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U.S. Department of Energy
Los Alamos Area Office, MS A316
Environmental Restoration Program
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505-667-7203/FAX 505-665-4504

Date: July 21, 2000
Refer to: ER2000-0353

JUL 2000
RECEIVED

Mr. John Kieling
NMED-HWB
P.O. Box 26110
Santa Fe, NM 87502

SUBJECT: LOS ALAMOS NATIONAL LABORATORY'S (LANL's) ENVIRONMENTAL RESTORATION (ER) PROJECT'S POTENTIAL RELEASE SITE (PRS) CONSOLIDATION WORKSHEETS SUPPORTING THE FISCAL YEAR 2000 ANNUAL UNIT AUDIT (AUA)

Dear Mr. Kieling:

Enclosed please find LANL's ER Project's PRS Consolidation Worksheets in support of Fiscal Year 2000 AUA. The enclosed Consolidation Worksheets describe each consolidated PRS and include a corresponding map or maps illustrating the location of each PRS within the consolidated unit. The only change made since the conclusion of our meetings in May 2000, was the removal of PRSs 16-010(e) and 16-010(f) from consolidated unit 16-010(h)-99. Both PRSs were placed back onto the Table previously provided to you as Enclosure 4, *HSWA SWMUs Not To Be Charged Annual Fee-FY00* because further research indicates that they are active Resource Conservation and Recovery Act units included on the Laboratory's Hazardous Waste Facility Permit. A thorough description and history of the PRSs included in consolidated unit 16-010(h)-99 are provided on page 35 of the enclosed Consolidation Worksheets. This change does not affect the total number of corrective action units subject to fee regulations.

The ER Project appreciates the time and effort your staff put toward the review of this deliverable as well as their comments and recommendations to resolve discrepancies during the AUA. We look forward to the opportunity to continue the refinement of the AUA in future audits.

If you have any additional questions, please don't hesitate to contact Dave McInroy at (505) 667-0819 or Joe Mose at (505) 667-5808.

Sincerely,

Julie A. Canepa, Program Manager
Los Alamos National Laboratory
Environmental Restoration

Sincerely,

Theodore J. Taylor, Program Manager
Department of Energy
Los Alamos Area Office

13416

JC/TT/NR/ev

Enclosure: FY00 Consolidation Worksheets

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PRS Consolidation Worksheet

PRS Consolidation Worksheet

Site Ty Effluent Discharge - Golf Course

Proposed PRS Number: 00-028(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
00-028(a)	HSWA	Soil contamination from effluent discharge - (active)	Metals	Rendija/Barranca/Guaje
00-028(b)	HSWA	Soil contamination from effluent discharge - (active)	Metals	Pueblo

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, general geographical proximity, similar transport mechanisms, indistinguishable source terms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit are both Los Alamos County recreation areas irrigated with effluent from former and current waste water treatment plants (WWTPs). PRS 00-028(a) is the Los Alamos County Golf Course and PRS 00-028(b) consists of the North Mesa athletic fields. Both sites were irrigated first by the former Central WWTP (PRS 00-016) from 1948 until 1964 and by the Pueblo WWTP (PRS 00-016(b)) from 1951 until 1991. Both treatment plants were intended to handle only sanitary waste water. Results from the RFI Report for PRSs 00-016(a,b), (LA-UR-97-3392) indicate that the only COPCs are metals.

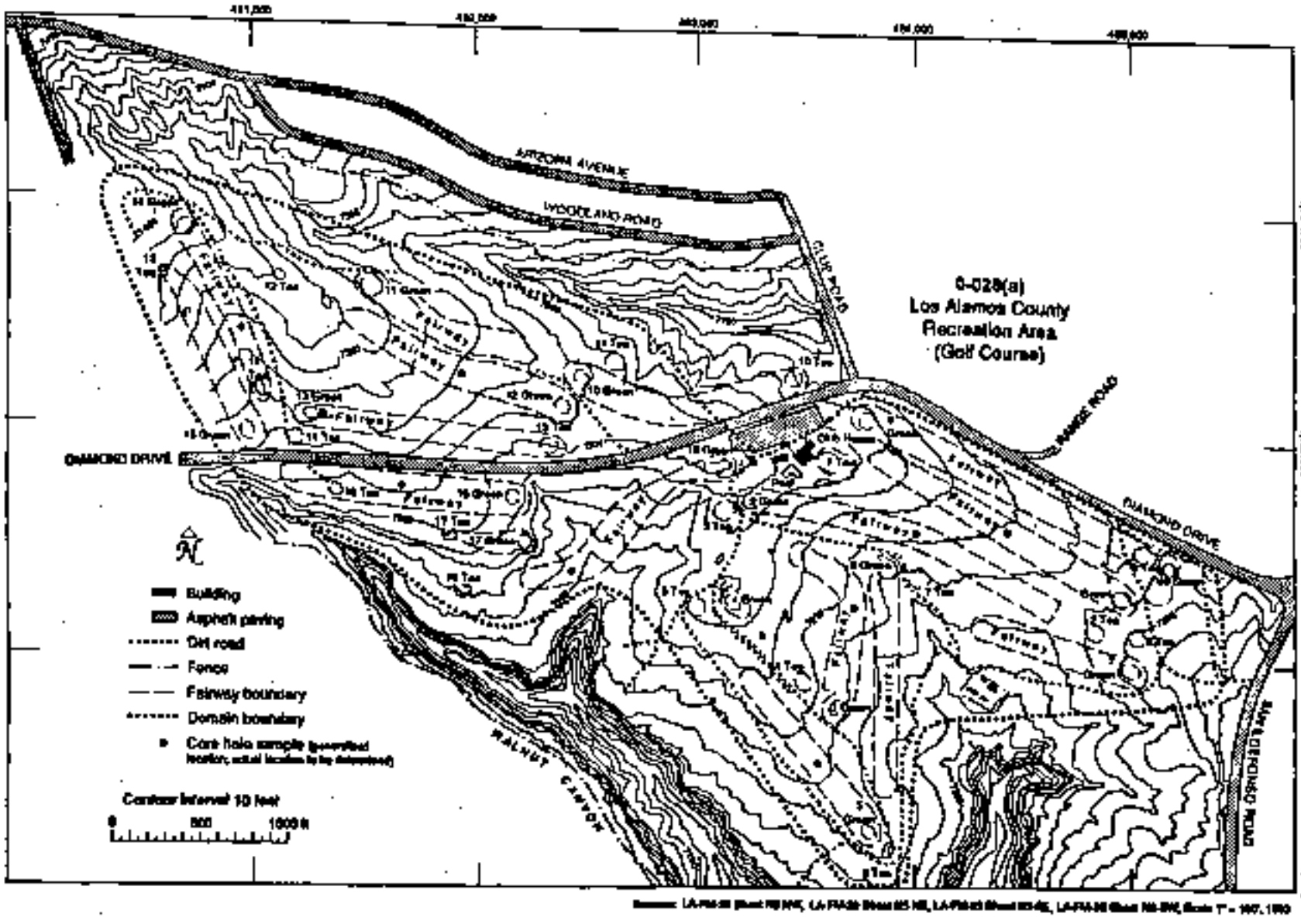


Figure 5-31. Sampling locations at Los Alamos County Golf Course [SWMU 0-028(a)].

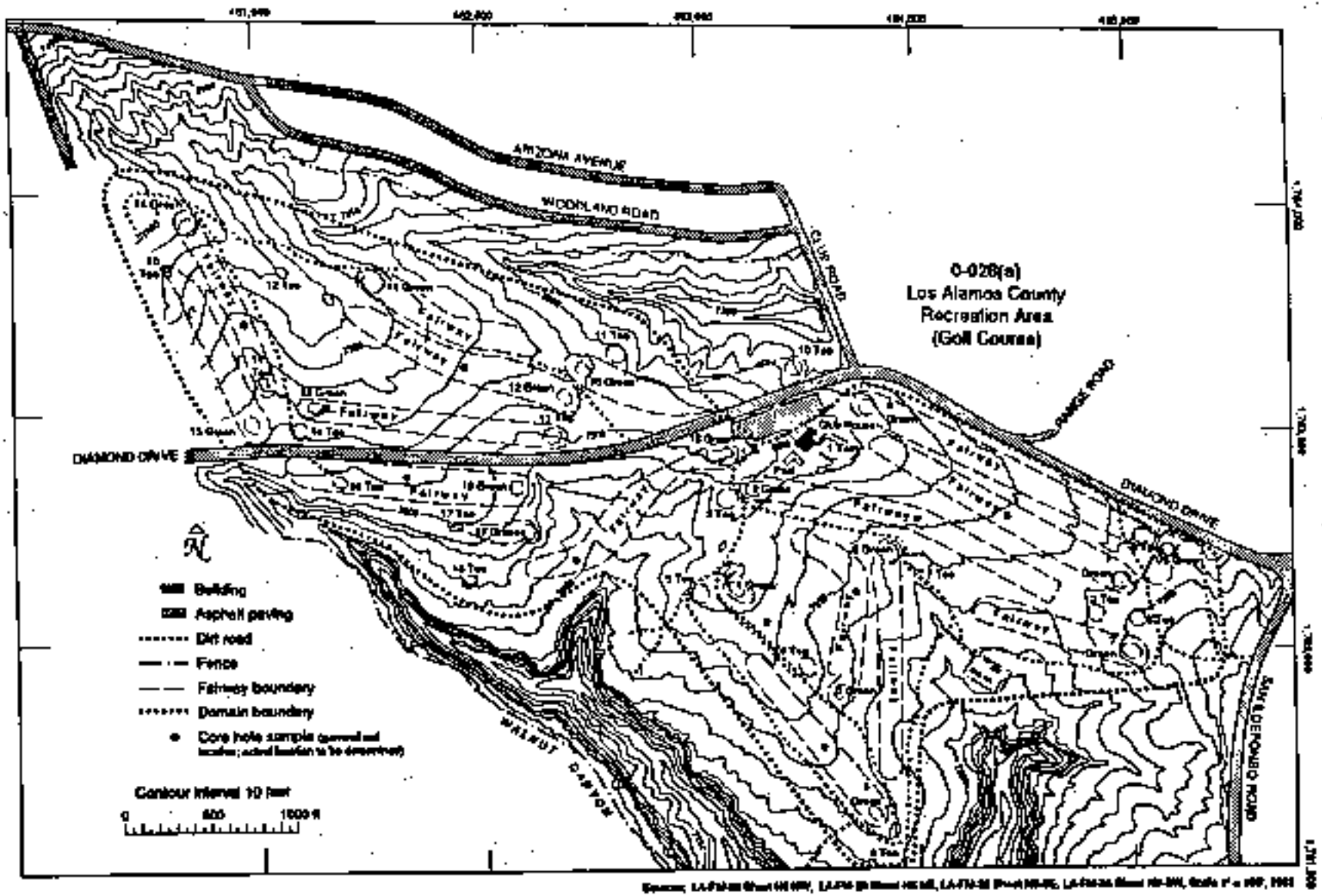


Figure 5-31. Sampling locations at Los Alamos County Golf Course [SWMU 0-028(a)].

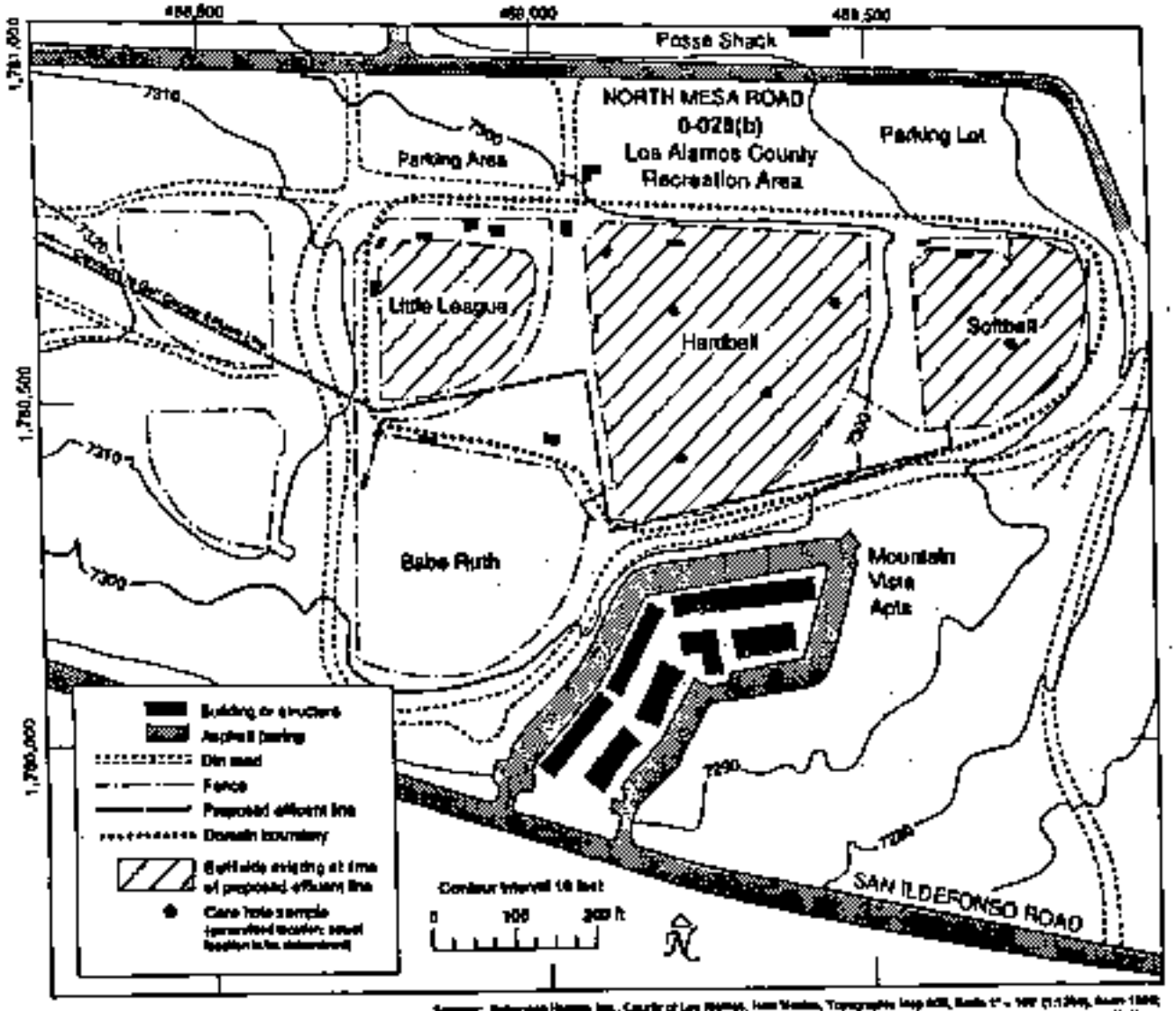


Figure 5-32. Sampling locations at North Mesa athletic fields [SWMU 0-028(b)].

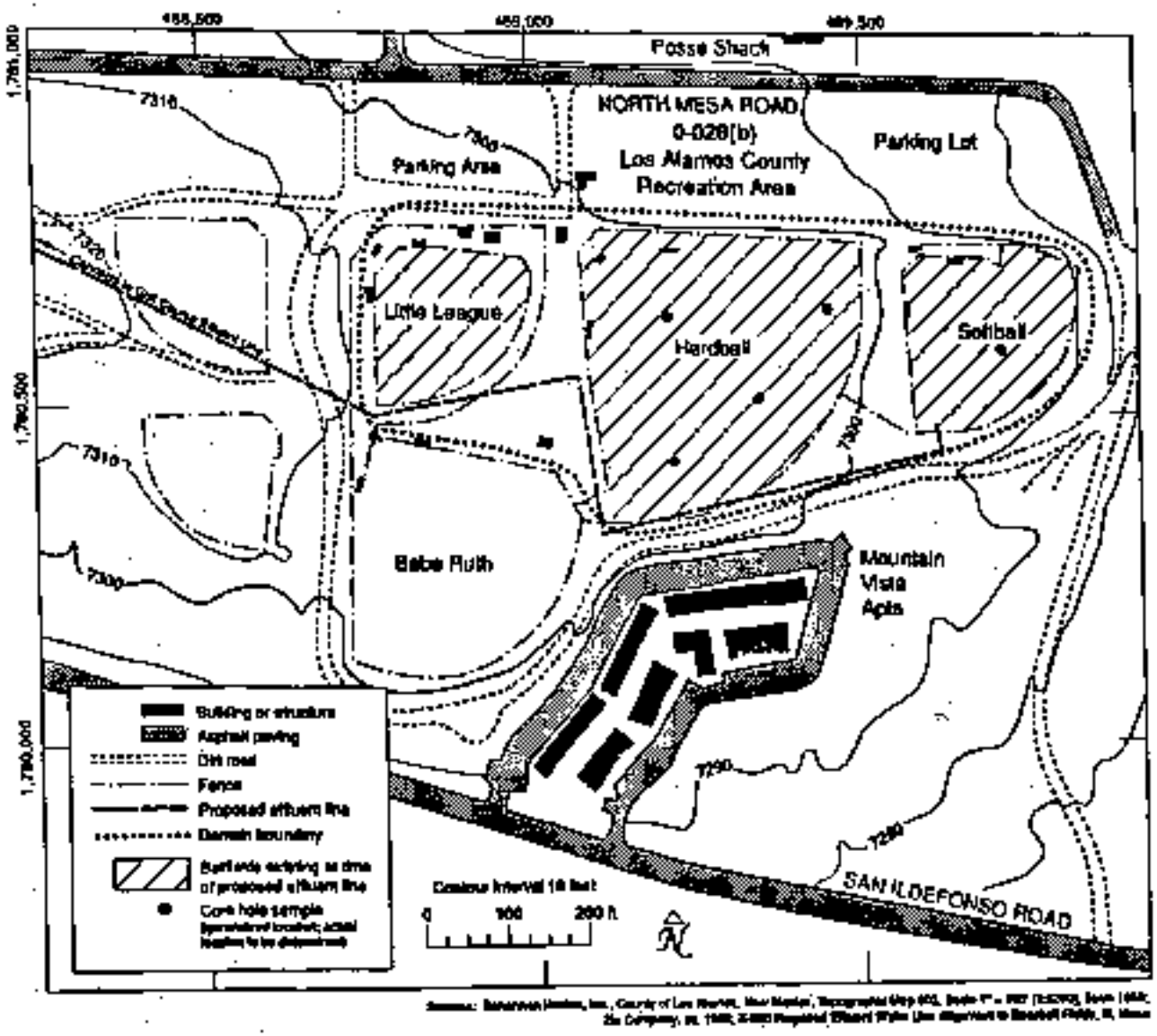


Figure 5-32. Sampling locations at North Mesa athletic fields [SWMU 0-026(b)].

PRS Consolidation Worksheet

Site Type: Former Structures - 6th St. Warehouse **Proposed PRS Number:** 00-030(b)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
00-004	Non-HSWA	Container storage area - (Inactive)	Metals, SVOCs, VOCs, PCBs	Middle Los Alamos
00-030(b)	HSWA	Septic system - (Inactive)	Metals, SVOCs, VOCs, PCBs	Middle Los Alamos
00-030(l)	HSWA	Septic system - (Inactive)	Metals, SVOCs, VOCs, PCBs	Middle Los Alamos
00-030(m)	HSWA	Septic system - (Inactive)	Metals, SVOCs, VOCs, PCBs	Middle Los Alamos
00-033(b)	Non-HSWA	Soil contamination/drain lines - (Inactive)	Metals, SVOCs, VOCs, PCBs	Middle Los Alamos

Consolidation Checklist Criteria:

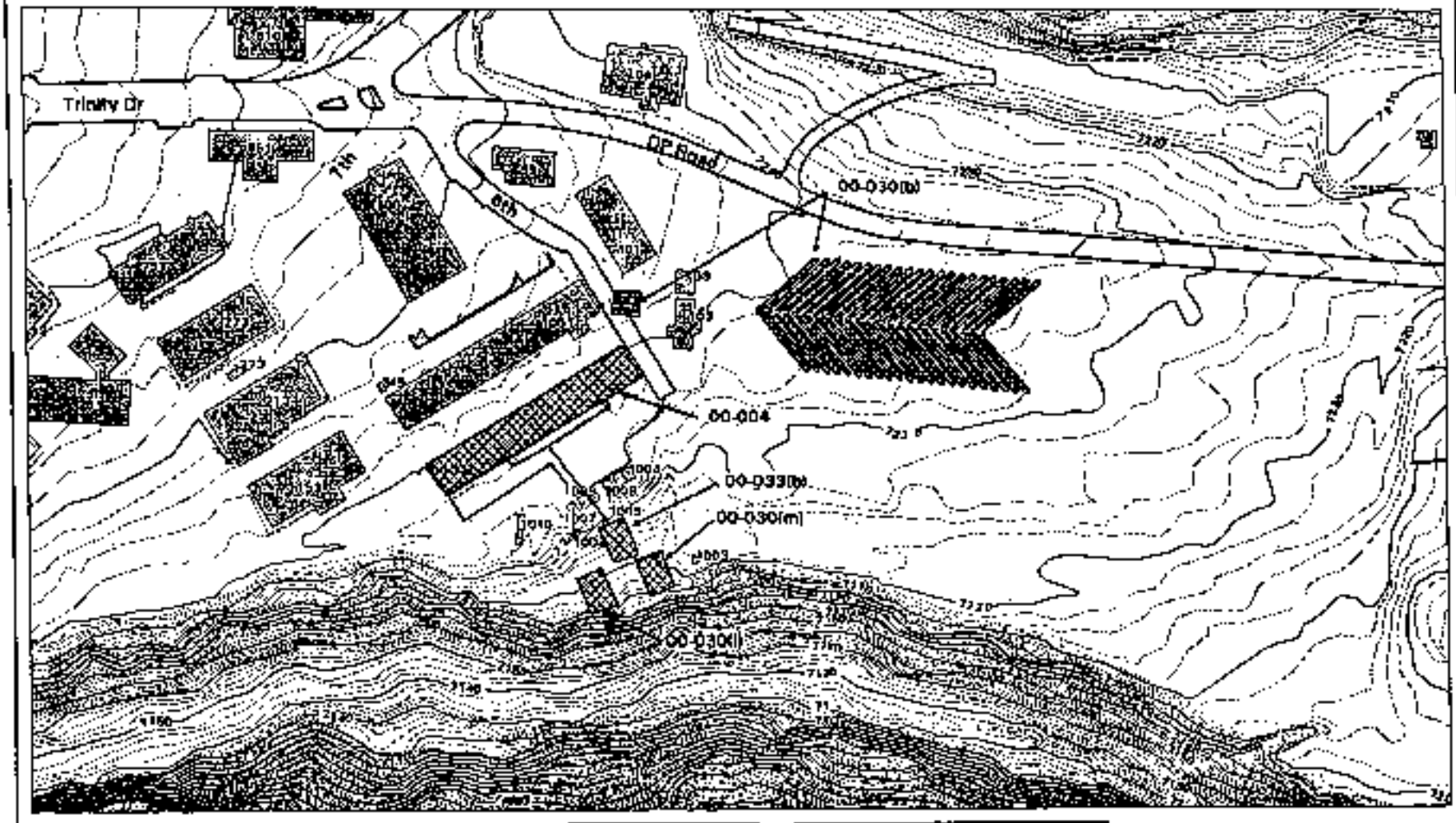
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, indistinguishable source terms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit were all associated with the former 6th Street Warehouse (Zia Warehouses) previously located at the intersection of DP Road and Trinity Drive. PRS 00-004 was a former chemical container storage area that was located inside the 6th Street Warehouse. PRS 00-030(b) known as former Septic System #1, consists of four septic tanks, including drain lines, a leach field and an outfall to Los Alamos Canyon, that served former Zia Warehouses 1, 2, 5, 6, 7, and 8, and an office building. PRS 00-030(l) was a septic system, including drain lines and outfall, that served Zia Warehouses 3 and 4. PRS 00-030(m) was a septic system, including drain lines, that served a residential trash incinerator. The drain line from this septic system connected to the outfall line from 00-030(b) before discharging into Los Alamos Canyon. All three septic systems have been removed. PRS 00-033 consists of potential soil contamination from structures and operations associated with the Zia Warehouses including all other drain lines. COPCs are commingled and the investigation of this consolidated PRS will include the evaluation of all former drain lines.



PRS Consolidation Unit 00-030(b)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Mario Jones

FIMAD Q108831 12 Jul 00

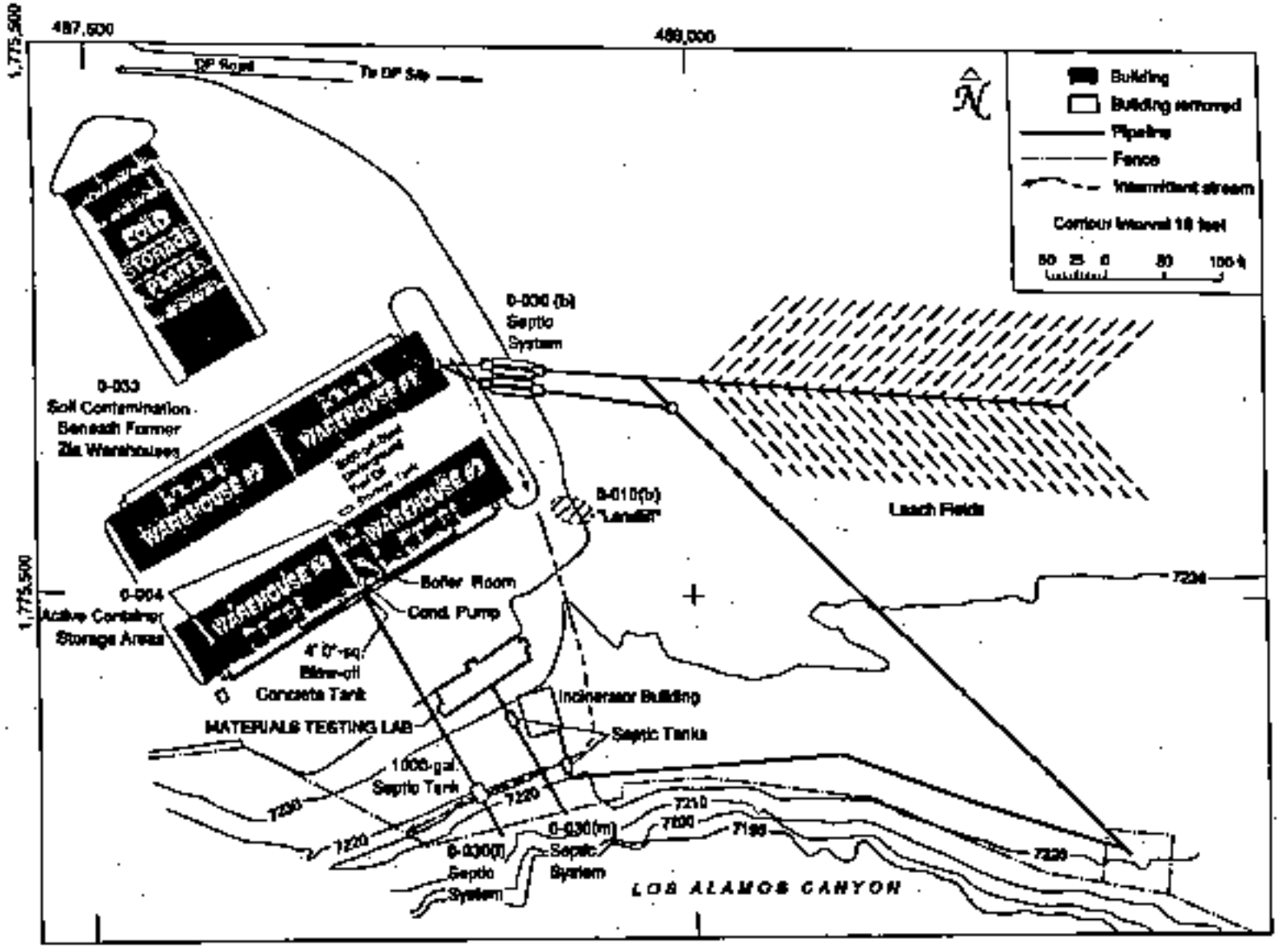


Figure 5-6. SWMU Group 0-1 (6th Street Warehouse Area).

PRS Consolidation Worksheet

Site Type: Miscellaneous - TA-1

Proposed PRS Number: 01-001(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
01-001(a)	HSWA	Former Septic Tank 134	Pu, Cs, Am, U, Metals, SVOCs	Upper Los Alamos
01-001(b)	HSWA	Former Septic Tank 135	Rad, Metals	Upper Los Alamos
01-001(c)	HSWA	Former Septic Tank 137 and Outfall	Rad, Metals	Upper Los Alamos
01-001(d)	HSWA	Former Septic Tank 138 and Outfall	Rad, Metals	Upper Los Alamos
01-001(e)	HSWA	Former Septic Tank 139 and Outfall	Rad, Metals	Upper Los Alamos
01-001(f)	HSWA	Former Septic Tank 140	U, Metals	Upper Los Alamos
01-001(g)	HSWA	Former Septic Tank 141 and Outfall	Rad, Metals	Upper Los Alamos
01-001(o)	HSWA	Former Sanitary Waste Line	Rad, Metals	Upper Los Alamos
01-001(s)	HSWA	Western Sanitary Waste Line	Rad, Metals	Upper Los Alamos
01-001(t)	HSWA	Former Septic System	Rad, Metals	Upper Los Alamos
01-001(u)	HSWA	Sanitary Waste Line	Rad, Metals	Upper Los Alamos
01-002(a)-00	HSWA	Former Acid Waste Line - changed FY00	Rad, Metals, SVOCs, VOCs, HE	Upper Los Alamos
01-003(a)	HSWA	Former Bailey Bridge Hillside Landfill	Rad, Metals	Upper Los Alamos
01-003(b)	Non-HSWA	Former Surface Disposal Area	Rad, Metals	Upper Los Alamos
01-003(e)	HSWA	Former Surface Disposal Area	Rad, Metals	Upper Los Alamos
01-004(a)	Non-HSWA	Former Incinerator Building	Rad, Metals	Upper Los Alamos
01-004(b)	Non-HSWA	Former Incinerator	Rad, Metals	Upper Los Alamos
01-005	Non-HSWA	Former Incinerator	Rad, Metals	Upper Los Alamos
01-006(a)	HSWA	Former Drain Lines and Hillside Outfalls	Rad, Metals	Upper Los Alamos
01-006(b)	HSWA	Former Drain Lines and Hillside Outfalls	Rad, Metals	Upper Los Alamos
01-006(c)	HSWA	Former Drain Lines and Hillside Outfalls	Rad, Metals	Upper Los Alamos
01-006(d)	HSWA	Former Drain Lines and Hillside Outfalls	Rad, Metals	Upper Los Alamos
01-006(e)	Non-HSWA	Former Drain Lines and Outfall	Rad, Metals	Upper Los Alamos
01-006(g)	Non-HSWA	Former Drain Lines and Hillside Outfalls	Rad, Metals	Upper Los Alamos
01-006(h)	HSWA	Former Drain Lines and Outfall	Rad, Metals	Upper Los Alamos
01-006(n)	HSWA	Former Storm Drain	Rad, Metals	Upper Los Alamos
01-006(o)	HSWA	Former Storm Drain	Rad, Metals	Upper Los Alamos
01-006(p)	Non-HSWA	Former Drain Lines	Rad, Metals	Upper Los Alamos
01-007(a)	HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals	Upper Los Alamos
01-007(b)	HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals	Upper Los Alamos
01-007(c)	HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals	Upper Los Alamos
01-007(d)	HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals	Upper Los Alamos
01-007(e)	HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals	Upper Los Alamos

01-007(f)	Non-HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals	Upper Los Alamos
01-007(h)	Non-HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals	Upper Los Alamos
01-007(i)	Non-HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals	Upper Los Alamos
01-007(j)	HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals	Upper Los Alamos
01-007(k)	HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals	Upper Los Alamos
01-007(m)	Non-HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals	Upper Los Alamos
01-007(o)	Non-HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals	Upper Los Alamos

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative affect in order to make further recommendations?	☑	☐

Consolidation Rationale:

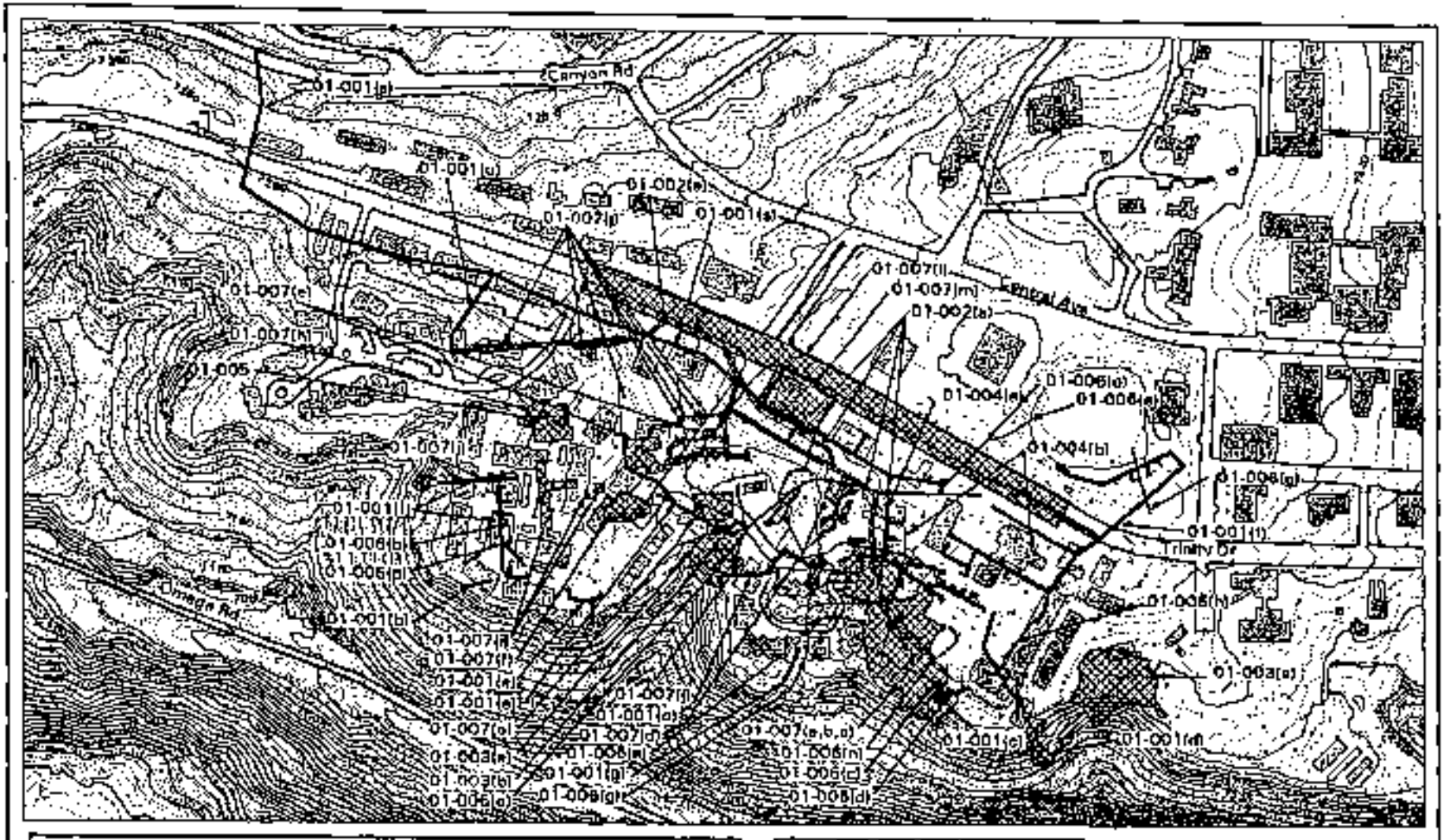
Based on the operational history, waste streams, geographical proximity, transport mechanisms (surface and shallow subsurface), and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The consolidated PRSs are all associated with former TA-1 operations and D&D activities. TA-1 was the site of Manhattan Project activities involving basic chemical operations including wet chemistry experimentation and wet and dry chemistry processing. TA-1 also housed several mechanical operations including casting, machining, and powder metallurgy.

Structures at TA-1 were served by an industrial waste line (PRS 1-002(a)) and three sanitary waste lines (PRSs 1-001(s, u and t)). The three sanitary waste lines discharged (via outfalls, septic tanks, and/or treatment plants) outside of TA-1 boundaries and are being addressed as part of other single or consolidated PRSs. During FY00, PRS 1-002 was divided into two parts: PRS 1-002(a)-00 - the industrial drain lines, and 1-002(b)-00 - the outfall from the TA-45 waste water treatment plant. PRS 1-002(a)-00 will be addressed as part of this consolidated unit and PRS 1-002(b)-00 will addressed as part of consolidated unit 45-001-00. Additionally, PRS 1-001(m), former septic tank 275, was removed from this consolidated unit during FY00 to address site-specific issues regarding the private property owner.

As operations gradually relocated to new technical areas, phased decommissioning and decontamination activities occurred. All former TA-1 buildings have been removed. Soils surrounding the buildings, within former building footprints, and adjacent to former plumbing structures were radiologically surveyed; any identified radioactively-contaminated soil was excavated and disposed and replaced with clean fill. Backfilling and recontouring was completed on the mesa-top area where considerable excavation of contaminated soils and volcanic tuff occurred during D&D activities in the 1970s. The area has been subject to substantial private and commercial development consisting of various retail stores, office buildings, and residences. Any remaining COPCs are commingled.



PRS Consolidation Unit 01-001(a)-99

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:5100

0 200 400

FEET

1983 North American Datum
Projection and Grid Tics
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is preliminary and has not been checked for accuracy.

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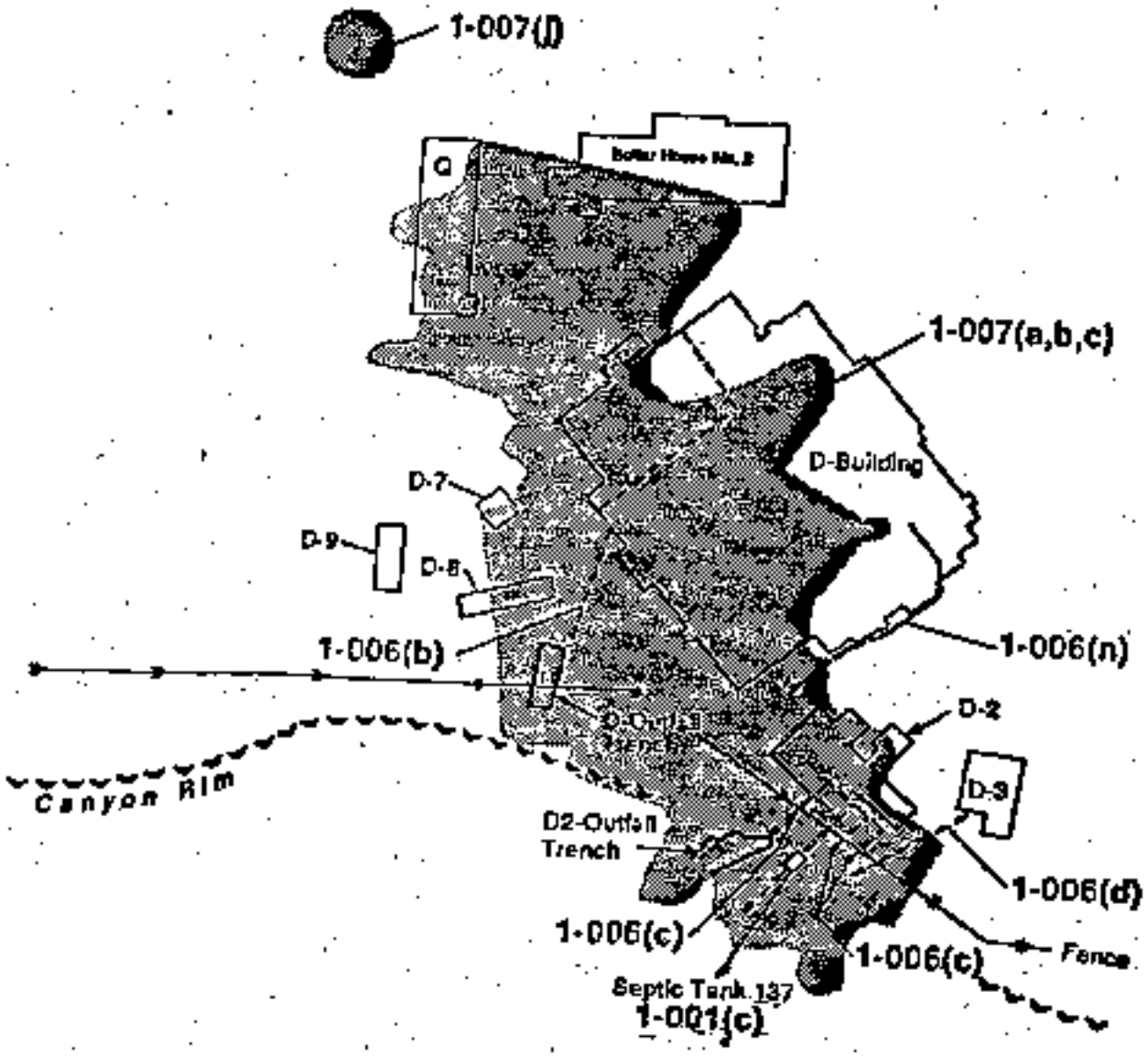


Note: Suspected subsurface soil contamination, SWMUs 1-007 (a,b, and c) have been combined and are depicted by the large shaded area.

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.

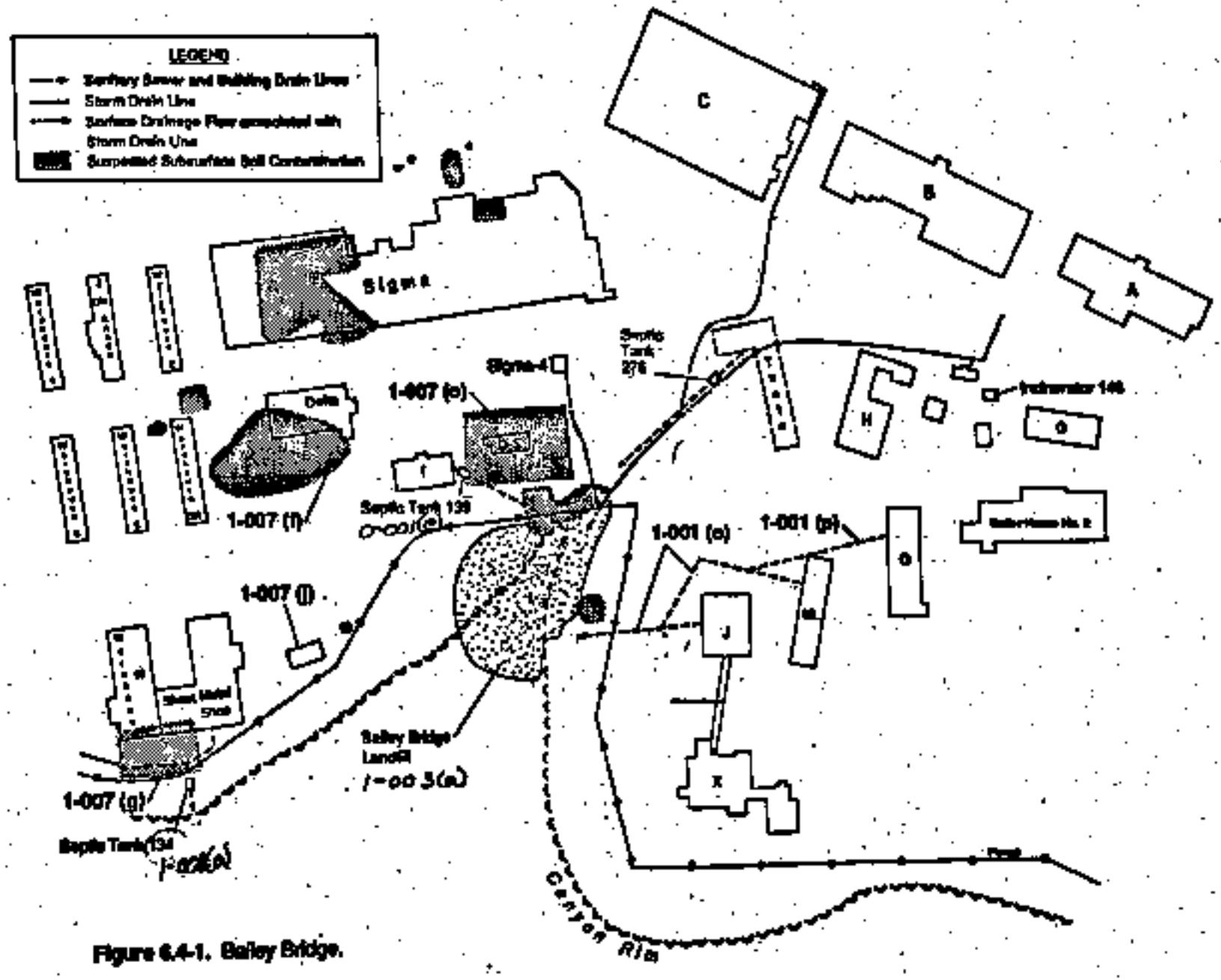


Figure 6.4-1. Bailey Bridge.

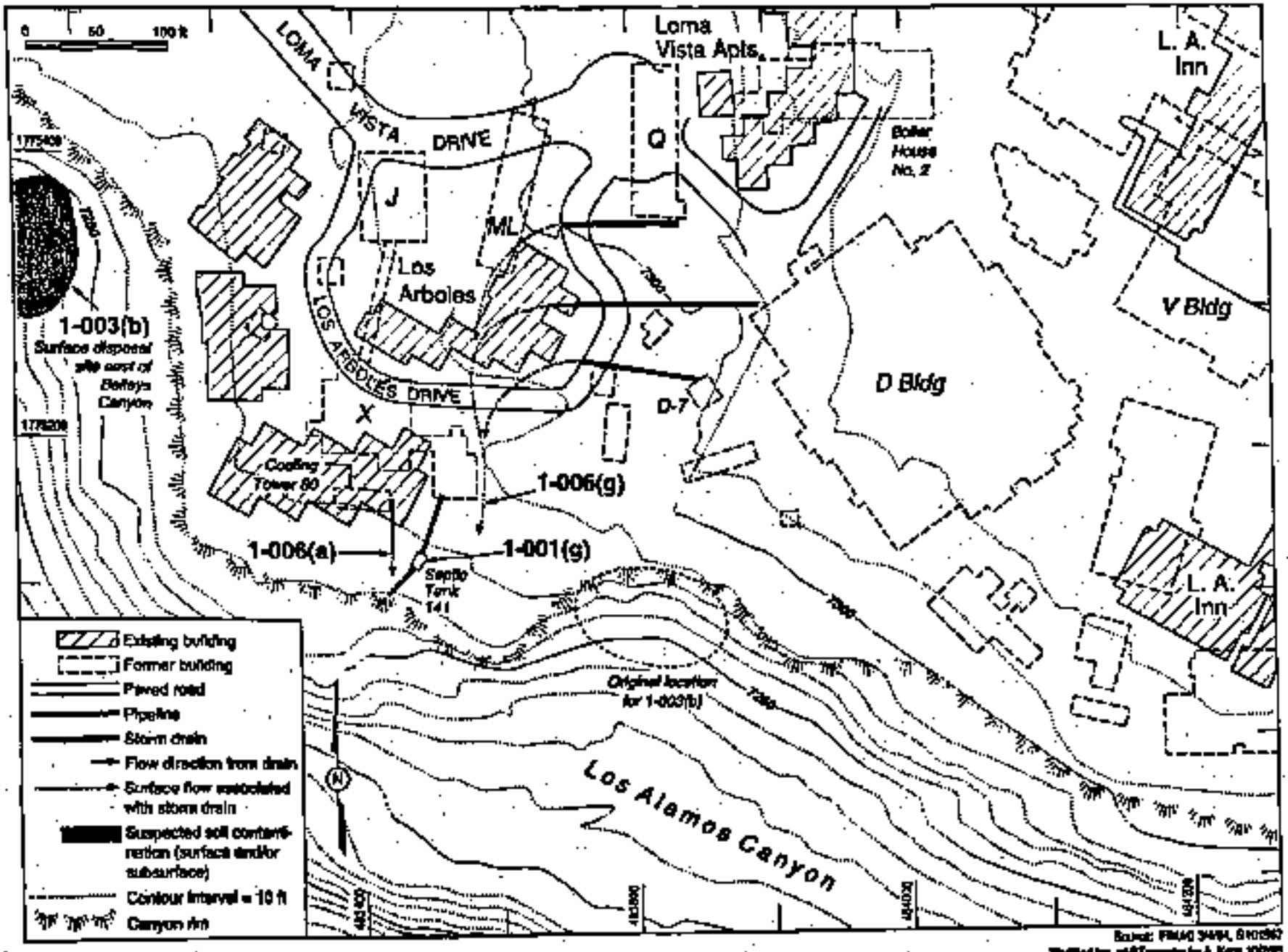


Fig. 1.1-4. Aggregate E (Cooling Tower 80).

