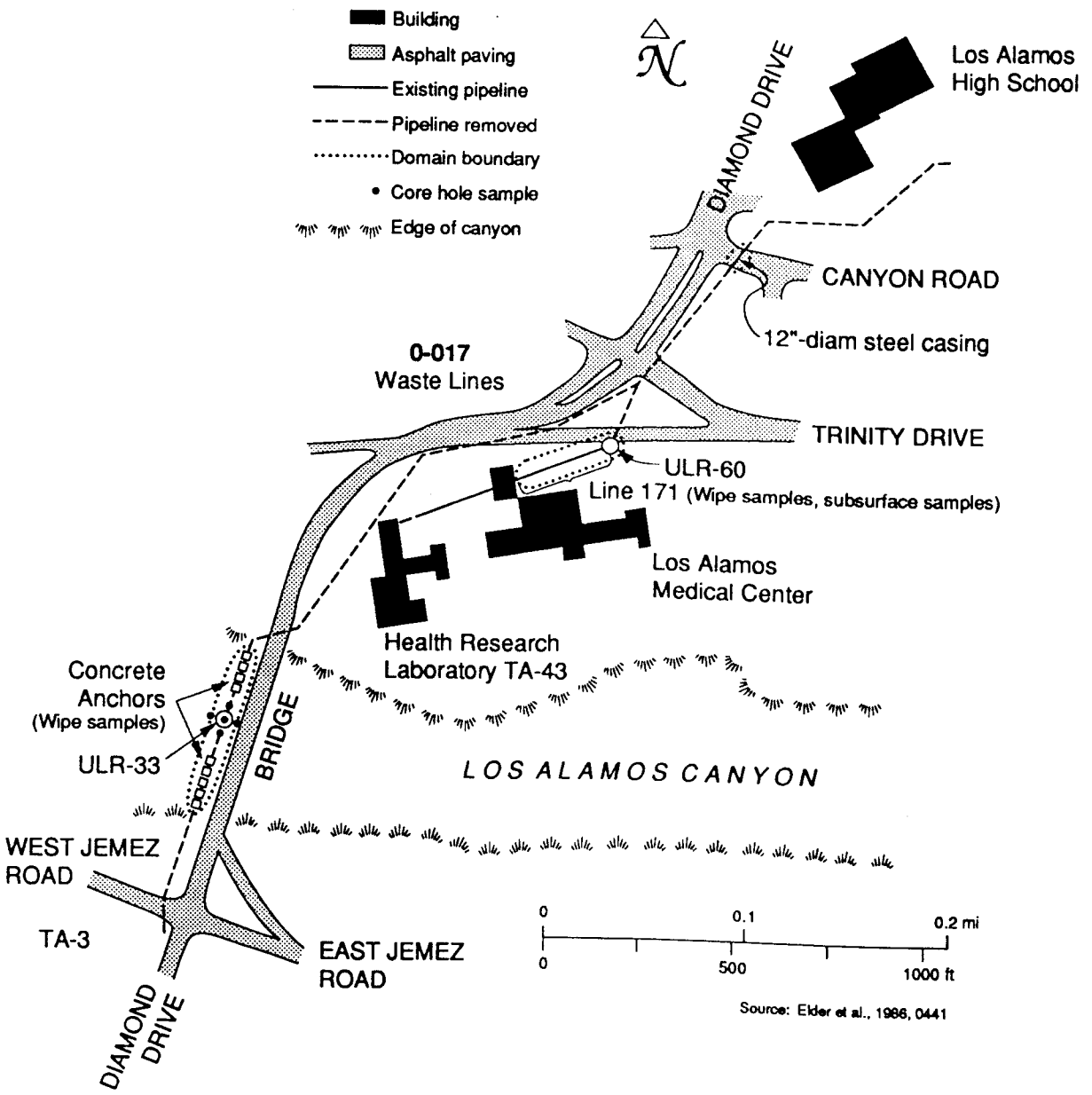


Figure 5-17. SWMU 0-017 (Waste Lines).

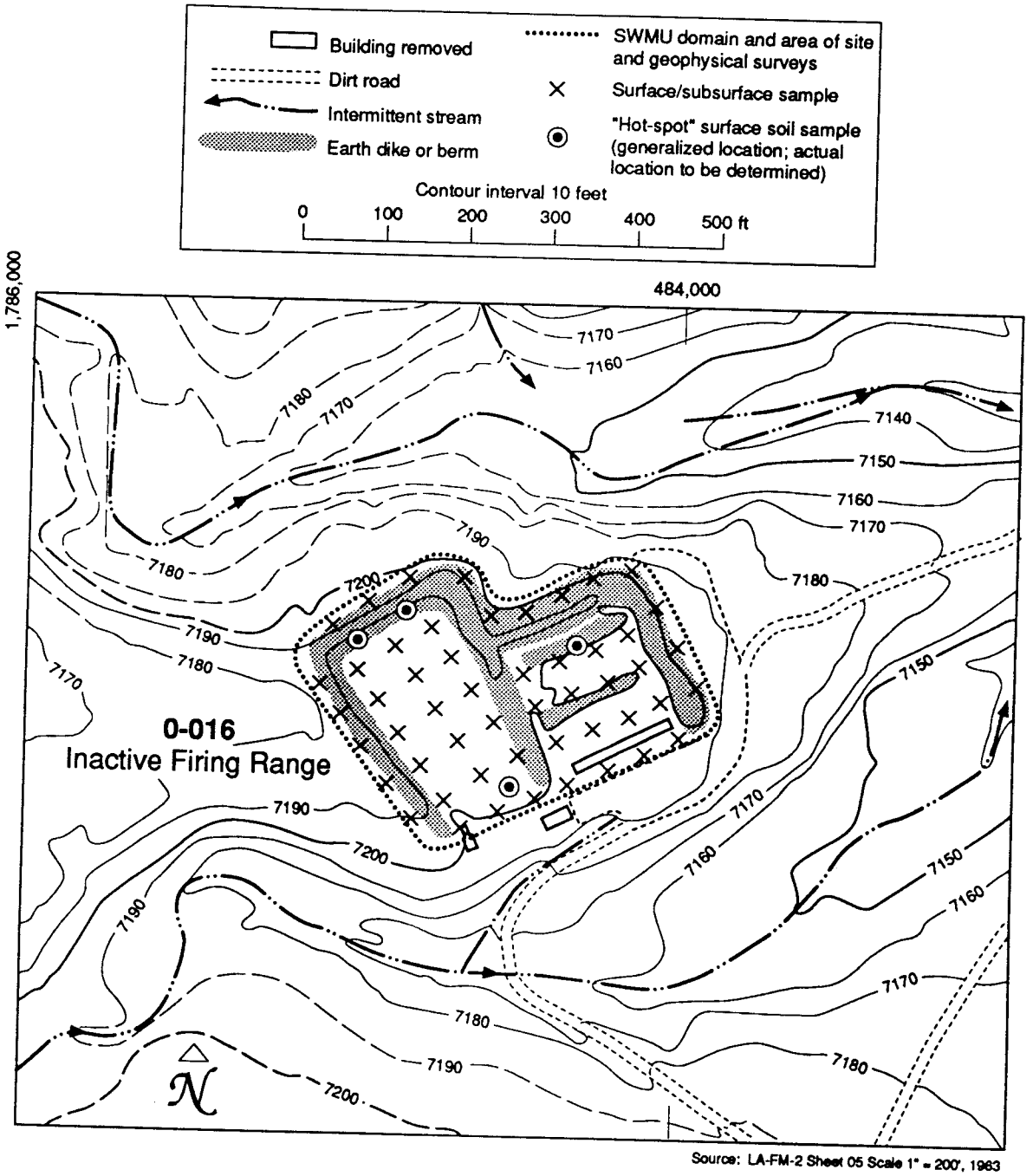


Figure 5-15. Sampling locations at SWMU 0-016 (Inactive Firing Range).

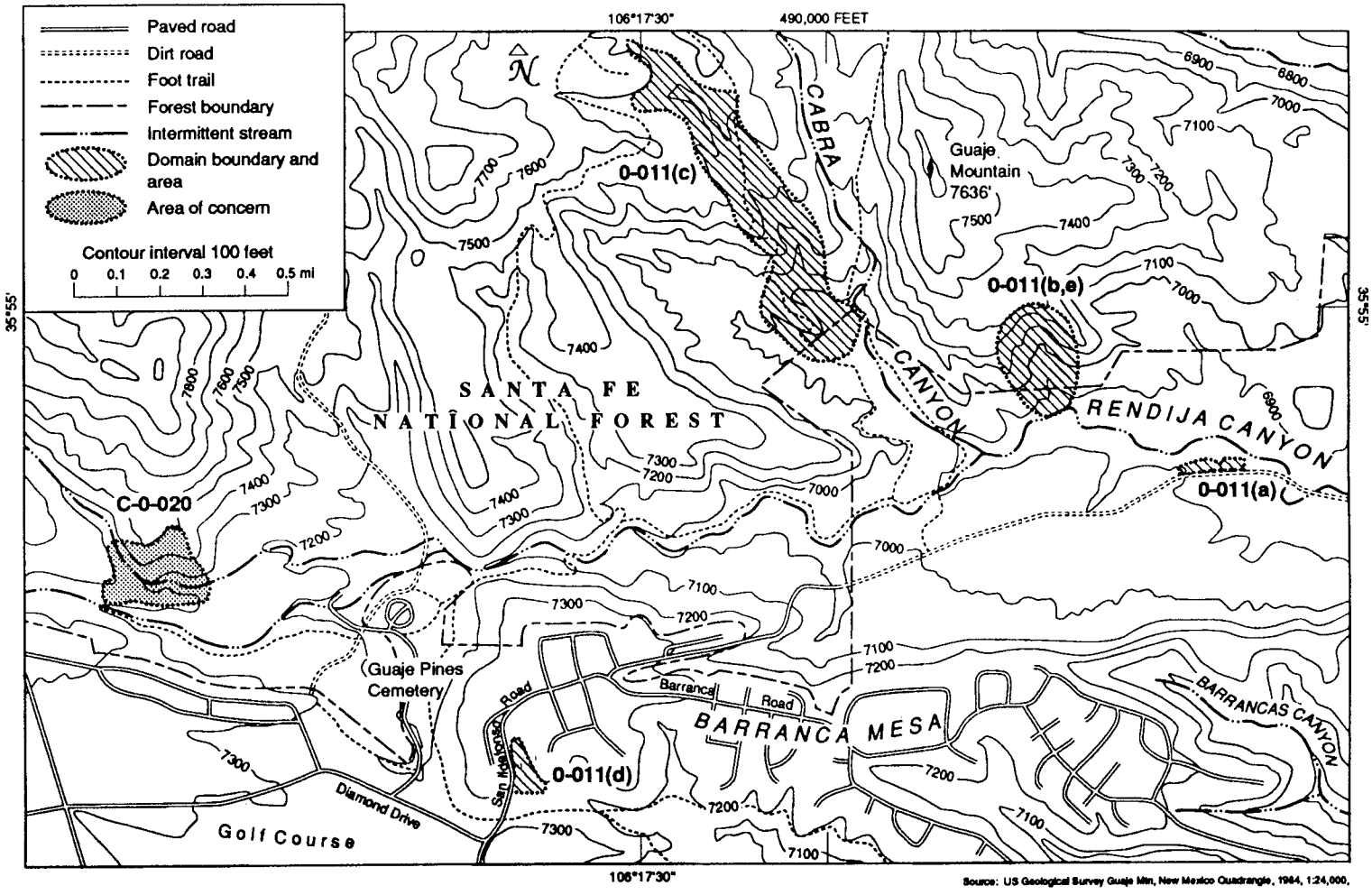


Figure 5-10. SWMU Aggregate 0-D (Mortar Impact Areas).

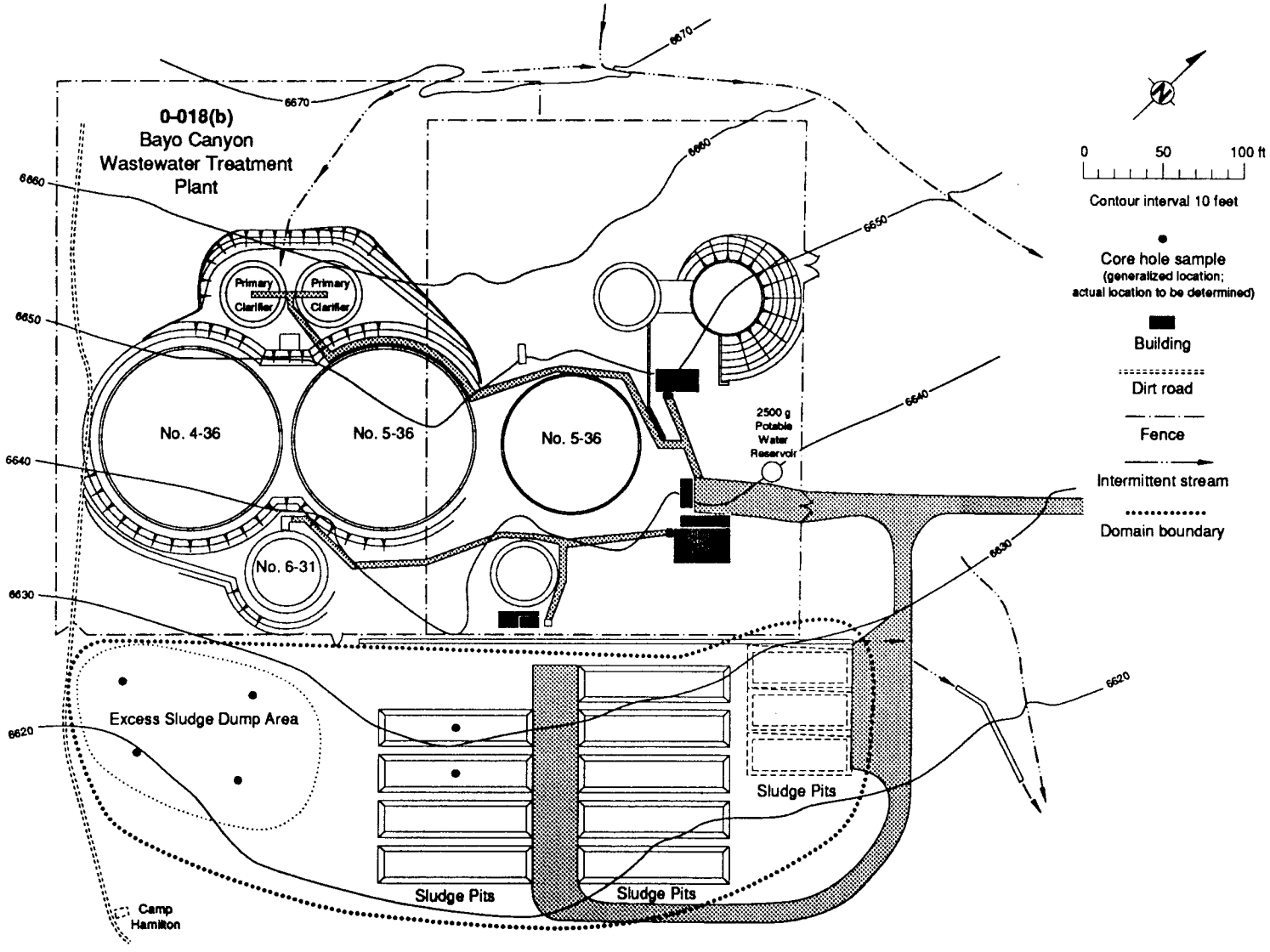


Figure 5-24. Sampling locations in SWMU 0-018(b) (Bayo Canyon Wastewater Treatment Plant).