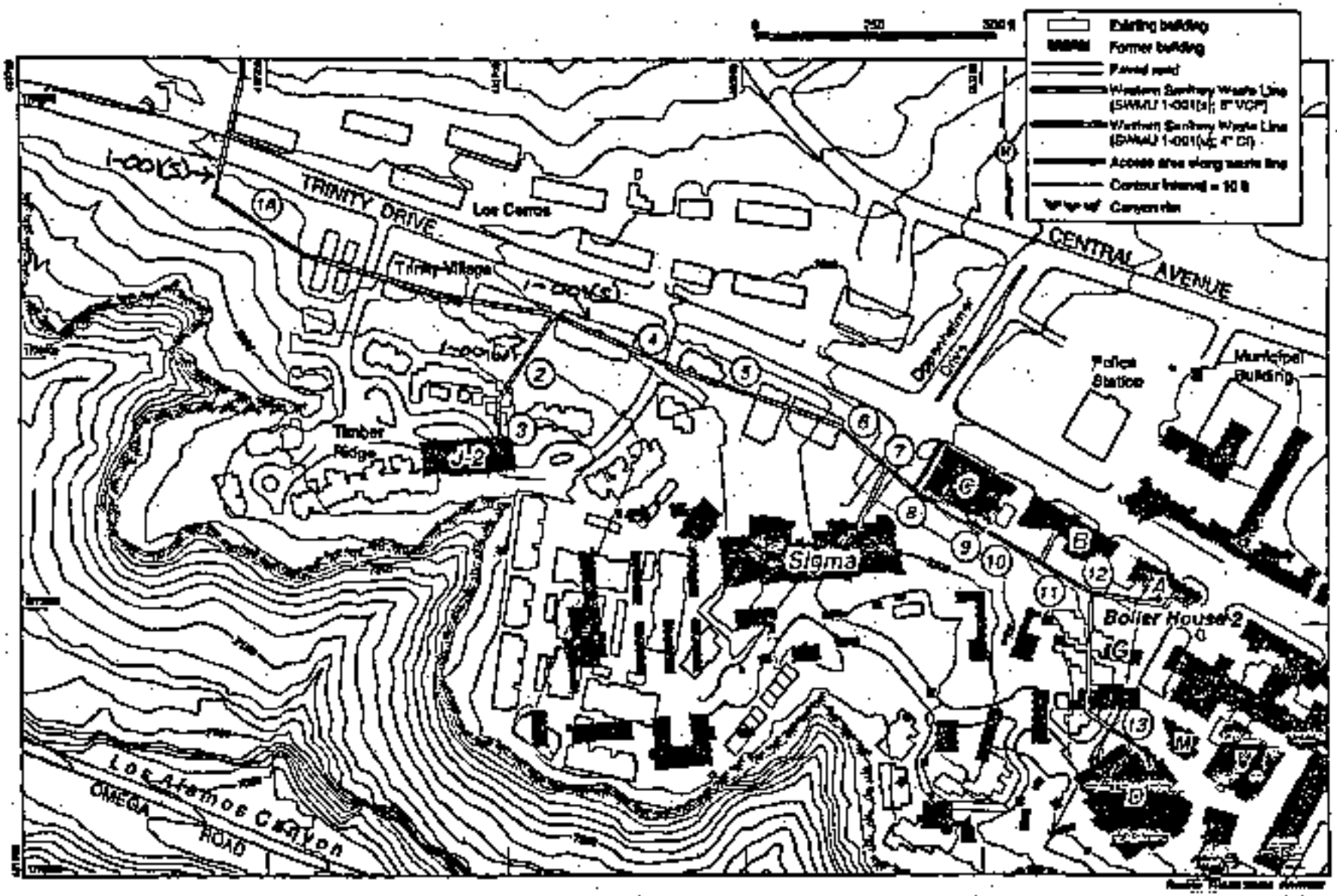


Fig. 5.1.1-1. Location of Western Sanitary Waste Line (highlights former Laboratory buildings).

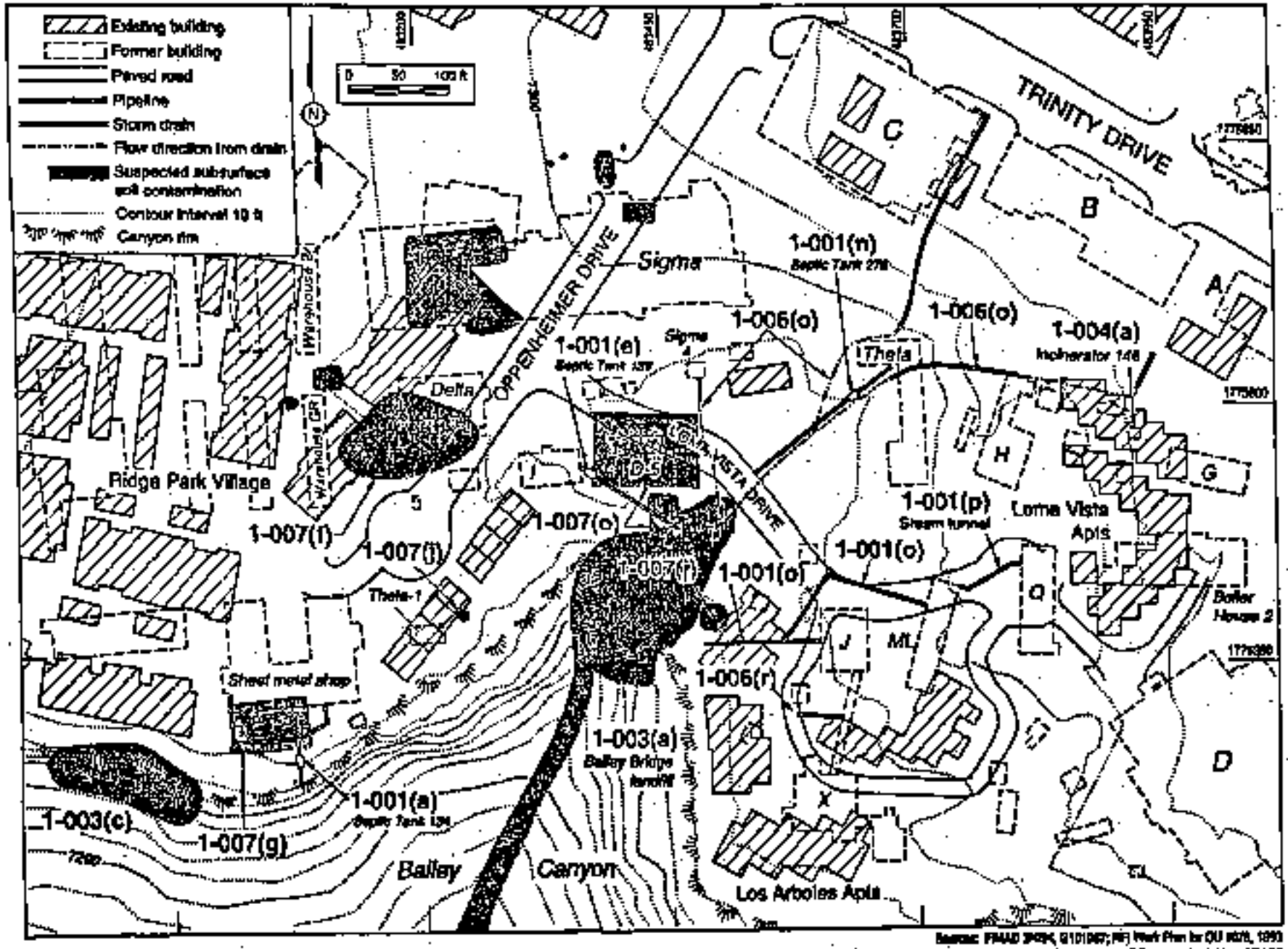
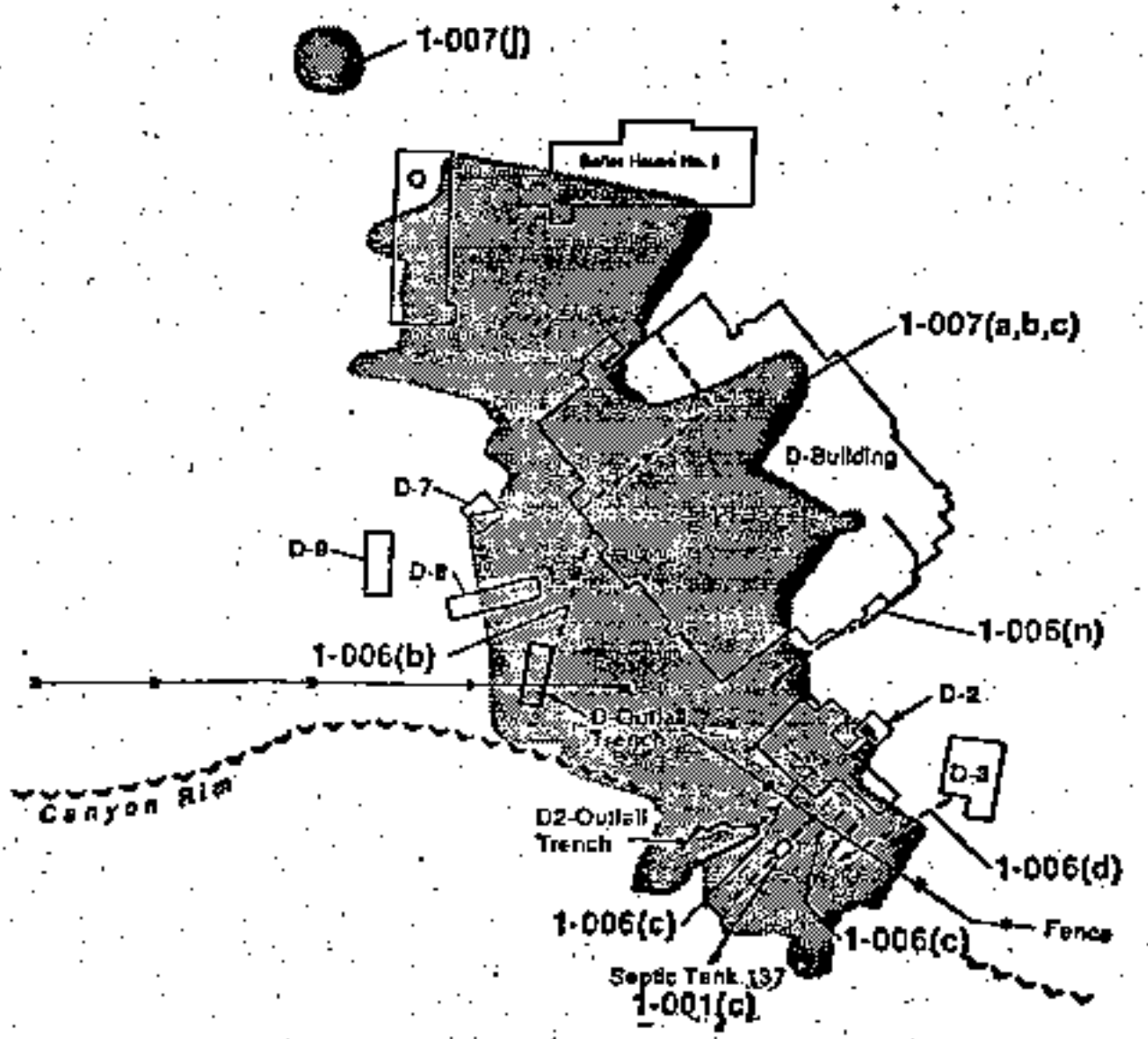


Fig. 5.2-1. Aggregate B PRS locations.



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.

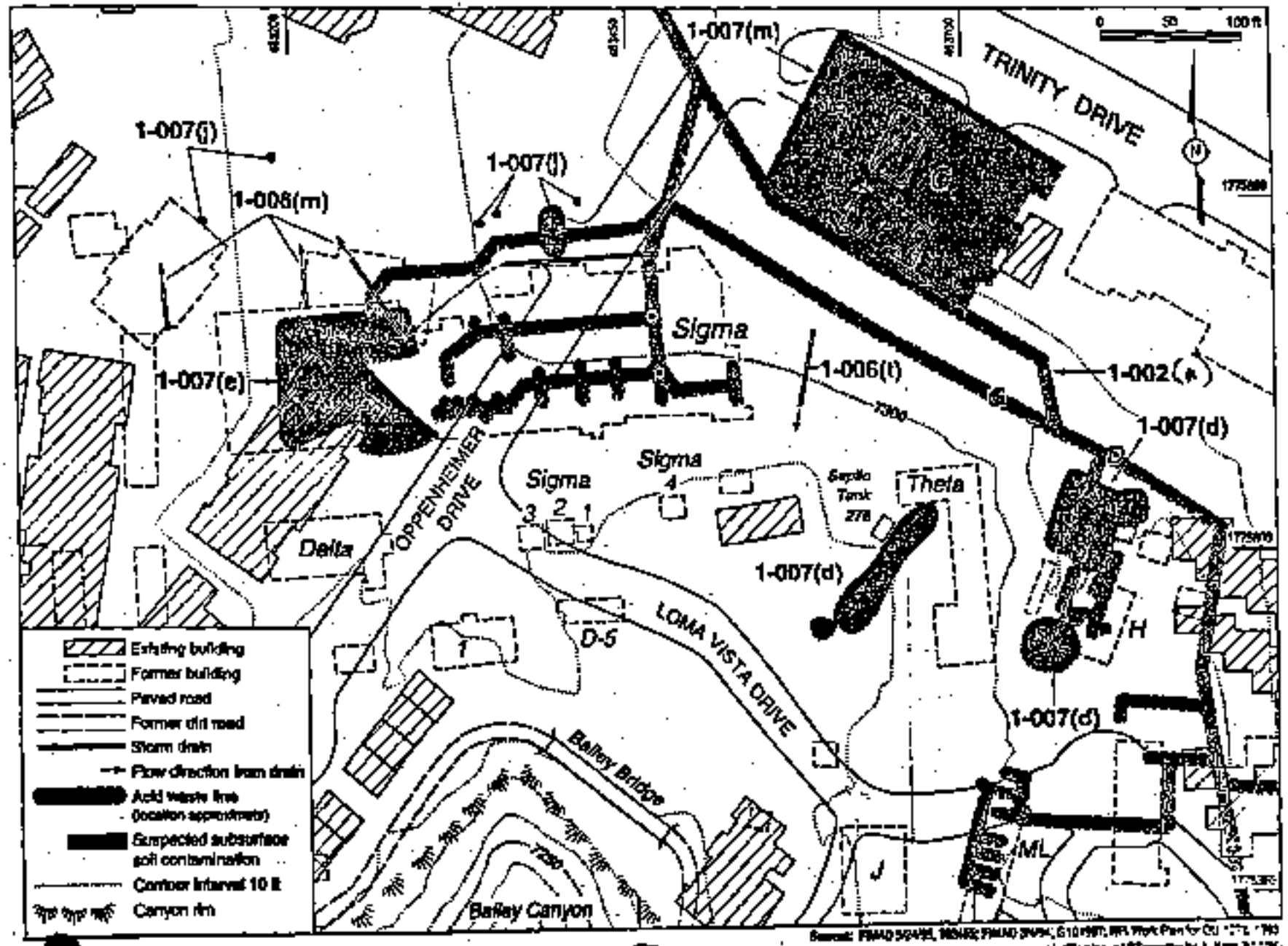


Figure 3.1-1. Aggregate A PRS locations.

PRS Consolidation Worksheet

Site Type: Former Structures - Omega West Reactor **Proposed PRS Number:** 02-007-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
02-007	HSWA	Septic System - (Inactive)	Rad, Metals	Middle Los Alamos
02-009(a)	HSWA	Former Structures - Soil Contamination	Rad, Metals	Middle Los Alamos
02-009(b)	HSWA	Former Structures - Soil Contamination	Rad, Metals	Middle Los Alamos
02-009(c)	HSWA	Former Structures - Soil Contamination	Rad, Metals	Middle Los Alamos

Consolidation Checklist Criteria:

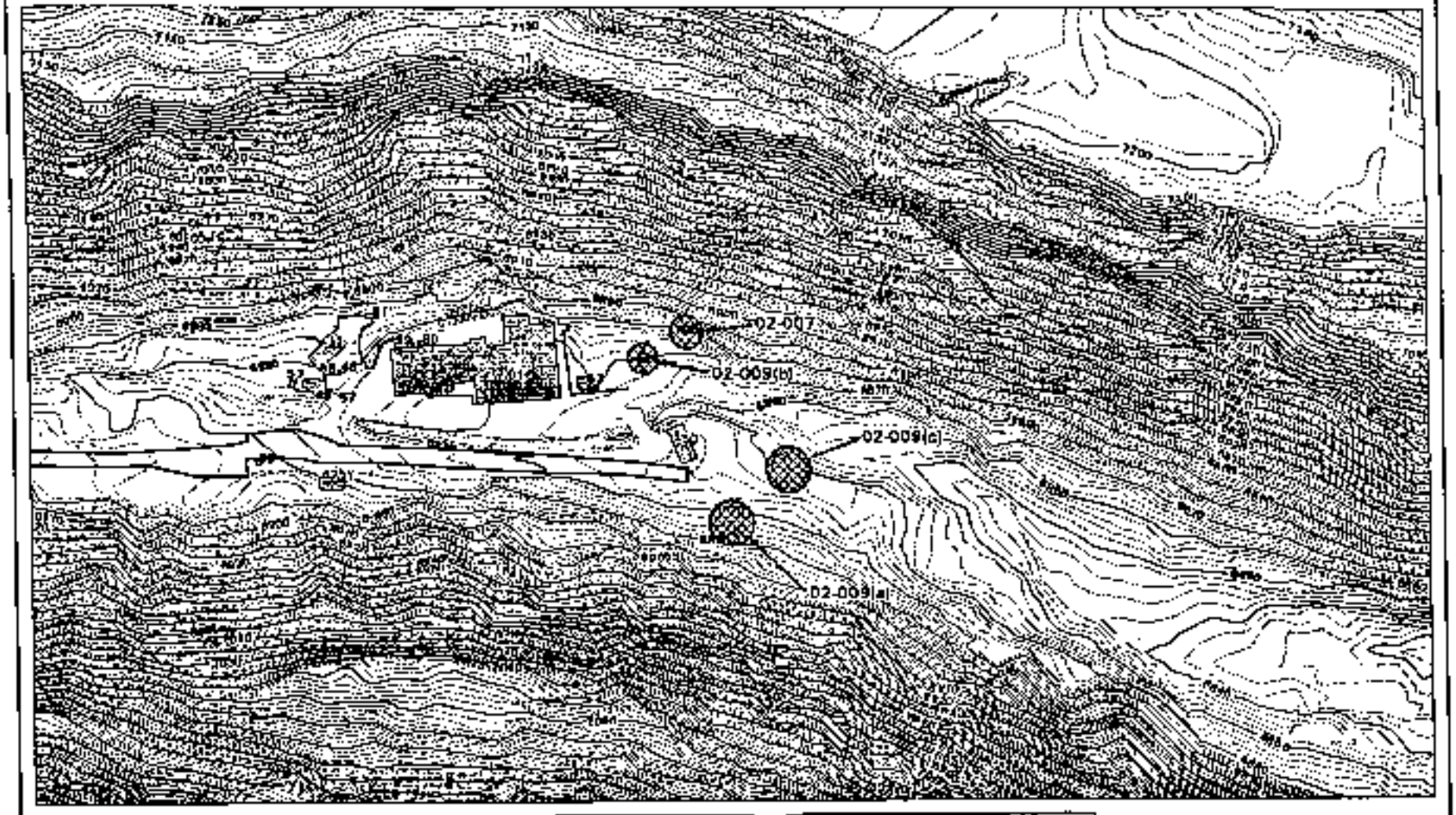
	Yes	No
1. *Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?*	☑	☐
2. *Is the contamination origin non-discernable?*	☑	☐
3. *Are the PRSs in the same geographic proximity?*	☑	☐
4. *Are the transport mechanisms and pathways similar?*	☑	☐
5. *Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?*	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms (near surface and subsurface), indistinguishable source terms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

Since 1943, Technical Area 2 has been the site of a series of research reactors. The Omega West Reactor (OWR) began operations in 1956, and was fueled by highly enriched uranium contained as a solid fuel. All of TA-2 is located in the bottom of Los Alamos Canyon and is inactive and all structures except for building TA-2-1 have been decommissioned and removed in the 1980s. Residual radionuclide contamination remaining after decommissioning was backfilled with clean fill. PRS 2-007 is the location of the former septic system including drain lines and a leach field. The system served building TA-2-1 which housed the OWR. The tank, drain lines, and soil from the leach field were removed in 1986. PRSs 2-009(a-c) are areas of potential soil contamination associated with the removal of former structures at TA-2. PRS 2-009(a) is residual radionuclide contamination from the former water boiler reactor which was housed in TA-2-50. PRS 2-009(b) consists of residual radionuclide contamination associated with the truck staging area during the site decommissioning, and PRS 2-009(c) is the former location of a condensate trap for the gaseous effluent stack line of TA-2-48. Inlet and outlet lines from the trap were found adjacent to drain lines for PRS 2-007. Contamination during decommissioning was found to overlap with PRS 2-007 and decommissioning has resulted in commingled COPCs consisting of radionuclides. No sampling and analyses have been completed for chemical constituents.



PRS Consolidation Unit 02-007-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Merle Jones

FIMAD G108532 12 Jul 00

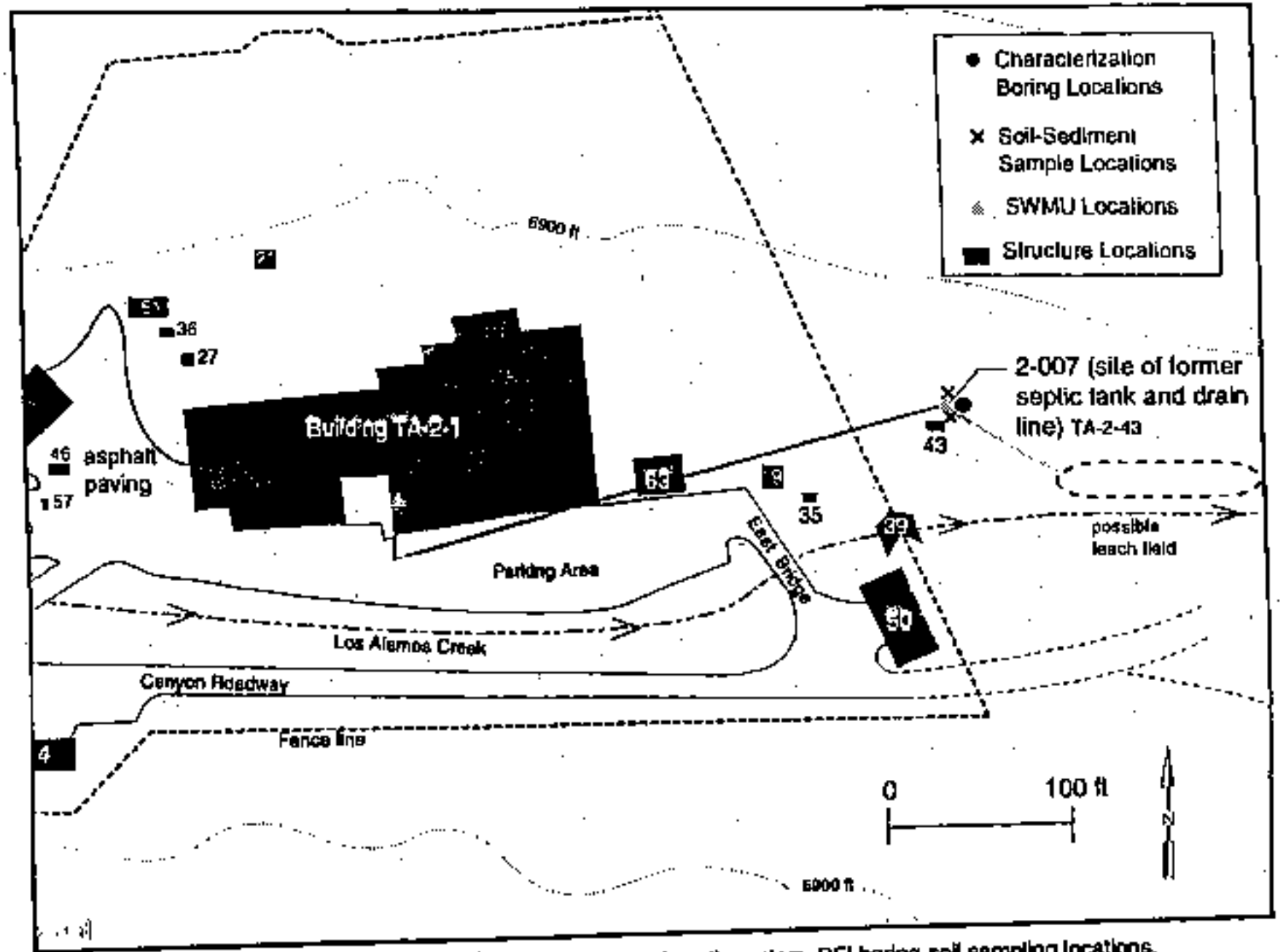


Figure 7.8-1 Proposed SWMU no. 2-007, decommissioned septic system, RFI boring-soil sampling locations.

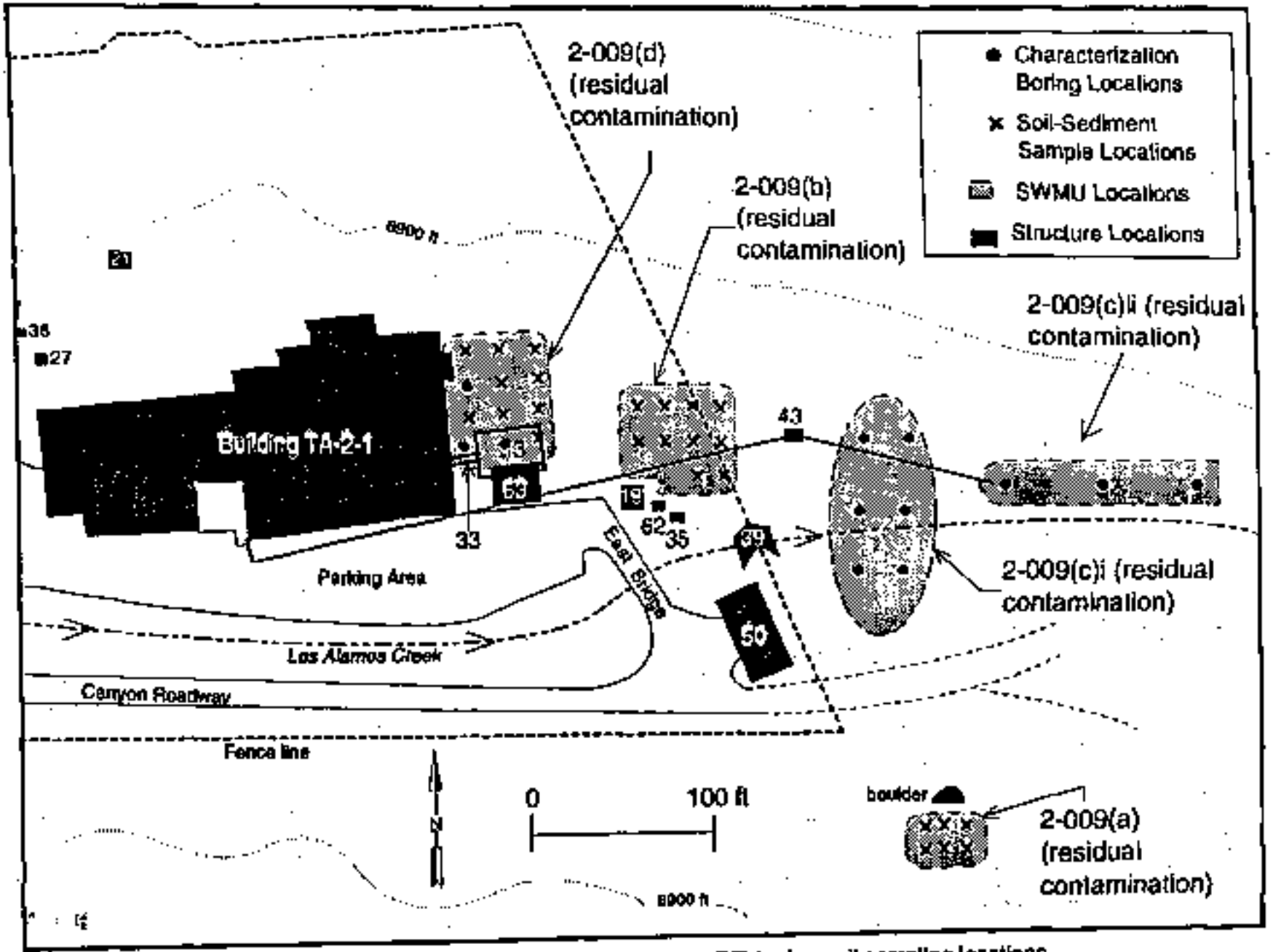


Figure 7.10-1 Proposed SWMU no. 2-009, operational releases, RFI boring-soil sampling locations.

PRS Consolidation Worksheet

Site Type: Asphalt Batch Plant

Proposed PRS Number: 03-009(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-009(a)	HSWA	Surface disposal - (inactive)	Metals, SVOCs/TPH	Upper Sandia
03-028	HSWA	Stormwater holding pond - (active)	Metals, Asbestos, SVOCs/TPH	Upper Sandia
03-029	HSWA	Disposal area - (inactive)	Metals, SVOCs/TPH	Upper Sandia
03-036(a)	HSWA	Aboveground tank - (inactive)	Metals, SVOCs/TPH	Upper Sandia
03-036(c)	HSWA	Aboveground tanks - (inactive)	Metals, SVOCs/TPH	Upper Sandia
03-036(d)	HSWA	Aboveground tank - (inactive)	Metals, SVOCs/TPH	Upper Sandia
03-043(b)	Non-HSWA	Aboveground tank - (inactive)	Metals, SVOCs/TPH	Upper Sandia
03-043(d)	Non-HSWA	Aboveground asphalt tank - (inactive)	Metals, SVOCs/TPH	Upper Sandia
03-043(h)	Non-HSWA	Aboveground asphalt tank - (inactive)	Metals, SVOCs/TPH	Upper Sandia
03-045(g)	HSWA	Storm Drain - (active)	Metals, SVOCs/TPH	Upper Sandia

Consolidation Checklist Criteria:

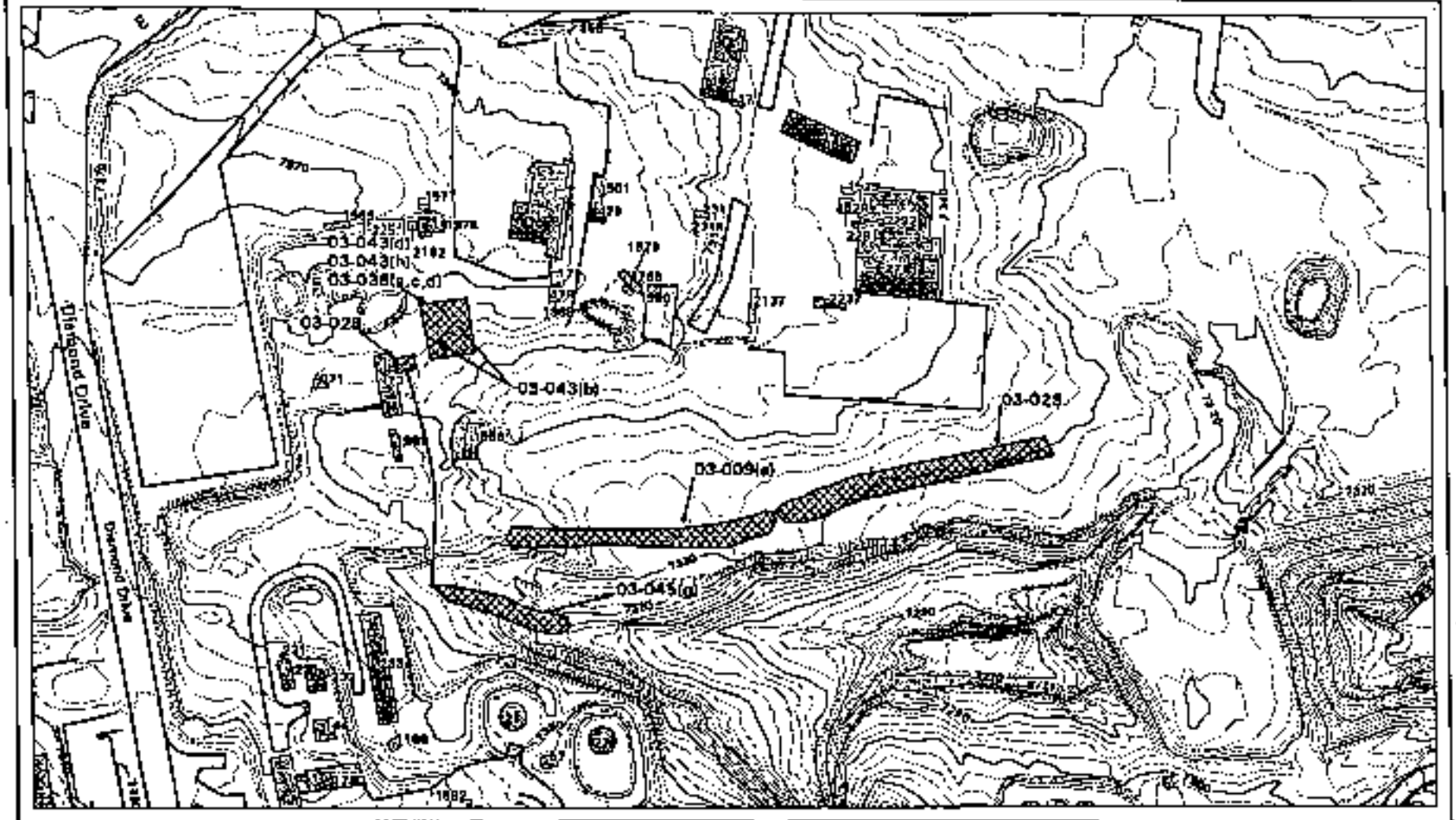
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, commingled COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit are associated with the asphalt batch plant at TA-3. PRS 3-009(a) is a former surface disposal site located just south of the batch plant where soil fill, and building debris from the plant were disposed. PRS 3-028 is an active concrete holding pond including a drain line and outfall that serves as a settling pond for mineral dust and particulate captures by scrubber from the plant. The NPDES-permitted outfall discharges to Sandia Canyon. PRS 3-029 is an inactive landfill used for the disposal of asphalt-related wastes including asphalt emulsion and sealer, and cured asphalt. PRSs 3-036(a, c and d) and PRSs 3-043(b, d and h) are the locations of former aboveground asphalt-emulsion storage tanks at the plant. PRS 3-045(g) is a storm drain including drain line and NPDES-permitted outfall that collects storm water runoff from the areas around the batch plant and discharges to Sandia Canyon.



PRS Consolidation Unit 03-009(a)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notes: Information on this map is provisional and has not been checked for accuracy.

Produced by Wanda Jones

FMAD-G108830 12 Jul 00

PRS Consolidation Worksheet

Site Type: Miscellaneous - TA-3 Power Plant

Proposed PRS Number: 03-012(b)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-012(b)	HSWA	Operational release and outfall - (active)	Metals, SVOCs, TPH	Upper Sandia
03-014(q)	HSWA	Treated effluent storage tank	Metals, SVOCs, TPH	Upper Sandia
03-045(b)	HSWA	Outfall and drain lines - (active)	Metals, SVOCs, TPH	Upper Sandia
03-045(c)	HSWA	Outfall and drain lines - (active)	Metals, SVOCs, TPH	Upper Sandia

Consolidation Checklist Criteria:

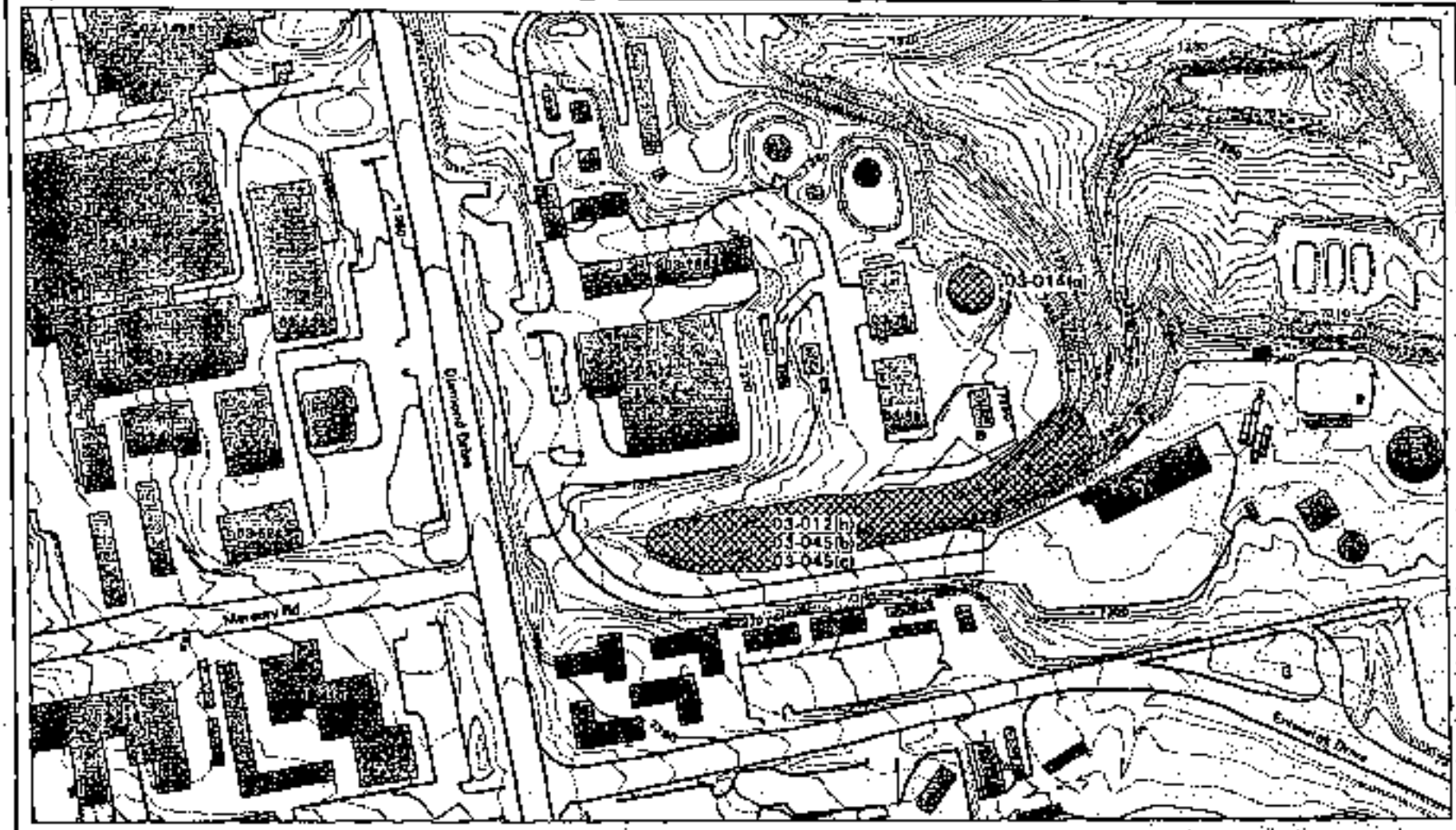
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit are all associated with waste water from the TA-3 Power Plant. PRS 3-012(b) is an NPDES-permitted outfall, including drain lines, from TA-3-22. Between 1951 and 1985, treated effluent from the TA-3 WWTP was used in Power Plant's cooling towers. The effluent was pumped from the WWTP to a holding tank in the power plant (PRS 3-014(q)). The use of treated effluent water was discontinued in 1990. PRS 3-045(b) is the NPDES-permitted outfall, including drain lines, from cooling towers TA-3-25 and -58 which served the Power Plant. This outfall overlaps PRS 3-012(b). Cooling tower TA-3-25 was demolished in 1990. PRS 3-045(c) is an NPDES-permitted outfall, including drain lines, that receives effluent from cooling tower TA-3-285 which serves the Laboratory's computer center. This outfall is adjacent to PRS 3-012(b). Waste water discharged to all three outfalls was treated with the same chemicals.



PRS Consolidation Unit 03-012(b)-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is preliminary and has not been checked for accuracy.

Produced by Marvin Jones

FIMAD 6108442 07 Apr 00

PRS Consolidation Worksheet

Site Type: Drain Lines and Outfalls

Proposed PRS Number: 03-013(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-013(a)	HSWA	Storm drain and outfall - (active)	Metals, SVOCs, TPH, PCBs	Upper Sandia
03-052(f)	HSWA	Drain lines and outfall - (inactive)	Metals, SVOCs, TPH, PCBs	Upper Sandia

Consolidation Checklist Criteria:

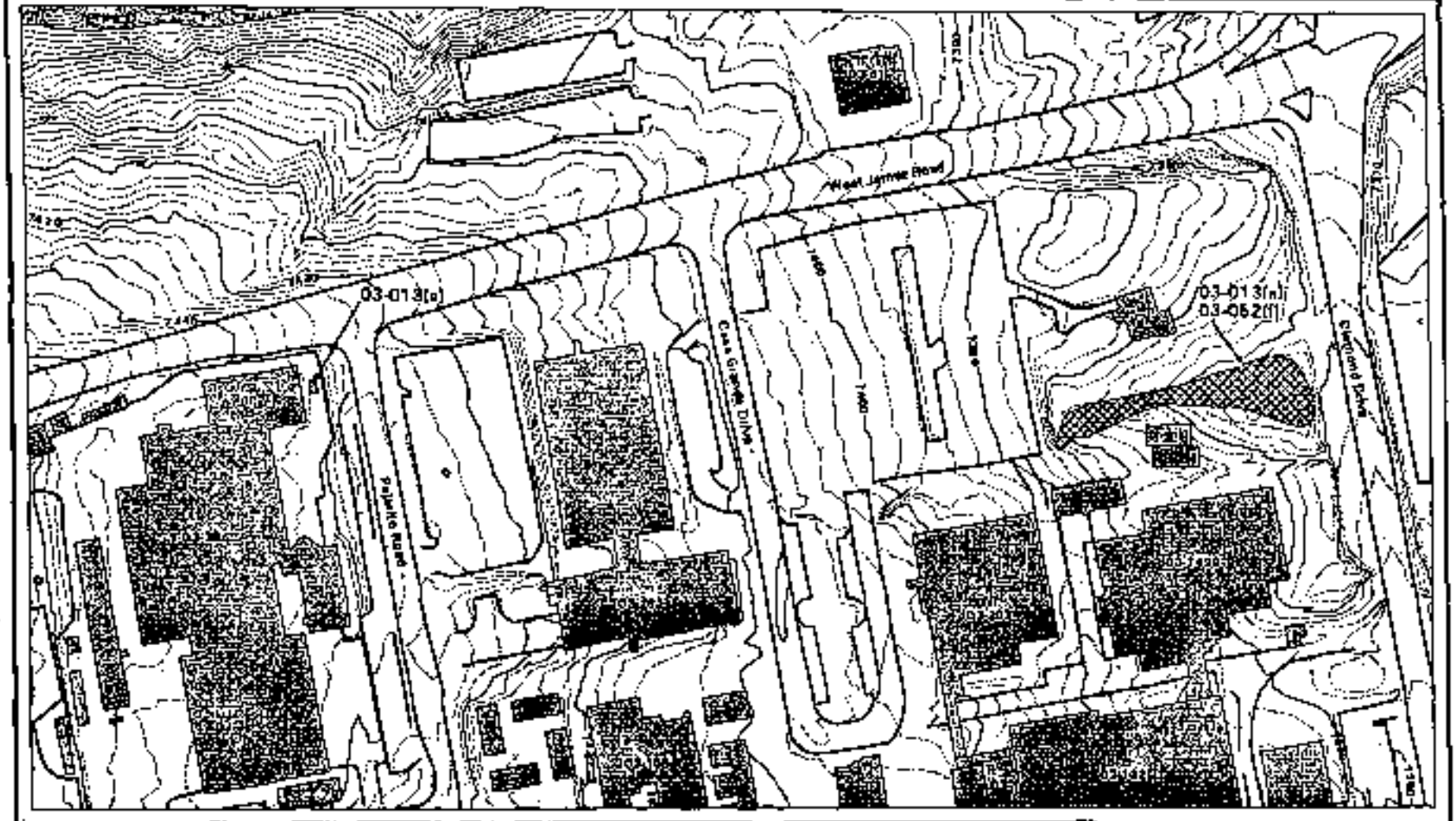
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative affect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The two PRSs in this consolidated unit consist of storm drains, drain lines and an outfall. PRS 3-013(a) is storm drain serving the area around the JCI shop building (TA-3-38). The drain line consists of a corrugated metal pipe that runs beneath TA-3 and daylights 100 feet east of the Otowi Building. Floor drains from the basement of TA-3-38 may have previously discharged to the drain line, but they are now tied to the sanitary sewer. PRS 3-052(f) consists of drains, drain lines and an outfall that received flow from TA-3-207, and possibly from TA-3-105. The drains in these buildings were tied to the sanitary sewer in 1991. The outfalls are collocated.



PRS Consolidation Unit 03-013(a)-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Mark Jones

FIMAD G105443 10 Apr 00

PRS Consolidation Worksheet

Site Type: Waste Water Treatment Plant

Proposed PRS Number: 03-014(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-014(a)	HSWA	Former Imhoff Tanks	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(b)	HSWA	Former Dosing siphons	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(b2)	Non-HSWA	Former Outfall	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(c)	HSWA	Former Trickling filters	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(c2)	Non-HSWA	Former Outfall	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(d)	HSWA	Former Secondary clarifiers	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(e)	HSWA	Former Imhoff tanks	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(f)	HSWA	Former Dosing siphons	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(g)	HSWA	Former Trickling filters	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(h)	HSWA	Former Secondary clarifiers	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(i)	HSWA	Former Comminutor and bar rack	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(j)	HSWA	Former Effluent pump pit	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(k)	HSWA	Former Drying beds	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(l)	HSWA	Former Drying beds	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(m)	HSWA	Former Drying beds	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(n)	HSWA	Former Drying beds	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(o)	HSWA	Former Drying beds (3)	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(p)	HSWA	Former Sewage lift station	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(u)	HSWA	Former Holding Tank	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-058(d)	HSWA	Former Drum Storage Area, added FY00	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia

Consolidation Checklist Criteria:

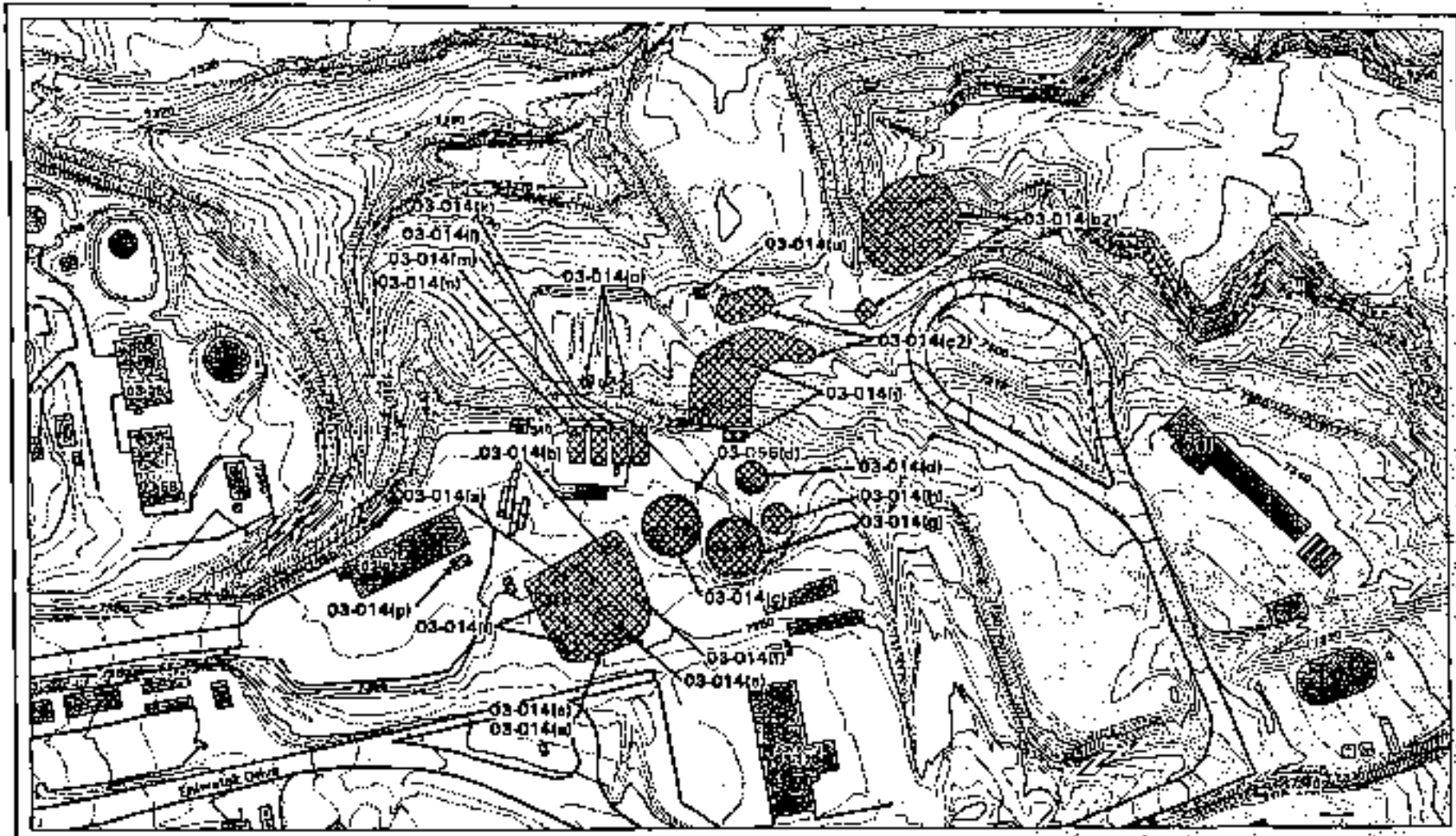
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms (surface and shallow subsurface), and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The TA-3 waste water treatment plant (WWTP) is a large operation and consists of two plants, designated as plant 1 (built in 1951) and plant 2 (built in 1965). The components of each plant are similar. The plants were used for the biological treatment of sanitary waste from TA-3, TA-43, and liquids from septic tanks. The 1990 SWMU report also notes that floor and sink drains from some industrial areas within TA-3 are also connected to the sanitary sewer. It is expected that contamination at the WWTP will not be discernable between the two plants and the ancillary equipment including interconnecting piping and drain lines between WWTP components. One former sewage lift station (PRS 3-014(p)) and associated drain line which served Building TA-3-265 located approximately 100 feet east of the plant is also included in this consolidated unit. The plant is currently inactive since the sewer lines were tied into the Laboratory SWSC in the early 1990s. PRS 3-058(d), added to this unit in FY06 is a former drum storage area previously located adjacent to trickling filter TA-3-47 at the TA-3 WWTP. Drums of lubricating oil used at the plant were stored in this area during the period of time the WWTP was in operation.