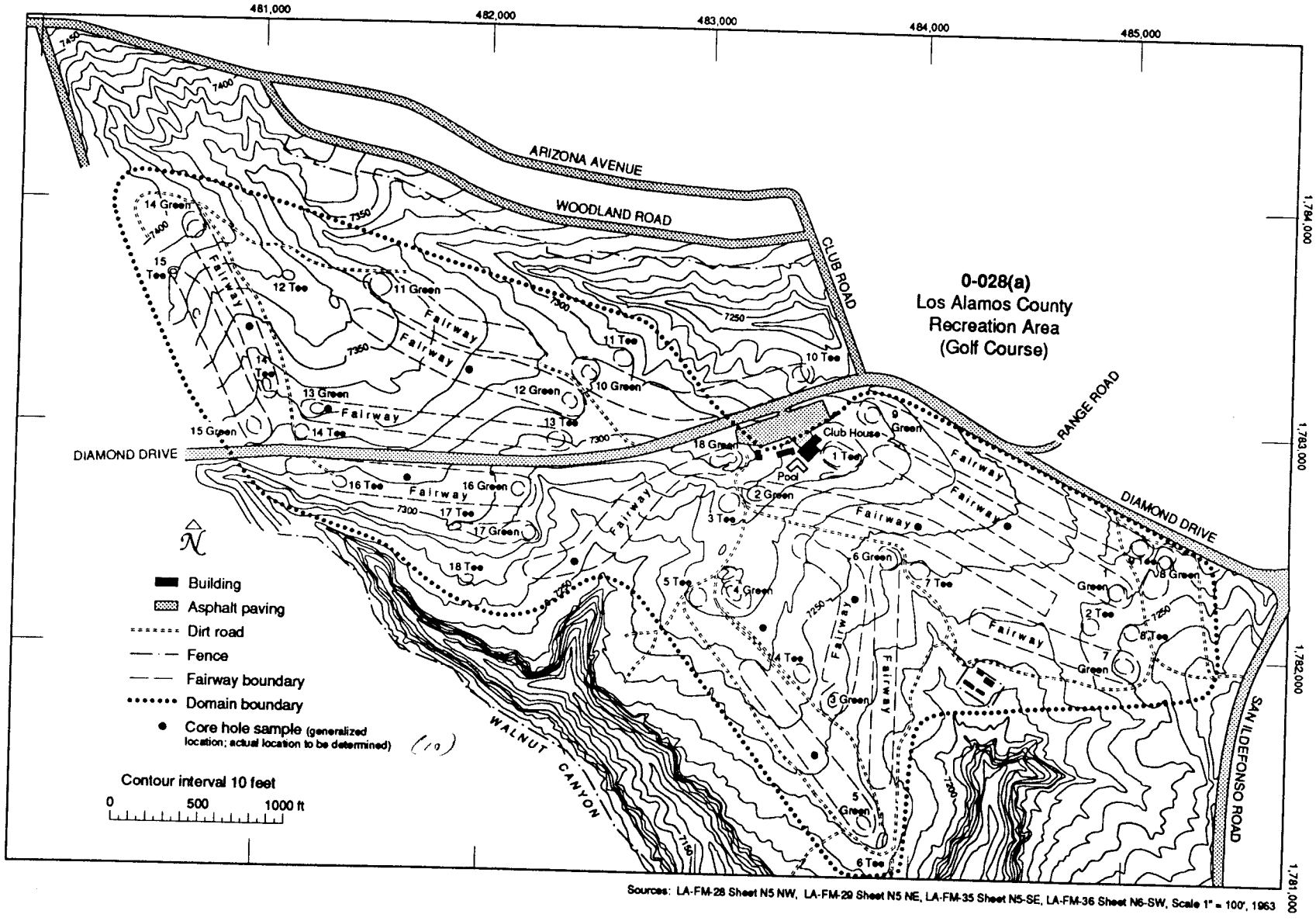
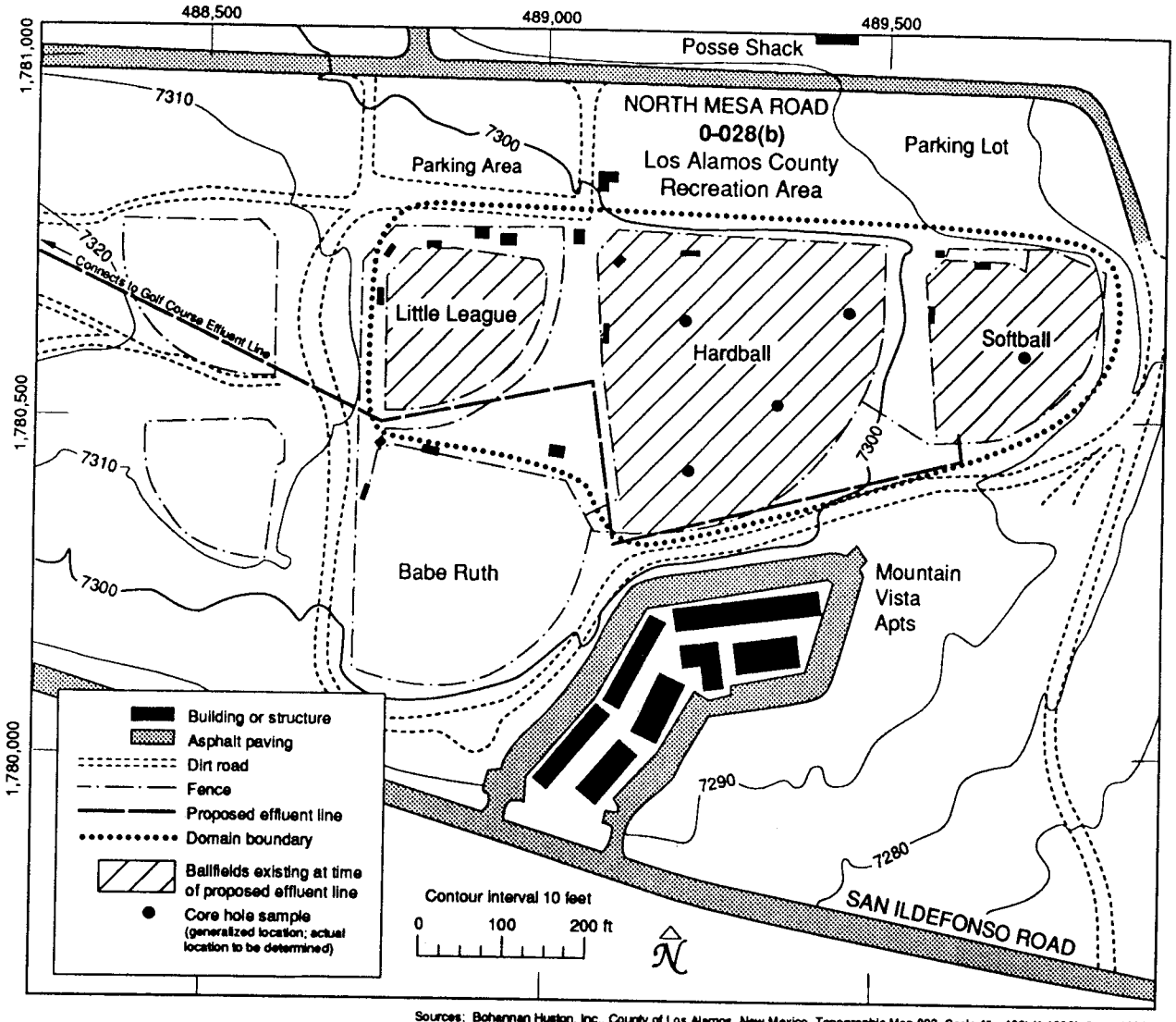


Figure 5-31. Sampling locations at Los Alamos County Golf Course [SWMU 0- 028(a)].



Sources: Bohannan Huston, Inc., County of Los Alamos, New Mexico, Topographic Map 803, Scale 1" = 100' (1:1200), flown 1986; Zia Company, ca. 1952, Z-850 Proposed Effluent Water Line Alignment to Baseball Fields, N. Mesa

Figure 5-32. Sampling locations at North Mesa athletic fields [SWMU 0-028(b)].