PRS Consolidation Unit 03-014(a)-99

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is preliminary and has not been checked for accuracy.

Produced by Marcia Jones

FIMAD 0108444 10 Apr 00

PRS Consolidation Worksheet

Site Type: Drain lines and Outfalls

Proposed PRS Number: 03-015-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-015	HSWA	Outfall and drain lines - (inactive)	Rad, Metals, SVOCs, PCBs	Upper Sandia
03-063	Non-HSWA	Facility and drain lines - (inactive)	Rad, Metals, SVOCs, PCBs	Upper Sandia

Consolidation Checklist Criteria:

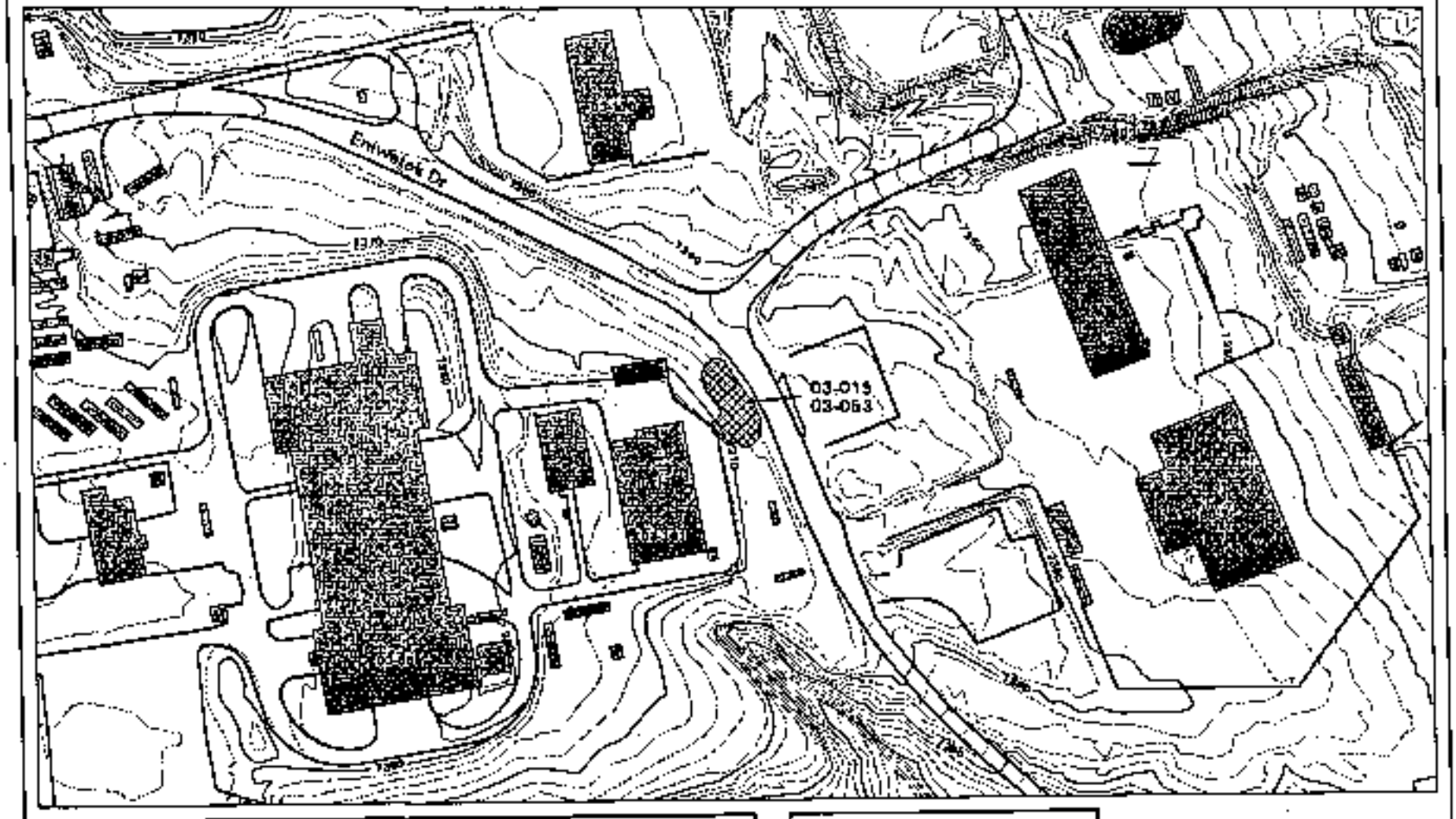
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, common waste streams, geographical proximity, similar transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 3-015 is an inactive outfall and drain lines that previously received discharges from floor, sink and roof drains in TA-3-141, the Rolling Mill Building. PRS 3-063 is designated as the basement area of the Rolling Mill Building with floor drains that formerly discharged to PRS 3-015. Areas of the building that may have discharged to the outfall include the former beryllium facility, mezzanine floor drains and roof drains. Floor and sink drains have since been rerouted to TA-50 and the roof drains to another outfall. The drain lines were decommissioned in 1993. COPCs are commingled within PRS 3-015.



PRS Consolidation Unit 03-015-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Hatched information on this map is provisional and has not been checked for accuracy.

Produced by Mandy Jones

RMAD 6108445 10 Apr 00

PRS Consolidation Worksheet

Site Type: Tanks and/or Assoc. Equipment

Proposed PRS Number: 03-038(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-038(a)	HSWA	Acid waste tank - (inactive)	Rad, Metals, SVOCs	Upper Los Alamos
03-038(b)	HSWA	Acid waste tank - (inactive)	Rad, Metals, SVOCs	Upper Los Alamos

Consolidation Checklist Criteria:

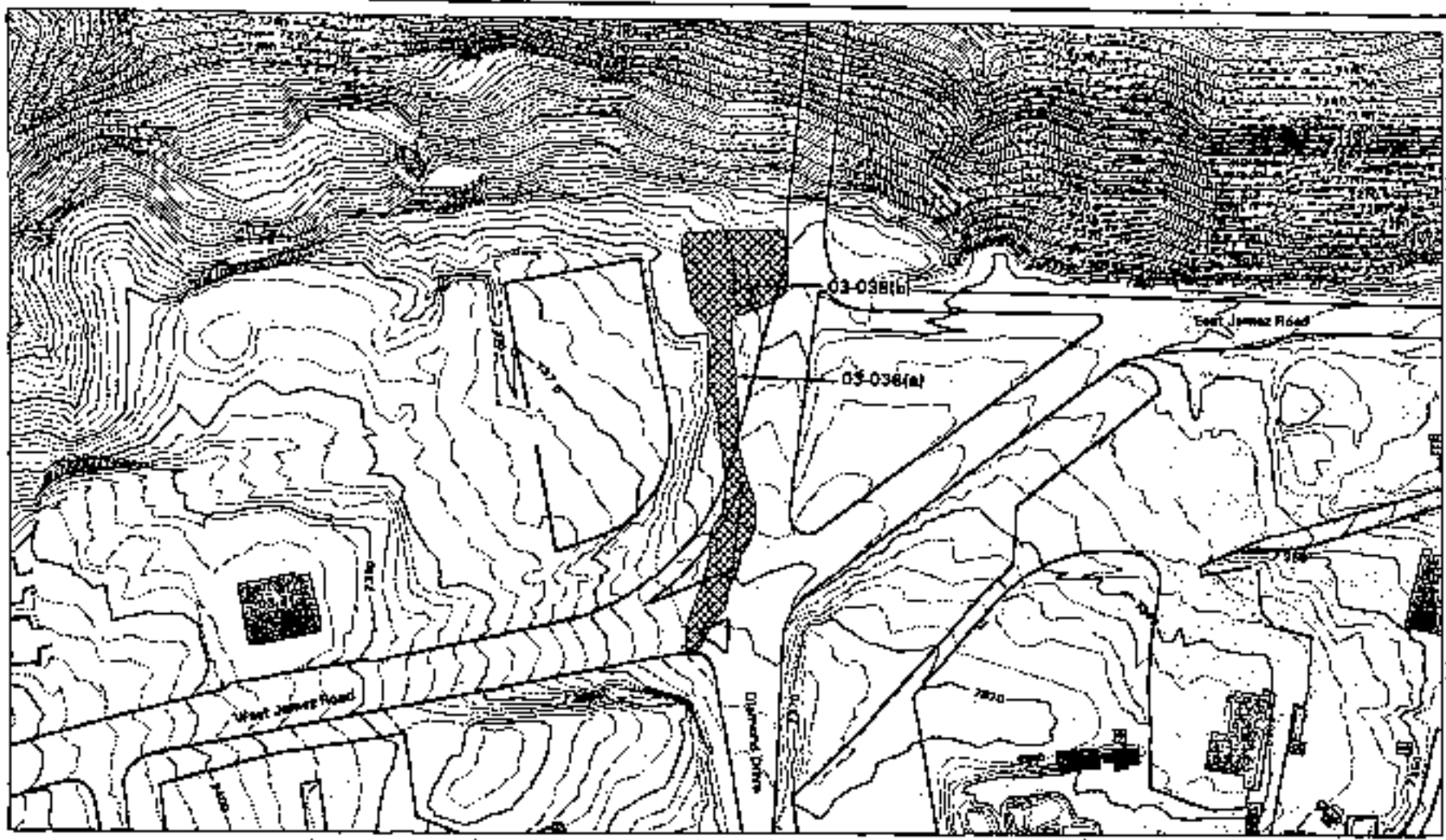
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The two PRSs in this consolidated unit were components of the Radioactive Liquid Waste Line Removal Project of 1981-1986. PRS 3-038(a) was an acid neutralizing and pumping building with two concrete underground storage tanks (TA-3-700). This was the central collection point for industrial waste from TA-3. The tanks were routinely pumped and the wastes taken to TA-50. PRS 3-038(b) was a 28,500-gal. acid waste retention tank located just north of PRS 3-038(a). In 1982, the tanks and building were removed and taken to TA-54, and all drain lines leading into and out of the PRSs were removed and the soils around the drain lines remediated. COPCs are commingled.



PRS Consolidation Unit 03-038(a)-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is preliminary and has not been checked for accuracy.

Produced by Morrison Jones

FIMAD G106446 10 Apr 00

PRS Consolidation Worksheet

Site Type: Drain Lines and Outfalls

Proposed PRS Number: 03-045(h)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-045(h)	HSWA	Cooling Tower Outfall - (Inactive)	Metals	Upper Sandia
03-049(a)	HSWA	Cooling Tower Outfall - (Inactive)	Rad, Metals	Upper Mortandad

Consolidation Checklist Criteria:

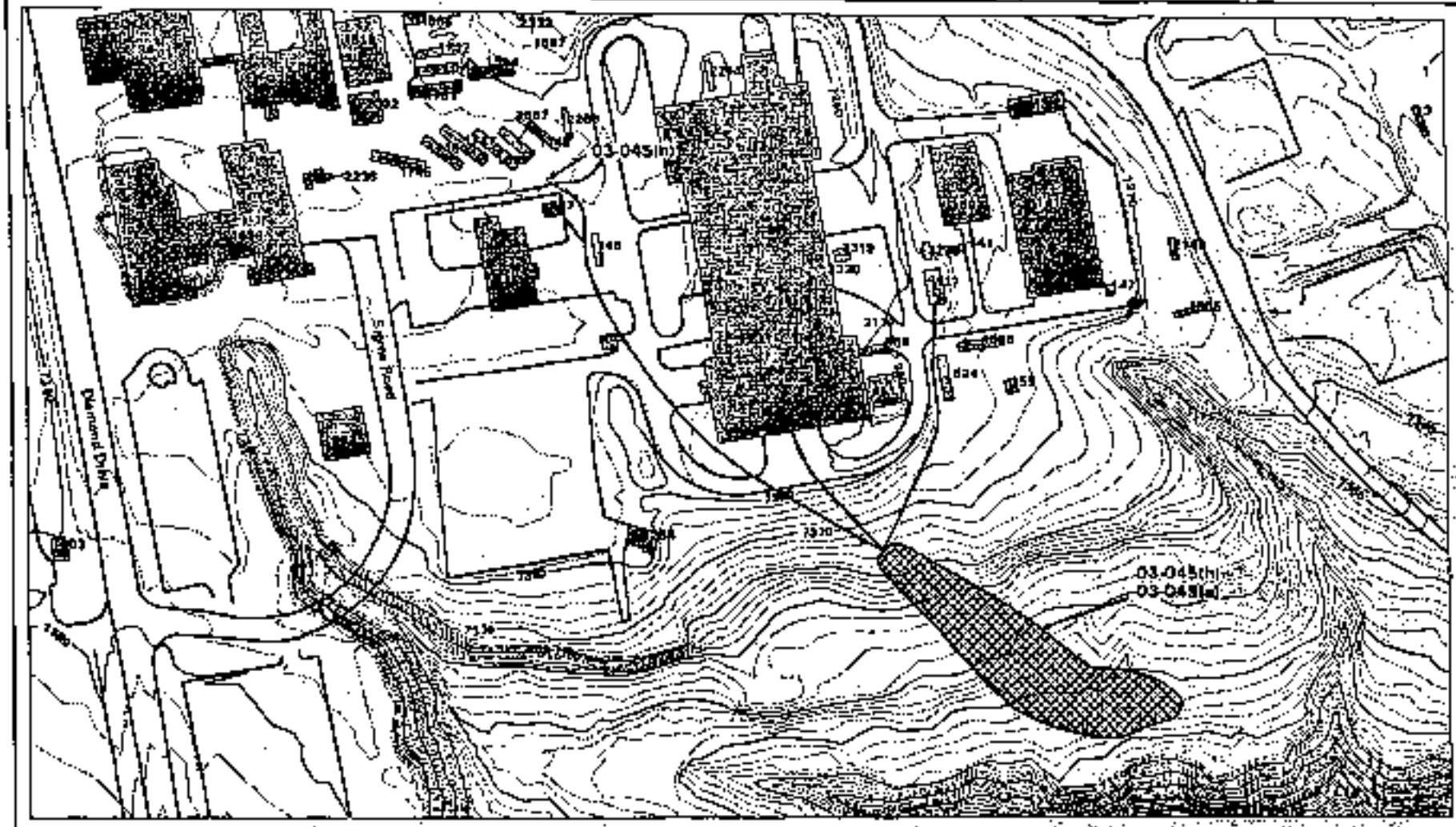
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 3-045(h) is the former NPDES-permitted outfall and drain line that received treated wastewater from cooling tower TA-3-187. PRS 3-049(a) is a former NPDES-permitted outfall and drain lines that received treated wastewater from cooling tower TA-3-127. From 1984 to 1990, the outfall also received discharge from rinse tanks associated with an electroplating operation in TA-3-66 (Sigma Building). The outfall areas of these two PRSs overlap allowing COPCs to commingle.



PRS Consolidation Unit 03-045(h)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Type:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Prepared by Marcia Jones

RMAD G106824 18 Jul 00

PRS Consolidation Worksheet

Site Type: Miscellaneous

Proposed PRS Number: 03-049(b)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-049(b)	HSWA	Operational release - (Inactive)	Rad, Metals, TPH	Upper Mortandad
C-03-014	Non-HSWA	Equipment Storage area - (Inactive)	Rad, Metals, TPH	Upper Mortandad

Consolidation Checklist Criteria:

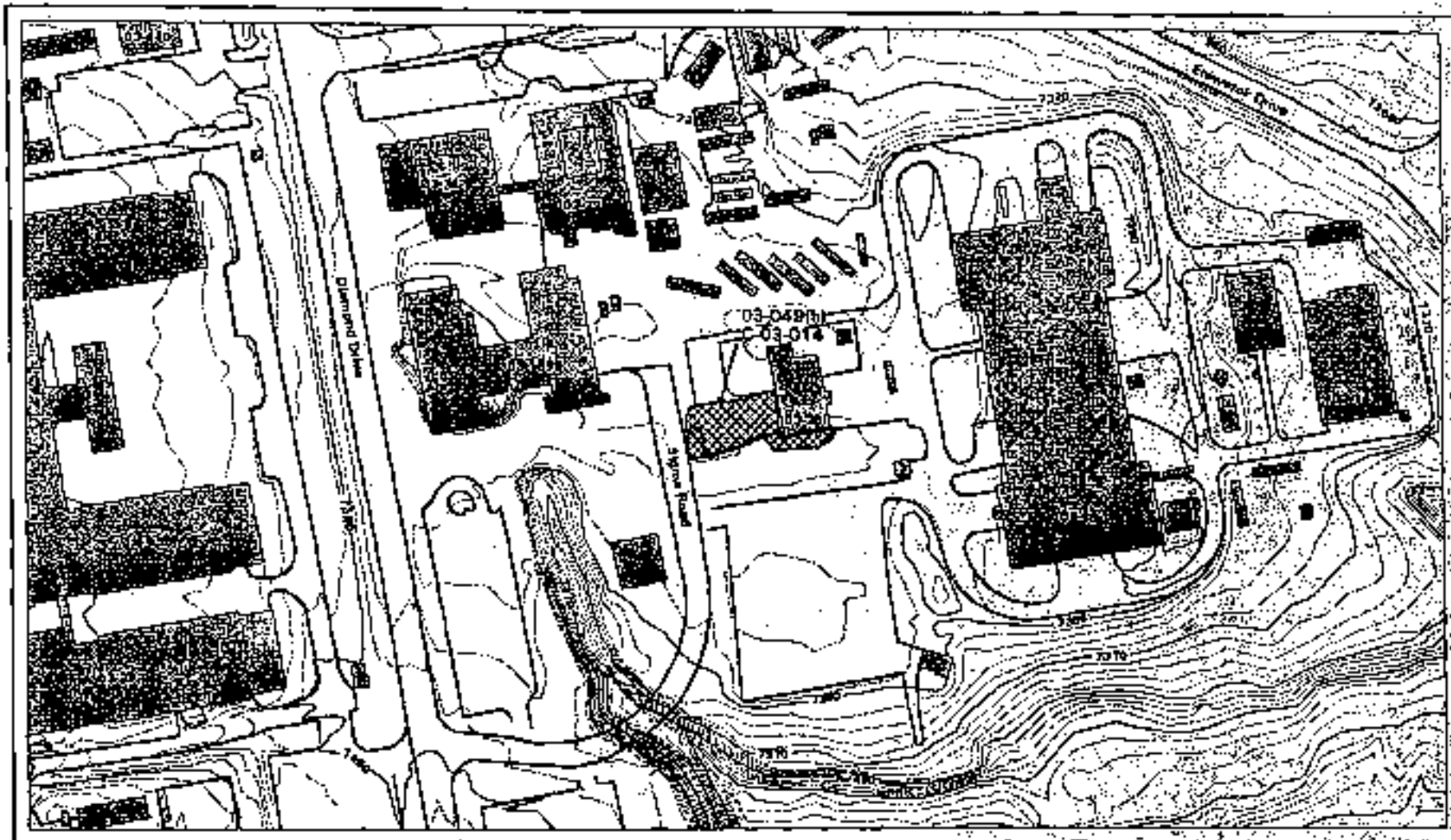
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 3-049(b) is the location of a former exhaust outlet from an inactive vacuum pump in the Press Building (TA-3-35). The pump was used to remove oil from furnaces in the building. The exhaust outlet was located 8 feet above the ground on the south wall of TA-3-35. PRS C-03-014 is the former location of an equipment storage area where scrap (containing oil) and radioactively-contaminated equipment was stored. Boundaries of the storage area overlap the area of the exhaust outlet and storm water runoff from both PRSs is commingled.



PRS Consolidation Unit 03-049(b)-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is preliminary and has not been checked for accuracy.

Produced by Marvin Jones

FIMAD 0109448, 10 Apr 00

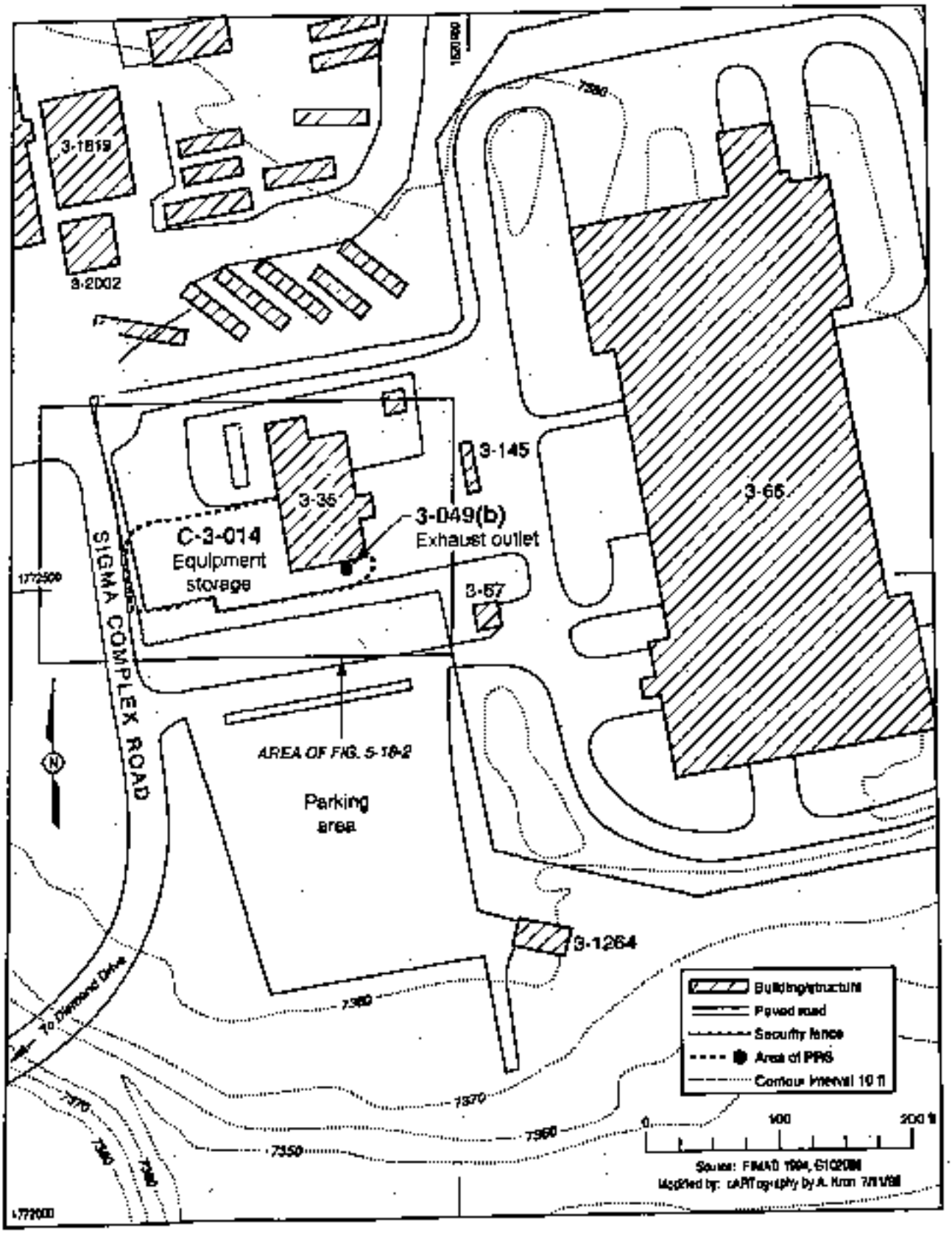
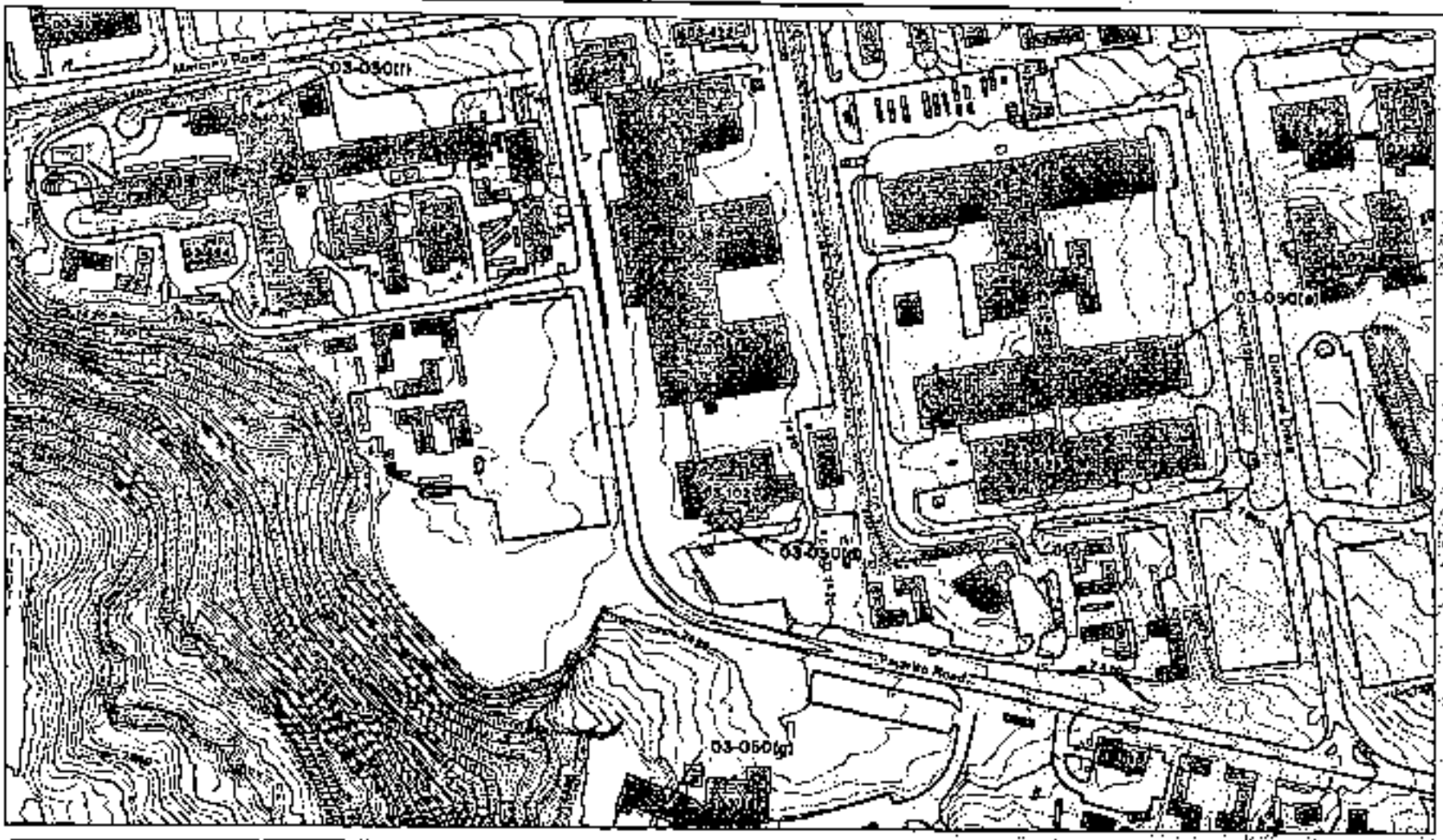


Fig. 5-18-1. Site location map of SWMU 3-049(b) and C-3-014.



PRS Consolidation Unit 03-050(a)-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:3600

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is preliminary and has not been checked for accuracy.

Produced by Marcia Jones

FIMAD 01068450 10 Apr 00

PRS Consolidation Worksheet

Site Type: Soil Contamination

Proposed PRS Number: 03-050(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-050(a)	HSWA	Stack emissions, CMR Bldg. - (active)	Rad, Metals	Upper Mortandad
03-050(d)	HSWA	Stack emissions, Bldg.TA-3-102 - (inactive)	Rad, Metals	Twomile
03-050(f)	HSWA	Stack emissions, Bldg.TA-3-40 - (inactive)	Rad, Metals	Twomile
03-050(g)	HSWA	Stack emissions, Bldg.TA-3-16 - (inactive)	Rad, Metals	Twomile

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit are associated with stack emissions from buildings located within TA-3, and the potential soil contamination resulting from these emissions. COPCs are commingled throughout TA-3. PRS 3-050(a) is attributed to emissions from exhaust stacks located at TA-3-29 (CMR Building). PRS 3-050(d) is where potential soil contamination may have occurred from the exhaust system on TA-3-102 where radioactive materials were machined for the Rover Program. PRS 3-050(g) is the potential soil contamination resulting from exhaust stacks at TA-3-40 which housed a variety of operations using radioactive materials. PRS 3-050(g) is the potential soil contamination attributed to tritium emissions from stack on the Van de Graaff Building (TA-3-16) which is now inactive. The majority of these building stack systems have been upgraded and operations generating the emissions ceased. These units were identified for consolidation by NMED during discussions in FY98 regarding PRSs proposed for NFA in previous permit mod. requests.

PRS Consolidation Worksheet

Site Type: Drain Lines and Outfalls

Proposed PRS Number: 03-052(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-052(a)	HSWA	Storm drain - (active)	Metals, SVOCs, TPH	Twomile
03-052(e)	HSWA	Storm drain - (active)	Metals, SVOCs, TPH	Twomile
03-054(b)	HSWA	Storm Water Outfall - (active)	Metals, SVOCs, TPH	Twomile

Consolidation Checklist Criteria:

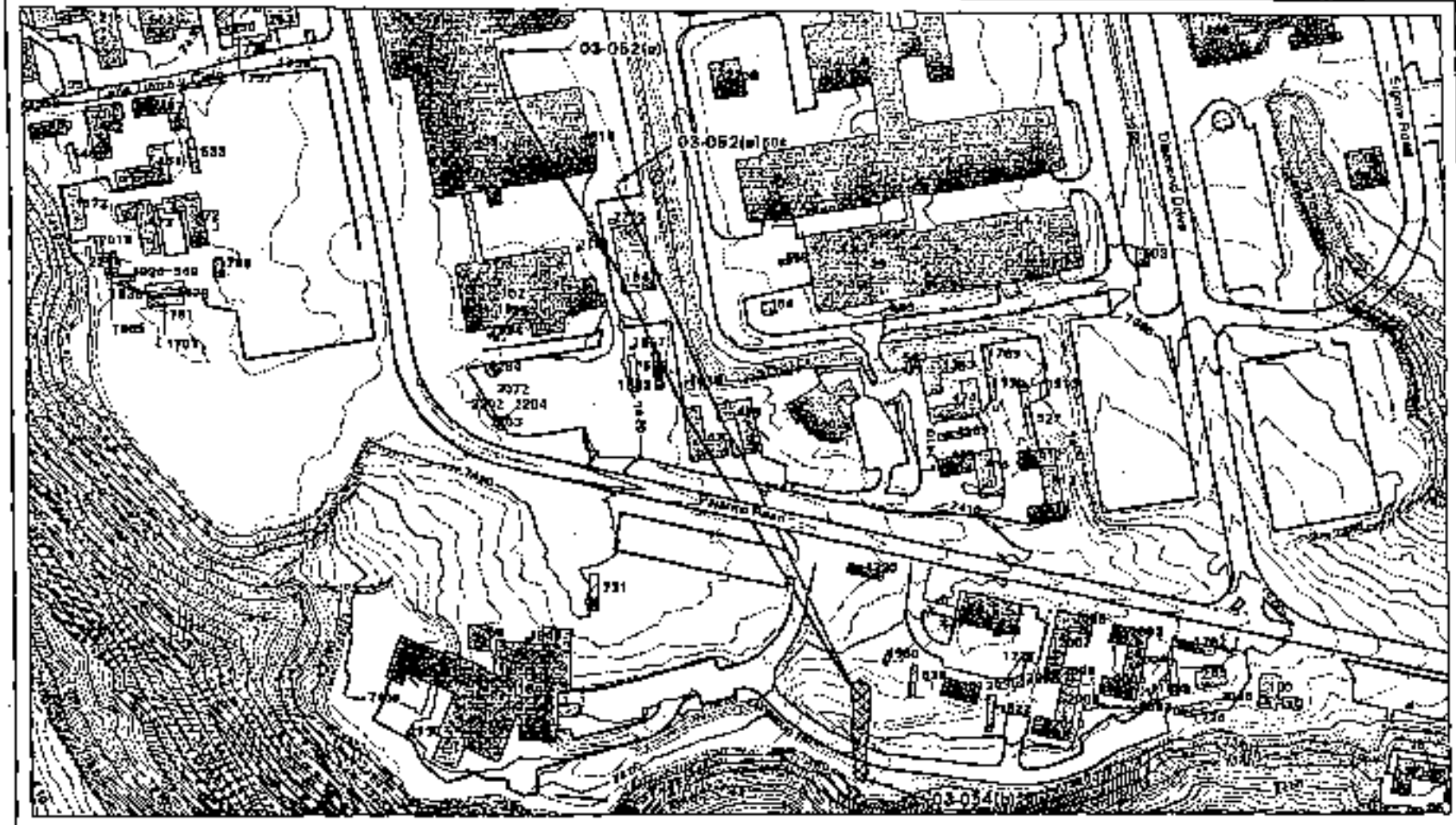
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit include two storm drains that discharge to a single storm sewer and outfall. PRS 3-052(a) is a storm drain near a loading dock adjacent to TA-3-39 which housed machining operations. Metal filings and cutting oils previously stored in dumpsters may have seeped into the drain. This situation has been remedied. PRS 3-052(e) is another storm drain located adjacent to TA-3-39. The drain lines from these PRSs combine and discharge to the NPDES-permitted outfall designated as PRS 3-054(b). The outfall also received noncontact cooling water and cooling water blowdown which has been rerouted.



PRS Consolidation Unit 03-052(a)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:3000

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jarret

FIMAD G108628 12 Jul 00

PRS Consolidation Worksheet

Site Type: Drain Lines and Outfalls

Proposed PRS Number: 03-054(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-054(a)	HSWA	Drain Lines and Outfall - (inactive)	Metals, SVOCs, TPH	Twomile
03-054(d)	HSWA	Drain Lines and Outfall - (inactive)	Metals, SVOCs, TPH	Twomile

Consolidation Checklist Criteria:

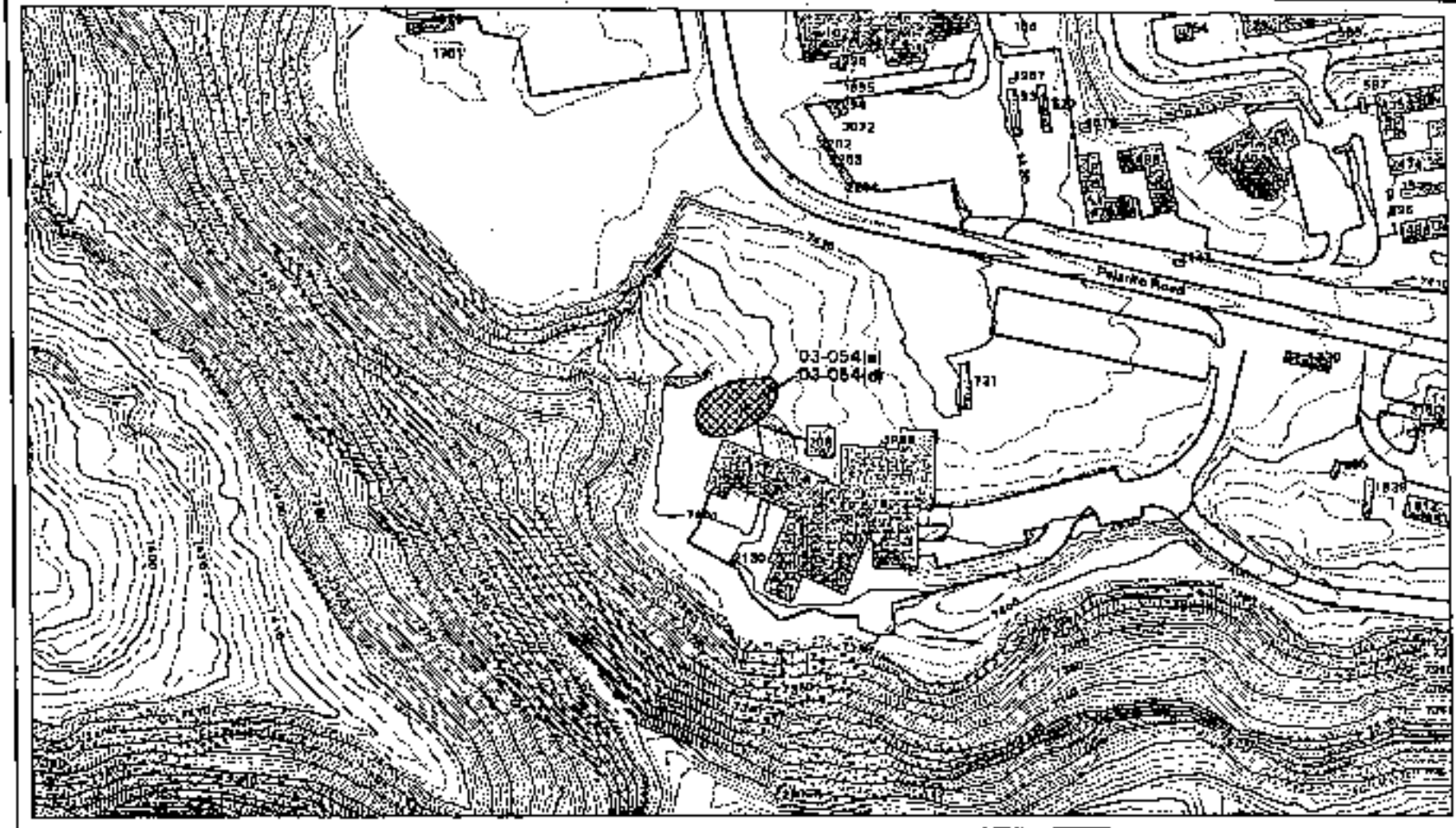
	Yes	No.
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 3-054(a) is a decommissioned outfall that received wastewater from cooling towers TA-3-19, and -16, and from floor drains in TA-3-208. PRS 3-054(d) is an NPDES-permitted outfall that received wastewater from air conditioning equipment on TA-3-16 and from drains in TA-3-208. The outfall areas overlap south of TA-3-16, COPCs are commingled.



PRS Consolidation Unit 03-054(a)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provided and has not been checked for accuracy.

Produced by Miracle Jones

RMAD G108626 18 Jul 00

PRS Consolidation Worksheet

Site Type: Storage Area

Proposed PRS Number: 03-059-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-003(n)	Non-HSWA	Transformer Storage Area - (Inactive)	PCBs, TPH	Upper Sandia
03-059	HSWA	Salvage yard - (Inactive)	Metals, PCBs, SVOCs/TPH	Upper Sandia

Consolidation Checklist Criteria:

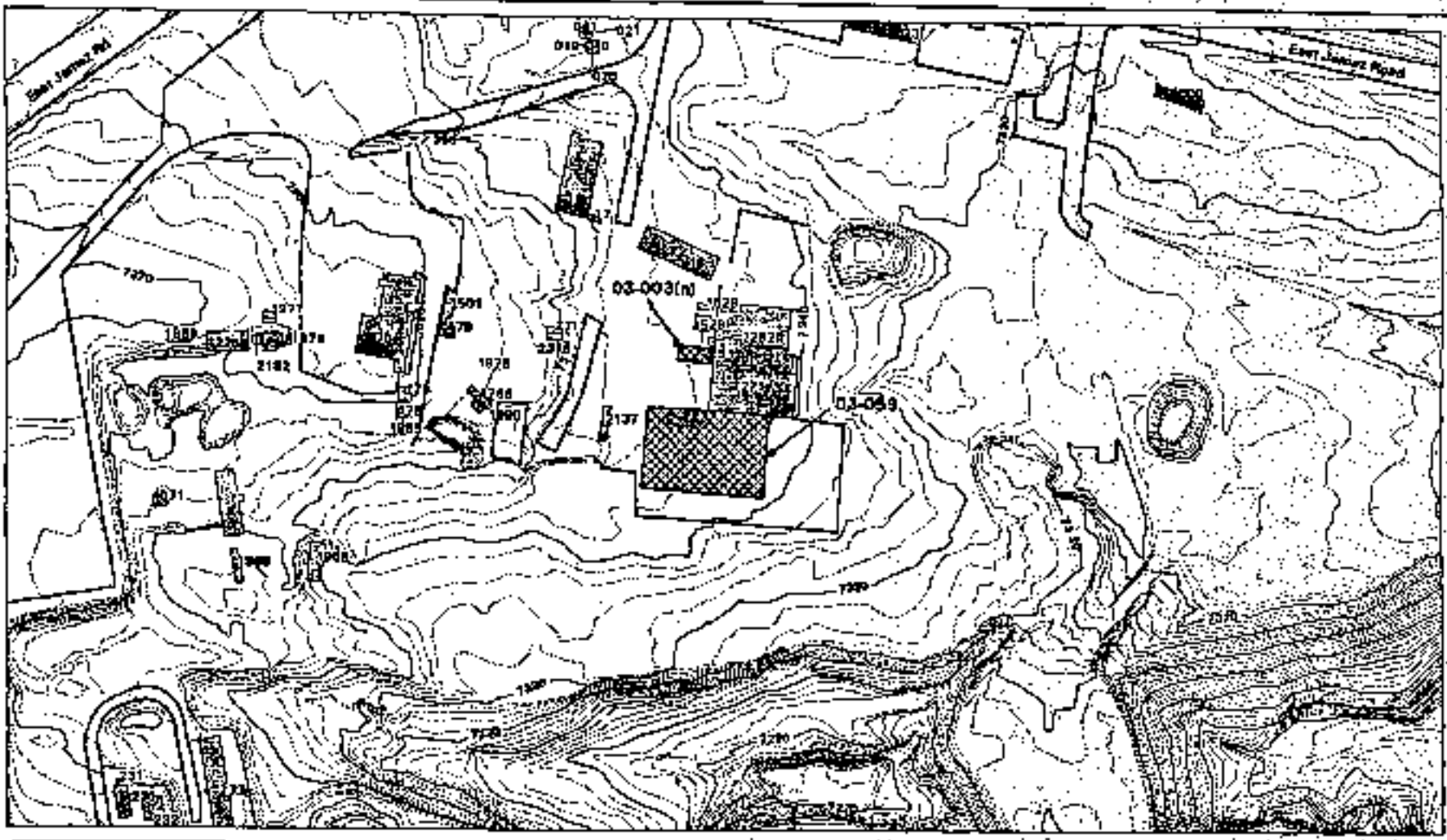
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, identical waste streams, geographical proximity, similar transport mechanisms (surface), commingled COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 3-059 is a former salvage yard adjacent to TA-3-271. From the early 1950s through May 1993, the area was used for the storage of transformers, electrical equipment, batteries, and scrap metal. PRS 3-003(n) is the former location of a transformer storage area adjacent to TA-3-271, where at least one documented PCB spill occurred. This second area was used for storage of electrical equipment when there was no room for additional equipment at PRS 3-059. Storm water runoff from both storage areas flowed to the southwest allowing COPCs to commingle.



PRS Consolidation Unit 03-059-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

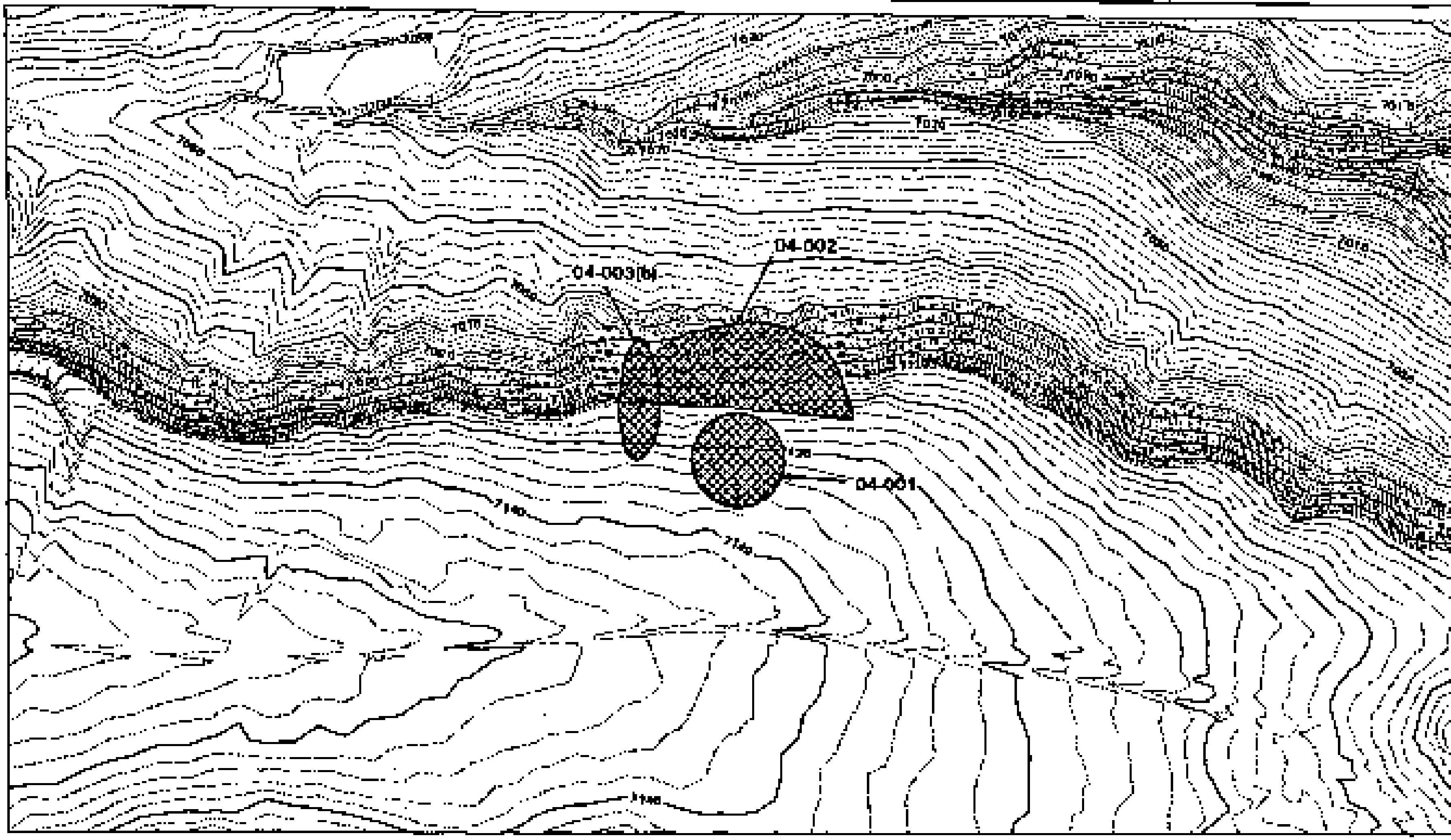
FEET

1983 North American Datum
Projection and Grid Tic:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Martin Jones

FIMAD G109623.12 Jul 00



PRS Consolidation Unit 04-001-99

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FIMAD G100833 12 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site - Alpha Site

Proposed PRS Number: 04-001-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
04-001	HSWA	Firing Site - (Inactive)	Rad, Metals	Middle Mortandad/Ten-Site
04-002	HSWA	Surface Disposal Site - (Inactive)	Rad, Metals	Middle Mortandad/Ten-Site
04-003(b)	HSWA	Outfall (Inactive) - added FY00	Rad, Metals	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

	Yes	No
1. *Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?*	☑	☐
2. *Is the contamination origin non-discernable?*	☑	☐
3. *Are the PRSs in the same geographic proximity?*	☑	☐
4. *Are the transport mechanisms and pathways similar?*	☑	☐
5. *Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?*	☑	☐

Consolidation Rationale:

Based on the operational history and geographic proximity of the firing site and disposal site, indistinguishable source terms, the common waste streams managed, transport mechanisms of similar contaminants, and the investigation required to assess the potential contamination, it is proposed that the above PRSs be consolidated.

Description:

PRSs 4-001 and 4-002 consist of an inactive firing site and its associated surface disposal site. After a shot, residual material from the firing site was bulldozed over the edge of the canyon to the area designated as the surface disposal site. The firing site was constructed in 1948 and abandoned in 1948. PRS 4-003(b), added in FY00, was the drain line and outfall from control building TA-4-3 located at PRS 4-001. All structures have been removed. The outfall area from this PRS overlaps PRSs 4-001 and 4-002 and they will be investigated simultaneously.

PRS Consolidation Worksheet

Site Type: Outfall - Alpha Site

Proposed PRS Number: 04-003(a)-00

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Watershed Aggregate*
04-003(a)	HSWA	Outfall - (inactive)	Metals, Rad	Upper Canada del Buey
04-004	Non-HSWA	Soil contamination beneath bldg.	Rad, Metals	Upper Canada del Buey

Consolidation Checklist Criteria:

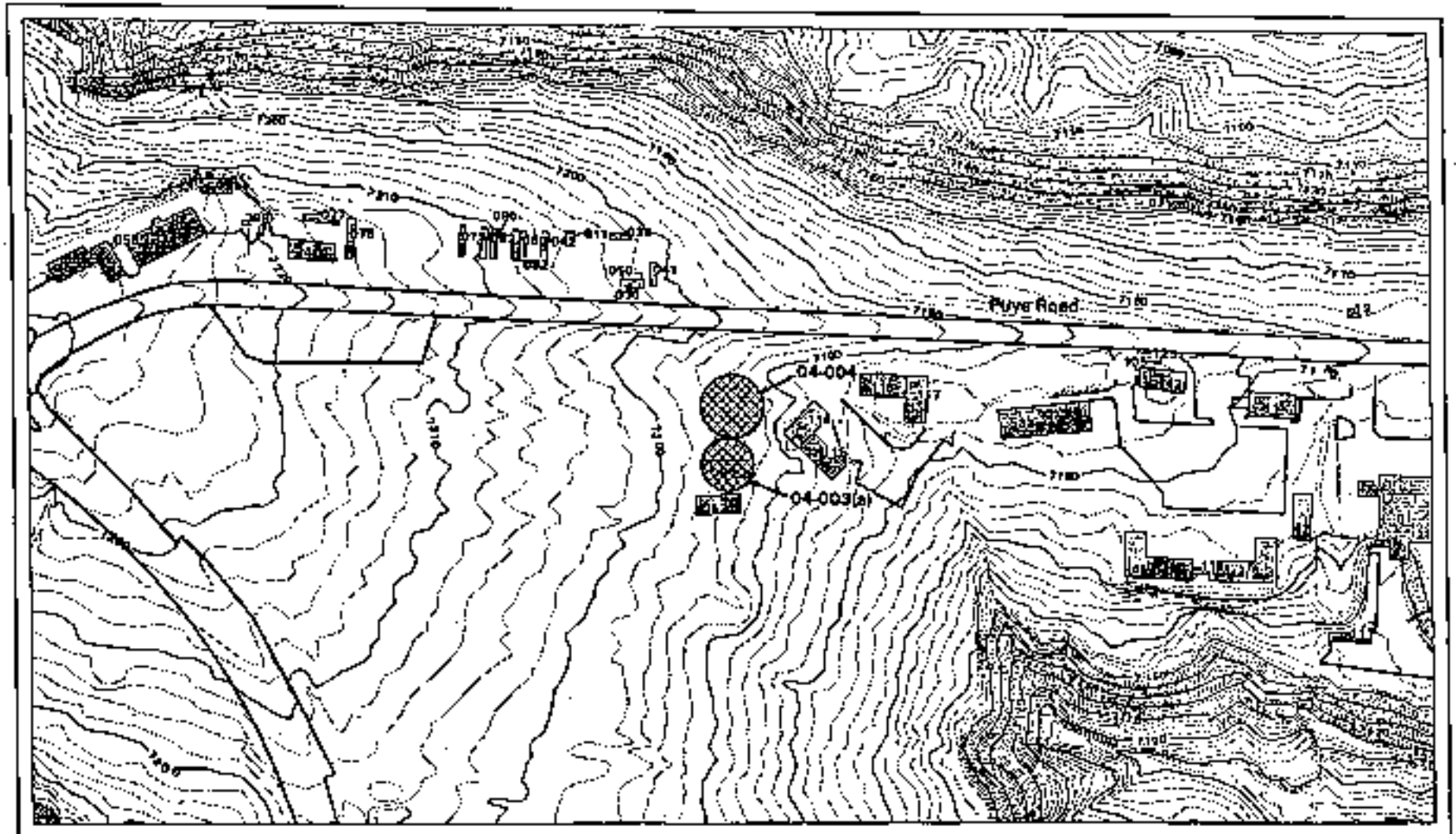
	Yes	*No*
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history and geographic proximity, the common waste streams managed, indistinguishable source term, similar transport mechanisms of similar contaminants, and the investigation required to assess the potential contamination, it is proposed that the PRSs be consolidated.

Description:

PRS 4-003(a) was the outfall and drain lines from building TA-4-7 which housed a photo processing laboratory. PRS 4-004 is the building footprint of TA-4-7 where film of firing tests performed at TA-4 was developed. The structures have been removed and potential soil contamination may remain in the vicinity of the building footprint and associated drain lines and outfall.



PRS Consolidation Unit 04-003(a)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notes: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FIMAD G1066634 12 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site - Beta Site

Proposed PRS Number: 05-001(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
05-001(a)	HSWA	Firing Site - (inactive)	Rad, Metals, HE	Middle Mortandad/Ten-Site
05-001(b)	HSWA	Firing Site - (inactive)	Rad, Metals, HE	Middle Mortandad/Ten-Site
05-002	HSWA	Disposal Site - (inactive)	Rad, Metals, HE	Middle Mortandad/Ten-Site
05-006(h)	HSWA	Soil cont. beneath former bldg. - added in FY00	Rad, Metals, HE	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

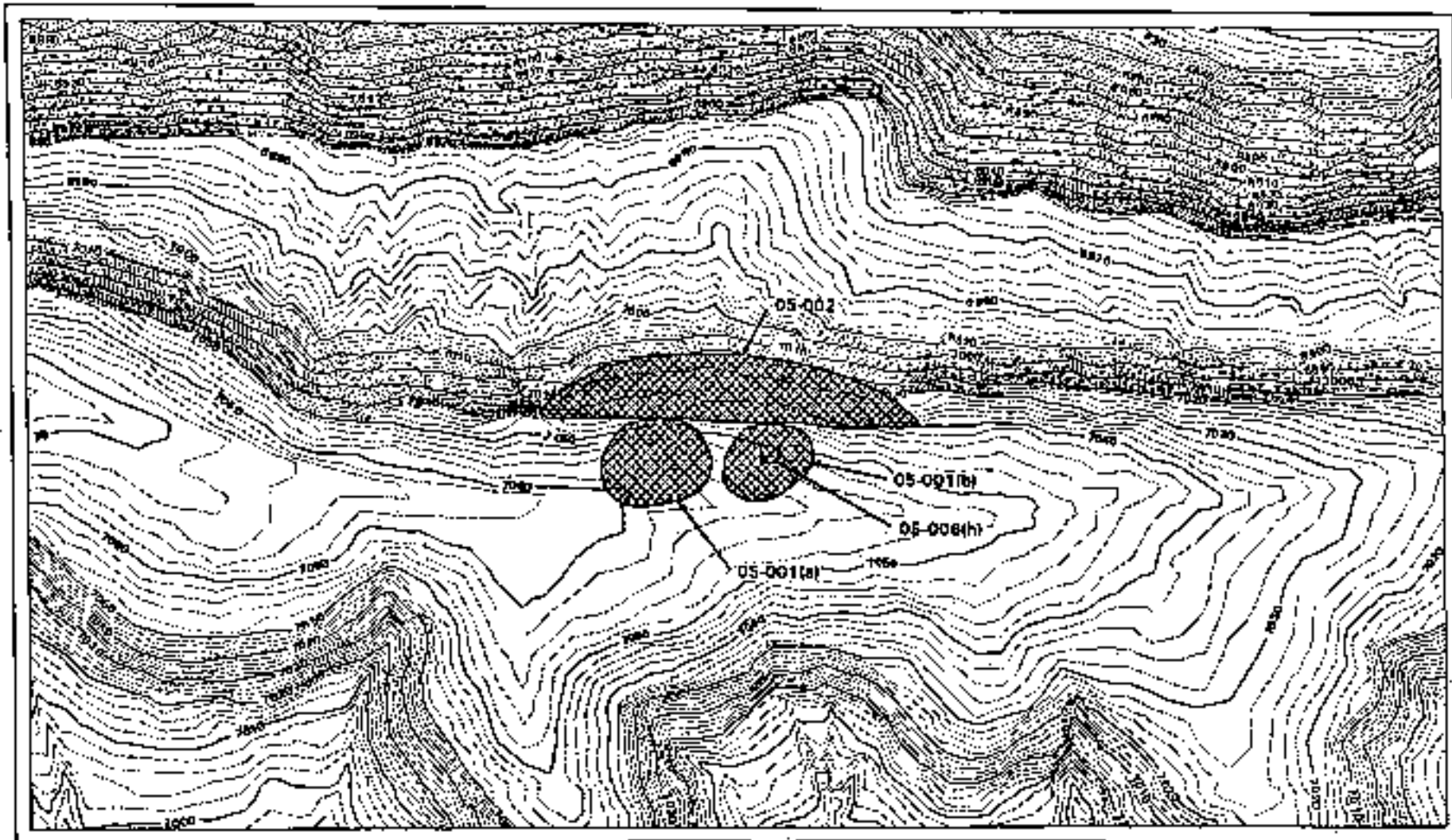
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms and the investigation required to assess the potential contamination at the firing sites, canyon side disposal area, and control building footprint, it is proposed that these PRSs be consolidated.

Description:

TA-5 also known as Beta Site consisted of firing sites and associated support facilities. The technical area was established in 1944 and was subsequently decontaminated and decommissioned in 1985. Firing Sites 5-001(a and b) are inactive. PRS 5-002 is the canyon side disposal area for both firing sites. After a shot, residual material was bulldozed over the side of the mesa. PRS 5-006(h) was a former control building TA-5-9 which was located within the blast radius of PRS 5-001(b) and supported both firing sites. The entire area was razed when TA-5-9 was removed spreading COPCs from the building and firing sites so that they are not discernable between PRSs. PRS 5-006(h) was added to this consolidated unit in FY00.



PRS Consolidation Unit 05-001(a)-99

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator).

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Merle Jones

FPAAD 0108835 12 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site - Beta Site

Proposed PRS Number: 05-005(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
05-005(a)	HSWA	Former French drain - (inactive)	U, HE, Metals, SVOCs	Middle Mortandad/Ten-Site
05-005(b)	HSWA	Soil contamination beneath former bldg.	U, HE, Metals, SVOCs	Middle Mortandad/Ten-Site
05-005(c)	HSWA	Soil contamination beneath former bldg.	U, HE, Metals, SVOCs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

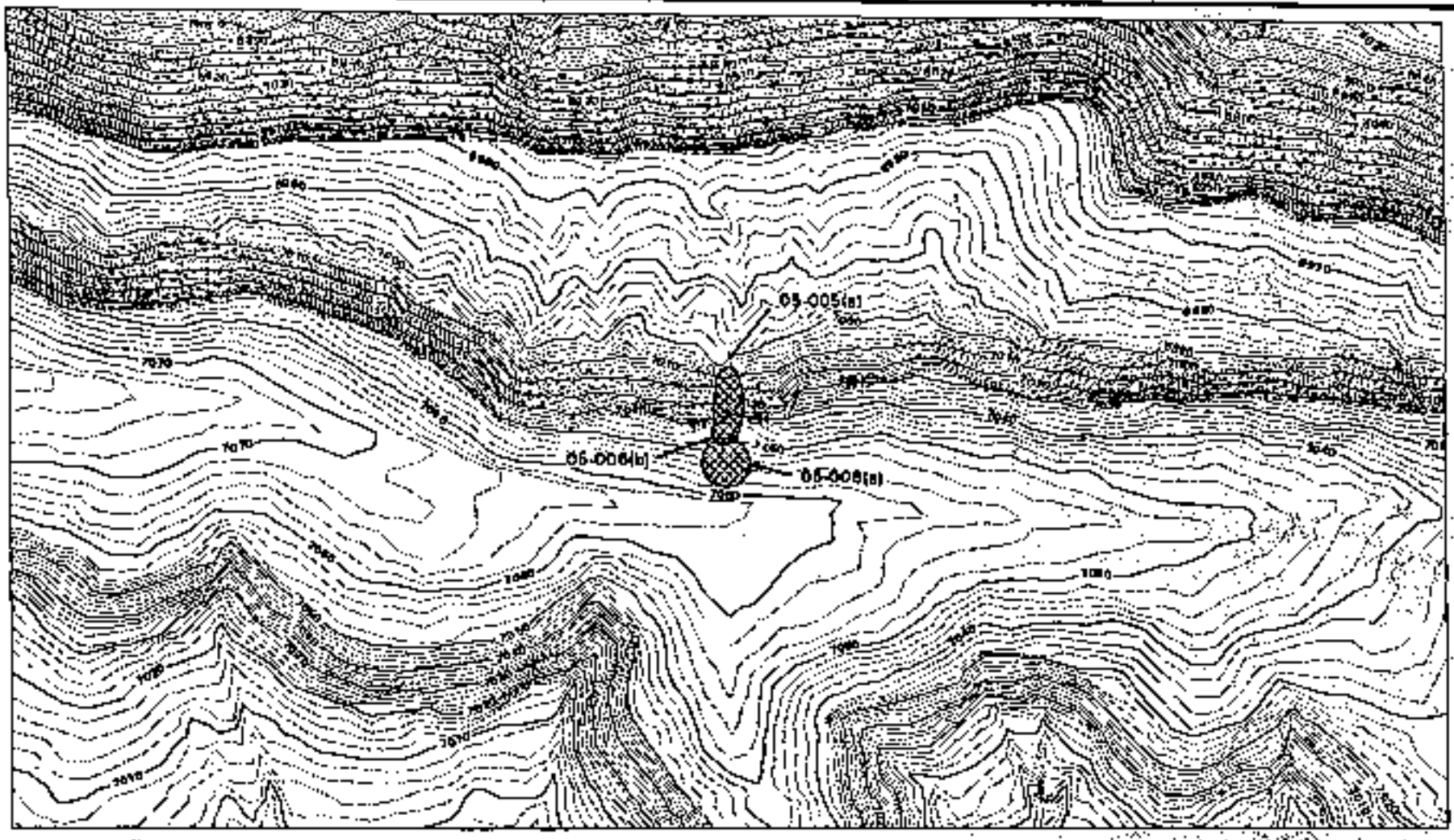
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms, indistinguishable COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

TA-5 also known as Beta Site consisted of firing sites and associated support facilities. The technical area was established in 1944 and was subsequently decontaminated and decommissioned in 1985. PRS 5-005(a) was a French drain that ran from the firing site control building (TA-5-4) toward Mortandad Canyon to the north. The drain was constructed in 1945 and abandoned along with the control building in 1958. PRS 5-005(b) is potential soil contamination at the former location of the control building (TA-5-4). PRS 5-005(c) is potential soil contamination associated with a former platform (TA-5-19) that was constructed adjacent to TA-5-4. The entire area was razed when TA-5-4 was removed in 1985 spreading COPCs from the control building, French drain and platform so that they are not discernable between PRSs.



PRS Consolidation Unit 05-005(a)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

[illegible] North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is preliminary and has not been checked for accuracy.

Produced by Marcia Jones

RMAD 0108636 12 Jul 00

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 05-005(b)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
05-005(b)	HSWA	Outfall - (inactive)	Rad, Metals, SVOCs, HE	Lower Mortandad/Cedro
05-006(c)	HSWA	Soil contamination beneath former bldg.	Rad, Metals, SVOCs, HE	Lower Mortandad/Cedro

Consolidation Checklist Criteria:

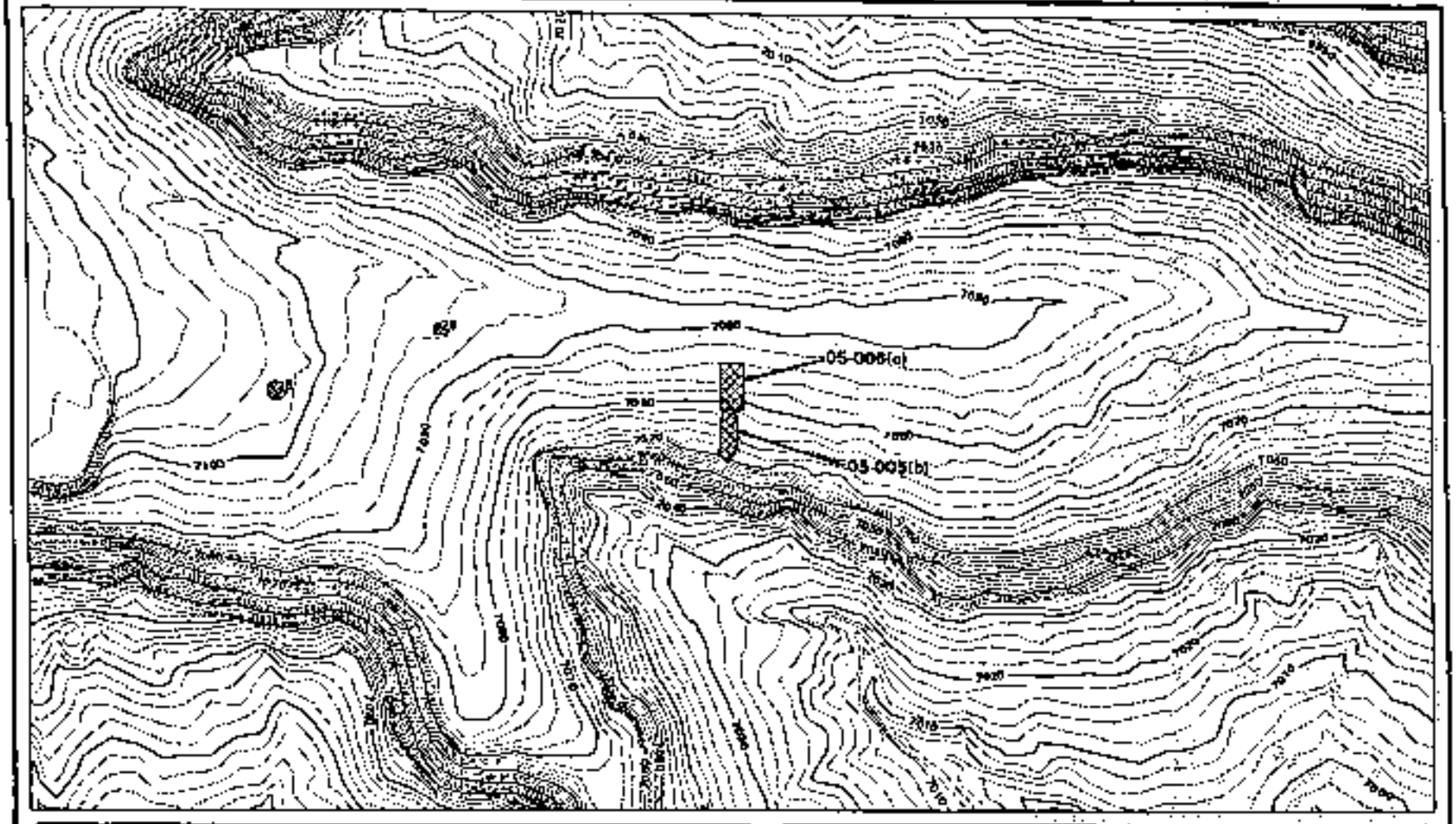
	Yes	No
1. *Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?*	☑	☐
2. *Is the contamination origin non-discernable?*	☑	☐
3. *Are the PRSs in the same geographic proximity?*	☑	☐
4. *Are the transport mechanisms and pathways similar?*	☑	☐
5. *Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?*	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms, indistinguishable COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The consolidated PRS consists of an outfall and associated drain lines (PRS 5-005(b)) from former building TA-5-5 and the potential soil contamination from the building itself. Building TA-5-5 housed a shop and darkroom from 1944 through 1959 in support of firing site activities at Bella Site. The entire area was razed when TA-5-5 was removed spreading COPCs from the building over the entire area so that they are not discernable between PRSs.



PRS Consolidation Unit 05-005(b)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Tables
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is preliminary and has not been checked for accuracy.

Produced by Marvin Jones

FIMAD 01088837 12 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site- Eastern Aggregate.

Proposed PRS Number: 06-002-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
06-002	HSWA	Septic system - (inactive)	Rad, Metals, HE	Twomile
06-003(c)	HSWA	Firing site - (inactive)	Rad, Metals, HE	Twomile
C-06-005	Non-HSWA	Support Building - (inactive)	Rad, Metals, HE	Twomile
C-06-008	Non-HSWA	Support Building - (inactive)	Rad, Metals, HE	Twomile
C-06-016	Non-HSWA	Explosives Magazine - (inactive)	Rad, Metals, HE	Twomile
C-06-020	Non-HSWA	Employee Restroom - (inactive)	Rad, Metals, HE	Twomile

Consolidation Checklist Criteria:

	Yes	No
1. *Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?*	☑	☐
2. *Is the contamination origin non-discernable?*	☑	☐
3. *Are the PRSs in the same geographic proximity?*	☑	☐
4. *Are the transport mechanisms and pathways similar?*	☑	☐
5. *Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?*	☑	☐

Consolidation Rationale:

Proposed consolidation of these sites is based on operational history, geographic proximity, transport mechanisms of similar COPCs, common human health and ecological exposure areas, and the investigation needed to assess potential contamination.

Description:

The PRSs in this consolidated unit are designated as the Eastern Aggregate of TA-6. PRS 6-002 is an abandoned septic system including tank, drain lines and outfall that received process wastewater from PRS 6-003 and sanitary wastewater from C-06-020. PRS 6-003(c) is an inactive firing site used for water recovery shots. PRS C-06-005, TA-6-13, housed detonator assembly operations, a chemistry laboratory and explosives storage. PRS C-06-008, TA-6-14 was used for explosives pressing and storage. PRS C-06-016, TA-6-28 was an explosives storage magazine. PRS C-06-020, TA-6-19 was an employee restroom.

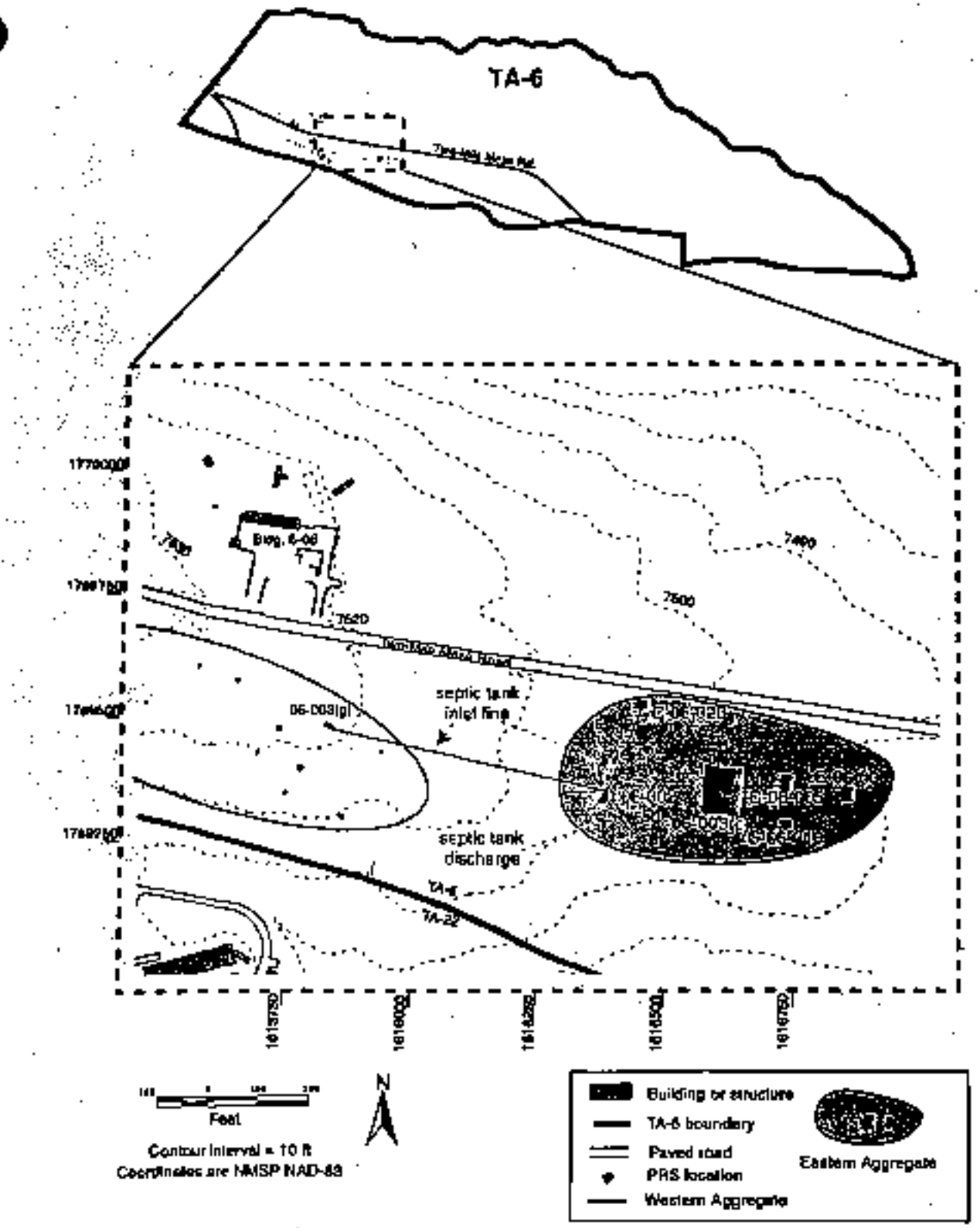
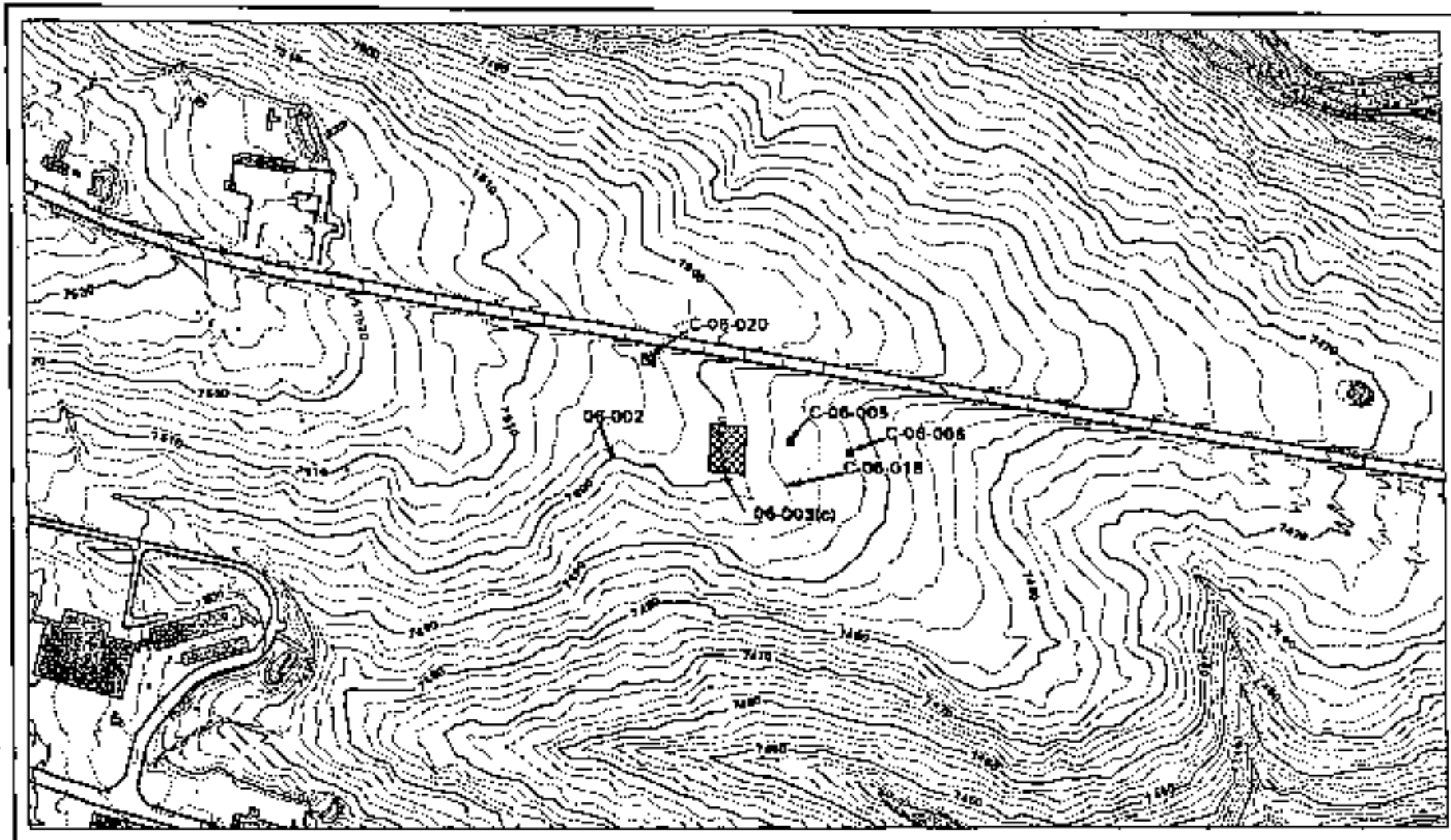


Figure 2.1-1. Engineering features in the vicinity of the Eastern Aggregate.



PRS Consolidation Unit 06-002-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:3600

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is preliminary and has not been checked for accuracy.

Produced by Morris Jones

RMAD-G108486 18 Apr 00

PRS Consolidation Worksheet

Site Type: Firing Site - Western Aggregate.

Proposed PRS Number: 06-003(g)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
06-003(g)	HSWA	Firing site & building - (inactive)	Rad, Metals, HE	Twomile
C-06-003	Non-HSWA	Support Building - (inactive)	Rad, Metals, HE	Twomile
C-06-007	Non-HSWA	Support Building - (inactive)	Rad, Metals, HE	Twomile
C-06-008	Non-HSWA	Explosives Storage Magazine - (inactive)	Rad, Metals, HE	Twomile
C-06-009	Non-HSWA	Explosives Storage Magazine - (inactive)	Rad, Metals, HE	Twomile
C-06-010	Non-HSWA	Explosives Storage Magazine - (inactive)	Rad, Metals, HE	Twomile
C-06-011	Non-HSWA	Explosives Storage Magazine - (inactive)	Rad, Metals, HE	Twomile
C-06-012	Non-HSWA	Explosives Storage Magazine - (inactive)	Rad, Metals, HE	Twomile
C-06-013	Non-HSWA	Explosives Storage Magazine - (inactive)	Rad, Metals, HE	Twomile
C-06-014	Non-HSWA	Explosives Storage Magazine - (inactive)	Rad, Metals, HE	Twomile
C-06-015	Non-HSWA	Explosives Storage Magazine - (inactive)	Rad, Metals, HE	Twomile
C-06-017	Non-HSWA	Explosives Storage Magazine - (inactive)	Rad, Metals, HE	Twomile
C-06-018	Non-HSWA	Explosives Storage Magazine - (inactive)	Rad, Metals, HE	Twomile
C-06-021	Non-HSWA	Explosives Storage Magazine - (inactive)	Rad, Metals, HE	Twomile

Consolidation Checklist Criteria:

	Yes	No
1. *Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?*	☑	☐
2. *Is the contamination origin non-discernable?*	☑	☐
3. *Are the PRSs in the same geographic proximity?*	☑	☐
4. *Are the transport mechanisms and pathways similar?*	☑	☐
5. *Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?*	☑	☐

Consolidation Rationale:

Proposed consolidation of these sites is based on operational history, geographic proximity, transport mechanisms of similar COPCs, common human health and ecological exposure areas, and the investigation needed to assess potential contamination.

Description:

The PRSs in this consolidated unit are designated as the Eastern Aggregate of TA-6. PRS 6-003(g) is an inactive firing pad that was converted for the recrystallization of the HE known as pentaerythritol tetranitrate (PETN). PRS C-06-003 was the control building for the firing site, and C-06-007 housed a boiler for stem generation. PRSs C-06-008 through -015, C-06-017, -018, and -021 were all explosives storage magazines for the site.

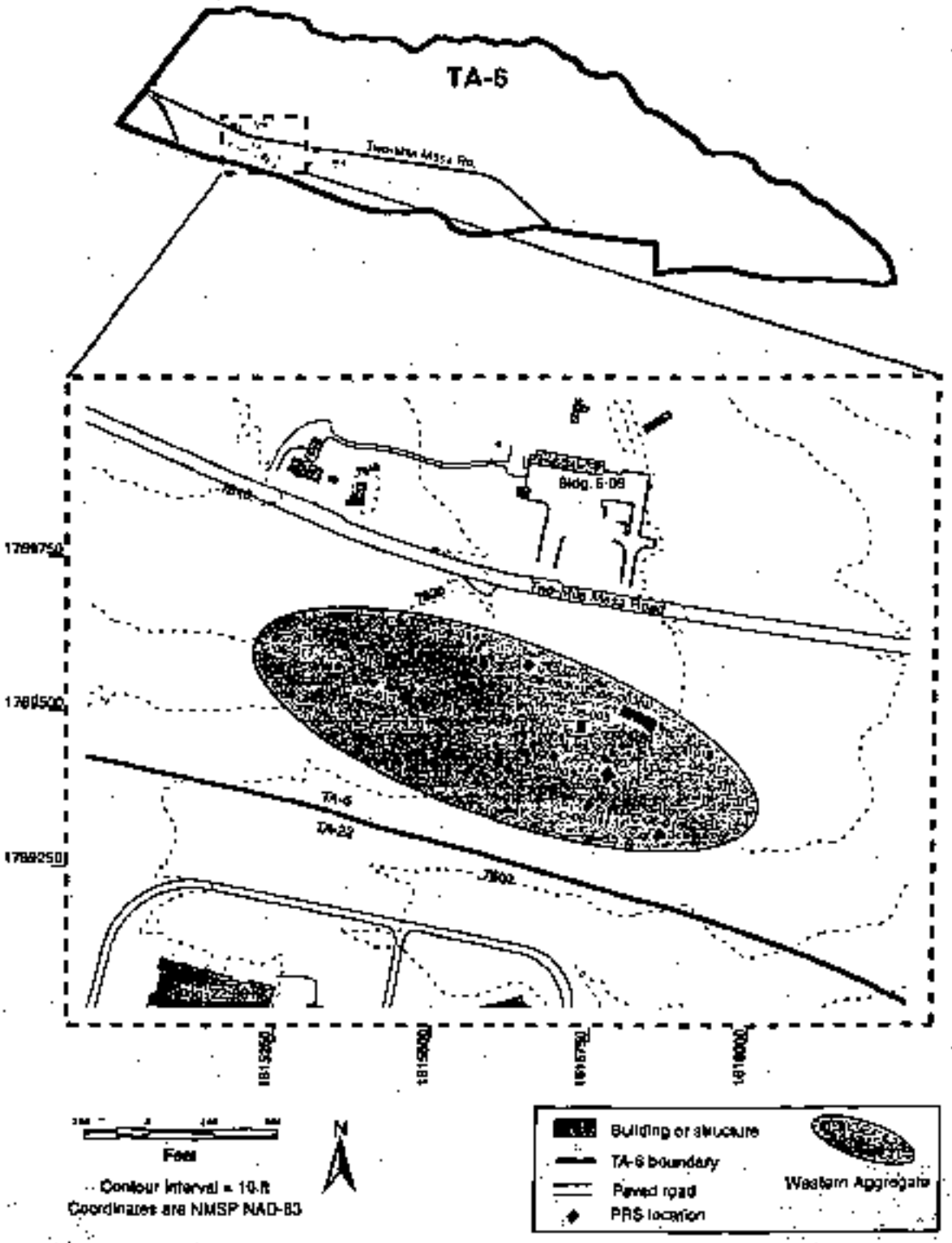
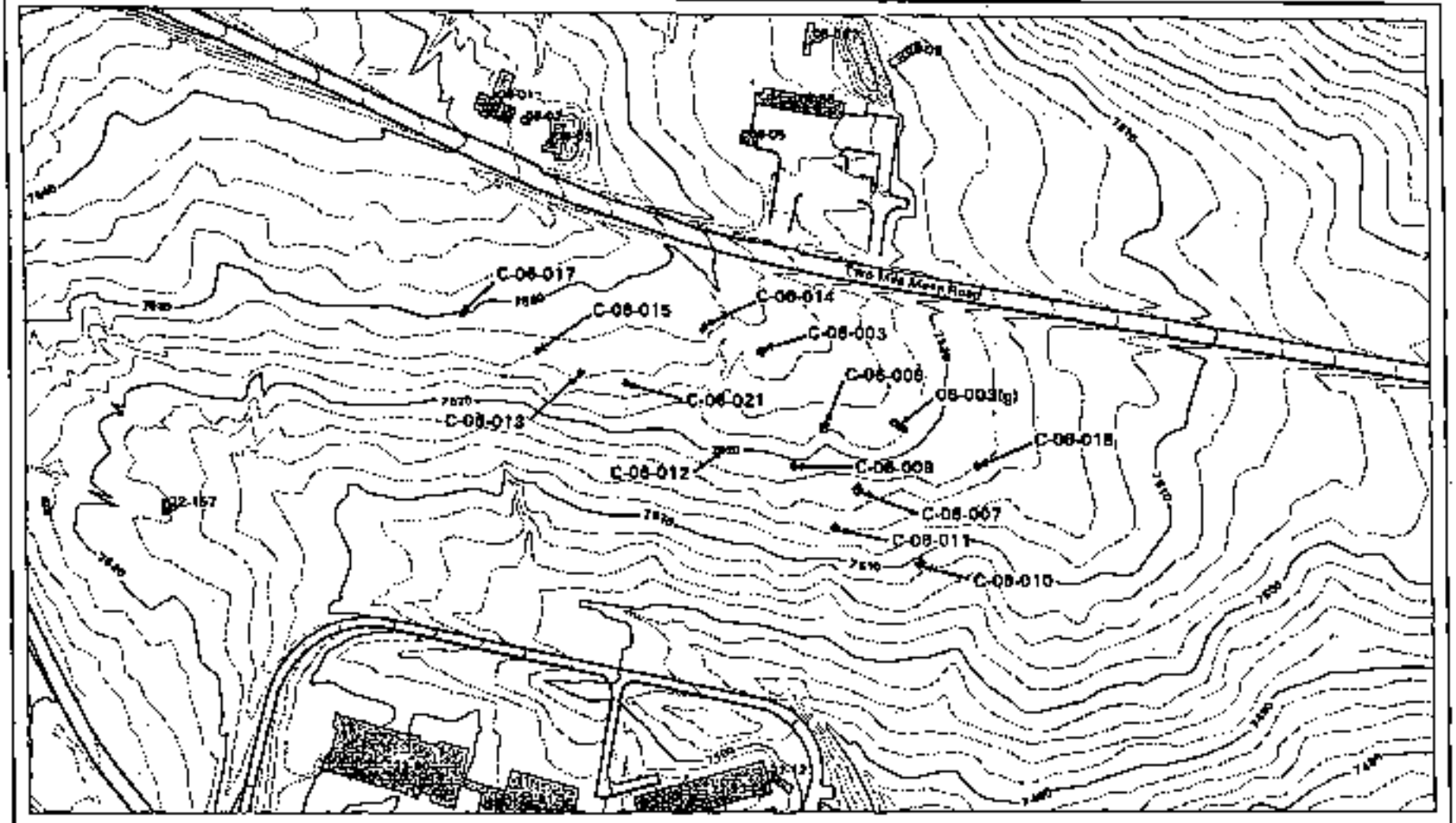


Figure 3.1-1. Engineering features in the vicinity of the Western Aggregate.



PRS Consolidation Unit 08-003(g)-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

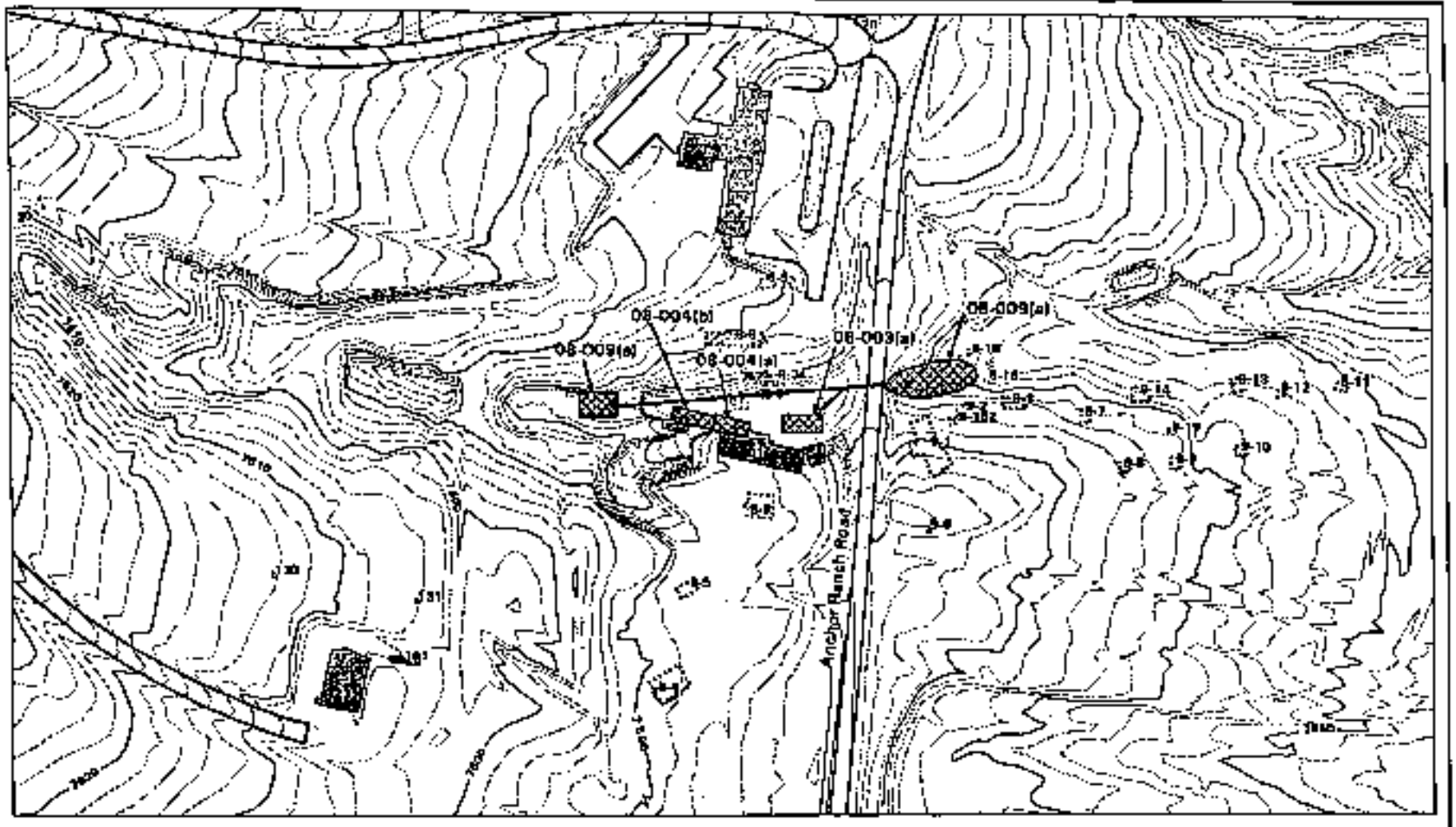
FEET

1983 North American Datum
Projection and Grid Ticks
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Maria Jones

FIMAD 01008467 18 Apr 00



PRS Consolidation Unit 08-003(a)-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Prepared by Marcus Jones

FINAID G:\08B3B 12 Jul 00

PRS Consolidation Worksheet

Site Type: Septic System - Bunker Site

Proposed PRS Number: 08-003(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
08-003(a)	HSWA	Septic tank and drain line - (inactive)	Rad, Metals, SVOCs, HE	Starmer/Upper Pajarito
08-004(a)	HSWA	Building drains and drain lines - (inactive)	Rad, Metals, SVOCs, HE	Starmer/Upper Pajarito
08-004(b)	HSWA	Drains and lines, TA-8-2 - (inactive)	Rad, Metals, SVOCs, HE	Starmer/Upper Pajarito
08-009(a)	HSWA	Storm drain and outfall, TA-8-2 - (inactive)	Rad, Metals, SVOCs, HE	Starmer/Upper Pajarito

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Proposed consolidation of these sites is based on operational history, waste streams, geographic proximity, transport mechanisms of similar COPCs (subsurface), common human health and ecological exposure areas, and the investigation needed to assess potential contamination.

Description:

PRS 8-003(a) is a former septic tank, including drain lines into and out of the tank, that served buildings TA-8-1 and -3. Activities involving photo-processing, explosives, solvents, radionuclides, and chemicals were conducted in both buildings. The outlet line from the tank tied into the sanitary sewage piping that discharged to outfall PRS 8-009(a). PRS 8-004(a) consists of former drains and drain lines in building TA-8-1 that discharged to PRS 8-003(a). PRS 8-004(b) consists of former drain lines from TA-8-2 that also discharged to septic tank TA-8-59 (PRS 8-003(a)). TA-8-2 housed a machine shop to fabricate parts made of uranium and a variety of metals. PRS 8-009(a) is a former storm drain inlet, drain line and outfall that served the abandoned bunker site. However, just before the drain line crossed under Anchor Ranch Road, the discharge line from septic tank TA-8-59 tied into the line. All structures have been removed and COPCs from all four PRSs are commingled in the subsurface.

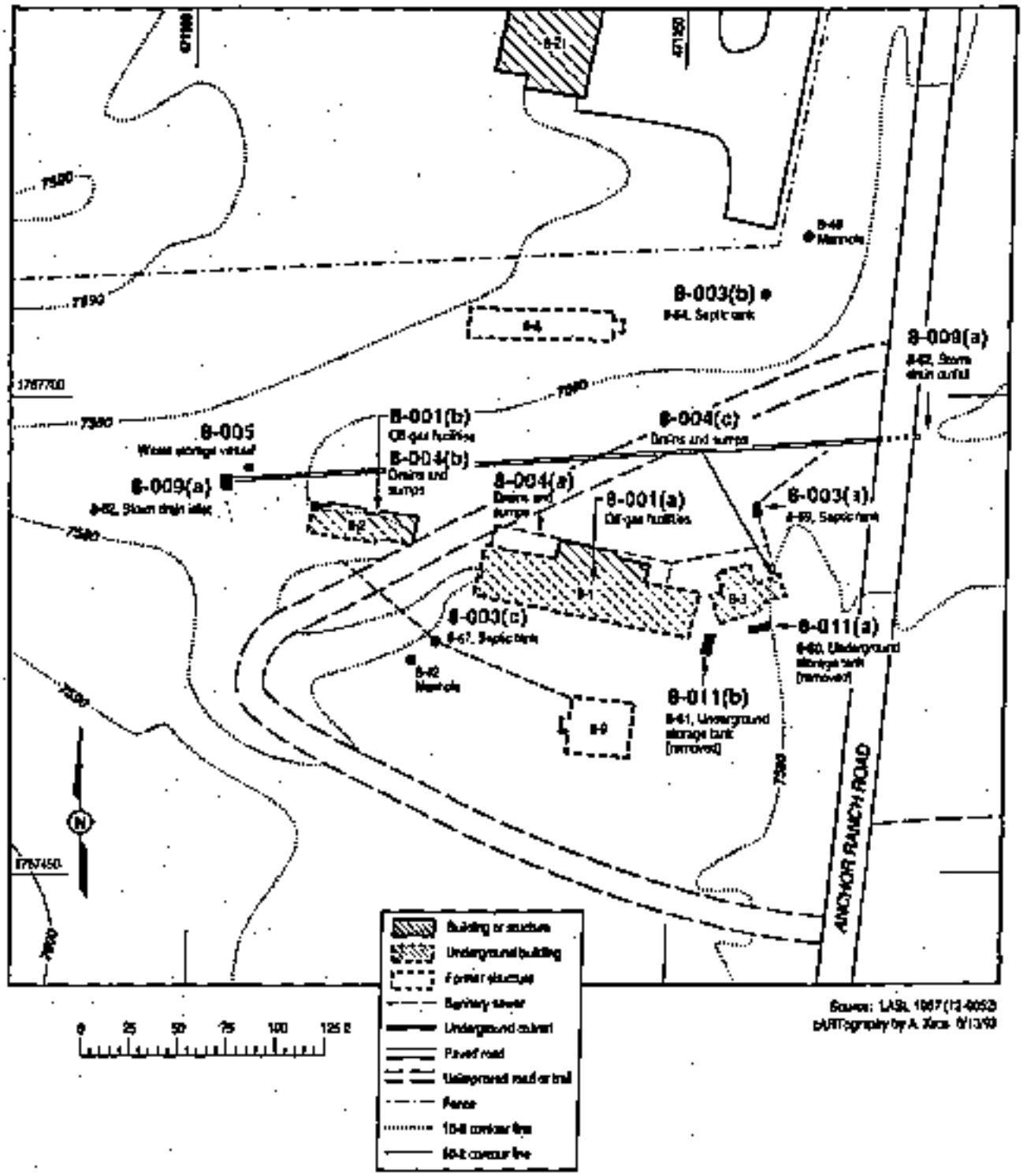


Figure 5-4. Locations of PRSs in Group 3, abandoned bunker site.