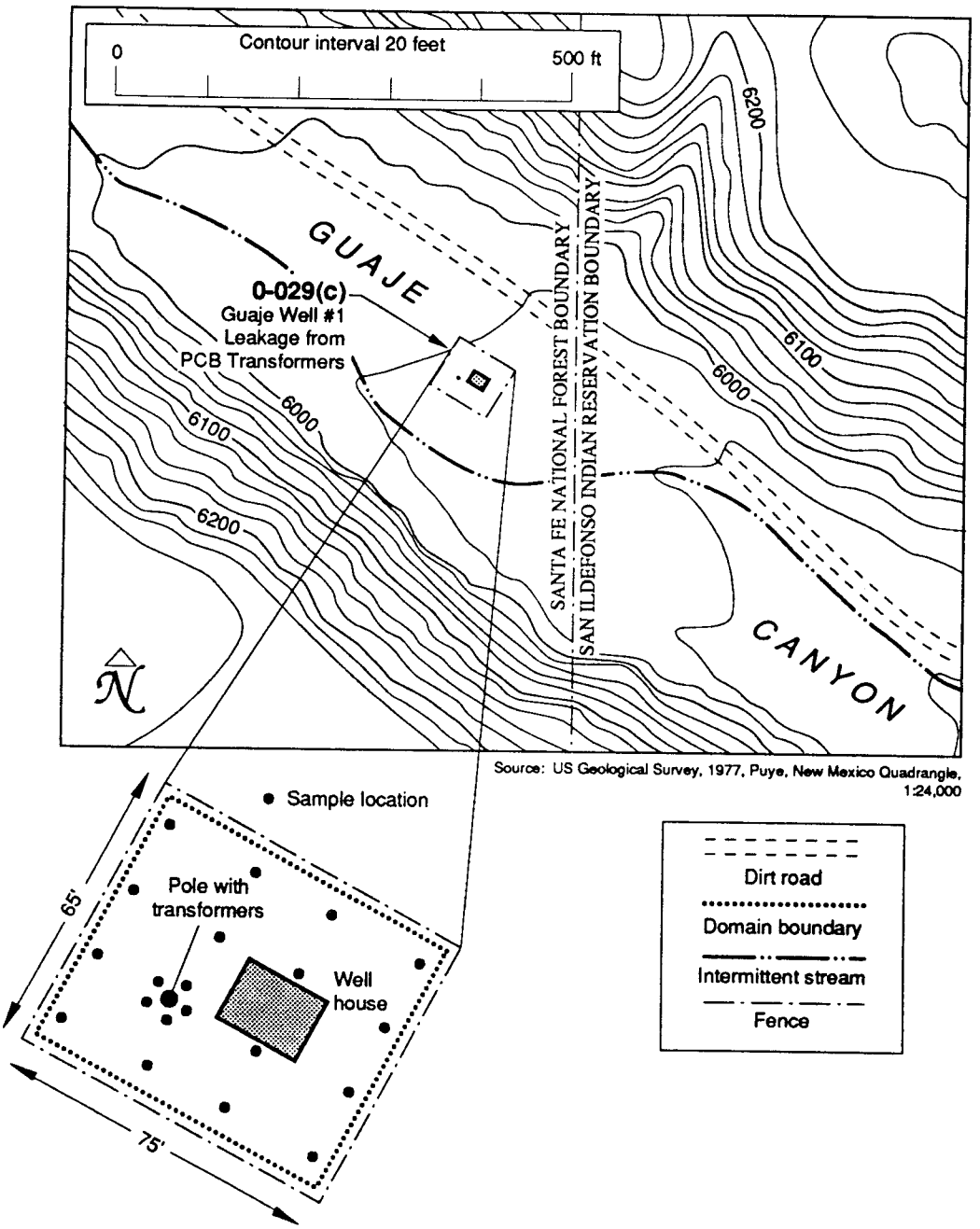


Figure 5-36. Sampling locations of SWMU 0-029(c) (PCB Transformers).

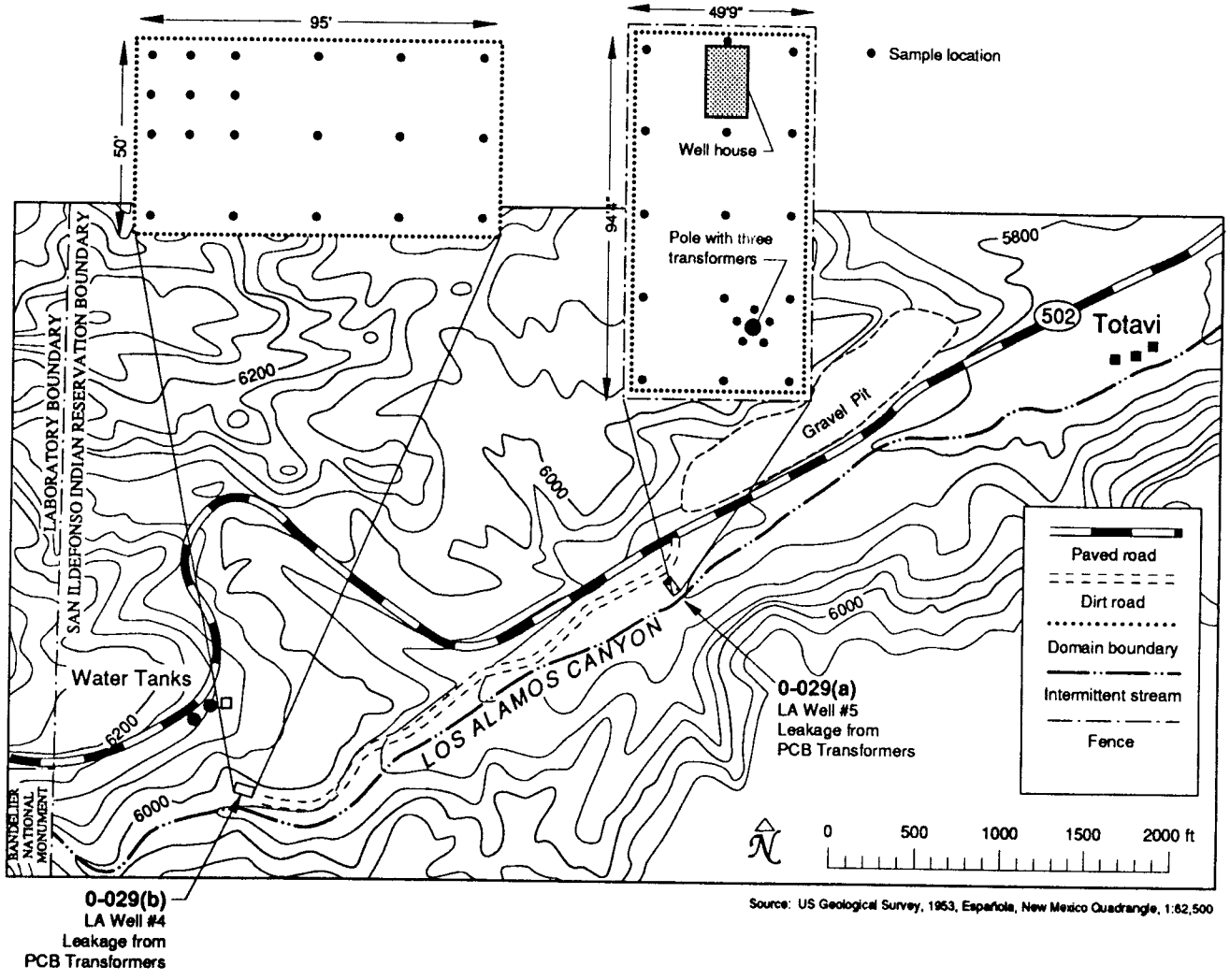
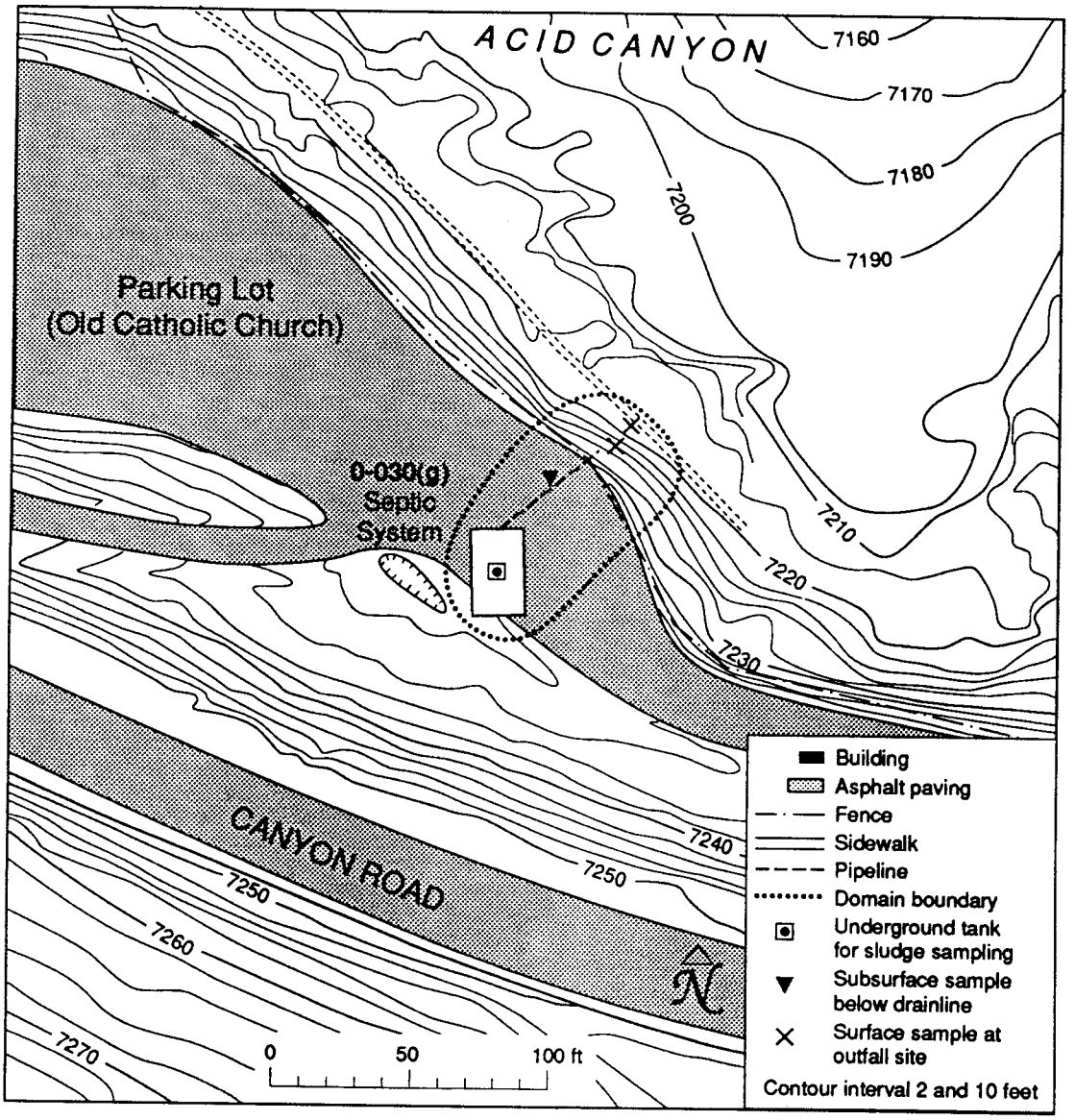
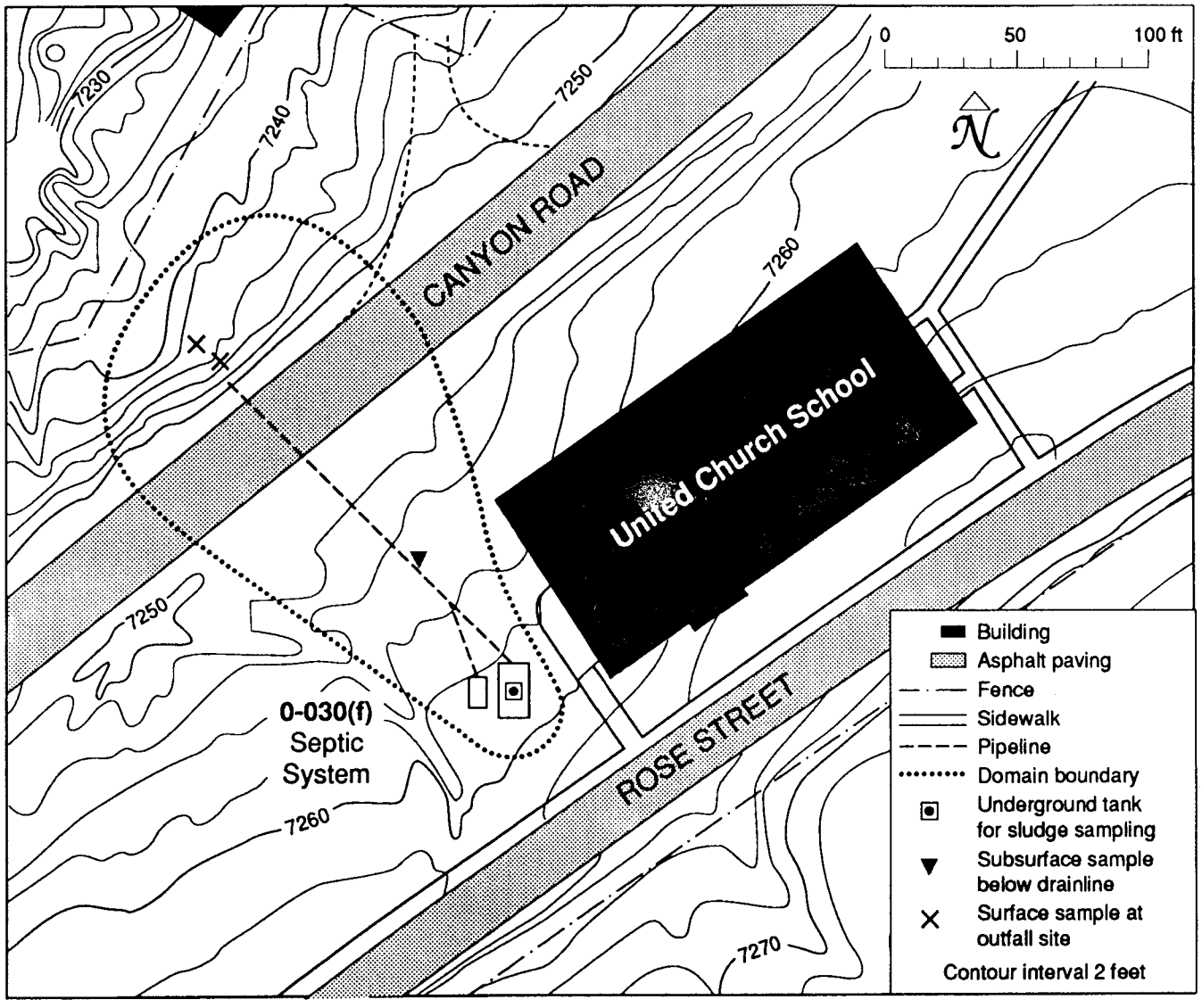