PRS Consolidation Worksheet

Site Type: Outfalls

Proposed PRS Number: 11-011(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
11-011(a)	HSWA	Outfall - (inactive)	Metals, SVOCs	S-Site (Martin)
11-011(b)	HSWA	Outfall - (inactive)	Metals, SVOCs	S-Site (Martin)

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, indistinguishable COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 11-011(a) was an NPDES-permitted outfall and drain line that received discharges from floor drains and an air conditioning unit (also referred to LANL engineering drawings as a "cooling tower") in TA-11-30A. The building housed support equipment for the vibration test facility located in TA-11-30. PRS 11-011(b) is an inactive outfall and drain lines that received discharges from floor and sink drains in TA-11-30. The outfall areas overlap and COPCs are commingled.

PRS Consolidation Worksheet

Site Type: Firing Site - R40 **Proposed PRS Number:** 15-002-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
15-002	HSWA	Disposal pit and burn site - (inactive)	Rad, Metals, HE, SVOCs	Pajarito/Fence
15-007(a)	HSWA	Material disposal area (MDA N) - (inactive)	Rad, metals, HE, SVOCs	Pajarito/Fence

Consolidation Checklist Criteria:

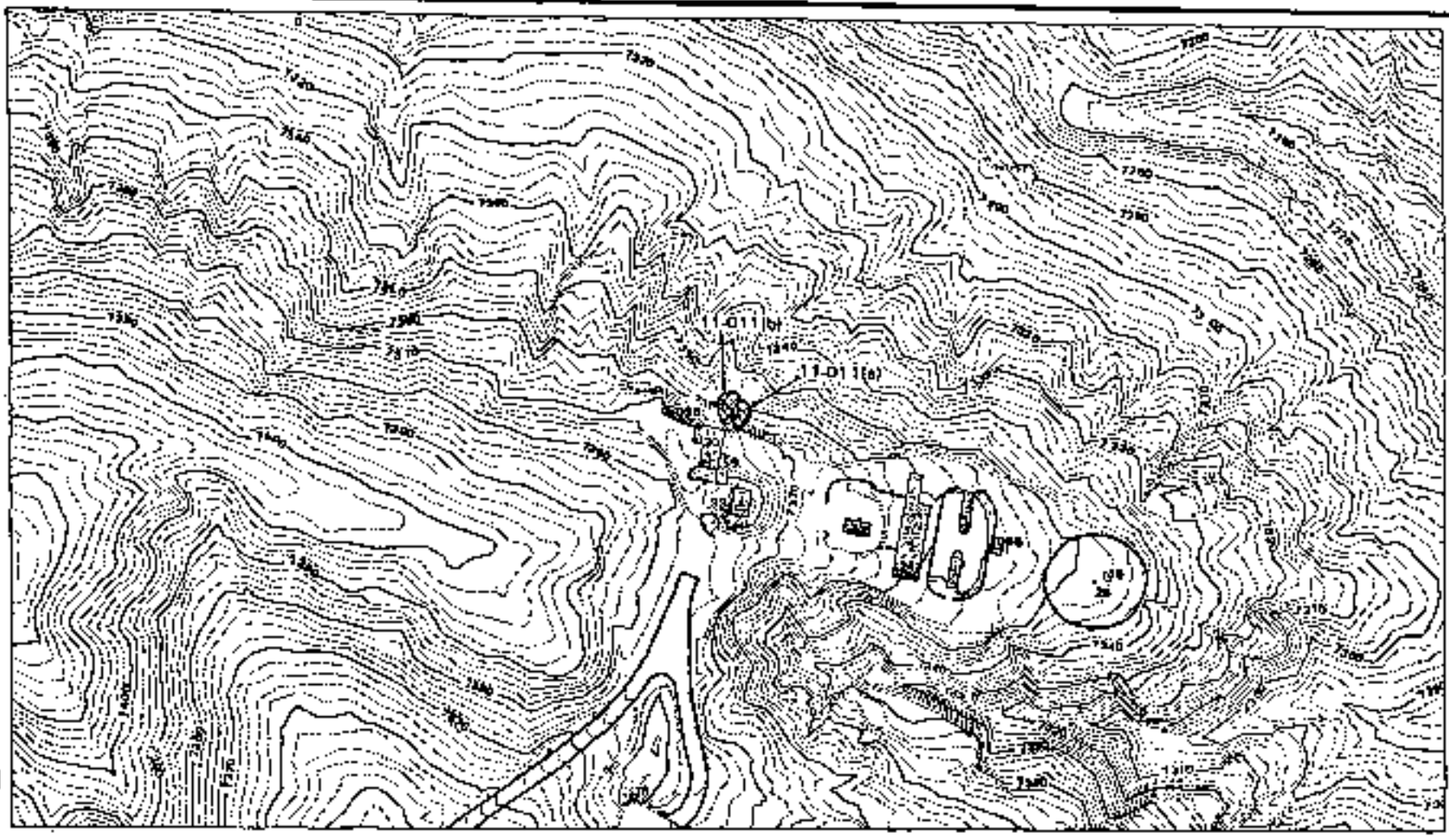
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, similar waste streams, geographical proximity, similar transport mechanisms (surface and near-surface), indistinguishable source terms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit were all associated with firing site R40. PRS 15-002 was a former disposal pit and burn site at R-40 and is located adjacent to MDA N, PRS 15-007(a). Rubble from adjacent support buildings and debris from the burn site were disposed at MDA N. Building TA-15-1 housed offices, a laboratory and shops, building TA-15-23 was used for storage and housed a laboratory, and TA-15-7 housed a control room and dark room. COPCs from the PRSs were commingled upon decommissioning.



PRS Consolidation Unit 11-011(a)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

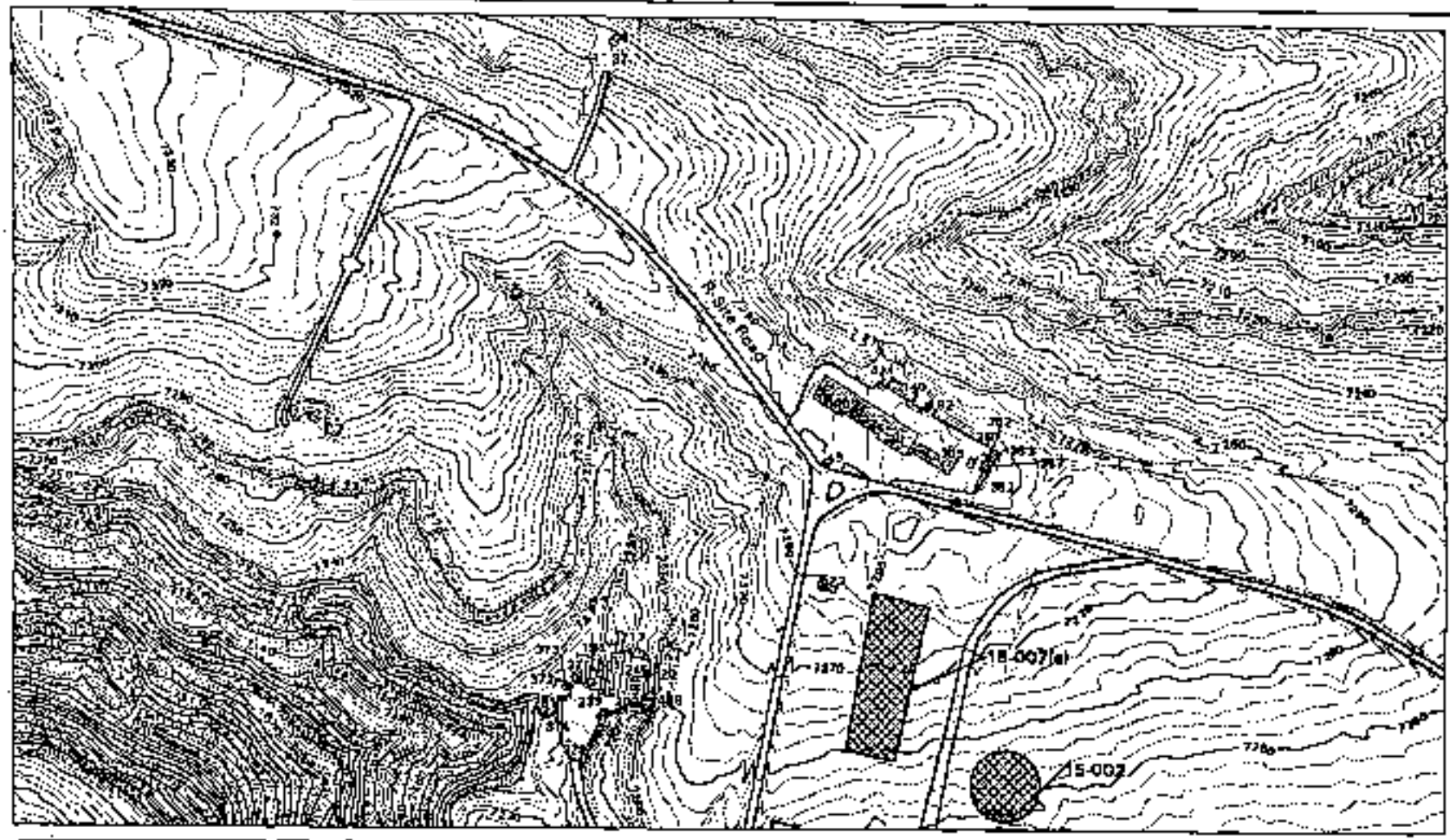
FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Wanda Jones

FIMAD G108839 12 Jul 00



PRS Consolidation Unit 15-002-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:4200

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notes: Information on this map is provisional and has not been checked for accuracy.

Produced by Kevin Jones

FIMAD 6108627 12 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site G

Proposed PRS Number: 15-004(g)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
15-004(g)	HSWA	Machine firing site - (inactive)	Rad, Metals, HE, SVOCs	Canon de Valle
15-006(c)	HSWA	Surface disposal area (inactive)	Rad, Metals, HE, SVOCs	Canon de Valle

Consolidation Checklist Criteria:

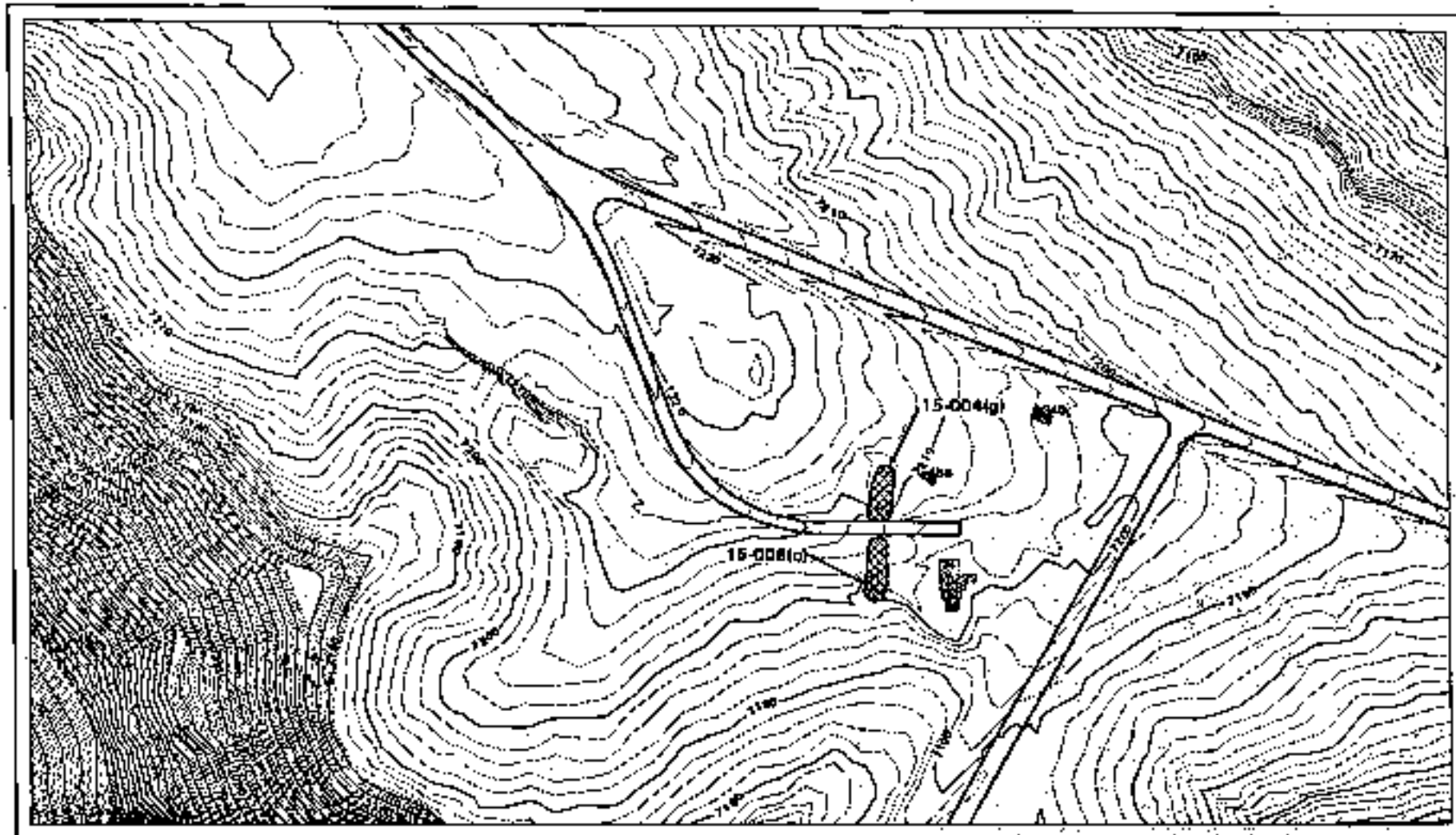
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, intermingled COPC, similar transport mechanisms, and the planned simultaneous characterization of all four sites it is proposed that the PRSs be consolidated.

Description:

This consolidate unit consists of an inactive firing site and an associated disposal area located within the blast radius of the firing site. PRS 15-004(g) is inactive firing site G and PRS 15-006(c) was the surface disposal area for demolished buildings and debris from the firing site. COPCs are commingled within the blast radius of the firing site and in the surface disposal area.



PRS Consolidation Unit 15-004(g)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Nation' information on this map is provisional and has not been checked for accuracy.

Produced by Kevin Jones

RMAD-G108928 12-Jul-00

PRS Consolidation Worksheet

Site Type: Firing Site - R45

Proposed PRS Number: 15-007(c)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
15-007(c)	HSWA	Test Shaft (Inactive)	Rad, Metals, HE	Threemile
15-007(d)	HSWA	Test Shaft (Inactive)	Rad, Metals, HE	Threemile

Consolidation Checklist Criteria:

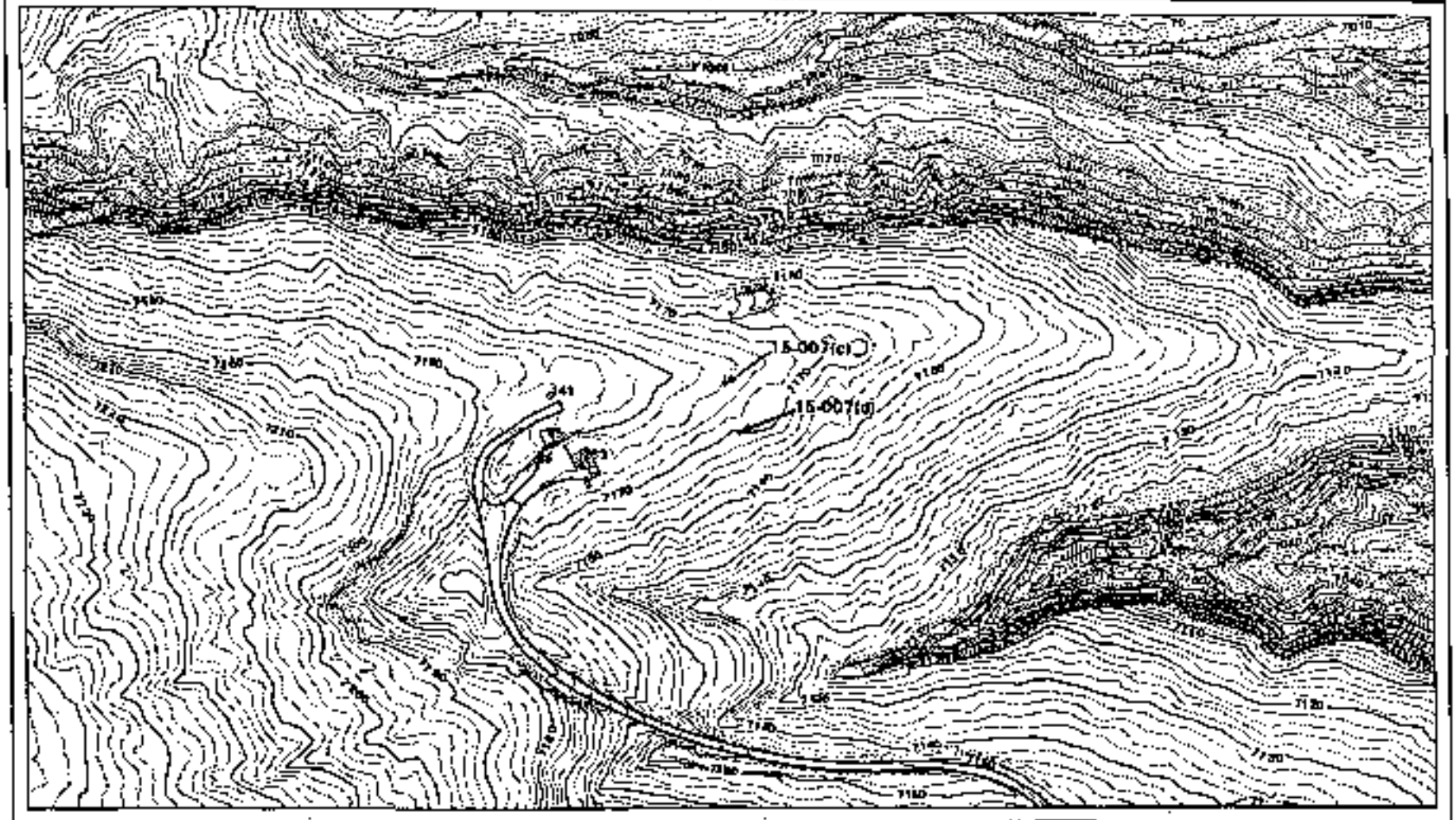
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, identical transport mechanisms (subsurface with surface contamination), similar COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

This consolidated unit consists of two inactive vertical shafts (PRSs 15-007(c) and 15-007(d)) used for one-time explosive tests at firing site R45. The shafts were approximately 130 feet deep and 8 feet in diameter. They were located 300 feet east of building TA-16-263 at firing site R-45. The tests were confined to the bottom of the shafts, which were subsequently filled and sealed with grout and concrete. Lead shot used for shielding is scattered near the surface of both shafts.



PRS Consolidation Unit 15-007(c)-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:3600

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notes: Information on this map is provisional and has not been checked for accuracy.

Produced by Merdis Jones

FNMAD 6109840 12 Jul 00

PRS Consolidation Worksheet

Site Type: Former Structures - Hollow

Proposed PRS Number: 15-009(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
15-009(a)	HSWA	Septic system (inactive)	Rad, Metals, HE, SVOCs, VOCs	Canon de Valle
15-011(a)	HSWA	Sump - (inactive)	Rad, Metals, HE, SVOCs, VOCs	Canon de Valle
15-011(b)	HSWA	Dry well - (inactive)	Rad, Metals, HE, SVOCs, VOCs	Canon de Valle
15-011(c)	HSWA	Outfall/Drainage Area - (inactive)	Rad, Metals, HE, SVOCs, VOCs	Canon de Valle
15-014(i)	HSWA	Outfall - (inactive)	Rad, Metals, HE, SVOCs, VOCs	Canon de Valle
15-014(j)	HSWA	Outfall - (inactive)	Rad, Metals, HE, SVOCs, VOCs	Canon de Valle
15-014(k)	HSWA	Outfall - (inactive)	Rad, Metals, HE, SVOCs, VOCs	Canon de Valle

Consolidation Checklist Criteria:

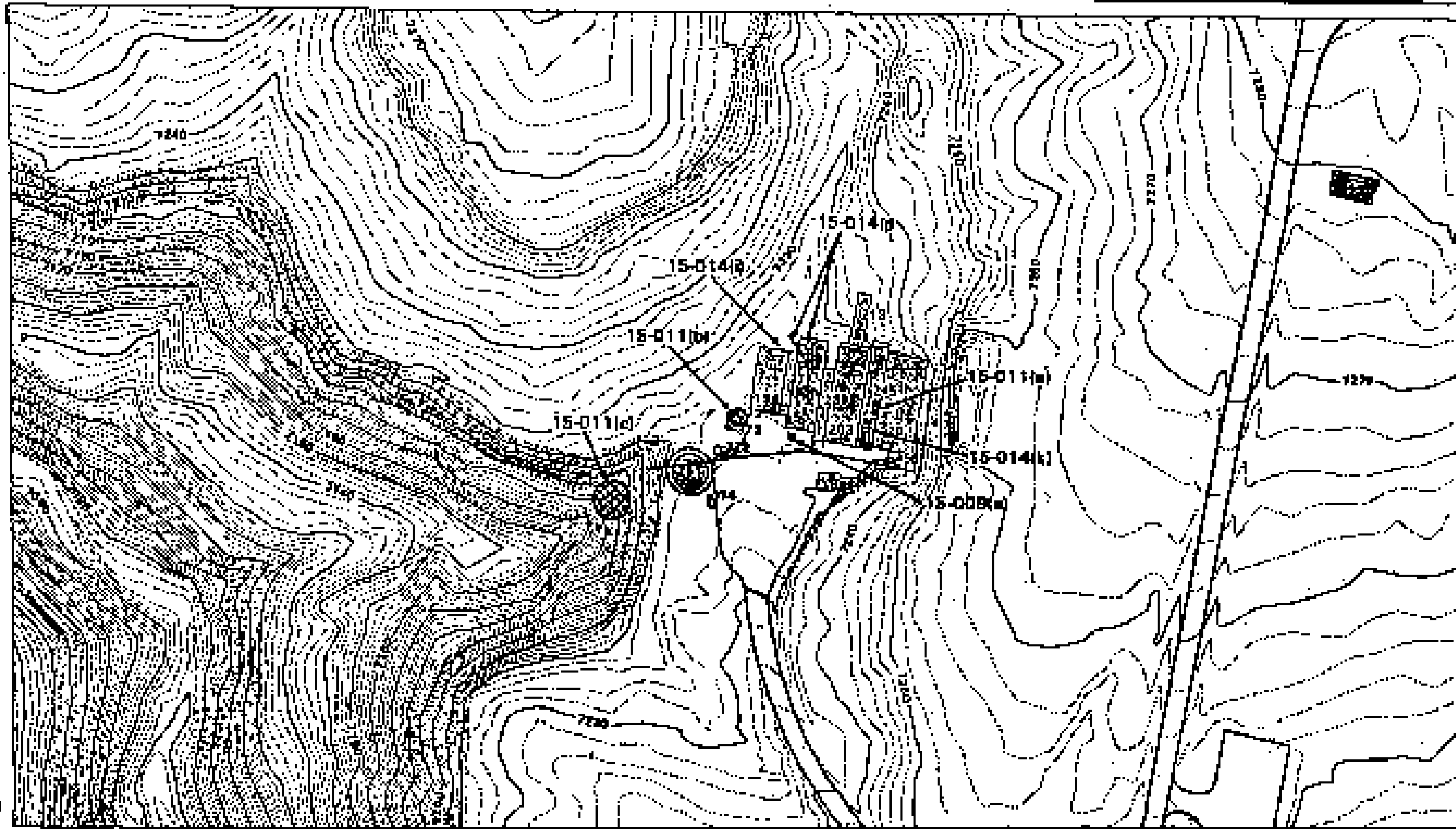
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, commingled waste streams, geographical proximity, interrelated transport mechanisms, similar COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

This consolidated unit consists of former assembly buildings, laboratories, shops, and associated septic systems, drain lines and outfalls that supported many of the TA-15 firing sites. PRS 15-009(a) is the inactive septic system including drain lines that served buildings located in the area of R Site known as The Hollow. PRS 15-011(a) consists of concrete trench drains not a sump, in building TA-15-20 that discharged to PRS 15-011(c). PRS 15-011(b) was a sump and drain line that served building TA-15-194 and an adjacent dry well that also discharged to PRS15-011(c). PRS 15-011(c) is the drainage where all the outfalls from operations within buildings in The Hollow combined to flow to Canon de Valle. PRS 15-014(i), is the former seepage pit, drain line and outfall area from drains in building TA-15-194. PRS 15-014(j) consists of the drain lines and outfall from building TA-15-203 and PRS 15-014(k) consists of the drain lines from building TA-15-20 that also discharged to manholes in TA-15-150 and -151, that were connected to PRS 15-011(a), which in turn drained to PRS 15-011(c). COPCs from these PRSs are commingled in the outfall area of PRS 15-011(c).



PRS Consolidation Unit 15-008(a)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:1800

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by [illegible]

FIMAD G109841 13 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 15-009(f)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
15-009(f)	HSWA	Septic tank/leach field - (Inactive)	Uranium, beryllium, lead, HE	Canon de Valle
15-009(k)	HSWA	Septic Tank/leach field - (Inactive)	Uranium, beryllium, lead, HE	Canon de Valle

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical, similar transport mechanisms, proximity, intermingled COPCs, and the planned simultaneous characterization of all three sites it is proposed that the PRSs be consolidated.

Description:

The consolidated PRS consists of two septic systems (PRSs 15-009(f) and 15-009(k)) including drain lines and leachfields that served former support buildings of the two firing former firing sites at R-103. These firing sites were small and only active from 1946 through 1952. The sites were subsequently demolished and the land regraded in 1967 spreading COPCs so that they are not discernable between PRSs.

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 15-014(a)-00

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Watershed Aggregate*
15-014(a)	HSWA	Outfall and drain lines - (inactive)	Uranium, beryllium, lead, HE	Canon de Valle
15-014(b)	HSWA	Outfall and drain lines - (inactive)	Uranium, beryllium, lead, HE	Canon de Valle

Consolidation Checklist Criteria:

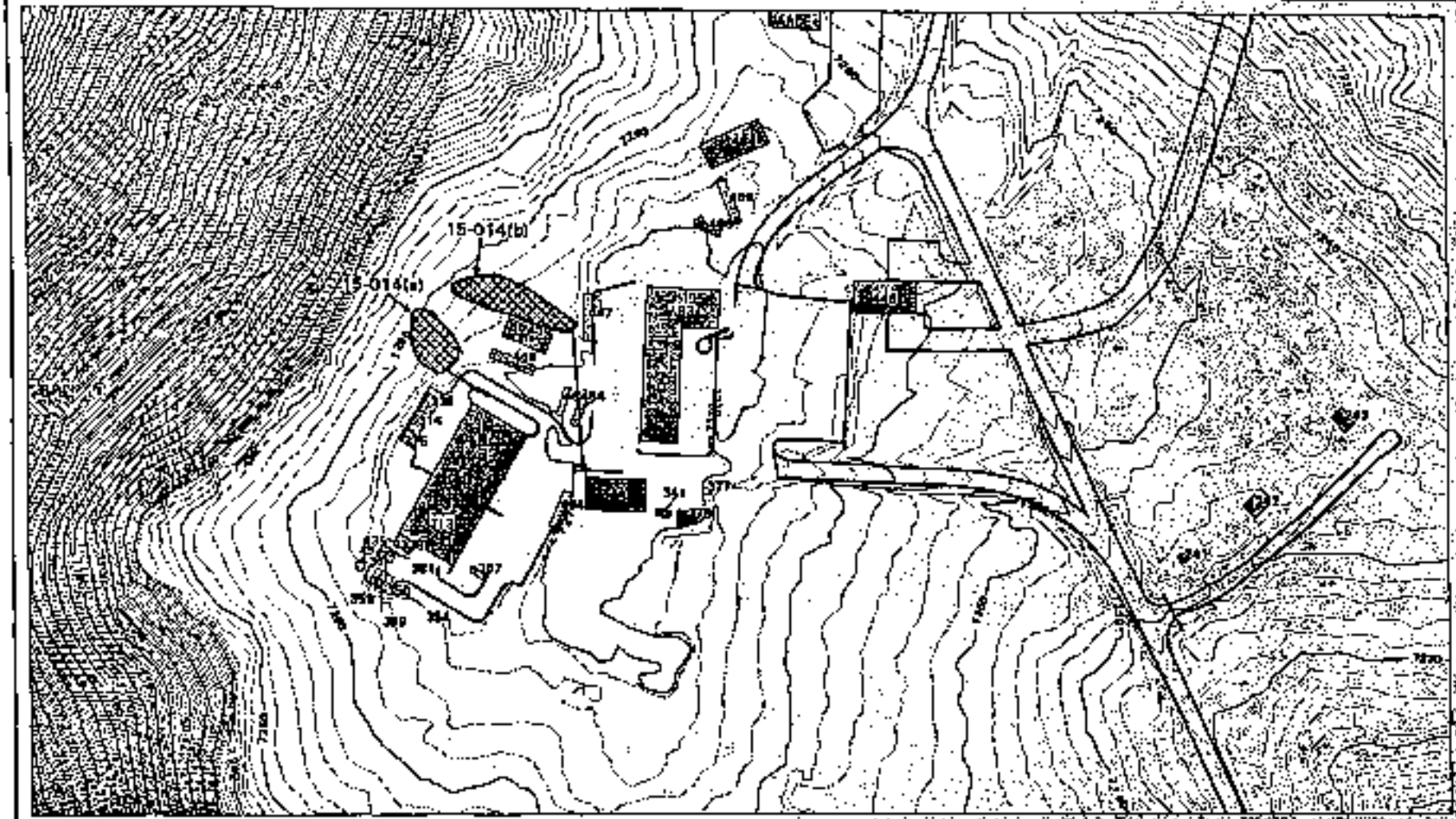
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical, similar transport mechanisms, proximity, intermingled COPCs, and the planned simultaneous characterization of all three sites it is proposed that the PRSs be consolidated.

Description:

The consolidated PRS consists of outfalls and drain lines from support building TA-15-183 for the two former firing sites R-183. These sites were among the first firing sites at the Laboratory that were used to test explosives from 1945 until 1953. These firing sites were small and only active from 1945 through 1952. The sites were subsequently demolished and the land regraded in 1967 spreading COPCs so that they are not discernable between PRSs.



PRS Consolidation Unit 15-004(b)-99

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Tiling:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provided and has not been checked for accuracy.

Prepared by Marcia Jones

FIMAD G1068929 12 Jul 00

PRS Consolidation Worksheet

Site Type: Septic System - TA-16-370 **Proposed PRS Number:** 16-006(c)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
16-006(c)	HSWA	Septic system - (inactive)	Metals, HE, SVOCs, VOCs	Upper Water
16-026(a)	HSWA	Outfall - (inactive)	Metals, HE, SVOCs, VOCs	Upper Water

Consolidation Checklist Criteria:

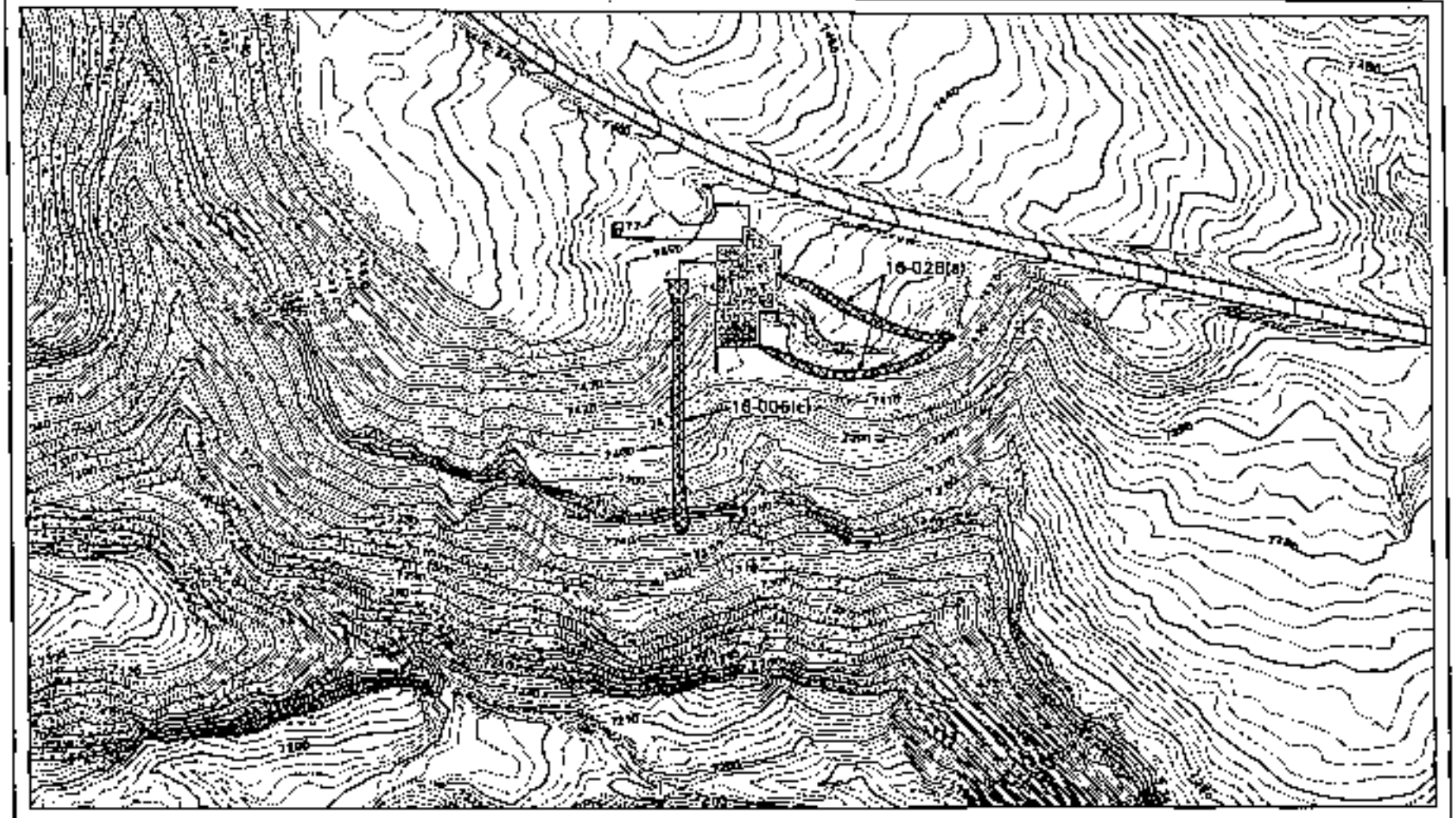
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history (TA-16-370), waste streams (primarily residual HE, metals, barium, and SVOCs), similar transport mechanisms, geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description:

PRS 16-006(c) is a former septic system, including the tank, drain lines, drain field, and outfall that served TA-16-370. The building housed barium nitrate and metal forming operations. The system received discharges from floor drains, water closets and lavatories. PRS 16-026(a) is potential soil contamination associated with two outfalls and associated drain lines from TA-16-370. One outfall received discharge from roof drains and a steam condensate pit, and the other received discharges from PRS 16-006(c). These PRS are all related to the same building (TA-16-370), the outfall areas overlap and COPCs are commingled.



PRS Consolidation Unit 16-006(c)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Mark Jones

RMAD 0108843 13 Jul 00

PRS Consolidation Worksheet

Site Type: Miscellaneous

Proposed PRS Number: 16-010(h)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
16-005(g)	HSWA	Former HE Filter Bed, 16-393	HE, Uranium, Barium	Canon de Valle
16-010(h)	HSWA	Decommissioned HE Basket Wash Facility, 16-390	HE, Uranium, Barium	Canon de Valle
16-010(i)	HSWA	Former HE Filter Bed/Burn Pad, 16-392	HE, Uranium, Barium	Canon de Valle
16-010(j)	HSWA	Former HE Filter Bed/Burn Pad, added Y00	HE, Uranium, Barium	Canon de Valle
16-010(k)	HSWA	Former HE Wastewater Steel Trough, 16-1129	HE, Uranium, Barium	Canon de Valle
16-010(l)	HSWA	Former HE Wastewater Steel Trough, 16-1134	HE, Uranium, Barium	Canon de Valle
16-010(m)	HSWA	Former HE Wastewater Steel Trough, 16-1135	HE, Uranium, Barium	Canon de Valle
16-010(n)	HSWA	Former HE Wastewater Steel Trough, 16-1136	HE, Uranium, Barium	Canon de Valle

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

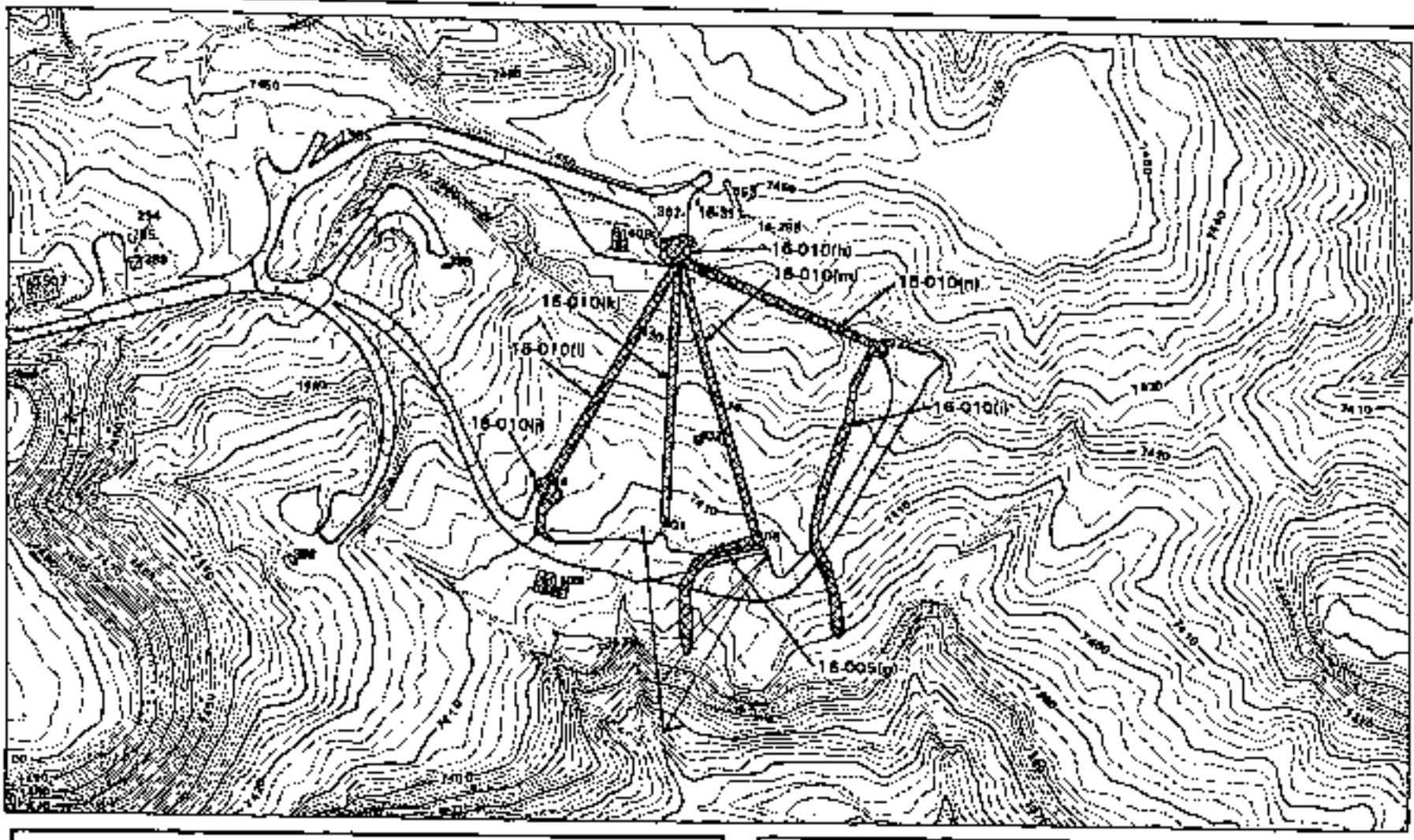
Based on the operational history of the burn ground, the geographical proximity of all the associated PRSs and undistinguishable source terms, similar transport mechanisms (surface and shallow subsurface) of common contaminants, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRSs located at the Technical Area (TA)-16 Burn Ground have been consolidated into one site, consolidated PRS 16-010(h)-99. These PRSs are associated with the basket wash facility (TA-16-390), PRS 16-010(h), and are identified as PRSs 16-010(l, j, k, l, m, and n) and 16-005(g). The basket wash facility operated from 1951 to 1965 and was used to clean filters from HE pumps. HE-contaminated waste water was then diverted into open steel troughs that discharged into filter beds. The filter beds consisted of concrete structures that were lined with bricks and contained gravel and sand. Filtered wash water collected within perforated piping along the bottom of the concrete structure and gravity-drained through a pipe to adjacent outfall areas. Filtered material/sludge that dried atop the sand and gravel filter beds was burned, collected, and taken to a scrap HE burning pit where it was re-burned. The wash system initially consisted of the TA-16-390 basket wash facility (PRS 16-010(h)), three open steel troughs and three filter beds. The three steel troughs, designated as TA-16-1134, TA-16-1135, and TA-16-1136 (PRSs 16-010(l), 16-010(m), and 16-010(n), respectively), discharged HE-contaminated wash water into filter beds TA-16-394, TA-16-393, and TA-16-392, respectively. Filter beds TA-16-394, TA-16-393, and TA-16-392 are also identified as PRSs 16-010(j), 16-005(g), and 16-010(i), respectively.

In 1961, an additional open steel trough designated as TA-16-1129 was added to the wash system; it discharged to filter vessel TA-16-401. In 1965, filter bed TA-16-393 (PRS 16-005(g)) was removed, disposed, and replaced by filter vessel TA-16-406 (at the same location as filter bed TA-16-393). The basket wash facility was decommissioned in 1965. In October 1990, filter vessels TA-16-401 and TA-16-406 along with burn tray TA-16-394 (which was placed on top of inactive filter bed TA-16-394 (PRS 16-010(j)), were included as hazardous waste treatment structures in the "Los Alamos National Laboratory General Part A Permit Application." Additional information regarding the filter vessels and the burn tray, including operations and waste management practices, is found in the Part B Permit Application for TA-16. Filter vessels TA-16-401 and TA-16-406 are also identified as PRSs 16-010(e and f), respectively.

These individual PRSs have been consolidated into one because they are located in the same geographic proximity, related by a single process/system, and have similar types of contamination exhibiting similar transport mechanisms and pathways. Additionally, the potential contamination present at each of the individual sites may also be present within the area encompassing all of these sites. The consolidated PRS will be investigated, characterized, assessed (including human health and ecological assessments), and potentially remediated as part of future corrective action activities at the TA-16 Burn ground.



PRS Consolidation Unit 16-010(h)-99

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

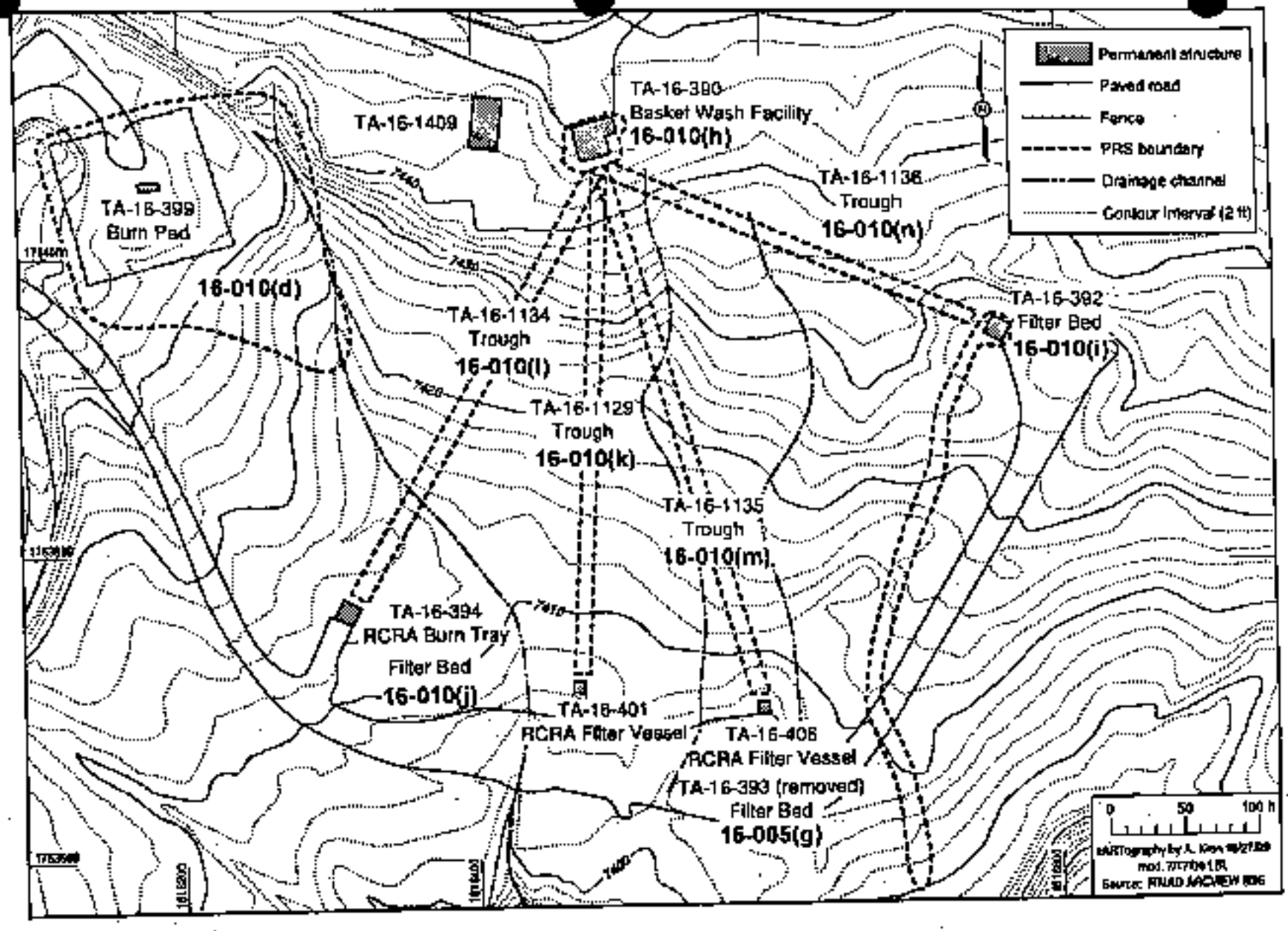
FEET

1927 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notes: Information on this map is preliminary and has not been checked for accuracy.

Produced by Mapla Jones

PMAD G106846 16 Jul 00


Permanent structure
Paved road
Fence
PRS boundary
Drainage channel
Contour interval (2 ft)
TA-16-1409
TA-16-390
Basket Wash Facility
16-010(h)
TA-16-1136
Trough
16-010(n)
TA-16-399
Burn Pad
16-010(d)
TA-16-1134
Trough
16-010(l)
TA-16-392
Filter Bed
16-010(i)
TA-16-1129
Trough
16-010(k)
TA-16-1135
Trough
16-010(m)
TA-16-394
RCRA Burn Tray
Filter Bed
16-010(j)
TA-16-401
RCRA Filter Vessel
TA-16-406
RCRA Filter Vessel
TA-16-393 (removed)
Filter Bed
16-005(g)
0
50
100 ft

PRS Consolidation Worksheet

Site Type: Drain Lines and Outfalls

Proposed PRS Number: 16-026(b2)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
16-026(b2)	HSWA	Outfall and Drain Line, TA-16-202 - (inactive)	Metals, SVOCs, VOCs, HE	Upper Water
16-028(d)	HSWA	Outfall and Drain line, TA-16-202 - (inactive)	Metals, SVOCs, VOCs, HE	Upper Water

Consolidation Checklist Criteria:

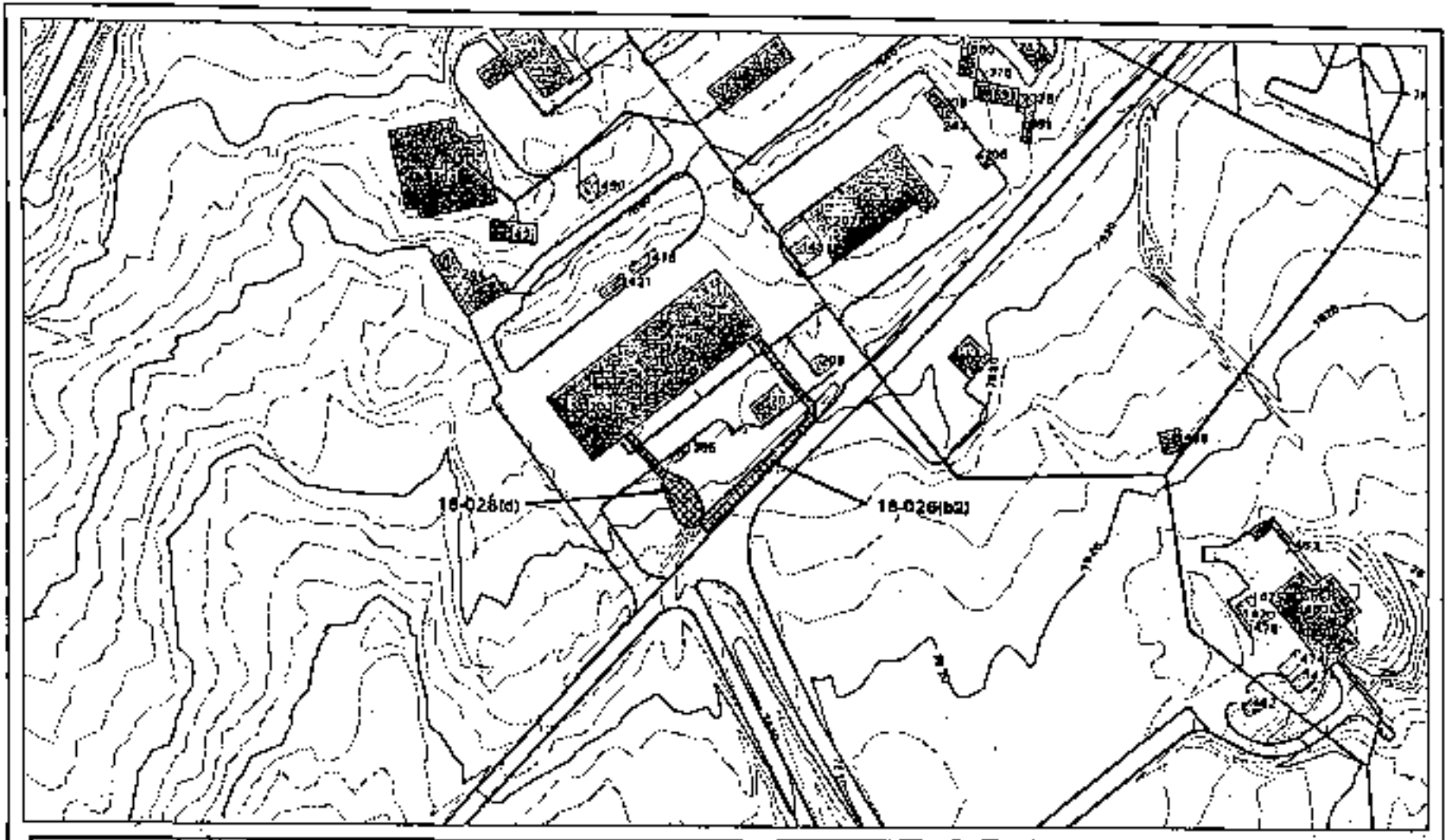
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history (of TA-16-202), waste streams (primarily residual HE, metals, SVOCs, VOCs), transport mechanisms (primarily surface and near surface contamination with some potential subsurface contamination), geographical proximity, common human health and ecological exposure areas, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description:

PRS 16-026(b2) is an overflow drain and associated drain line and outfall from a former oil interceptor in a decommissioned machine shop in building TA-16-202. PRS 16-028(d) is a former NPDES-permitted outfall and drain lines which previously received discharges from drains throughout TA-16-202. The outfall currently receives only storm water runoff. The outfall areas overlap and COPCs are commingled.



PRS Consolidation Unit 18-026(b2)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notes: Information on this map is preliminary and has not been checked for accuracy.

Produced by Mimi Jones

PMAD G108964 13 Jul 00

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 16-029(g)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
16-021(a)	HSWA	Systematic release site - (inactive) added FY00	Metals, SVOCs, VOCs, HE	Upper Water
16-029(e)	HSWA	One HE Sump and Drain Line - (active)	Rad, SVOCs, VOCs, HE	Upper Water
16-029(g)	HSWA	Outfall from HE Sump and Drain Line - (active)	Rad, SVOCs, VOCs, HE	Upper Water

Consolidation Checklist Criteria:

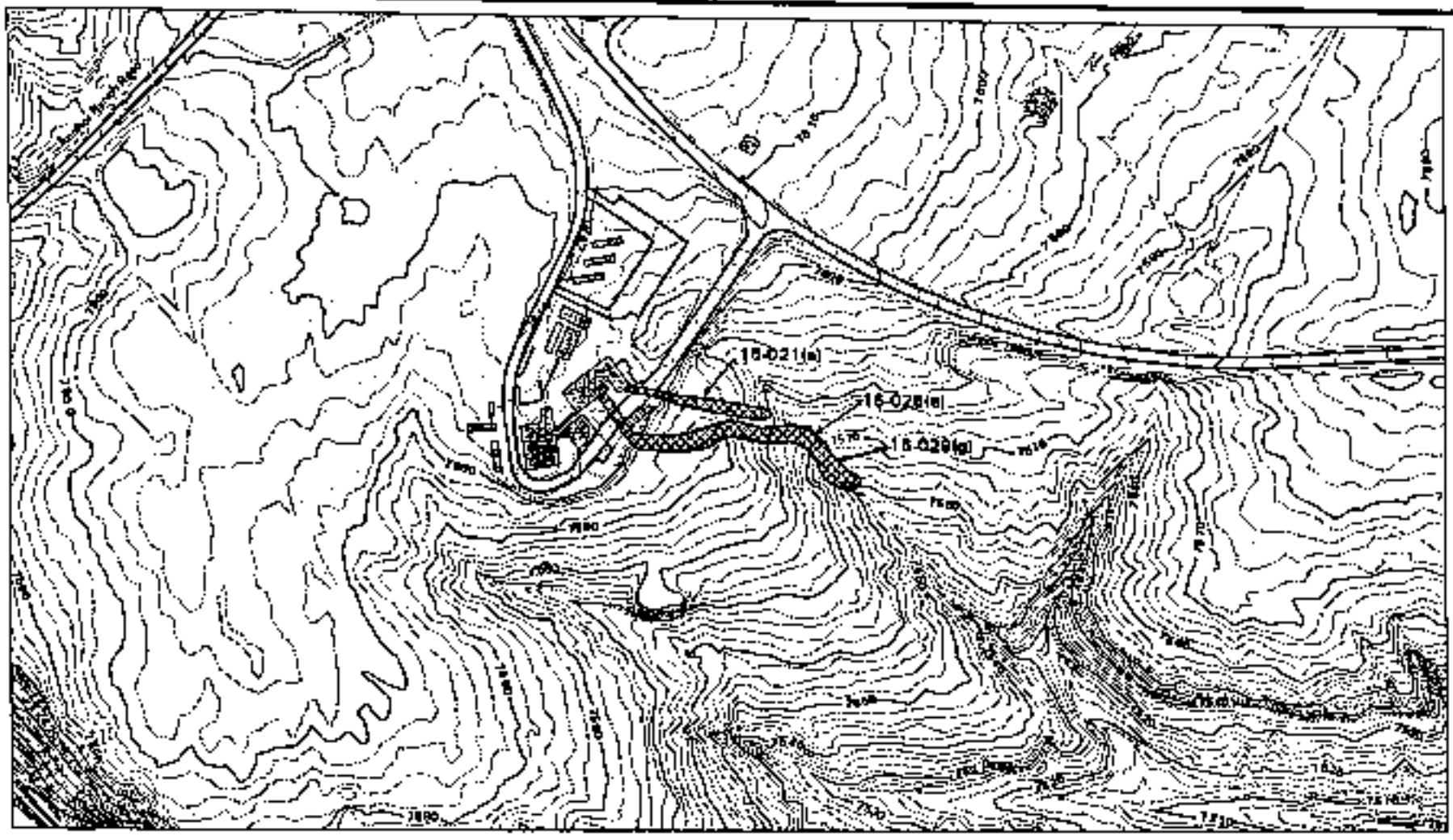
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms (surface, subsurface and sediments), and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The consolidated PRS consists of an HE sump, drain line and outfall associated with TA-16-450, a materials testing facility. TA-16-450 was constructed in the early 1950s as a chemical engineering laboratory for explosives; however, it was never used as such and HE was never used in the building. PRS 16-029(e), the sump that receives wash-down water from the floor trenches in Room 101 which is discharged to the NPDES-permitted outfall (EPA 04A091) designated as PRS 16-029(g). PRS 16-021(a), added to this consolidated PRS in FY00, is an area where metals are suspected to have been released to soils and a stream channel from similar processes in the same building (TA-16-450). This area of potential contamination overlaps with PRS 16-029(g) and COPCs are commingled.



PRS Consolidation Unit 16-029(g)-99

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:3000

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Merrie Jones

FIMAD 3108477 18 Apr 00

PRS Consolidation Worksheet

Site Type: Former Structures - 40s Line **Proposed PRS Number:** 16-029(z)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
16-005(c)	HSWA	Former septic system - (inactive) added FY00	Metals, HE	Upper Water
16-011	Non-HSWA	Incinerator - (inactive)	Metals, HE, barium, SVOCs	Upper Water
16-023(b)	Non-HSWA	Former Incinerator Cage	Metals, HE, barium, SVOCs	Upper Water
16-025(p)	Non-HSWA	Former Raw HE Inspection Room	HE and barium	Upper Water
16-025(q)	HSWA	Former HEX-ray Examination Room	Metals, HE, barium cyanide	Upper Water
16-025(r)	HSWA	Former HE rathouse	Metals, HE, barium	Upper Water
16-025(s)	HSWA	Former Radiography Bldg.	Rad, Metals, HE, barium	Upper Water
16-025(u)	HSWA	Former HE Machining Room	Metals, HE, barium	Upper Water
16-025(v)	HSWA	Former HE Machining and Casting Room	Metals, HE, barium	Upper Water
16-026(w)	HSWA	Former Outfall from Photography Lab	Metals, SVOCs, VOCs, HE, barium, cyanide	Upper Water
16-029(z)	HSWA	Former Sumps and Drain Line	Metals, SVOCs, VOCs, HE, cyanide	Upper Water
16-032(a)	HSWA	Former Secondary Pumps, Drain Line and Outfall	Metals, SVOCs, VOCs, HE, barium, cyanide	Upper Water
16-034(l)	HSWA	Former Equipment Bldg.	Metals, HE, barium	Upper Water
16-034(p)	HSWA	Former Trash Incinerator	Metals, HE SVOCs, barium	Upper Water

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history (40s-Line), waste streams (primarily residual HE, metals, barium, and SVOCs), transport mechanisms (primarily surface and near surface contamination with some potential subsurface contamination), geographical proximity, common human health and ecological exposure areas, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description:

The consolidated PRS encompasses an area which is the location of the footprints of former HE process buildings, three former sump, drain line, and outfall systems associated with the 40s-Line of HE process buildings, three former trash incinerators also associate with the 40s-Line, one former equipment building, and one former radium source building. All of the former structures are related to and located along or in close proximity to the 40s-Line of HE process buildings. The 40s-Line contained several HE production facilities in a single line of buildings that were connected by enclosed walkways. PRS 16-025(p), (TA-16-44) was used for physical inspection and sifting of raw HE materials; PRS 16-025(q), (TA-16-45) housed an x-ray facility for examination of HE lenses; and PRS 16-025(r), (TA-16-46) was a rat house used for temporary storage of HE products awaiting radiography in TA-16-45, and was separate from the process buildings. PRS 16-025(u) (TA-16-42) housed HE casting operations; and PRS 16-025(v), (TA-16-43) housed experimental HE casting and/or machining operations. All of these buildings were of wood construction, with wooden floors on pilars. Each of the buildings had floor troughs that discharged to sumps, that with the exception of TA-16-46, discharged to a common outfall. PRS 16-026(w) consisted of a drain line and outfall from the dark room at TA-16-45. PRS 16-029(z) includes the sumps that were previously located in the former HE processing buildings (TA-16-42, -43, -44, and -45. PRS 16-032(a) includes the secondary sumps for these buildings and the common drain line linking them all. PRSs 16-011, -023(b), and -034(p) (TA-16-412, -403, and -41, respectively) were the locations of incinerators used to burn paper and cloth that may have been contaminated with low levels of HE. All three incinerators were located with the 40s-Line. PRS 16-034(l) is the former location of an equipment storage building (TA-16-47). The structure may have stored HE or HE-contaminated materials and was intentionally burned down in early 1990. PRS 16-025(s) (TA-16-48) was a radium source storage building along the 40s-Line. PRS 16-005(c) was a septic system, including drain lines, that served TA-16-[illegible] The building contained offices and lavatories.

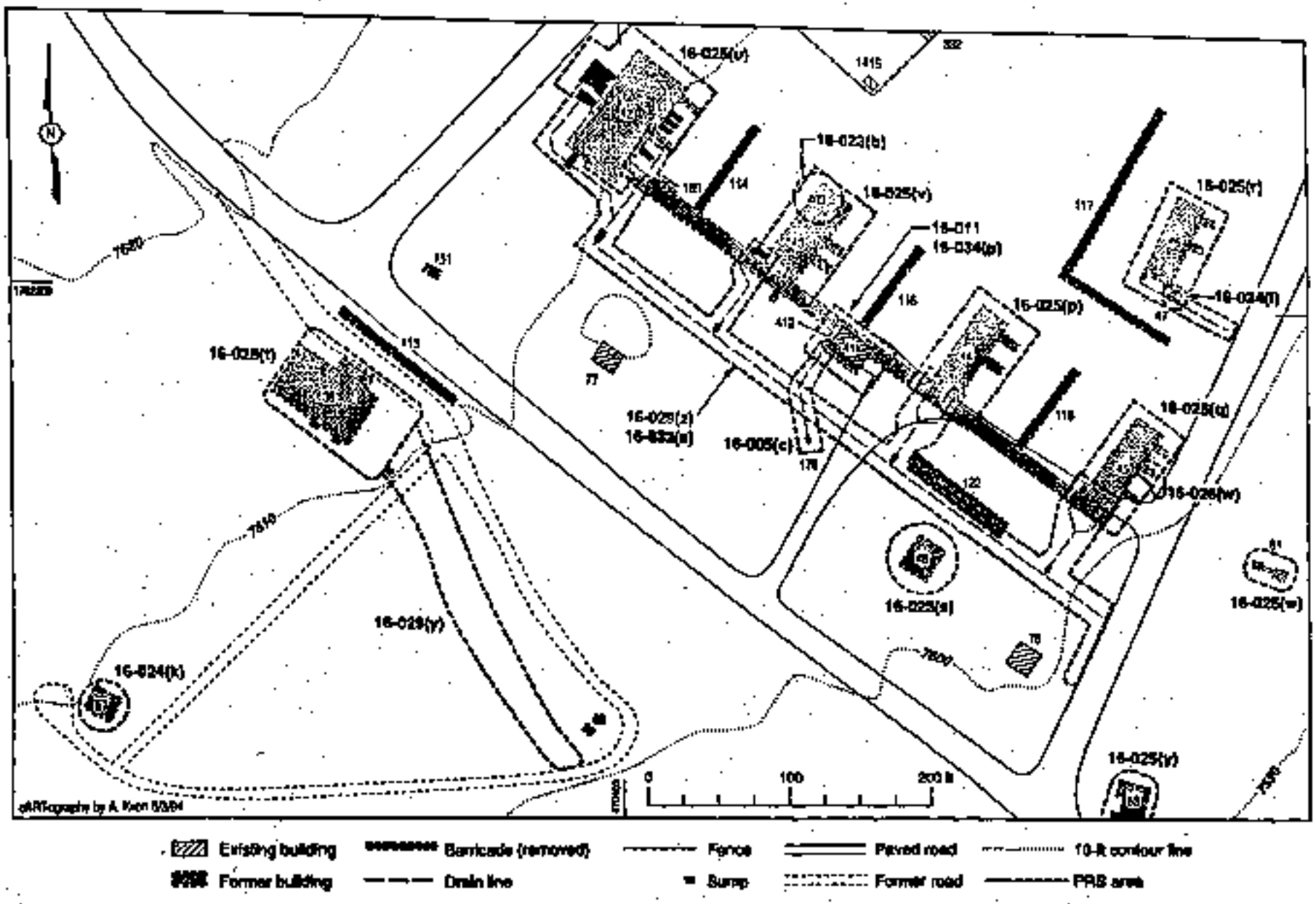


Fig. 5-75. Locations of PRSs at GMX-3 south.

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 16-034(b)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
16-005(j)	HSWA	HE Septic System - (Inactive)	Rad, Metals, SVOCs, cyanide	Cañon de Valle
16-005(m)	HSWA	HE Sump, Drain Line and Outfall - (Inactive)	Rad, Metals, SVOCs, cyanide	Cañon de Valle
16-025(m)	HSWA	Soil Contamination - added FY00	Rad, Metals, SVOCs	Cañon de Valle
16-025(n)	HSWA	Former Source Storage Hutment, added FY00	Rad, Metals	Cañon de Valle
16-025(o)	HSWA	Former Source Storage Hutment, added FY00	Rad, Metals	Cañon de Valle
16-034(b)	HSWA	Former HE X-ray Radiography Building	Rad, Metals, SVOCs, HE, cyanide	Cañon de Valle
16-034(c)	HSWA	Former HE Warehouse	Rad, Metals, SVOCs, HE, cyanide	Cañon de Valle
16-034(d)	HSWA	Former HE Machine Shop	Metals, SVOCs, HE	Cañon de Valle
16-034(e)	HSWA	Former HE Storage Building	He, barium	Cañon de Valle
16-034(f)	HSWA	Former HE Laboratory	Rad, Metals, SVOCs, VOCs, HE	Cañon de Valle

Consolidation Checklist Criteria:

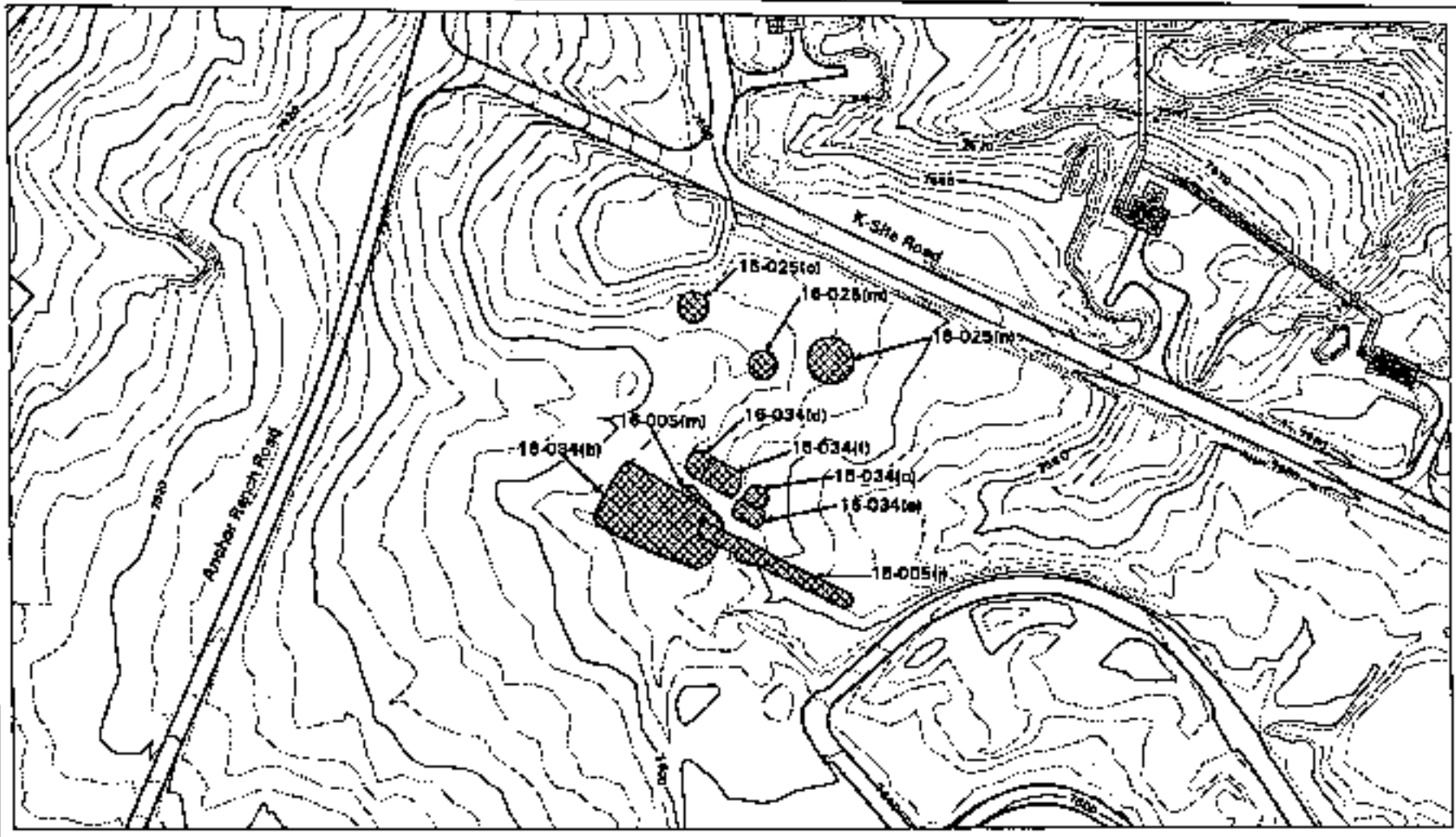
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative affect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history of the T-Site waste streams (primarily residual HE, metals, barium, radionuclides, VOCs, and SVOCs), transport mechanisms (primarily surface and near surface contamination with some potential subsurface contamination), geographical proximity, common human health and ecological exposure areas, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description:

The consolidated PRS encompasses an area which was formerly the location of the T-Site (TA-24) HE-related magazines, hutments, warehouses, shops, laboratories, and septic system. The site is currently devoid of structures and has been overgrown with trees. TA-24 was used primarily for radiographic operations of HE charges. Construction of structures at T-Site began in 1944 and continued until it ceased being used as an active site in 1950. Most of the structures remaining at TA-24 were destroyed by intentional burning in 1950, with residual debris and subsurface structures being removed in 1965. HE was reported to have been removed to better than 3% wt, and radionuclides cleaned up to background. PRS 16-034(b) is the former location of TA-16-490, a decommissioned primary laboratory and office building. The building housed X-ray radiography of HE, photoprocessing, electron microscopy and storage. Solvents were also used in the building. PRS 16-005(j) is the location of the former septic tank and drain line (TA-16-507) which served TA-16-490. PRS 16-005(m) is the former location of TA-16-507, a decommissioned sump (chemical pit), drain line and outfall that received effluent from the large room in the central section of TA-16-490. The sump drained to the east of TA-16-490 and was shown to be contaminated with HE prior to its removal in 1960. PRS 16-034(d) is the former location of TA-16-492, a decommissioned machine shop and was shown to be contaminated with residual HE prior to burning in 1950. PRS 16-034(f) is the former location of TA-16-488, a decommissioned laboratory. Small-scale photoprocessing was conducted in the building in addition to plutonium autoradiography experiments. PRS 16-034(c) is the former location of TA-16-491, a decommissioned warehouse hut. During WWII the hut was used to store equipment, but by 1950 was the site of X-ray exposure experiments on rabbits and rats. PRS 16-034(e) is the former location of TA-16-496, a former storage building. PRSs 16-025(m, n and o), added to this unit in FY00, are three areas of potentially contaminated soils associated with the former x-ray facility (TA-16-495) and two identical source hutments (TA-16-499 and -500).



PRS Consolidation Unit 16-034(b)-99

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is psychosomatic and has not been checked for accuracy.

Produced by Marvin Jones

FIMAD G1D8478 18 Apr 00

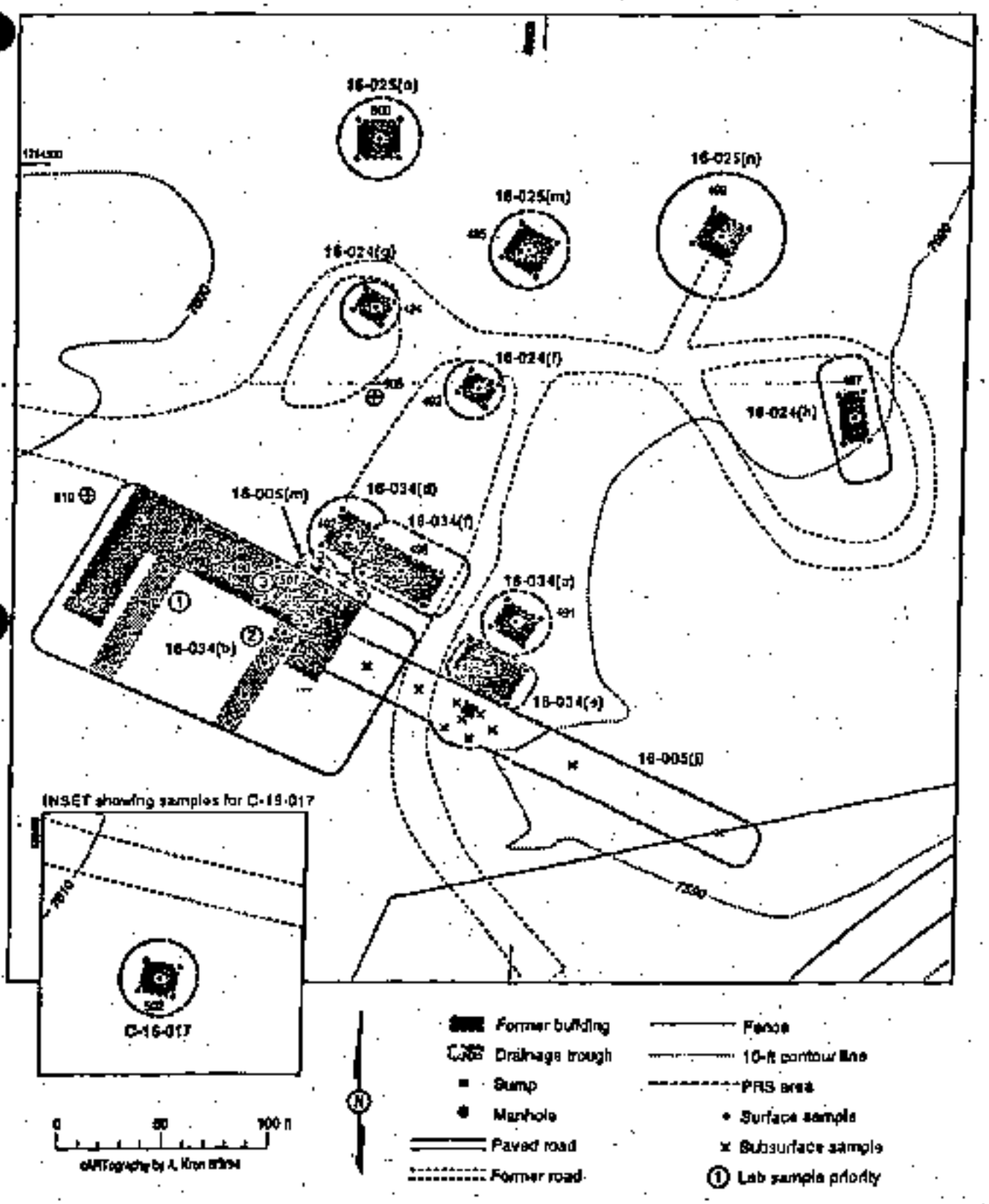


Fig. 5-92. Sampling locations at T-Sites.

PRS Consolidation Worksheet

Site Type: Ind. or San. Waste Water Treatment

Proposed PRS Number: 18-001(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
18-001(a)	HSWA	Sanitary Lagoons - (inactive)	Rad, Metals, VOCs	Lower Pajarito
18-001(b)	HSWA	Sewer lines - (inactive)	Rad, Metals, VOCs	Lower Pajarito

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, commingled waste streams, geographical proximity, interrelated transport mechanisms, similar COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 18-001(a) was the former location of sanitary sewage lagoons on Pajarito Road. 18-001(b) consisted of the associated drain lines that carried sanitary wastewater from buildings at TA-18 to the lagoons and drain lines that discharged the waste water from the lagoons into an NPDES-permitted outfall in Pajarito Canyon. The system was in operation from the 1960s until 1992 when the TA-46 WWTP came on line.

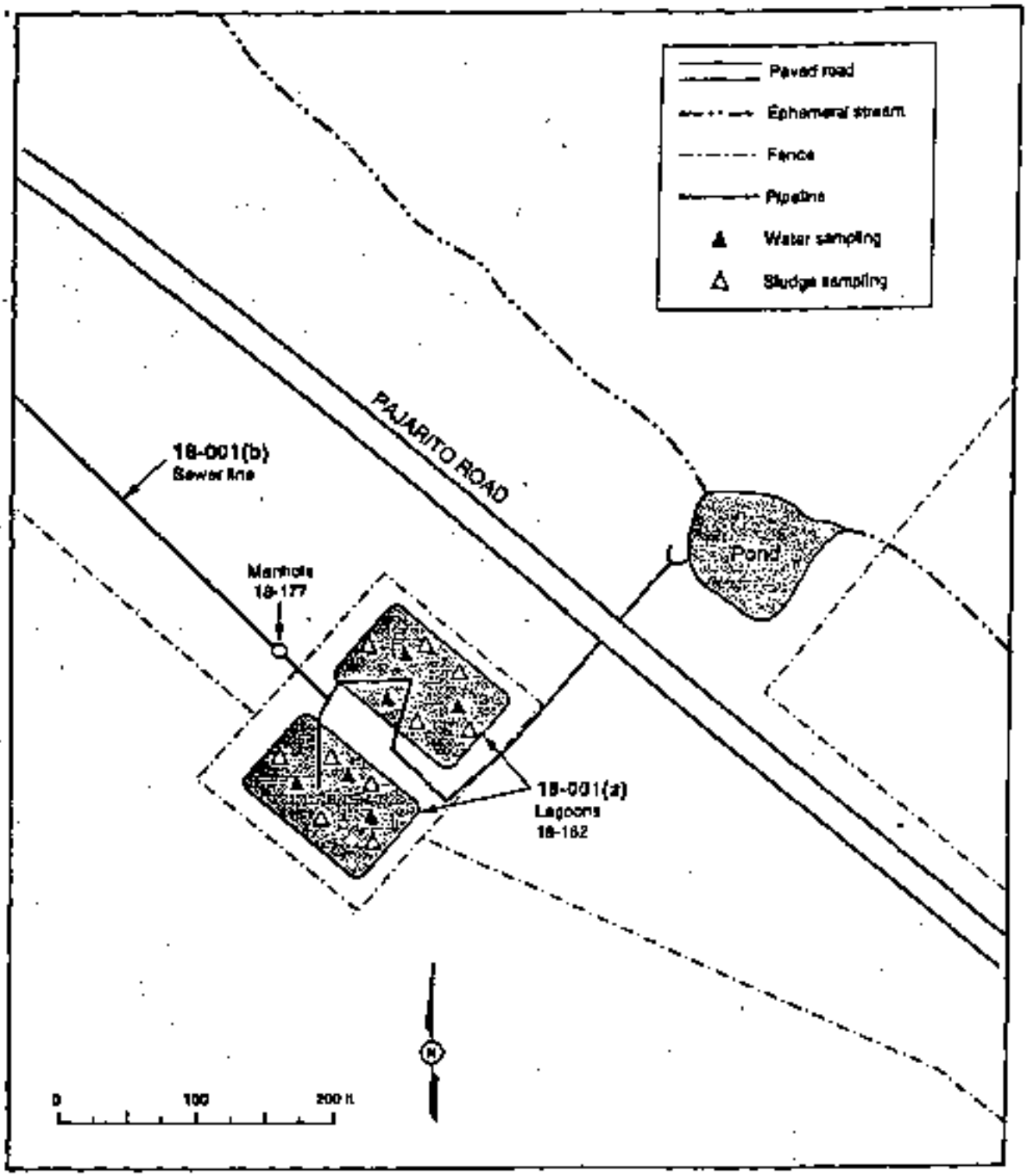


Figure 5-9. Proposed sampling locations at SWMU 18-001(a), sewage lagoons.

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls - Kiva 1

Proposed PRS Number: 18-001(c)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
18-001(c)	HSWA	Sump - (inactive)	Rad, Metals, SVOCs, VOCs	Lower Pajarito
18-012(b)	HSWA	Outfall - (inactive)	Rad, Metals, SVOCs, VOCs	Lower Pajarito

Consolidation Checklist Criteria:

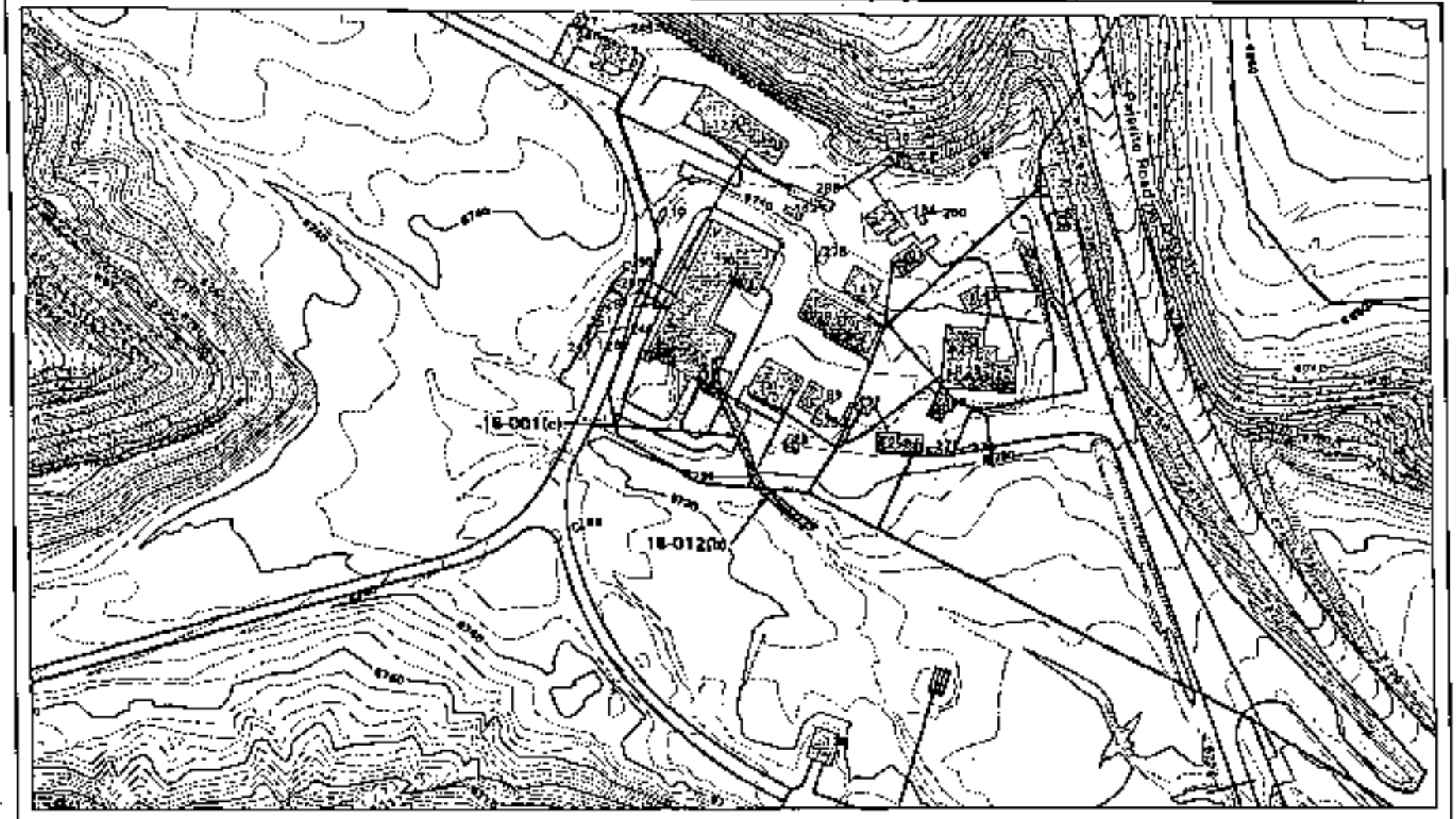
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, commingled waste streams, geographical proximity, interrelated transport mechanisms, similar COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRSs in this consolidated unit include a sump, acid drain lines and an outfall that previously served TA-18-30. PRS 18-001(c) is a sump in the basement of building TA-18-30. Discharge from the sump was combined with other discharges including floor, sink and roof drains from TA-18-30 and -31 and released to an outfall identified as PRS 18-012(b). The outfall is locale within 20 feet of the main drainage channel in Pajarito Canyon. TAs-18-30 housed laboratories and offices, while TA-18-31 housed utilities for TA-18.



PRS Consolidation Unit 18-001(c)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is preliminary and has not been checked for accuracy.

Produced by Maggie Jones

FIMAD G108847 13 Jul 00

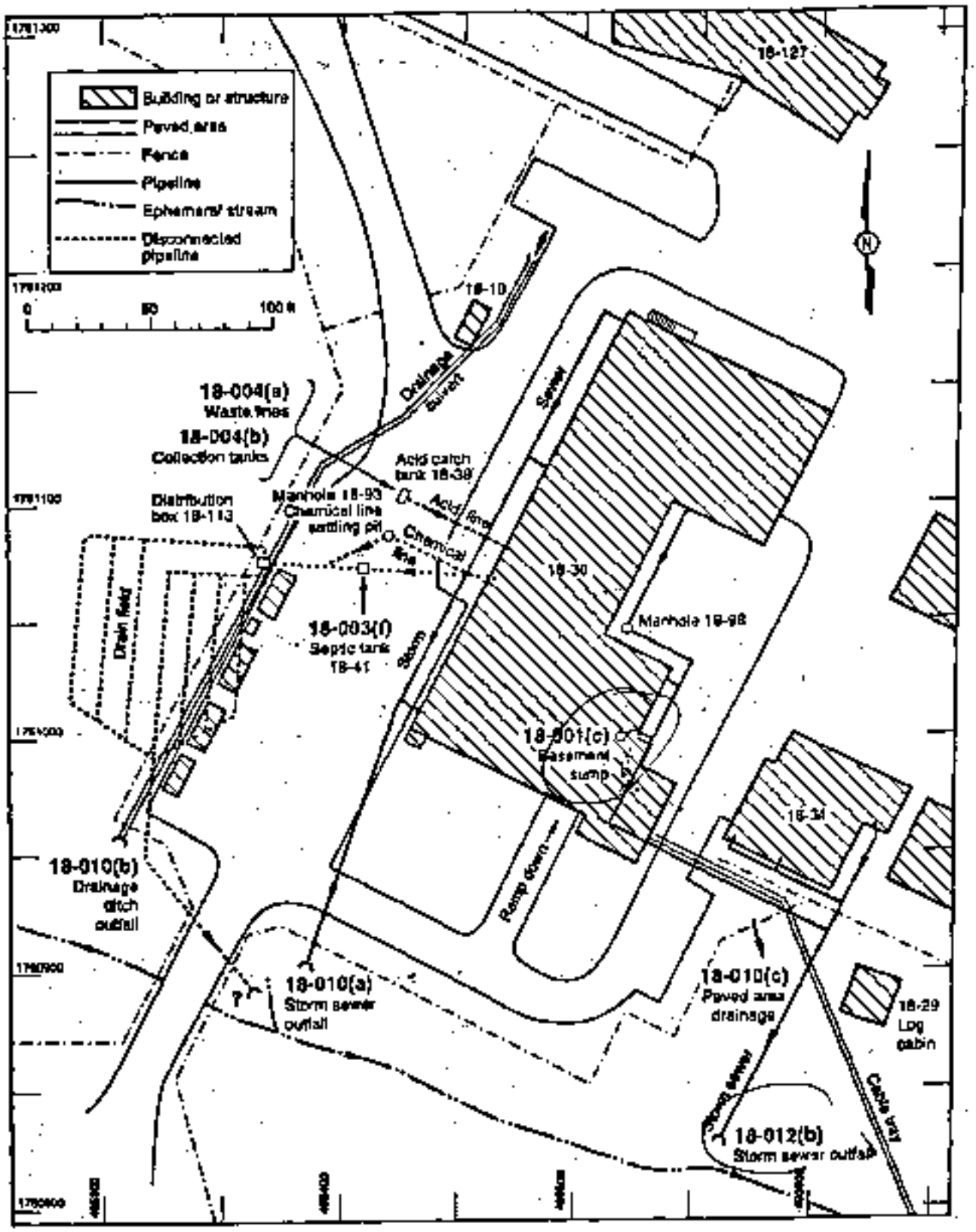


Figure 5-6. Potential release sites near Building 30, TA-18.

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 18-003(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
18-003(a)	HSWA	Settling pit - (inactive)	Rad, Metals, SVOCs, VOCs	Lower Pajarito
18-003(b)	HSWA	Septic system - (inactive)	Rad, Metals, SVOCs, VOCs	Lower Pajarito

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, commingled waste streams, geographical proximity, interrelated transport mechanisms, similar COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 18-003(a) is a settling pit and drain lines that served building TA-18-23 (Kiva 1). The pit was equipped with a steel catch basin that was emptied annually. The acid sinks in Kiva 1 would drain into the settling pit. Any overflow from the catch basin would enter the Kiva 1 sanitary sewer system downstream of PRS 18-003(b), but would end up in the leach field. PRS 18-003(b) consists of the septic tank, drain lines and drain field which also served building TA-18-23. TA-18-2, known as Kiva 1 was the site of uranium mockup tests and critical assembly work.

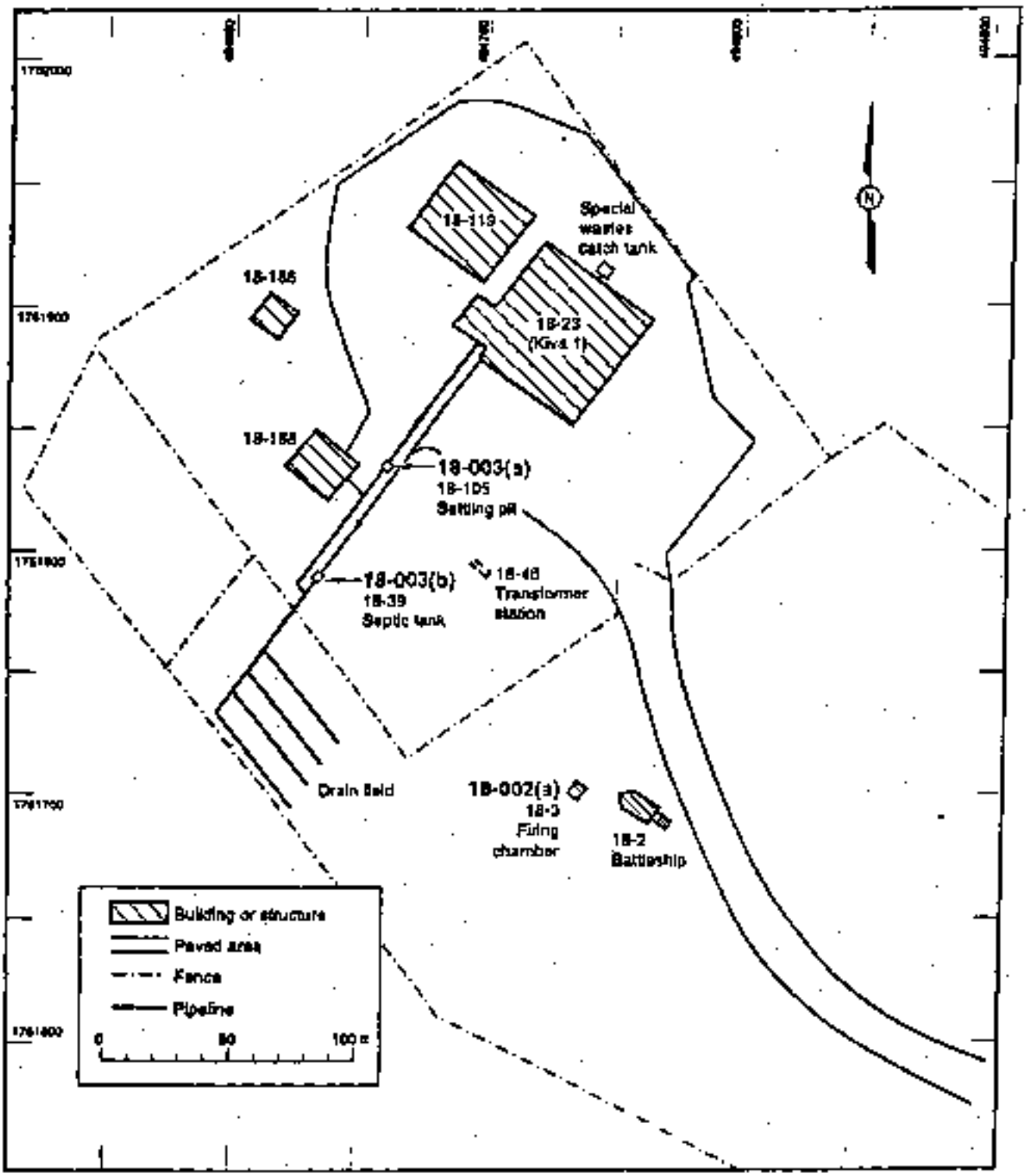


Figure 5-2. Potential release sites near Kiva 1, TA-18.

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 18-004(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
18-004(a)	HSWA	Waste lines - (inactive)	Rad, Metals, SVOCs, VOCs	Lower Pajarito
18-004(b)	HSWA	Collection tanks and vault - (inactive)	Rad, Metals, SVOCs, VOCs	Lower Pajarito

Consolidation Checklist Criteria:

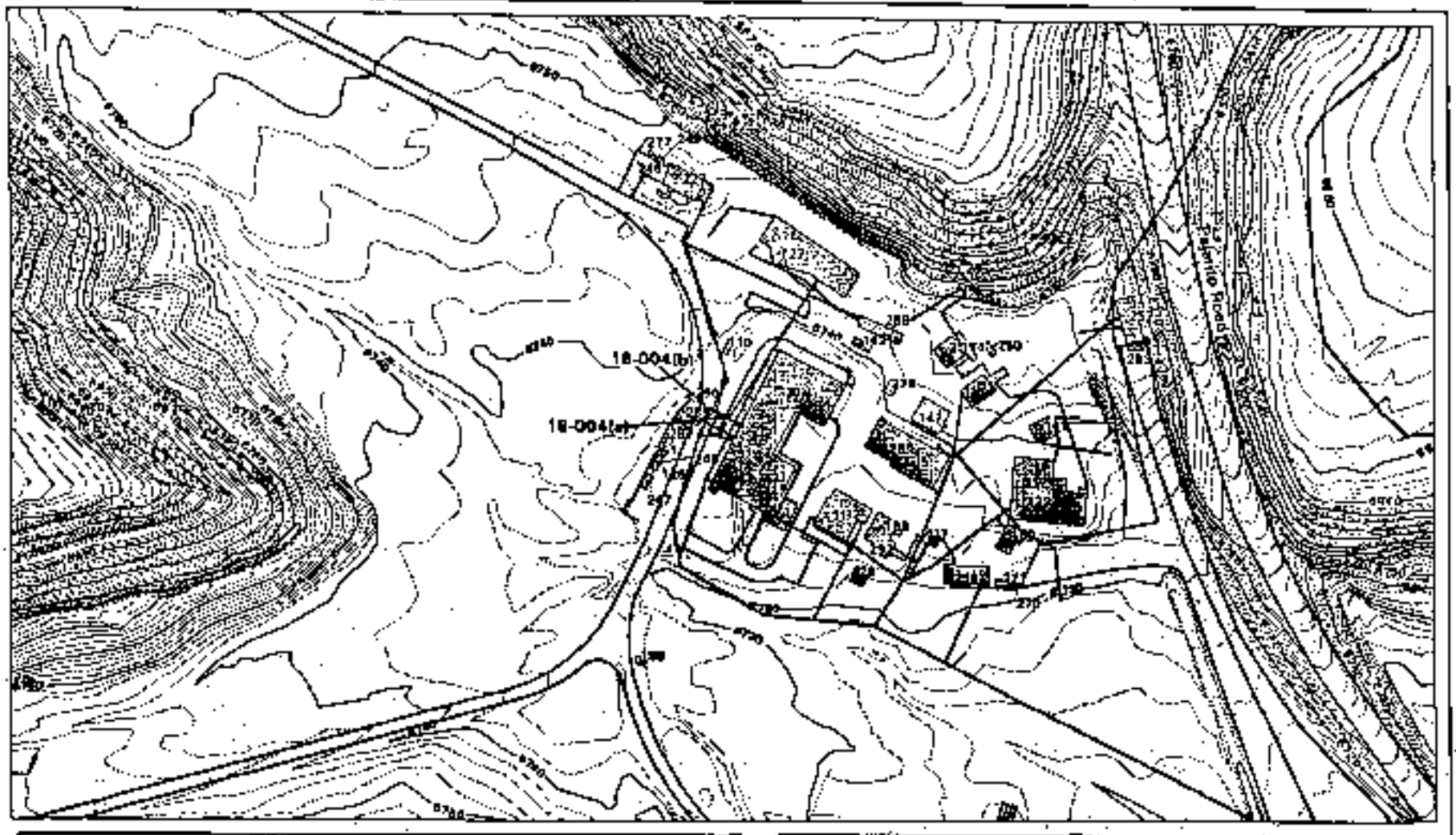
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, commingled waste streams, geographical proximity, interrelated transport mechanisms, similar COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 18-004(a) consists of former acid waste lines from building TA-18-30 which discharged into two stainless steel tanks in a subsurface concrete containment vault (PRS 18-004(b)). The containment vault was equipped with a sump that had no drain. The tanks were periodically pumped and the wastewater disposed of at TA-50. The tanks have been removed, inlet drain lines capped, concrete walls razed and the area backfilled to grade. TA-18-30 housed laboratories and offices.