Figure 5-35. Sampling locations of SWMUs 0-029(a and b) (PCB Transformers).



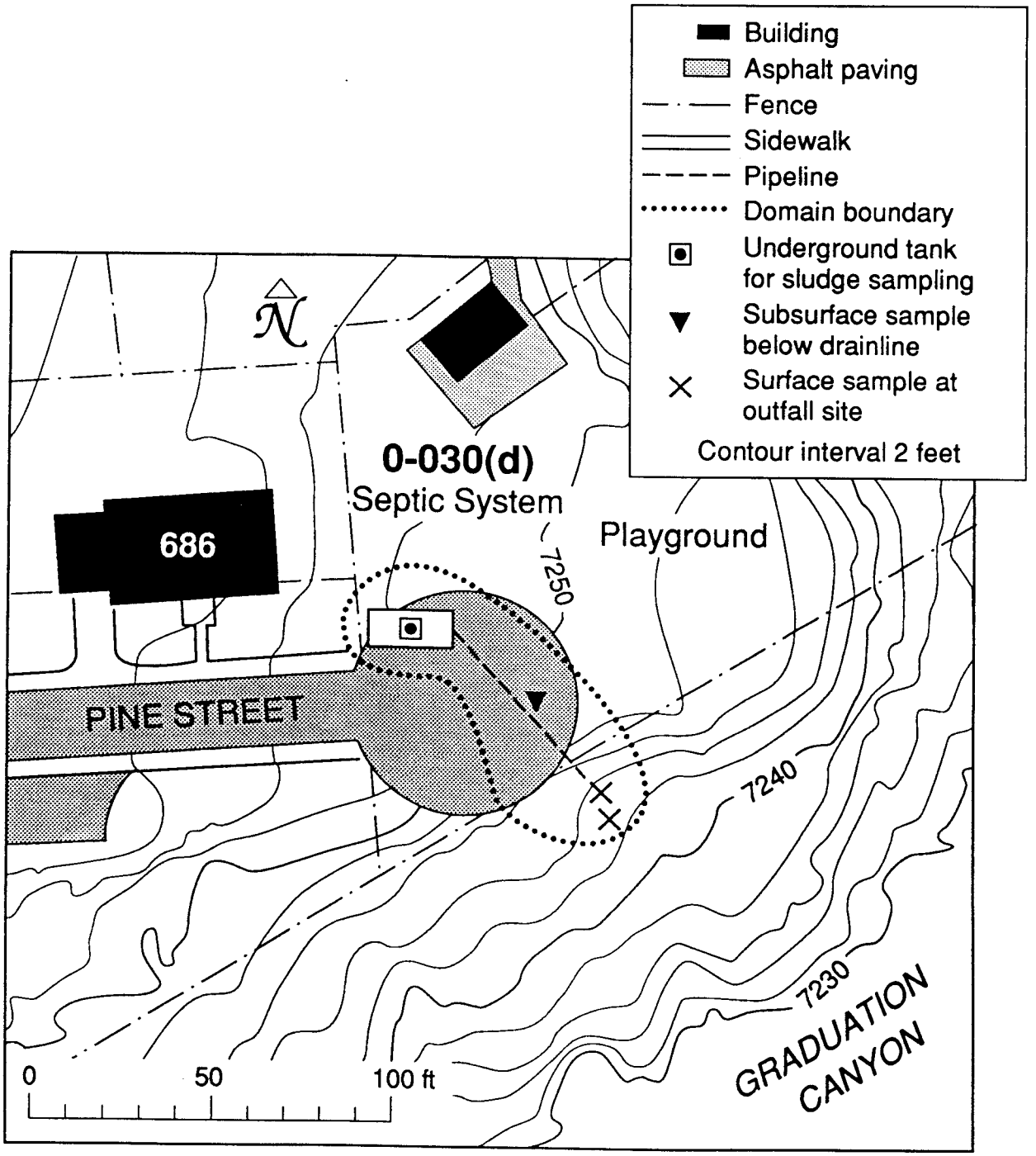
Source: LA-FM-105 Sheet L5-NE-1, 1" = 50', 1963

Figure 5-44. Sampling locations for SWMU 0-030(g).



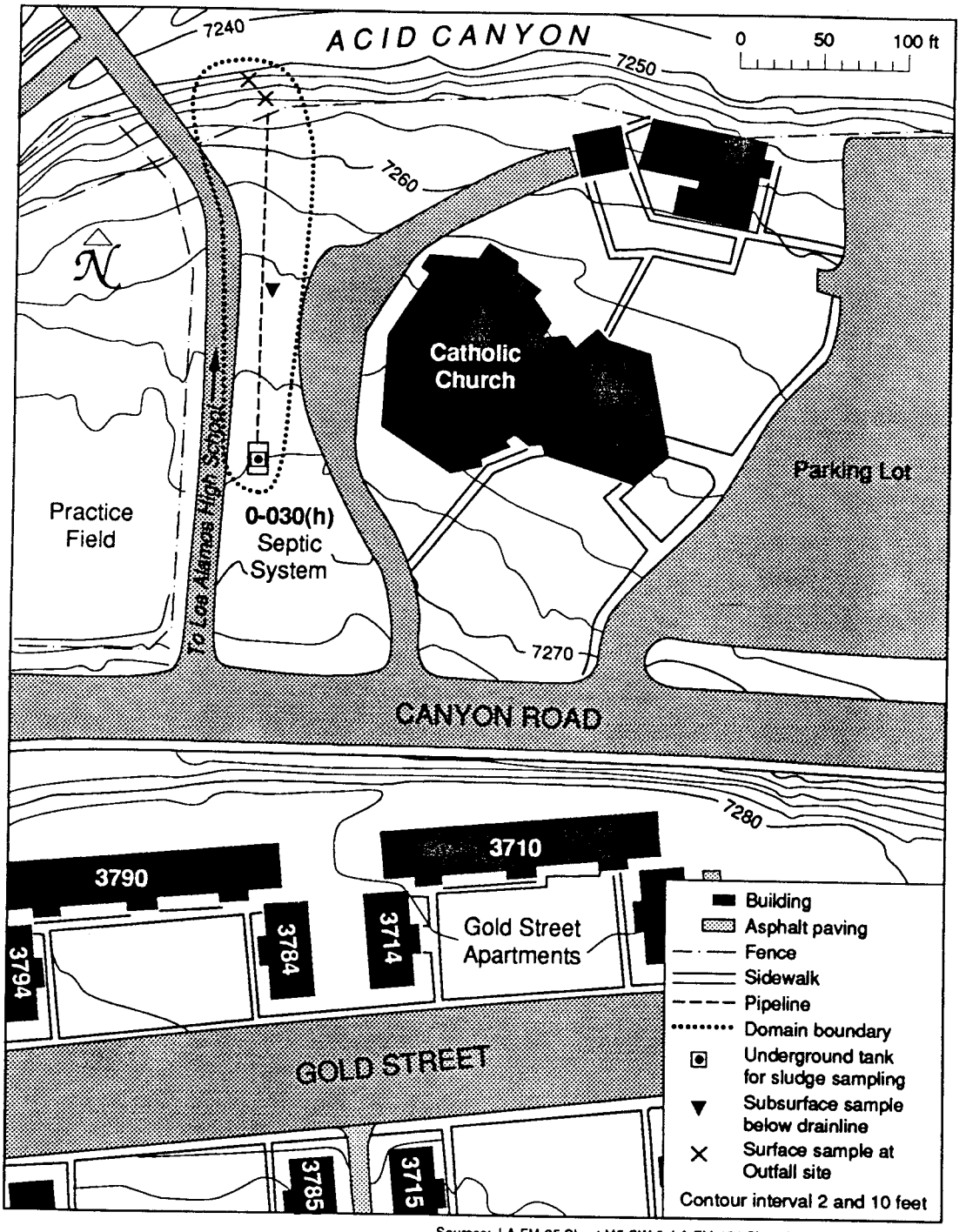
Sources: LA-FM-97 Sheet M5-SE-3; LA-FM-106 Sheet L5-NE-2, 1" = 50', 1963

Figure 5-43. Sampling locations for SWMU 0-030(f).



Source: LA-FM-108 Sheet L6-NW-2 1" = 50'

Figure 5-41. Sampling locations for SWMU 0-030(d).



Sources: LA-FM-95 Sheet M5-SW-3; LA-FM-104 Sheet L5-NW-2, 1" = 50', 1963; Bohannan Huston, Inc., County of Los Alamos, NM, Topographic Map 47, 1" = 100', 1986

Figure 5-45. Sampling locations for SWMU 0-030(h).

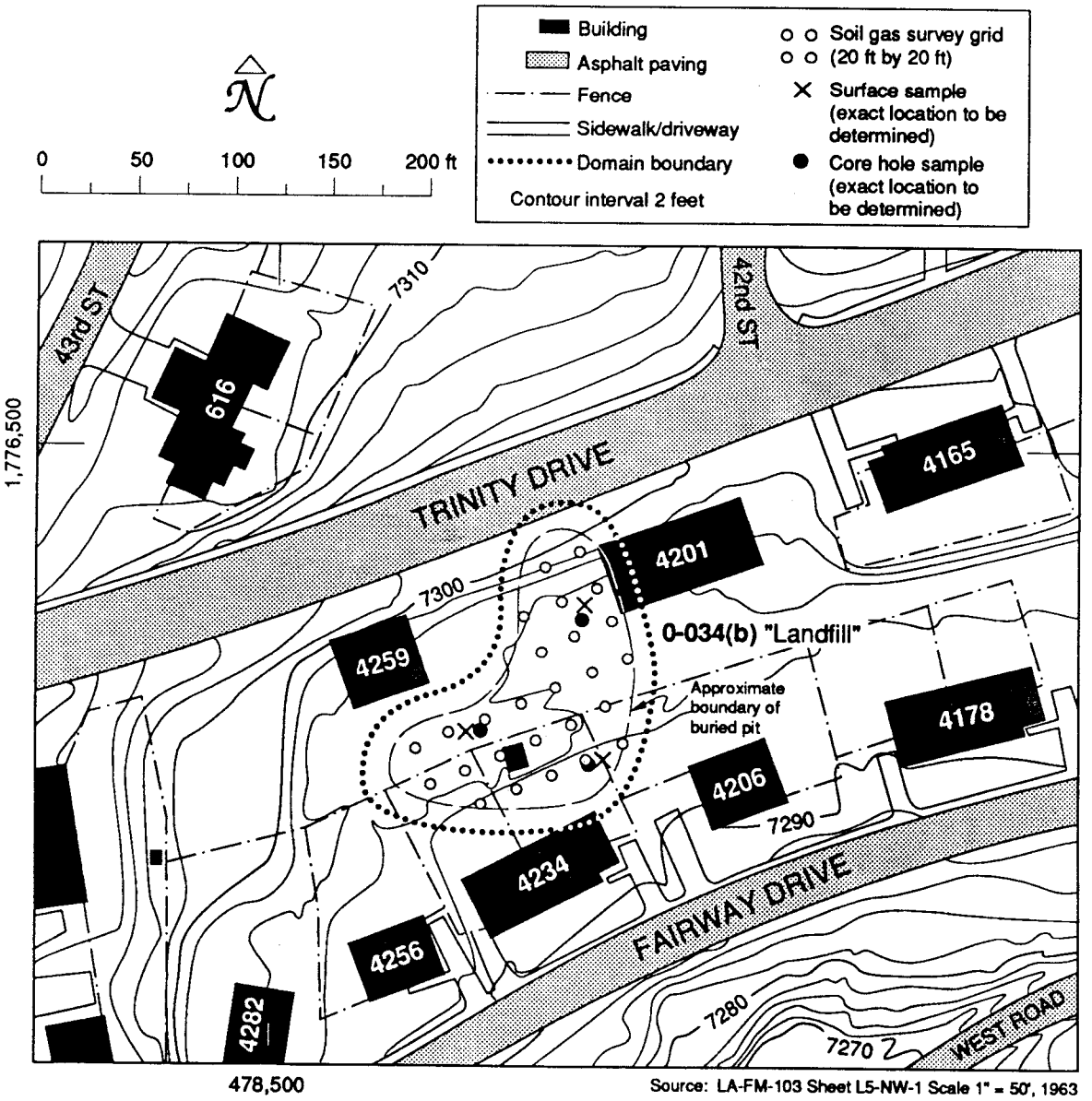


Figure 5-63. Sampling locations at the Western Area pit [SWMU 0-034(b)].