PRS Consolidation Unit 18-004(a)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

RMAD G108646 13 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 20-001(b)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
20-001(b)	HSWA	Landfill Area 2 - (Inactive)	Rad, Metals, HE	Lower Sandia
20-002(c)	HSWA	Firing site - (Inactive)	Rad, Metals, HE	Lower Sandia
20-003(c)	Non-HSWA	Former Firing Site	Rad, Metals, HE	Lower Sandia

Consolidation Checklist Criteria:

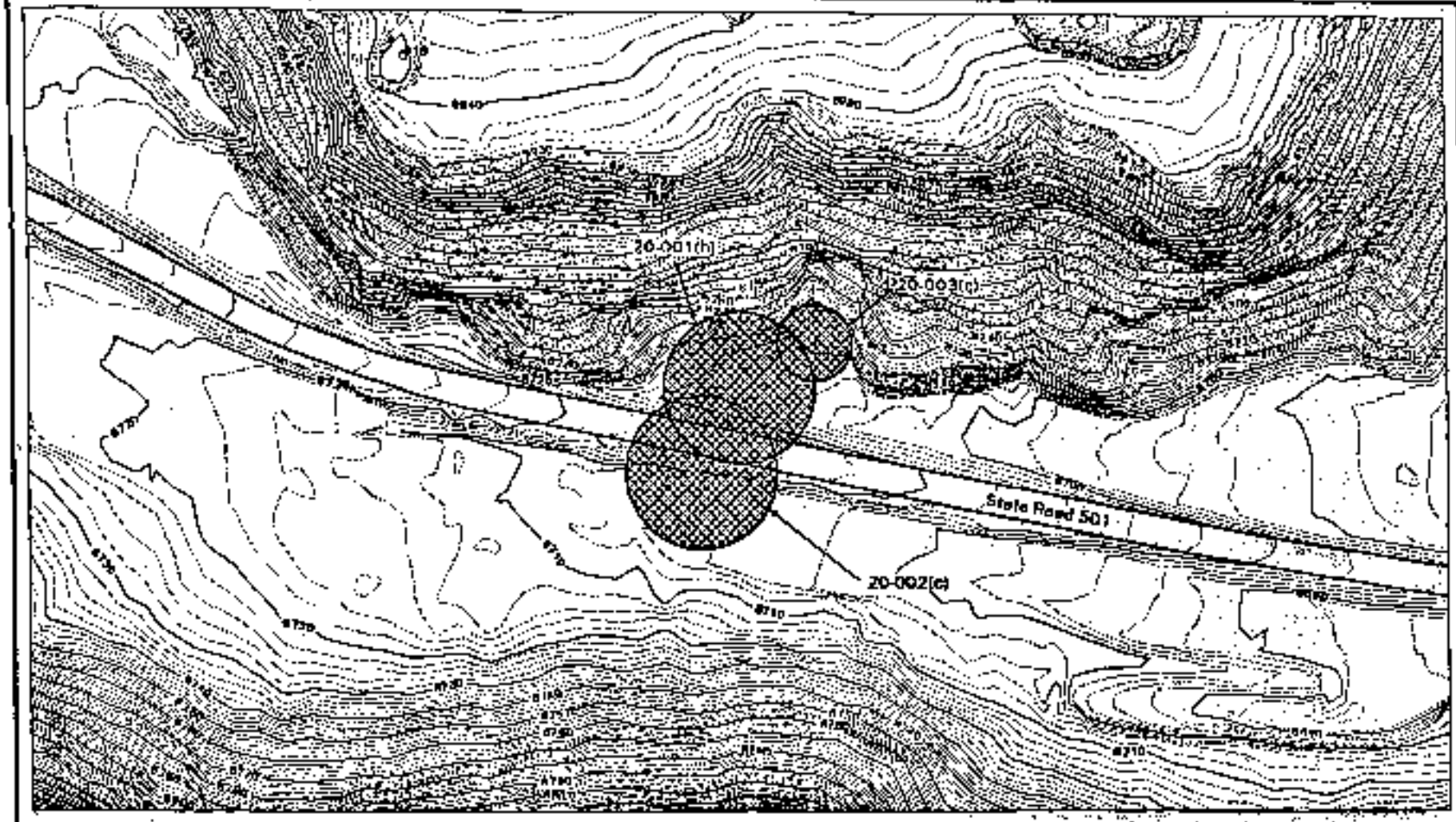
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 20-001(b) is a small landfill known as Sandia Canyon Area 2. Debris from the adjoining firing site (PRS 20-002(c)), the former navy gun site (20-003(c)), and from the decommissioned control building and berm were disposed of in the landfill. A VCA was implemented at the navy gun site (PRS 20-003(c)) in 1995 to remove the concrete pad, rubble electrical conduit and wires. The area will still require confirmation sampling along with the other two sites. All of the structures associated with the firing site were within its blast radius.



PRS Consolidation Unit 20-001(b)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Tick:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notes: Information on this map is provisional and has not been checked for accuracy.

Produced by Merck Jones

FIMAD G108849 13 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 20-001(c)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
20-001(c)	HSWA	Landfill - (inactive)	Rad., Metals, HE	Lower Sandia
20-002(a)	HSWA	Firing site - (inactive)	Rad, Metals, HE	Lower Sandia
20-002(b)	HSWA	Firing site - (inactive)	Rad, Metals, HE	Lower Sandia

Consolidation Checklist Criteria:

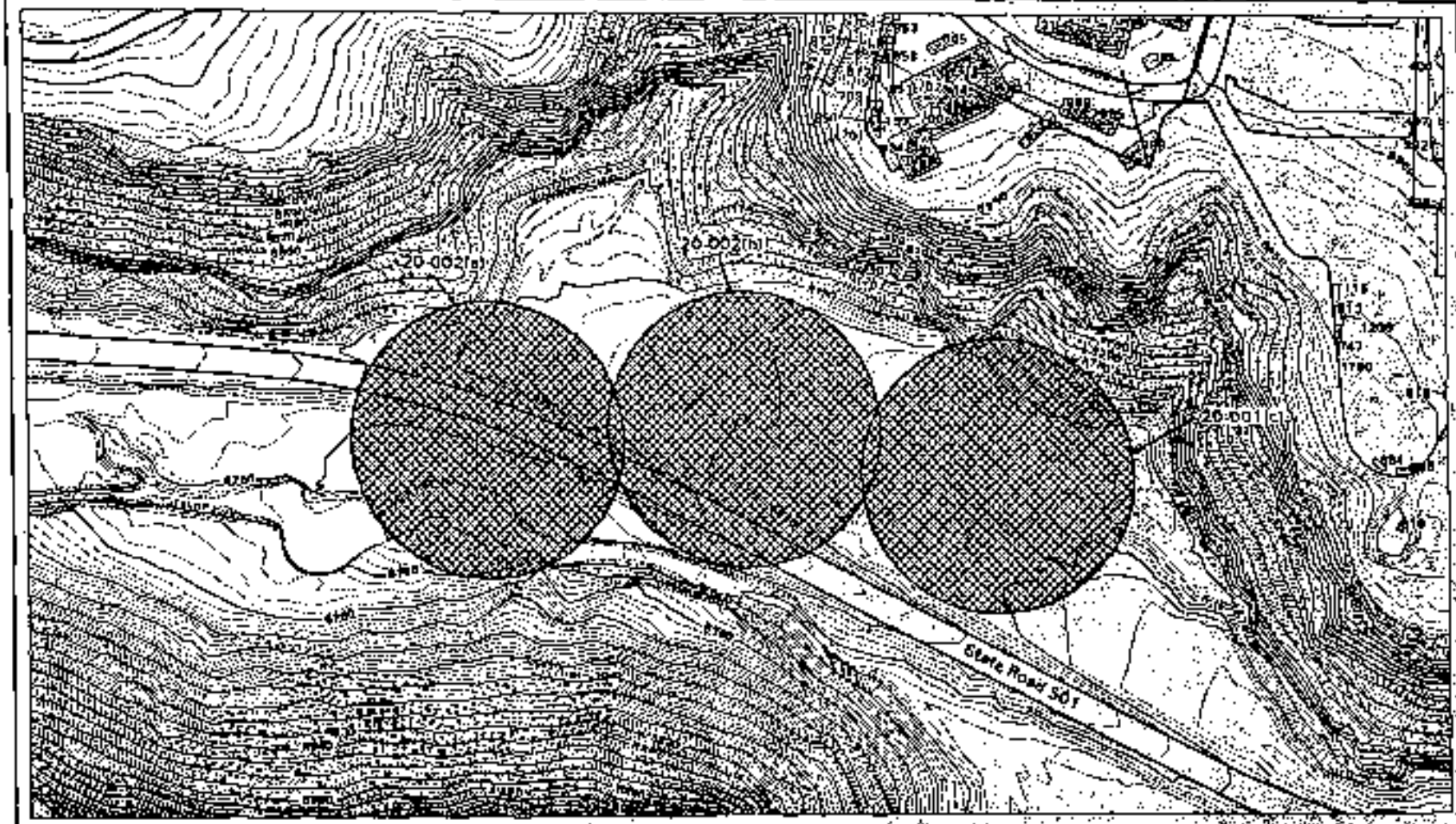
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 20-001(c) is a small landfill known as Sandia Canyon Area 3. Debris from the adjoining firing sites (PRS 20-002(a and b)), and from the decommissioned control building and barn were disposed in the landfill. The blast radii of the two firing sites overlapped each other and all associated structures.



PRS Consolidation Unit 20-001(c)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Morris Jones

FIMAD-G108850 13 Jul 00

PRS Consolidation Worksheet

Site Type: Miscellaneous

Proposed PRS Number: 21-006(c)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
21-006(a)	HSWA	Disposal pit Bldg. 21-2 - (Inactive)	Ethylene glycol, phosphoric acid, Pu	Middle Los Alamos
21-006(b)	HSWA	Disposal pit - (Inactive)	Ethylene glycol, phosphoric acid, Pu	Middle Los Alamos
21-006(c)	HSWA	Subsurface Unit - (Inactive) added FY00	Ethylene glycol, phosphoric acid, Pu	Middle Los Alamos
21-006(d)	HSWA	Subsurface Unit - (Inactive) added FY00	Ethylene glycol, phosphoric acid, Pu	Middle Los Alamos

Consolidation Checklist Criteria:

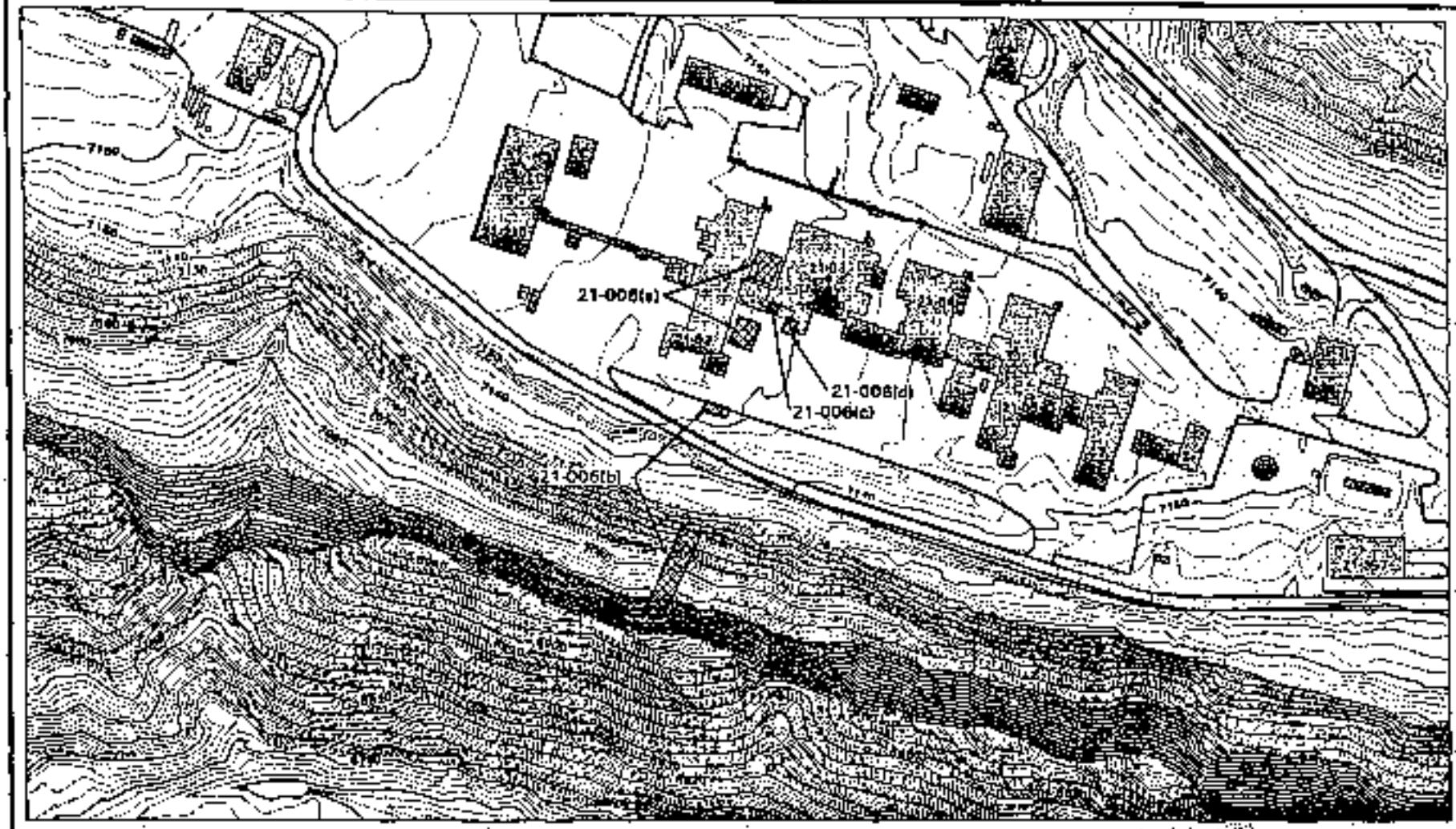
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

These PRSs are thought to be the same PRS or located in the same area, received the same waste streams, and are therefore proposed for consolidation.

Description:

PRS 21-006(c) is the site of an inactive underground seepage pit located outside of room 322 in building TA-21-3, and was used to decontaminate radioactive materials containers from a drain in room 322. Because of additions to building TA-21-3, the location of the pit is under rooms 3133 and 3131 of the addition. PRS 21-006(d) may be the same PRS as 21-006(c) or collocated. PRSs 21-006(a and b) were added to this unit in FY00. PRS 21-006(a) is a former seepage pit and drain lines that appears to be either a duplicate of or collocated with PRSs 21-006(c and d). PRS 21-006(b) also consists of a former seepage pit and drain line from TA-21-2 with an outfall to Los Alamos Canyon. Buildings TA-21-2 and -3 both housed similar laboratories.



PRS Consolidation Unit 21-006(c)-99

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Tick:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Norris Jones

RMAD 6108475 18 Apr 00

PRS Consolidation Worksheet

Site Type: Waste Water Treatment Plant

Proposed PRS Number: 21-016(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
21-001	Non-HSWA	Rad Waste Storage Area - (Inactive)	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-007	HSWA	Former Incinerators - (Inactive) added FY00	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-010(a)	HSWA	Former Industrial Liquid Waste Treatment Plant	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-010(b)	HSWA	Former Acid Waste Manhole	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-010(c)	HSWA	Former Acid Waste Storage Tank	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-010(d)	HSWA	Former Acid Waste Storage Tank	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-010(e)	Non-HSWA	Industrial Septic Tank	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-010(f)	HSWA	Former Grit Chamber	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-010(g)	HSWA	Former Acid Tank	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-010(h)	HSWA	Former Acid Waste Manhole	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-011(a)	HSWA	Building 21-257	Rad, Metals, VOCs	Middle Los Alamos
21-011(c)	HSWA	Former Acid Tank and Sump	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-011(d)	HSWA	Aboveground Acid Holding Tank	Rad, Metals, VOCs	Middle Los Alamos
21-011(e)	HSWA	Aboveground Acid Holding Tank	Rad, Metals, VOCs	Middle Los Alamos
21-011(f)	HSWA	Aboveground Effluent Holding Tank	Rad, Metals, VOCs	Middle Los Alamos
21-011(g)	HSWA	Aboveground Effluent Holding Tank	Rad, Metals, VOCs	Middle Los Alamos
21-011(h)	Non-HSWA	Aboveground acid storage tank	Rad, Metals, VOCs	Middle Los Alamos
21-011(i)	HSWA	Aboveground NaOH storage tank	Rad, Metals, VOCs	Middle Los Alamos
21-011(j)	HSWA	Aboveground Am raffinate storage tank	Rad, Metals, VOCs	Middle Los Alamos
21-016(a)	HSWA	4 Absorption Beds	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-016(b)	HSWA	Caisson Building, 21-188	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-016(c)	HSWA	82 Asphalt-Lined Shafts	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-028(a)	Non-HSWA	Former Waste Storage Area	Rad, Metals, VOCs	Middle Los Alamos
C-21-009	Non-HSWA	Cement Paste Spill	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
C-21-012	Non-HSWA	Cement Past Spill	Rad, Metals, SVOCs, VOCs	Middle Los Alamos

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

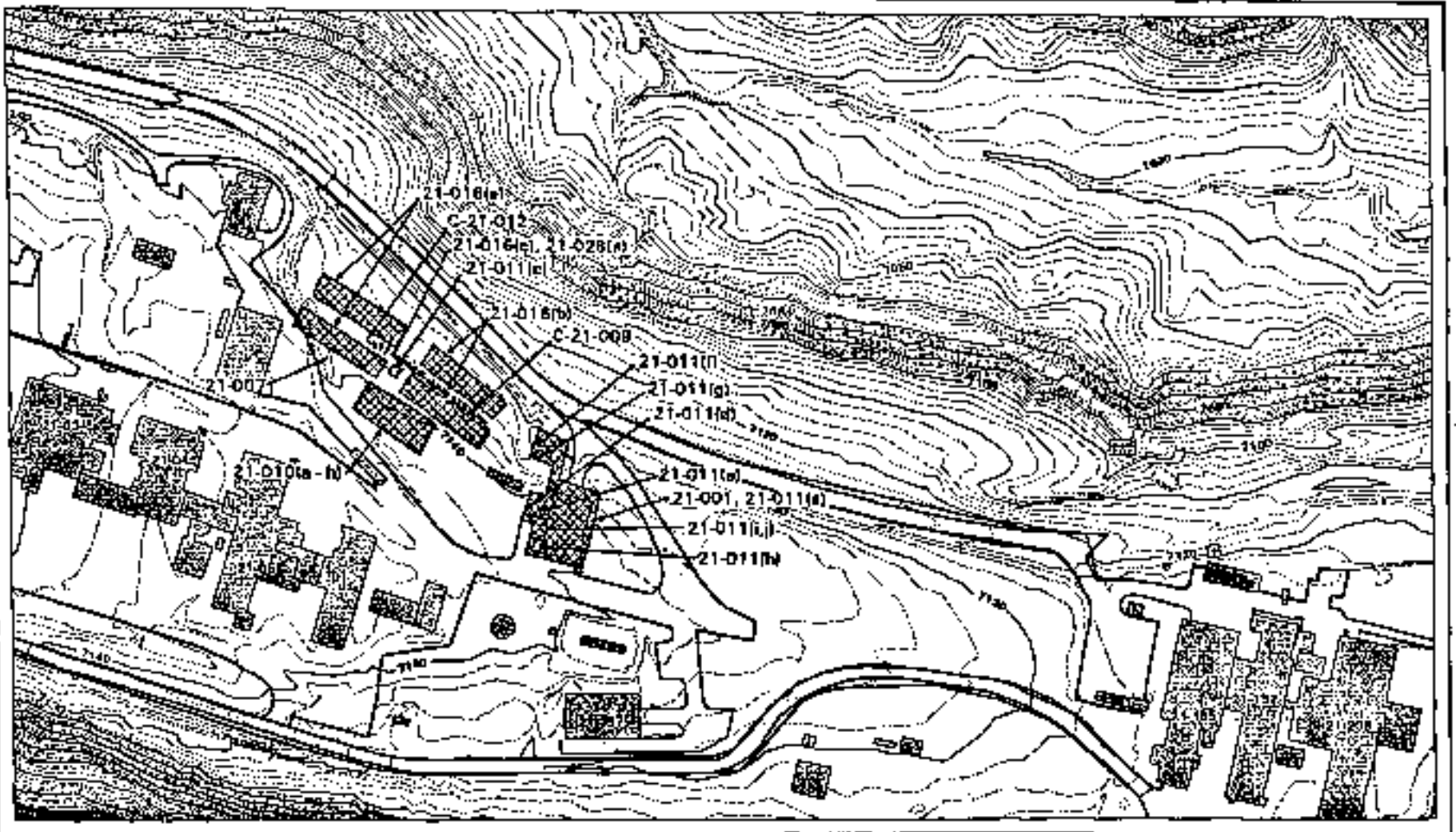
Consolidation Rationale:

Based on the operational history and the geographical proximity of the waste water treatment plant, the holding tanks, and the outfalls, the common waste streams managed, the transport mechanisms (surface to subsurface) of identical contaminants and the investigation needed to assess all of the components of the WWTP, it is proposed that these PRSs be consolidated.

Based on the operational history, waste streams, transport mechanisms (surface to subsurface), geographical proximity, and the investigation needed to assess the above PRSs/AOCs, it is proposed that the PRSs/AOCs be consolidated to identify them as being part of the MDA T inventory.

Description:

These PRSs are associated with the waste water treatment plant at TA-21. PRS 21-011(a) was the waste treatment plant TA-21-257 put into operation in 1967. The plant treated liquid waste from plutonium processing operations associated with DP site for disposal at MDA T and discharged through an outfall (21-011(k)) to DP Canyon. PRSs 21-011(d & e) were 13,500-gal. aboveground acid holding tanks (TA-21-110 & -111) located near building TA-21-257, that received acid waste from DP East, DP West and from the "General's Tanks" (two 50,000-gallon tanks used to store highly enriched plutonium solutions) buried at MDA A. PRS 21-011(f) was a 12,700-gal. aboveground effluent holding tank (TA-21-112) located near building TA-21-257, that received effluent originally from TA-21-35, then after 1967, from TA-21-257. The treated effluent was retained in the tank for three to five days, then discharged to DP Canyon at outfall 21-011(k). After 1982 the effluent was pumped to TA-50 for disposal. PRS 21-011(g) was a 12,700-gal. aboveground effluent holding tank (TA-21-113) located near building TA-21-257, that received effluent originally from TA-21-35, then after 1967, from TA-21-257. The treated effluent was retained in the tank for three to five days, then discharged to DP Canyon. After 1982 the effluent was pumped to TA-50 for disposal. PRS 21-011(h) was a 2,000-gal. aboveground acid storage tank (TA-21-256) located near building TA-21-257, that was known as Pug Mill Tank. The tank was removed in 1986. PRS 21-011(i) was a 1,000-gal. aboveground sodium hydroxide storage tank (TA-21-288) located near building TA-21-257, installed in 1967. PRS 21-011(j) was a 1,600-gal. aboveground americium raffinate storage tank (TA-21-289) located near building TA-21-257, installed in 1967. Reported spills during tanker truck transfer operations occurred to the surrounding area not originally asphalted. The exact date the tank was taken out of operation is not known. PRS 21-001 was a storage area for the WWTP. TA-21 (DP Mesa) has several MDAs associated with it. MDA T consists of four absorption beds, a distribution sump, retrievable waste storage area (currently empty and backfilled), a series of disposal shafts (up to 8 ft. in diameter and 70 ft. deep), the former waste treatment plant (TA-21-35), and cement paste spills on the surface and within the retrievable waste storage area. Historic operations at MDA T involved the disposal of radioactive liquid process wastes from the purification of radioactive materials. PRS 21-007, added to this unit in FY00, was the location of an incinerator used to burn salamanders after testing. The incinerator was located on top of MDA T. The remainder of the PRS in this consolidated unit [PRSs 21-010(a-h) and 21-028(a)] are comprised of PRSs associated with decommissioned waste treatment facilities and various storage areas. These PRSs are either adjacent to or within the PRS boundary of MDA T. TA-21 (DP Mesa) has several MDAs associated with it. MDA T consists of four absorption beds, a distribution sump, retrievable waste storage area (currently empty and backfilled), a series of disposal shafts (up to 8 ft. in diameter and 70 ft. deep), the former WWTP (TA-21-35), and cement paste spills on the surface and within the retrievable waste storage area. Historic operations at MDA T involved the disposal of radioactive liquid process wastes from the purification of radioactive materials.



PRS Consolidation Unit 21-016(g)-99

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is preliminary and has not been checked for accuracy.

Produced by Marcia Jurica

FIMAD 0106460 18 Apr 00

PRS Consolidation Worksheet

Site Type: MDA V

Proposed PRS Number: 21-018(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
21-013(b)	HSWA	Surface Disposal Site - (inactive)	Rad, Metals, VOCs	Middle Los Alamos
21-013(g)	Non-HSWA	Surface disposal site - (inactive)	Rad, Metals, VOCs	Middle Los Alamos
21-018(a)	HSWA	Liquid disposal pits - (inactive)	Rad, Metals, VOCs	Middle Los Alamos
21-018(b)	HSWA	Former laundry facility - (inactive)	Rad, Metals, VOCs	Middle Los Alamos
21-023(c)	HSWA	Septic system - (inactive) added FY00	Rad, Metals, VOCs	Middle Los Alamos

Consolidation Checklist Criteria:

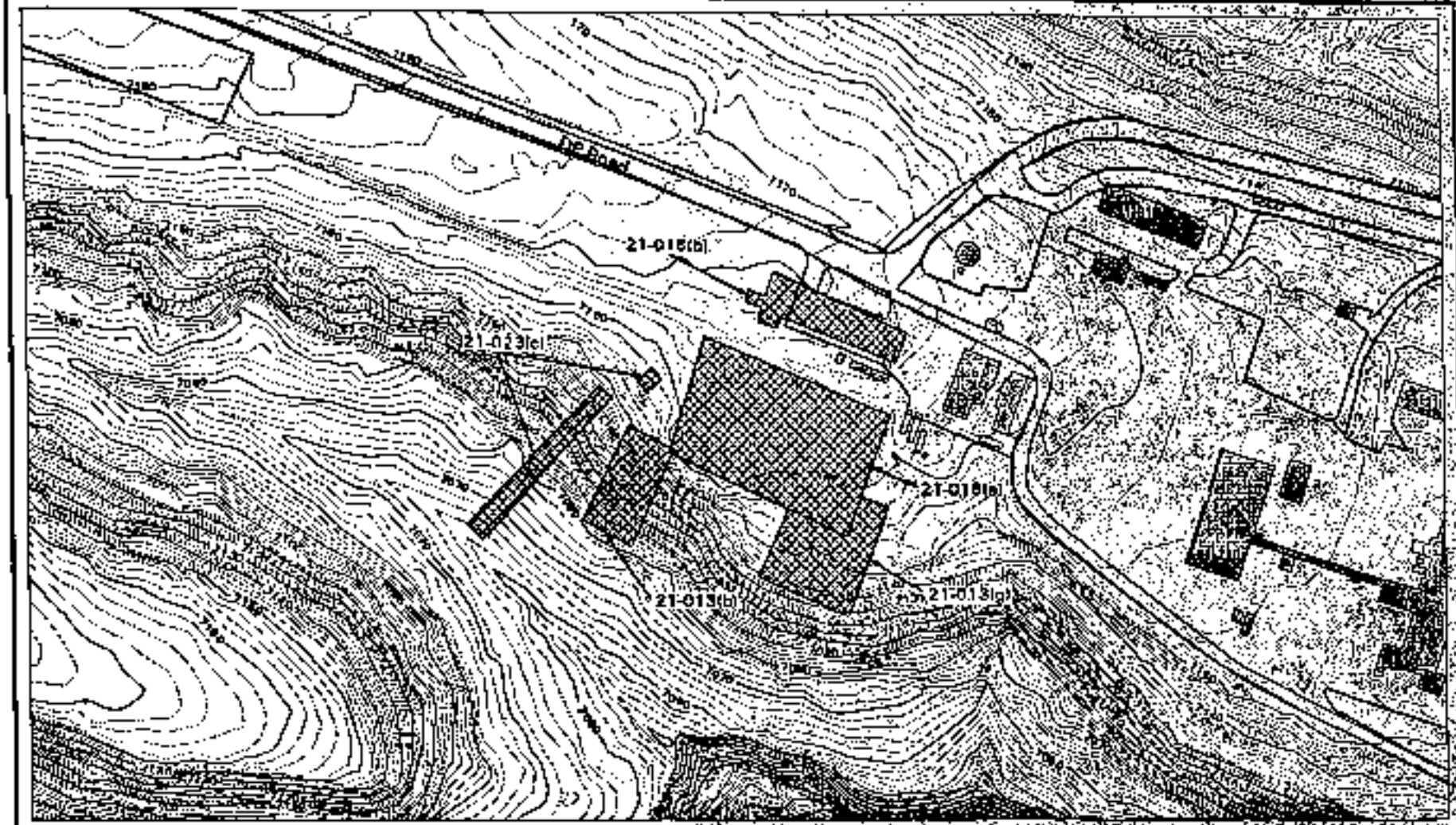
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-dispersable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on operational history of the laundry facility, geographic proximity of each of the associated PRSs, transport mechanisms (surface and subsurface) of identical contaminants, and the type of investigation needed to assess these PRSs and surrounding area, they are proposed for consolidation.

Description:

PRSs 21-013(b, g) and 21-018(a, b) are associated with Material Disposal Area (MDA) V. PRS 21-018(a) consists of three liquid absorption beds (20 ft x 200 ft x 8 ft deep) designed to dispose of the outflow from the radioactive laundry facility (PRS 21-018(b)) and the 6" iron pipe that piped the outflow from PRS 21-018(b). The beds were in continuous use from 1945 to 1961. Historic evidence shows the bed were under-designed for the volume of waste water discharged, resulting in overflows into the adjacent drainage and into Los Alamos Canyon. PRSs 21-013(b, g) are surface disposal areas (building debris pushed over the mesa edge) immediately down gradient from the absorption beds; overflows from the beds flowed over these PRSs. The laundry facility structure has been removed. PRS 21-023(c), added to this unit in FY00, was the septic system including tank, drain lines and outfall, that served the waste treatment laboratory, TA-21-33. This PRS was located adjacent to MDA V and has identical COPCs.



PRS Consolidation Unit 21-018(a)-99

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is preliminary and has not been checked for accuracy.

Produced by Morris Jones

FSMAD-G108481 18 Apr 00

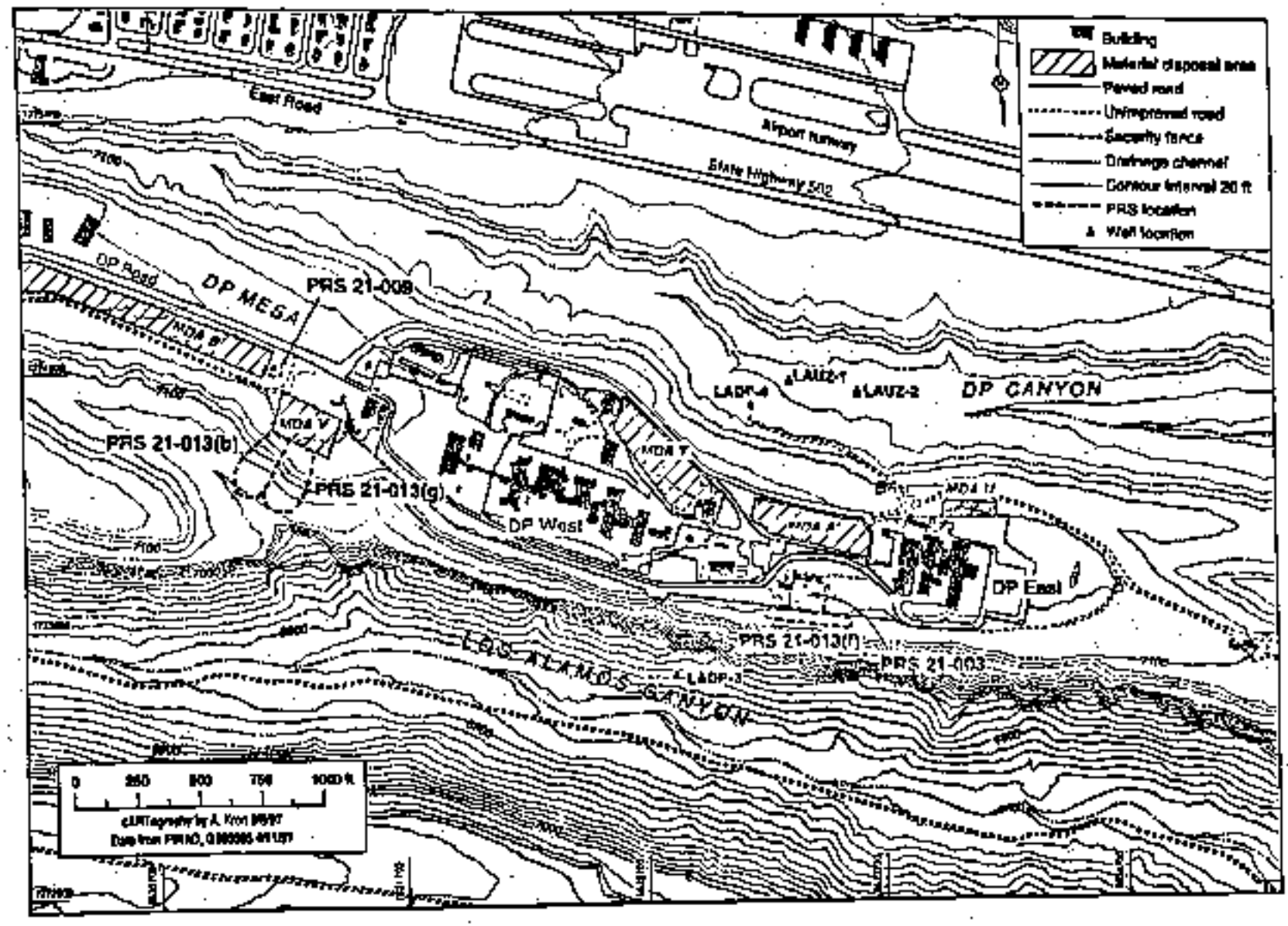


Fig. 1.1-3 Location of PRSs 21-013(b, f, and g).

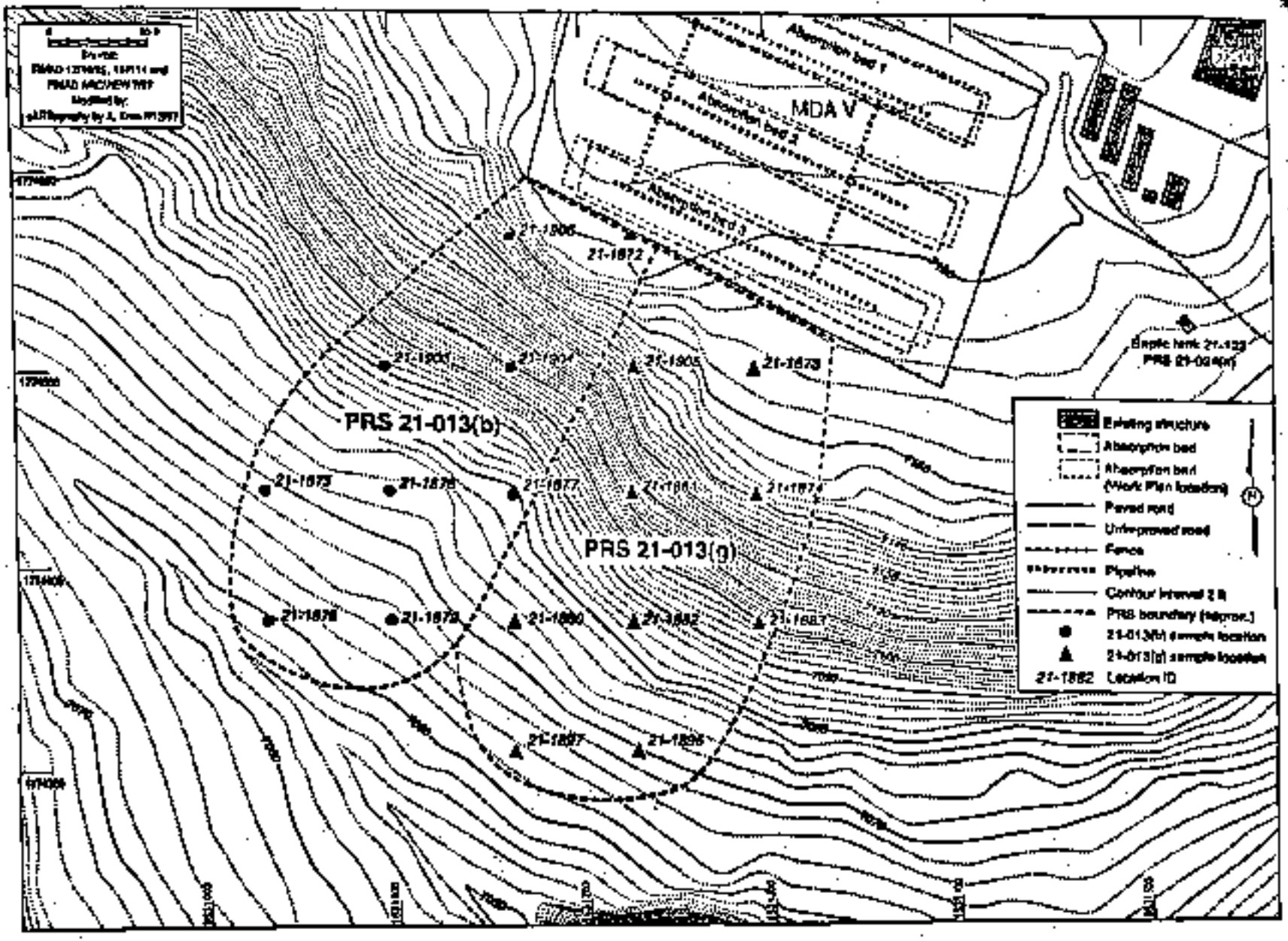


Fig. 5.1.4-1. Locations of samples collected at PRSs 21-013(b,g).

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 21-024(l)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
21-004(a)	Non-HSWA	Aboveground Tank - (Inactive)	Rad, VOCs	Middle Los Alamos
21-022(a)	HSWA	Former Sump - (Inactive), added FY00	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-024(l)	HSWA	Outfall - (Inactive)	Rad, VOCs	Middle Los Alamos

Consolidation Checklist Criteria:

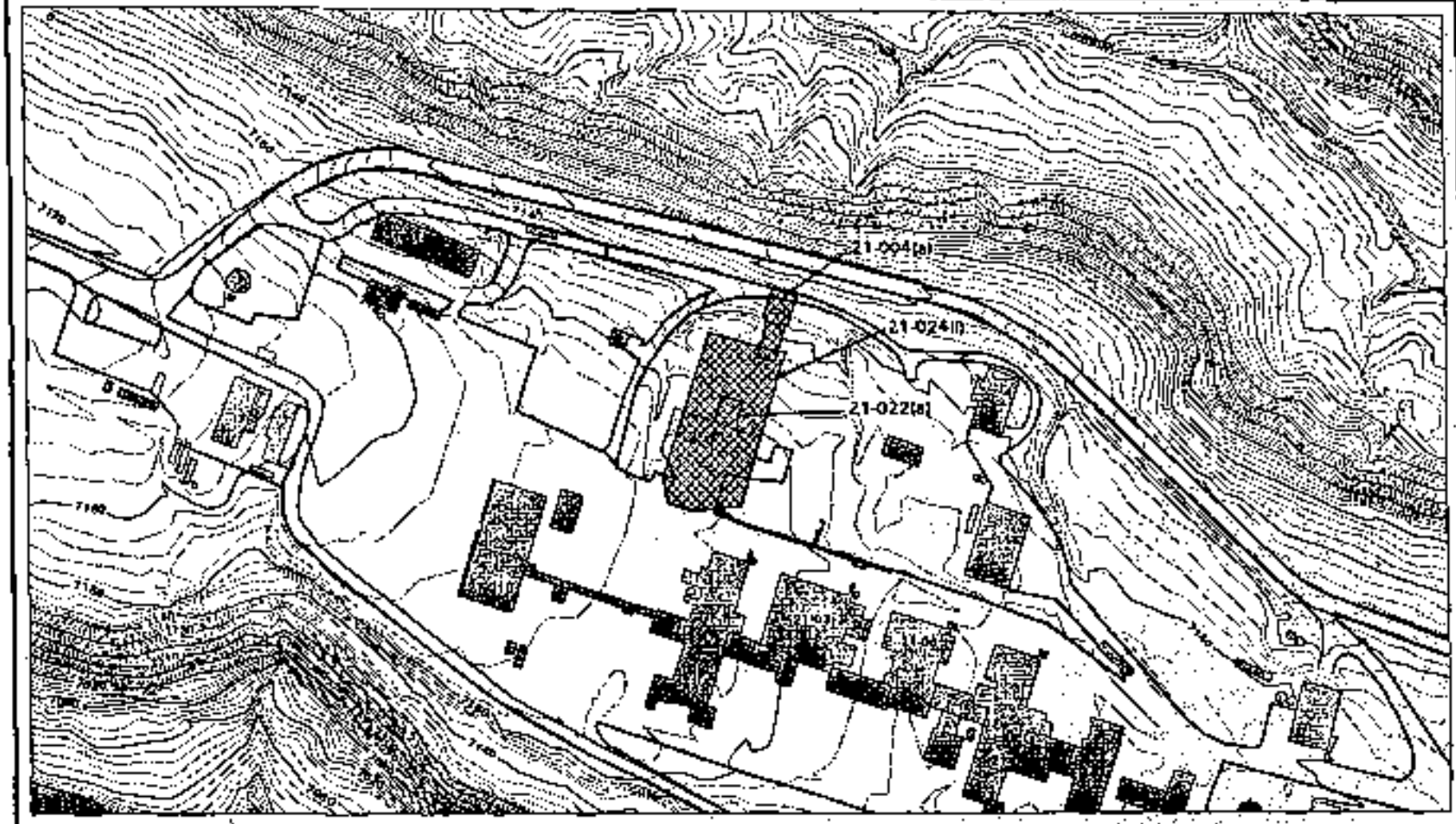
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative affect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Because the three PRS's are in the same location any investigation or remediation will incorporate them all, these PRSs are therefore proposed for consolidation.

Description:

PRS 21-004(a) is an aboveground tank (#335) and drain line north of building TA-21-21. The tank replaced outfall PRS 21-024(l) that was connected to floor drains in TA-21-021. TA-21-021 was known as the vault where all finished metal products (plutonium and uranium) were stored. Wash-down water from floor cleaning may have been discharged to the outfall and subsequently to the tank. The interior of the tank has been swiped and no radioactive contamination was detected. The vault is currently inactive and scheduled for D&D. PRS 21-022(a), added to this unit in FY00, is an inactive containment sump inside the vault in TA-21-21 (PRS 21-024(l)). COPCs are collocated and the PRSs (including drain lines) will be investigated simultaneously.



PRS Consolidation Unit 21-024(i)-98

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinates System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Maxie Jones

FIMAD 01084B3 18 Apr 00

PRS Consolidation Worksheet

Site Type: MDA K

Proposed PRS Number: 33-002(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
33-002(a)	HSWA	Septic Tank - (inactive)	Rad, Metals, SVOCs	Chaquehui
33-002(b)	HSWA	Sump - (inactive)	Rad, Metals, SVOCs	Chaquehui
33-002(c)	HSWA	Sump - (inactive)	Rad, Metals, SVOCs	Chaquehui
33-002(d)	HSWA	Sump and Outfall - (inactive)	Rad, Metals, SVOCs	Chaquehui
33-002(e)	HSWA	Roof Drain Outfall - (inactive)	Rad, Metals, SVOCs	Chaquehui
33-010(f)	HSWA	Surface disposal area - (inactive) added FY00	Rad, Metals, SVOCs	Chaquehui

Consolidation Checklist Criteria:

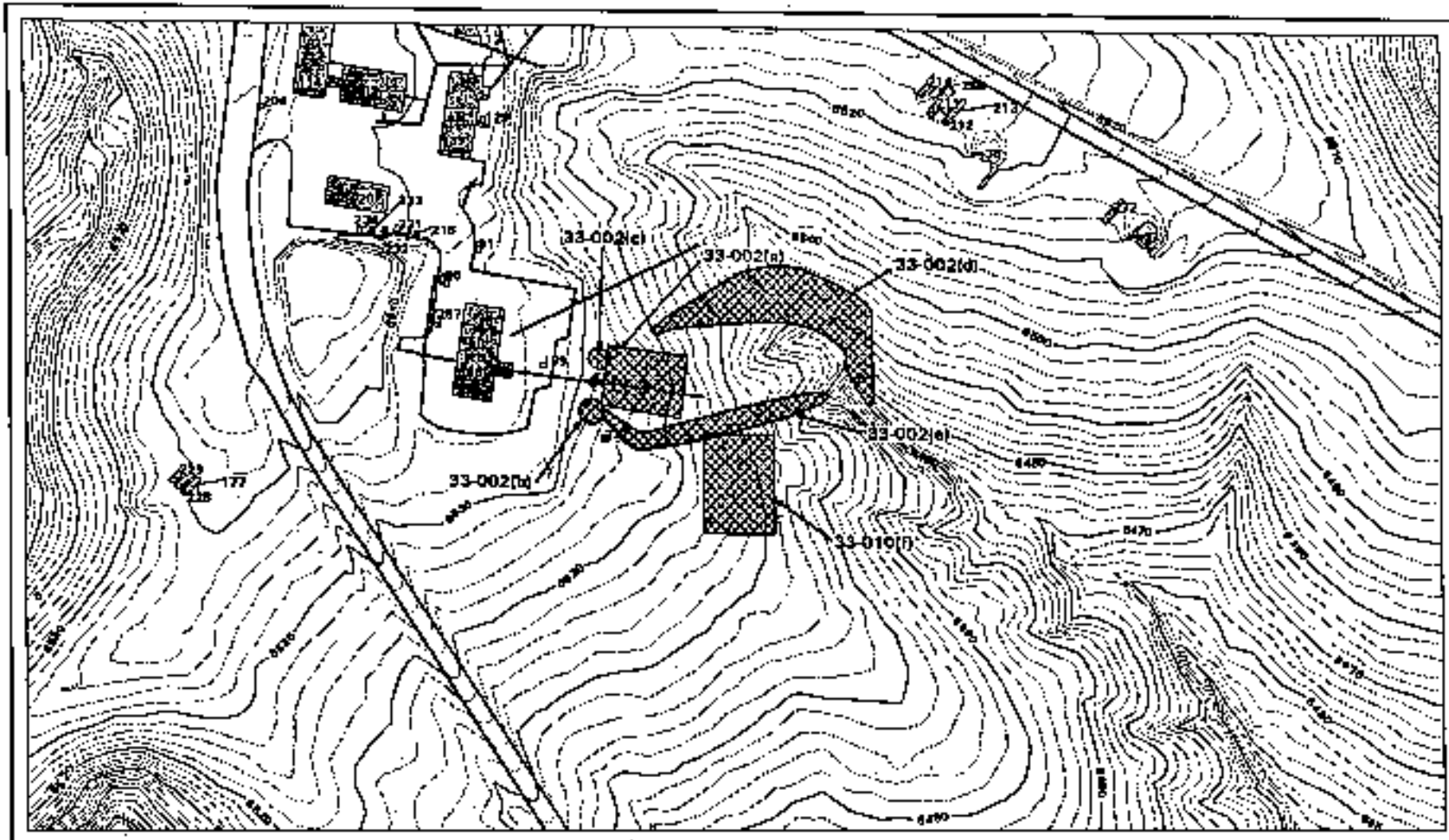
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Because the PRSs are located in the same geographic proximity, they will be investigated concurrently, the have similar transport mechanisms (near-surface and subsurface), and the contaminants are identical and commingled, the PRSs listed above are proposed for consolidation.