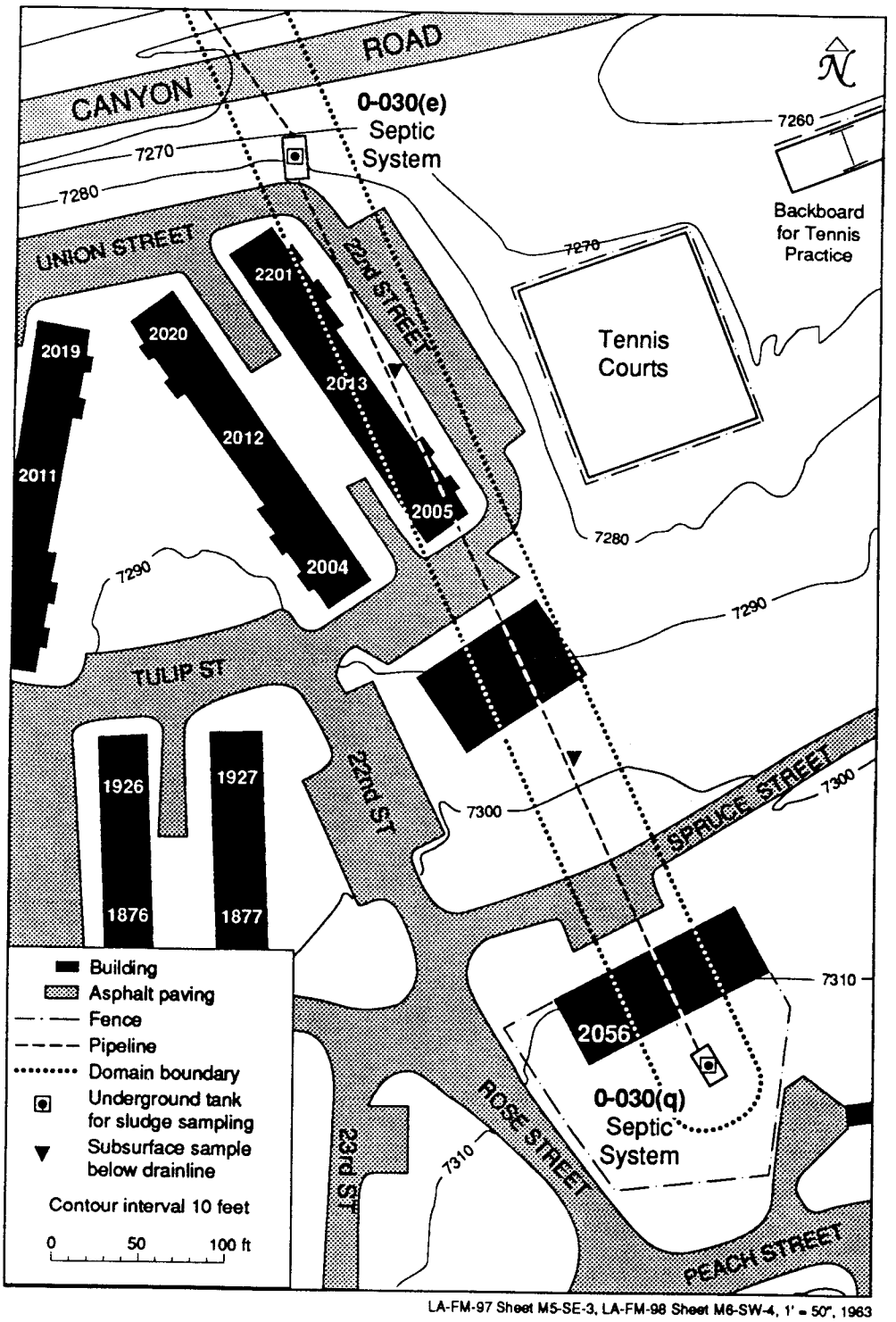
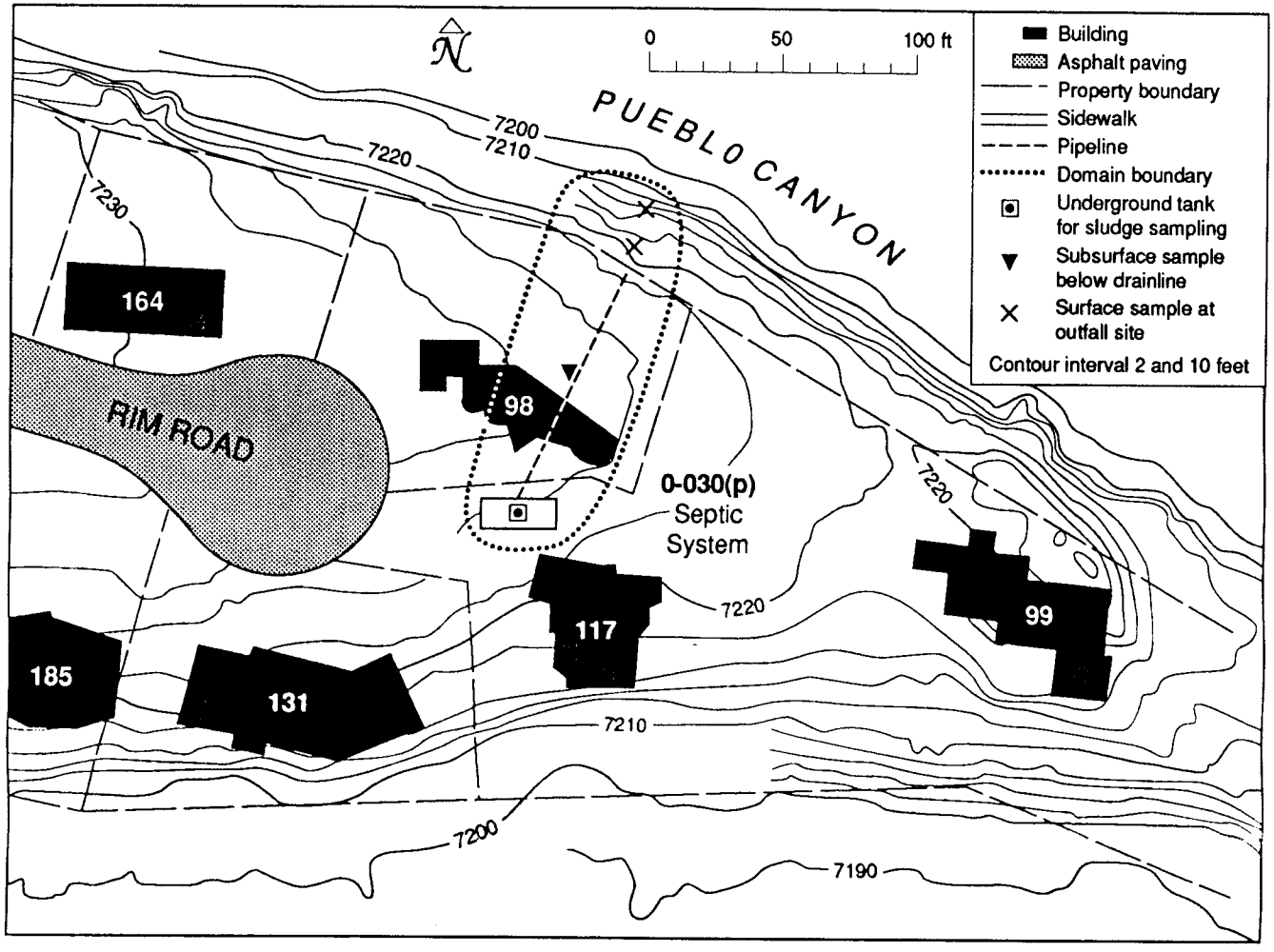
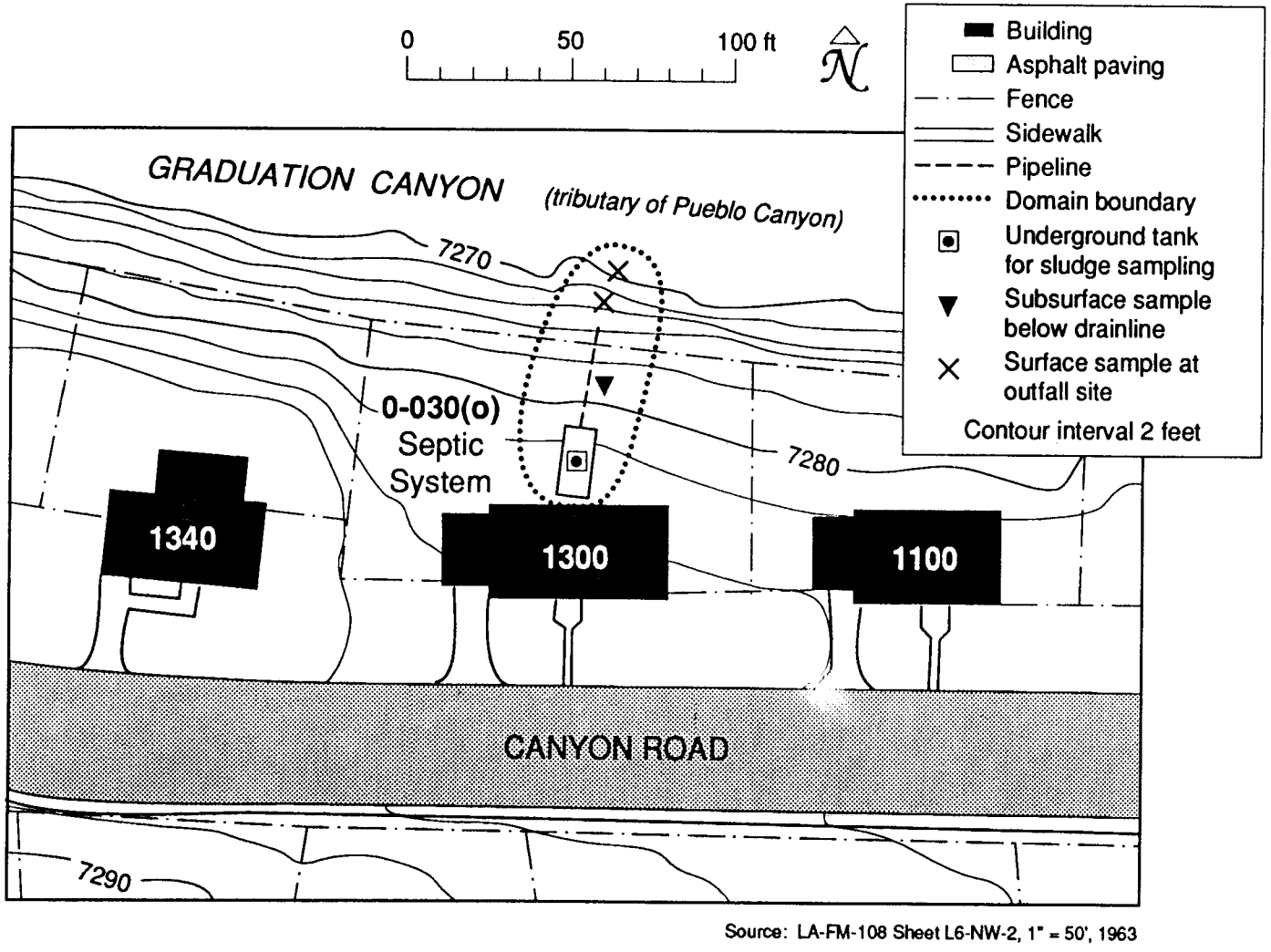


Figure 5-52. Sampling locations for SWMU 0-030(q).



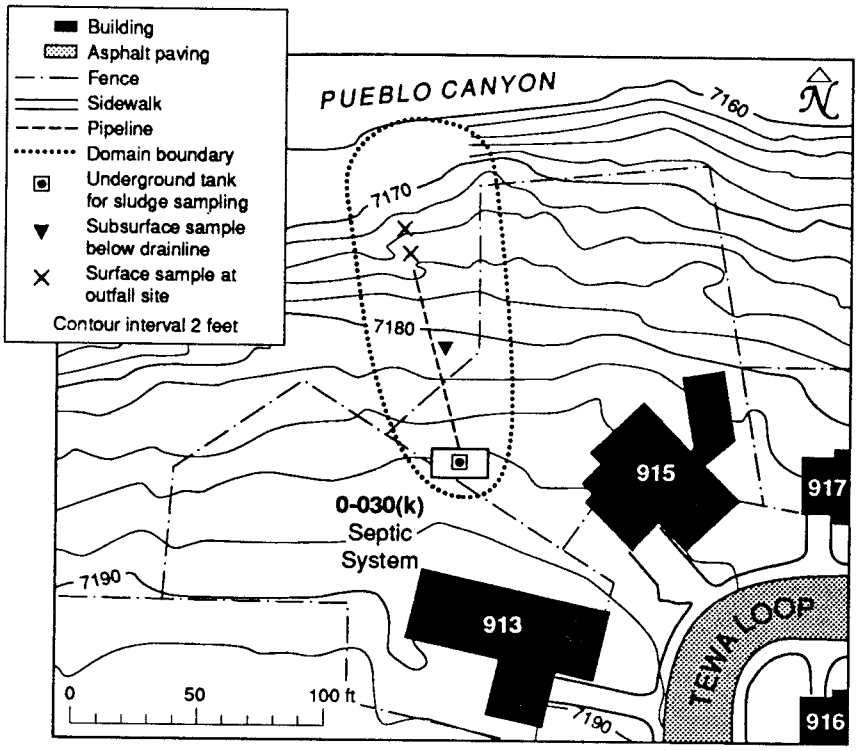
Source: LA-FM-100 Sheet M6-SE-4, 1" = 50', 1963

Figure 5-51. Sampling locations for SWMU 0-030(p).



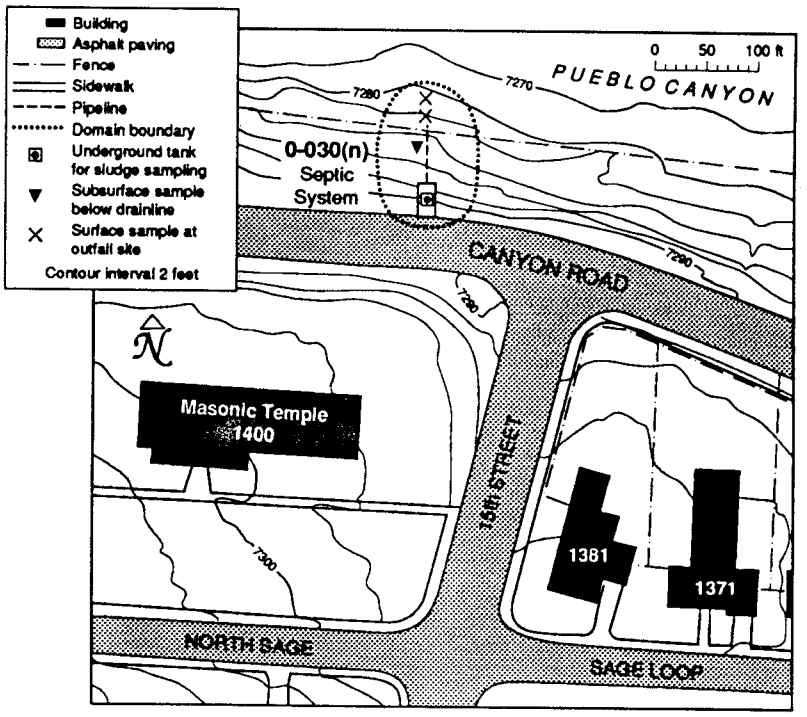
Source: LA-FM-108 Sheet L6-NW-2, 1" = 50', 1963

Figure 5-50. Sampling locations for SWMU 0-030(o).



Source: LA-FM-110 Sheet L6-NE-2, 1" = 50', 1963

Figure 5-48. Sampling locations for SWMU 0-030(k).



Source: LA-FM-98 Sheet M6-SW-4, 1" = 50', 1963

Figure 5-49. Sampling locations for SWMU 0-030(n).

List of Proposed Modifications to be made on a Semi-Annual Basis to the Los Alamos National Laboratory (LANL) Hazardous Waste Operating Permit (HWOP)

- All Class I permit modifications listed in Appendix I of 40 CFR - 270.42
- Changes to State, County, Department of Energy (DOE), and LANL phone numbers
- Changes to addresses for State, County, DOE, and LANL entities
- Changes in administrative nomenclature for position titles, organizations, and physical structures
- Names of personnel
- Changes to the Chemical Waste Disposal Form
- Changes to the Waste Profile Form
- Changes to the Inspection Form
- Changes to the list of Potential Release Sites and Solid Waste Management Units from the proposed Table I of Module II of the Operating Unit
- Names of contractors
- Typos