Description:

MDA K contains a septic system, two sumps, a siphon tank, leach field, outfall, and a roof drain that served building TA-33-86, the TA-33 tritium facility. The tritium facility experienced accidental releases of tritium during its operating life, but is presently inactive. The associated septic system, sumps, leach field, cooling water outfall and roof drain are contaminated with tritium. Solvents were used in the building to clean contaminated parts. The septic system was used primarily for sanitary wastes, but also received tritium and possible uranium-contaminated waste. In 1961, the septic system received two emergency releases of plutonium-contaminated liquid. The sump received organic contaminants and tritium. The cooling water and roof drains also contained tritium. PRS 33-010(f) is a surface disposal area consisting of buried building debris located directly adjacent to the boundary of MDA K. It was added to this consolidated unit in FY00.



PRS Consolidation Unit 33-002(a)-99

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Tics:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notes: Information on this map is preliminary and has not been checked for accuracy.

Prepared by Nicole Jones

RMAD G106881 13 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site - Main Site

Proposed PRS Number: 33-004(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
33-004(a)	HSWA	Septic system - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Chaquehui
33-004(h)	HSWA	Outfall - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Chaquehui
33-004(i)	HSWA	Outfall - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Chaquehui
33-011(d)	HSWA	Storage area - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Chaquehui
33-015	HSWA	Incinerator - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Chaquehui
33-017	HSWA	Operational release/Drainage - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Chaquehui

Consolidation Checklist Criteria:

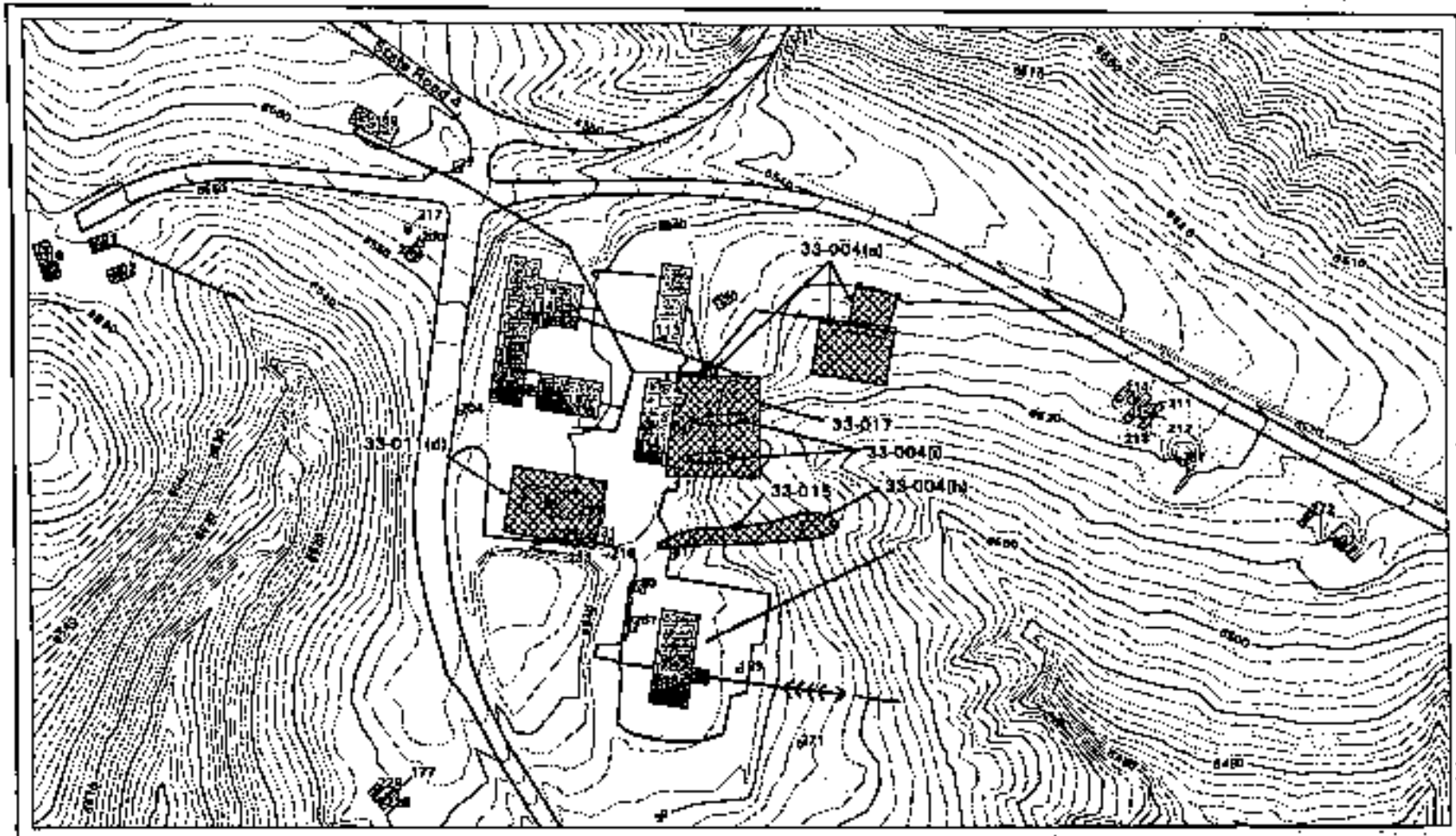
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history of Main Site, similar and commingled waste streams, geographical proximity, similar transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

Main Site is located just inside the entrance gate to TA-33. Main Site was the location of offices, laboratories and shops established to support activities conducted at the TA-33 firing sites. PRS 33-004(a), a septic tank, sampling box, drain lines, two seepage pits and a drain field, received sanitary and industrial waste from buildings TA-33-19, -39, -113, -114, and -188. PRS 33-004(i) consists of two former outfalls and drain lines from building TA-33-39 that discharged to PRS 33-017. TA-33-39 housed a welding and soldering shop and a machine shop. PRS 33-004(h) was a drain line and outfall that served building TA-33-20 where beryllium and uranium were stored. The outfall discharged to PRS 33-017. PRS 33-011(d) was the asphalt storage area around building TA-33-20 where beryllium, uranium, and scrap from shots were stored. Storm water runoff from this area discharged to PRS 33-017. PRS 33-015 was an incinerator located within the boundary of PRS 33-017, just east of building TA-33-20. Materials burned in the incinerator are not confirmed. PRS 33-017 is a drainage area located northeast of Main Site, which received runoff from all of the paved area around Main Site in addition to the PRSs in this consolidated unit.



PRS Consolidation Unit 33-004(a)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Tick:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provided and has not been checked for accuracy.

Produced by Mario Jones

FIMAD 6108862 13 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site - Area 6

Proposed PRS Number: 33-004(g)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
33-004(g)	HSWA	Outfall - (inactive)	Rad, Metals, SVOCs, HE	Chaquehui
33-007(c)	HSWA	Firing range - (inactive)	Rad, Metals, SVOCs, HE	Chaquehui

Consolidation Checklist Criteria:

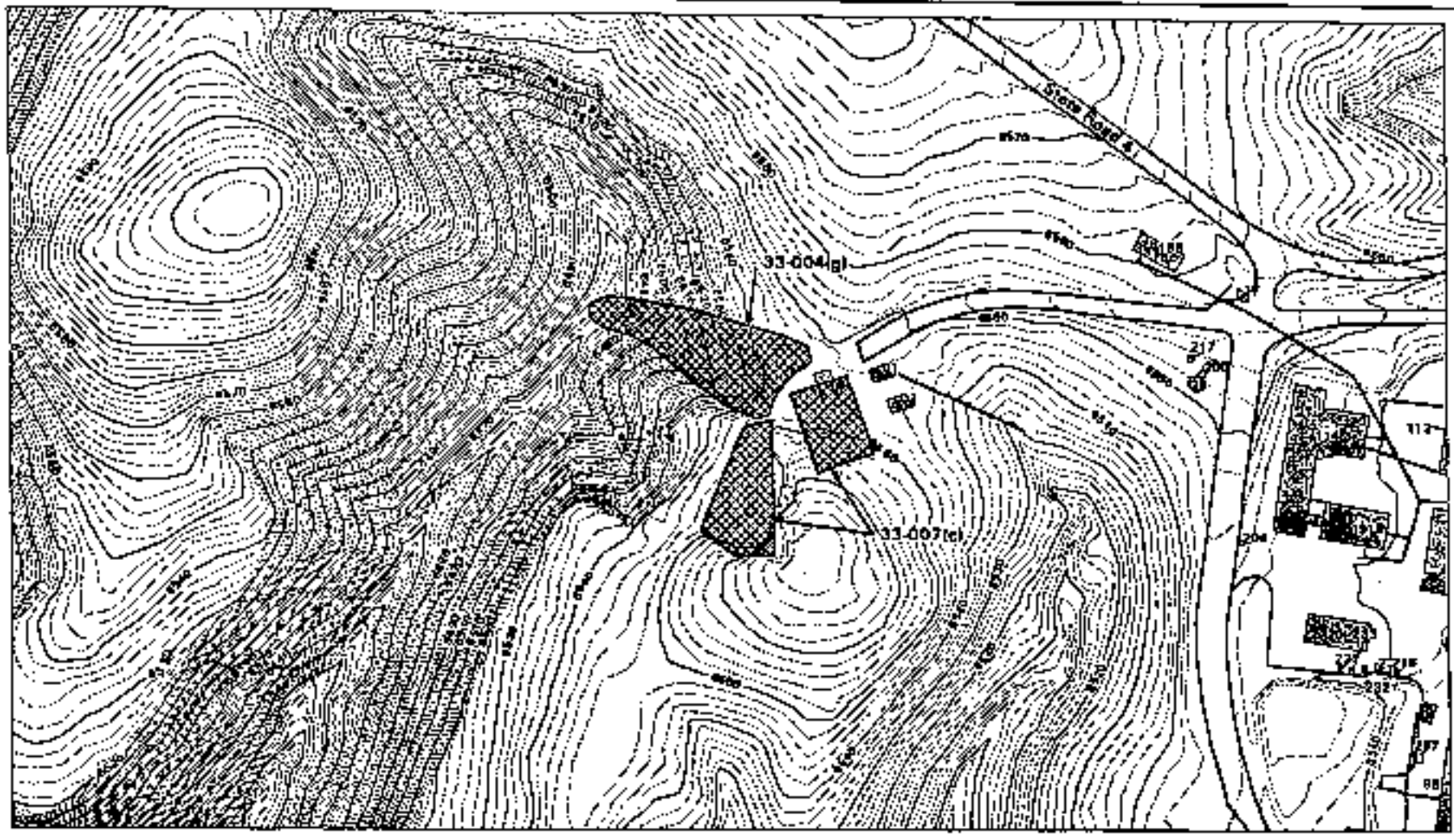
	Yes	No
1. *Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?*	☑	☐
2. *Is the contamination origin non-discernable?*	☑	☐
3. *Are the PRSs in the same geographic proximity?*	☑	☐
4. *Are the transport mechanisms and pathways similar?*	☑	☐
5. *Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?*	☑	☐

Consolidation Rationale:

Based on the operational history, commingled waste streams, geographical proximity, similar transport mechanisms, indistinguishable source terms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit are all associated with the former TA-33 firing site known as Area 6 which was developed in 1948 for initiator experiments. Shots were discontinued by 1955, however, machining continued until the site was decommissioned in the 1970s. Building TA-33-16 housed an air gun and electronic equipment used to measure neutron production in initiators. PRS 33-004(g) is the drain line and outfall from TA-33-16. Military guns were also stationed on concrete pads around the building. PRS 33-007(c) consists of the two firing areas at Area 6 that consisted of shot pads, surrounded by concrete aprons and catcher boxes. Decommissioning of Area 6 resulted in the commingling of COPCs from these PRSs.



PRS Consolidation Unit 33-004(g)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1927 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Mardie Jones

RMAD 0108853 13 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site - South Site

Proposed PRS Number: 33-004(j)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
33-004(j)	HSWA	Outfall - (inactive)	Rad, Metals, SVOCs, HE	Chaquehui
33-006(a)	HSWA	Firing site - (inactive)	Rad, Metals, SVOCs, HE	Chaquehui
33-007(b)	HSWA	Firing range - (inactive)	Rad, Metals, SVOCs, HE	Ancho Canyons
33-008(a)	HSWA	Surface disposal area - (inactive)	Rad, Metals, SVOCs, HE	Chaquehui
33-010(c)	HSWA	Surface disposal - (inactive)	Rad, Metals, SVOCs, HE	Chaquehui
33-010(h)	HSWA	Surface disposal - (inactive)	Rad, Metals, SVOCs, HE	Chaquehui
33-011(c)	HSWA	Storage area - (inactive)	Rad, Metals, SVOCs, HE	Chaquehui
33-014	HSWA	Burn site - (inactive)	Rad, Metals, SVOCs, HE	Chaquehui

Consolidation Checklist Criteria:

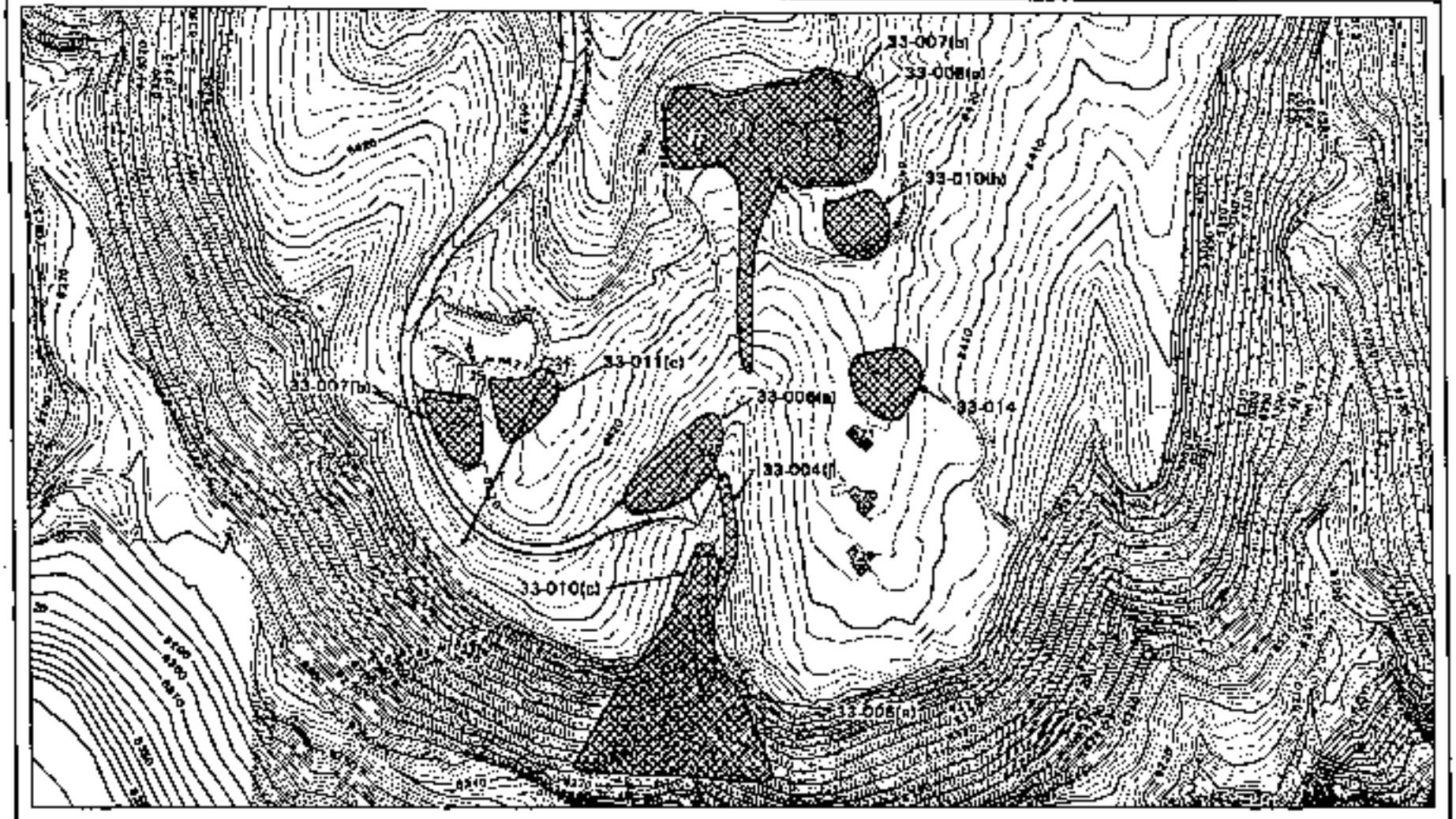
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, commingled waste streams, geographical proximity, similar transport mechanisms, indistinguishable source terms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRSs in this unit are all located within an area known as South Site at TA-33. Uranium shells containing beryllium used in implosion test devices spread shot debris and shrapnel over the entire South Site. The northeast end of the bowl was elevated by a horseshoe-shaped berm. The entire site drains to the south to Chaquehui Canyon which was within the blast radius of the site. TA-33-24 was the control building which housed electronics. PRS 33-004(j) is the drain line and outfall from building TA-33-26 which also housed electronic detonating devices. PRS 33-008(a) was the former shot pad atop TA-33-26. PRS 33-007(b) was two former gun-firing areas near TA-33-25 and -28. PRS 33-008(a) is a former surface disposal area for debris from South Site. PRS 33-010(c) is a surface disposal area where debris from shots was placed. PRS 33-010(h) is a surface disposal area also used for debris from shot pads at the site. PRS 33-011(c) is the former location of a billet storage area between TAs-33-63, -25, and -24. PRS 33-014 was a burn pit for building debris from South Site. Decommissioning at the site resulted in commingling of COPCs.



PRS Consolidation Unit 33-004(j)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:3000

0 200 400

FEET

1983 North American Datum
Projection and Grid Tics:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Morris Jones

RMAD 0108654 13 Jul 00

PRS Consolidation Worksheet

Site Type: Former Structures - Main Site

Proposed PRS Number: 33-005(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
33-005(a)	HSWA	Septic system - (Inactive)	Rad, metals, SVOCs, PCBs	Chaquehui
33-005(b)	HSWA	Drain lines - (Inactive)	Rad, metals, SVOCs, PCBs	Chaquehui
33-005(c)	HSWA	Drain Lines - (Inactive)	Rad, metals, SVOCs, PCBs	Chaquehui
33-011(a)	HSWA	Storage area - (Inactive)	Rad, Metals, SVOCs, PCBs	Chaquehui

Consolidation Checklist Criteria:

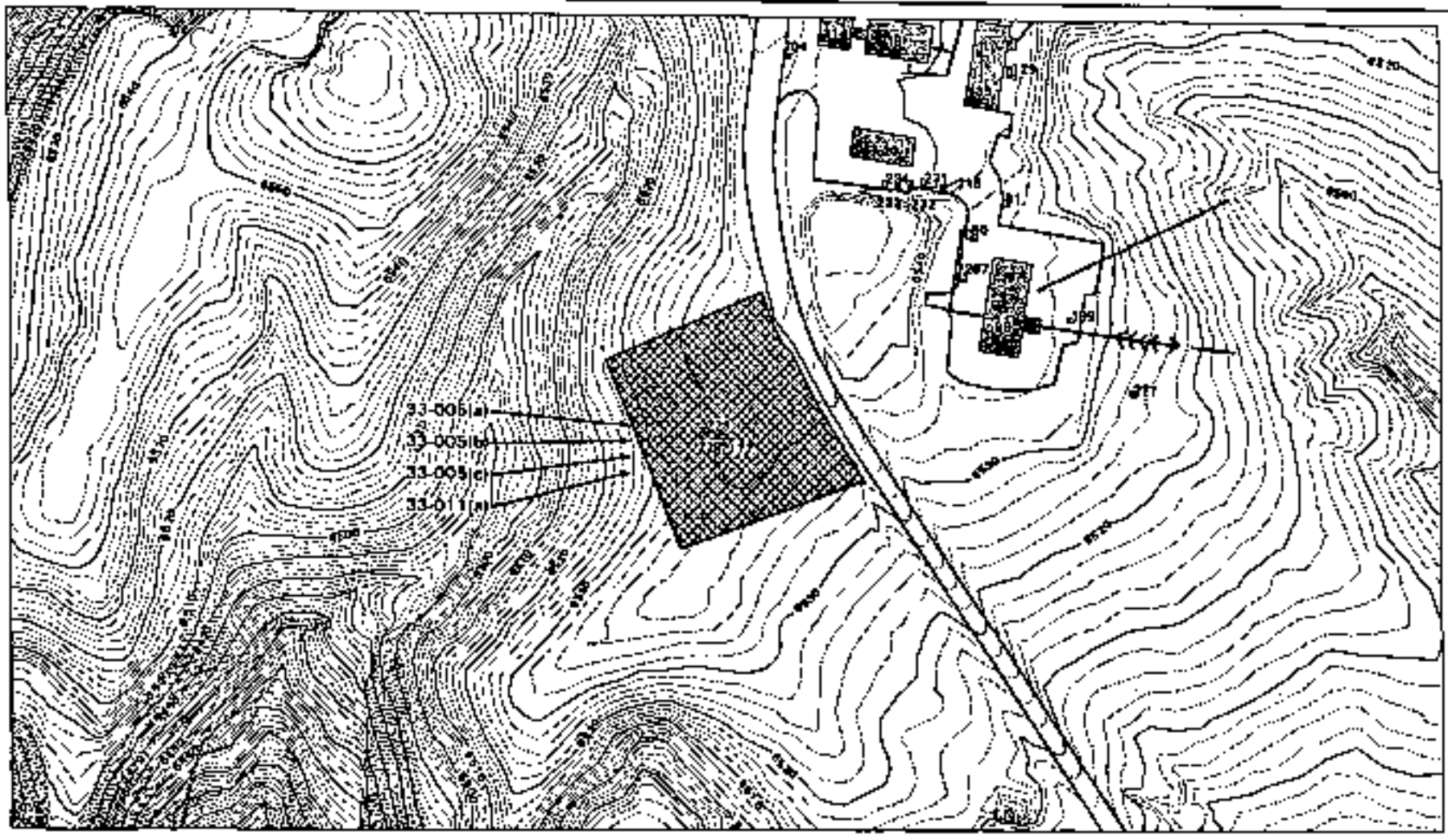
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, identical waste streams, geographical proximity, similar transport mechanisms, indistinguishable source terms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRSs in this consolidated unit were associated with former processing building TA-33-21 located south and west of the Main Site support facilities. TA-33-21 was constructed in 1950 and contained gloveboxes housing saws to section projectiles made of uranium, beryllium and polonium. Experiments using plutonium were also conducted in the gloveboxes. The entire building was contaminated in 1960 and never used again. PRS 33-005(a) was a septic system including drain lines and leach field that served restrooms and change room lavatories in TA-33-21. PRSs 33-005(b and c) were drain lines from sinks, showers, gloveboxes in the process and hot change rooms. The drain lines discharged to the septic tank (PRS 33-005(a)) which discharged to the leach field approximately 50 feet south of the building. PRS 33-011(a) was the drum storage area for building TA-33-21. The building storage area and septic system were removed in 1974; the debris was disposed of at Area G.



PRS Consolidation Unit 33-005(a)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Tiles
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

RMAD 6106855 17 Jul 00

PRS Consolidation Worksheet

Site Ty Firing Site - East Site

Proposed PRS Number: 33-006(b)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
33-006(b)	HSWA	Firing range- (inactive)	Rad, Metals, HE	South Ancho
33-007(a)	HSWA	Firing range - (inactive)	Rad, Metals, HE	South Ancho
33-008(b)	HSWA	Landfill - (inactive)	Rad, Metals, HE	South Ancho
33-010(a)	HSWA	Surface disposal - (inactive)	Rad, Metals, HE	South Ancho

Consolidation Checklist Criteria:

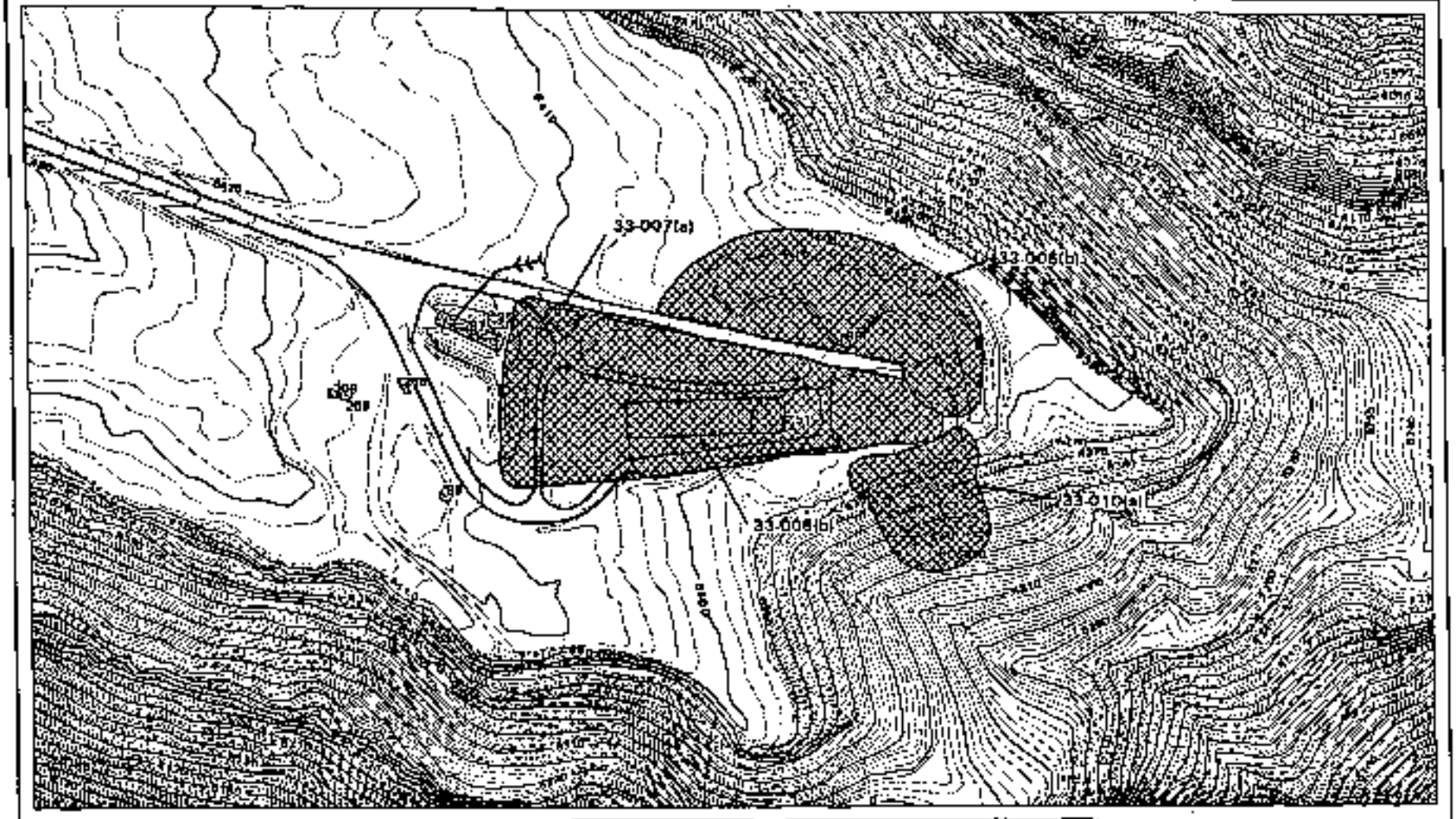
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative affect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, commingled waste streams, geographical proximity, similar transport mechanisms (surface and near-surface), indistinguishable source terms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRSs in this consolidated unit are all associated with the former TA-33 firing site known as East Site. East Site was established in 1955 to test gun-type initiators. Projectiles containing beryllium and polonium-210 or cobalt-60 were shot into berms or catcher boxes. The site was decommissioned in 1984. The developed area of the site consists of three bunkered structures and a large v-shaped berm. The main drainage through the site flows to the east. PRS 33-006(b) consists of two adjacent crescent-shaped berms with a concrete shot pad in the center of each bermed area, (TAs -33-97 and -98, respectively). PRS 33-007(a) is the area south of the berms where two gun mounts (TAs-33-116 and -135) were previously located. PRS 33-008(b) was a former disposal area for debris from decommissioning of the site. PRS 33-010(a) is a canyonside disposal site where debris from the shot pads at East Site was moved prior to each subsequent shot. Decommissioning of East Site resulted in the commingling of COPCs.



PRS Consolidation Unit 33-006(b)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Tics:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

RMAD G108856 17 Jul 00

PRS Consolidation Worksheet

Site Type: Waste Water Treatment Plant

Proposed PRS Number: 35-003(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-003(a)	HSWA	Former Holding Tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(b)	HSWA	Former Holding Tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(c)	HSWA	Former Holding Tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(e)	HSWA	Former Surge tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(f)	HSWA	Former Surge tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(g)	HSWA	Former Surge tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(h)	HSWA	Former Retention Tank	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(m)	HSWA	Former Surge tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(misc)	Non-HSWA	Former Miscellaneous piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(n)	HSWA	Former Holding tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(o)	HSWA	Former Surge tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(p)	HSWA	Former Air filter building - added in FY00	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

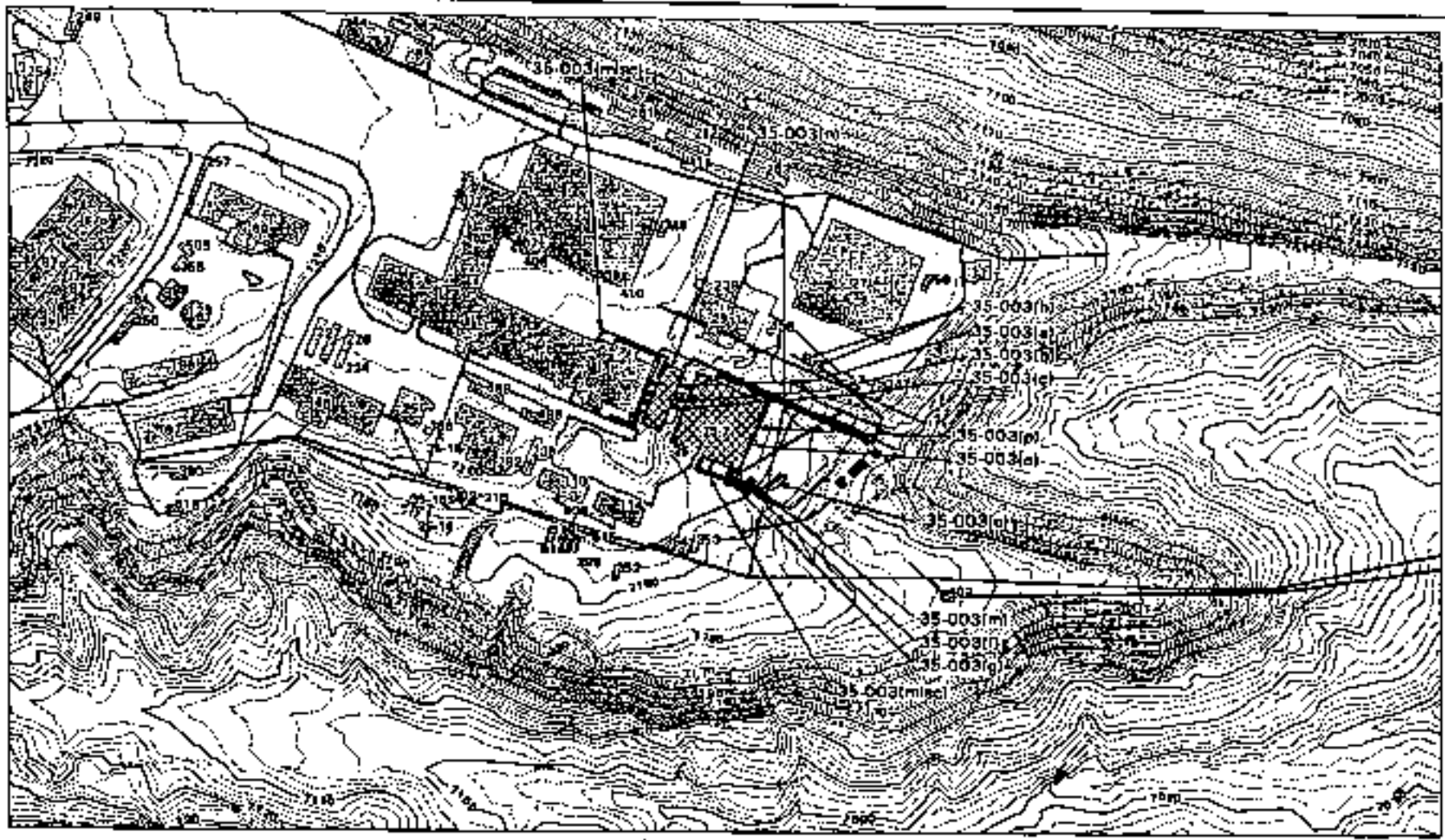
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface, subsurface and sediment), geographical proximity, overlapping dispersion areas, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description:

The TA-35 waste water treatment plant (WWTP) was a large operation located on the east end of Ten Site mesa that operated from 1951 until 1963. It consisted of an array of underground waste lines, storage tanks, and chemical treatment precipitation tanks. The plant treated liquid waste that originated from the radiochemistry laboratories and operation of the radioactive lanthanum-140 hot cells in Building TA-35-2. PRS 35-003(misc.) consists of the network of underground lines that connected the various structures that composed the Ten Site WWTP. All buildings, foundations, and structures were removed during D&D activities in 1981 and 1985. It is expected that contamination at the WWTP will not be distinguishable from each PRS at the site. PRS 35-003(p), added to this consolidated unit in FY00 was the Air Filter building at the TA-35 WWTP, where air contaminated with radioactivity from the facility was sent. Consolidated PRS 35-003(a)-99 was broken out into the mesa top component (this consolidated PRS) and the canyon component (PRS 35-003(d)-00) in FY00.



PRS Consolidation Unit 35-003(a)-99

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcie Jones

RMAD G108857 17 Jul 00

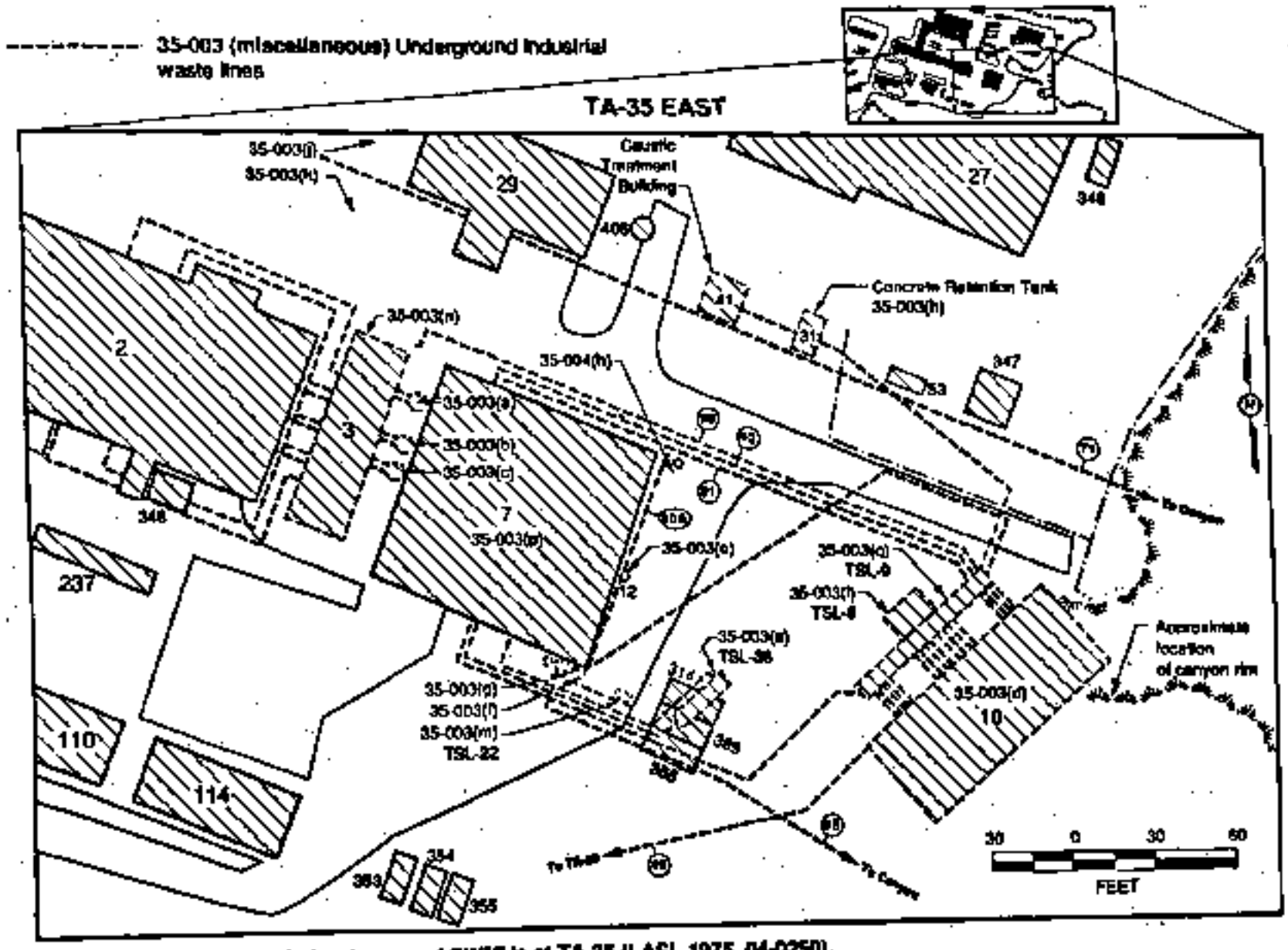


Figure 3-5. Locations of structures and SWMUs at TA-35 (LASL 1975, 04-0250).

PRS Consolidation Worksheet

Site Type: WWTP - Pratt Canyon

Proposed PRS Number: 35-003(d)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-003(d)	HSWA	Former Holding Tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(l)	HSWA	Former Holding tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(q)	HSWA	Former Holding tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(r)	Non-HSWA	Former Outfall and receiving canyon	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

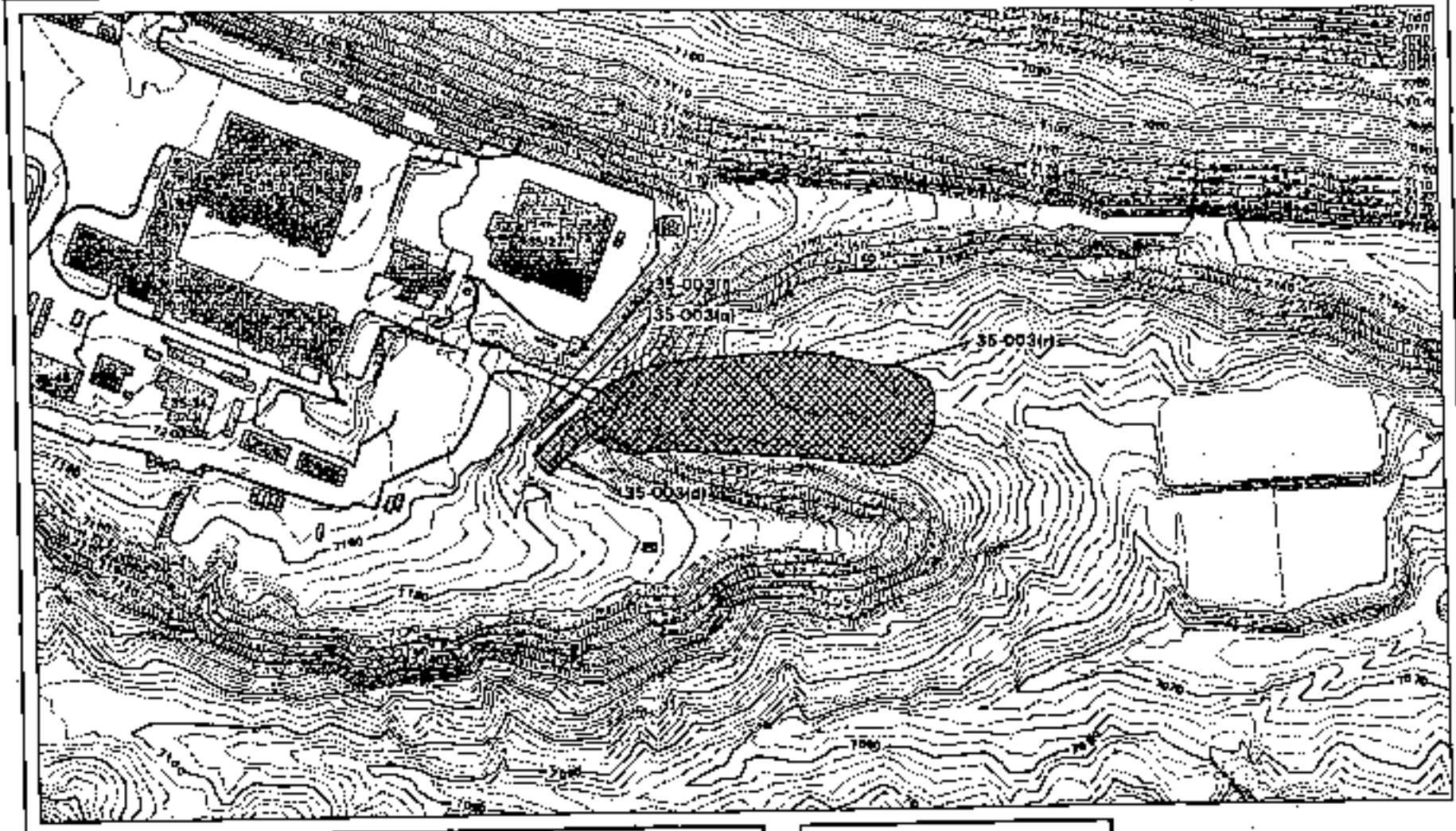
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface, subsurface and sediment), geographical proximity, overlapping dispersion areas, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description:

The PRSs in this consolidated unit represent the canyon component of the WWTP consolidated unit 35-003(a)-99. PRS 35-003(d) was the former holding tank building, TA-35-10 at the WWTP. PRS 35-003(l) was a former pump pit for the drain lines (PRS 35-003(q)) that carried wastewater to and from TA-35-10, and on to TA-50 or the canyon. Two of the lines had direct outfalls to the small side canyon east of the WWTP, PRS 35-003(r). PRS 35-003(r) is a small shallow canyon located immediately east of the former WWTP. The canyon received effluent discharge and spills from the WWTP holding tanks. All buildings, foundations, and structures were removed during D&D activities in 1981 and 1985. It is expected that contamination at the WWTP will not be distinguishable from each PRS at the site.



PRS Consolidation Unit 35-003(d)-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is preliminary and has not been checked for accuracy.

Produced by Maggie Jones

FIMAD G108488 18 Apr 00

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 35-003(j)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-003(j)	HSWA	Former Oil Storage Tank	VOCs, PCBs, Rad	Middle Mortandad/Ten-Site
35-003(k)	HSWA	Former Location of oil tanks	VOCs, PCBs, Rad	Middle Mortandad/Ten-Site
35-014(b)	HSWA	Former Leaking Drum, added FY00	VOCs, PCBs, Rad	Middle Mortandad/Ten-Site
35-014(d)	Non-HSWA	Former Location of dielectric spill	VOCs, PCBs, Rad	Middle Mortandad/Ten-Site
35-015(b)	HSWA	Location of former waste oil treatment facility	VOCs, PCBs, Rad	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

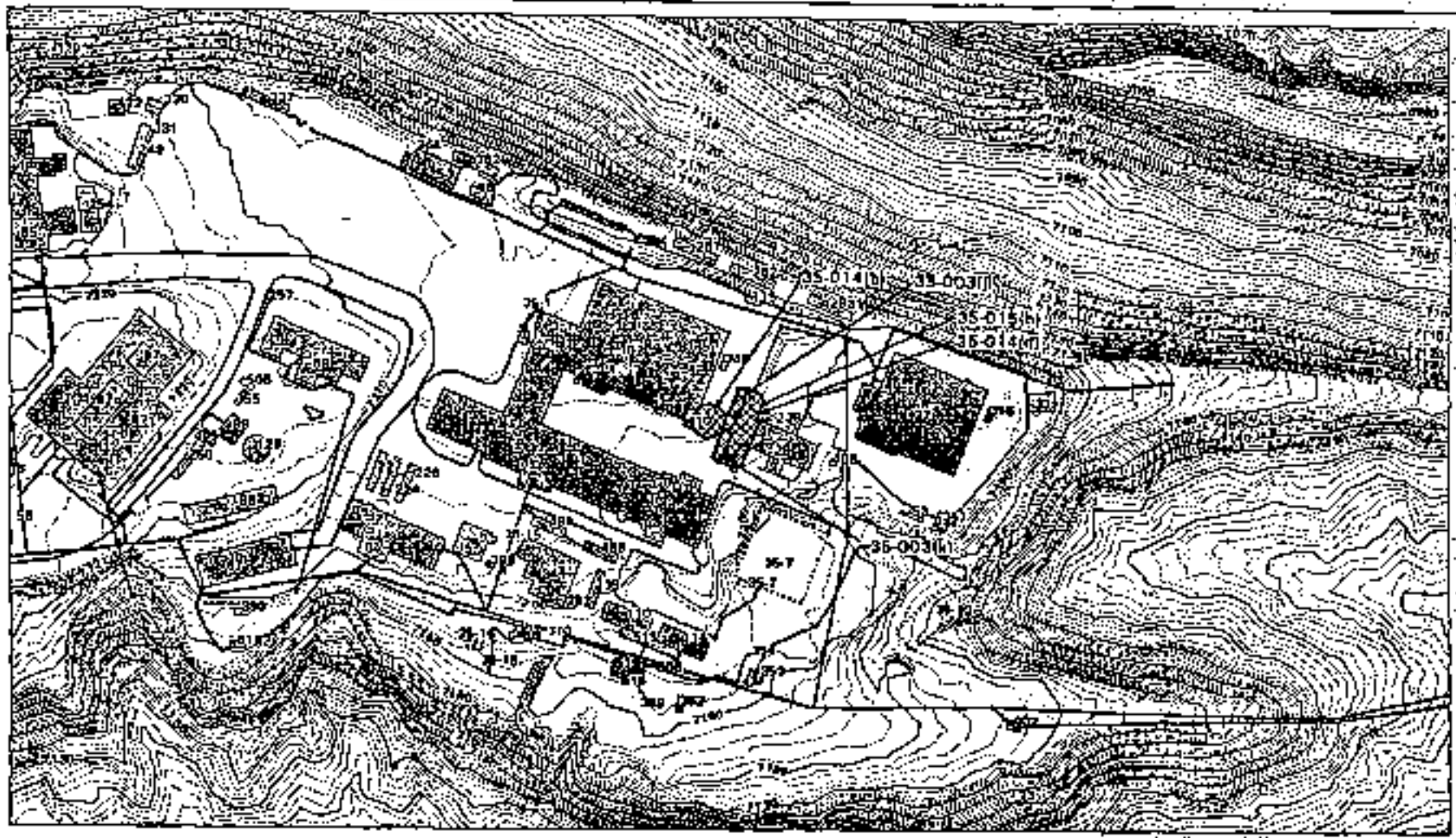
	Yes	No
1. *Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?*	☑	☐
2. *Is the contamination origin non-discernable?*	☑	☐
3. *Are the PRSs in the same geographic proximity?*	☑	☐
4. *Are the transport mechanisms and pathways similar?*	☑	☐
5. *Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?*	☑	☐

Consolidation Rationale:

Since the PRSs are all in close proximity, have the same COPCs, undistinguishable source terms, were part of one system, and the investigation required to assess contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit are all located on Ten Site Mesa in a highly industrialized area of TA-35. There are no PRS boundaries allowing COPCs to intermingle. All of the PRSs will be investigated simultaneously. PRS 35-015(b) is the location of a former waste oil treatment facility. The facility processed used oil from the Helios CO2 laser in TA-35-86. The facility was removed in 1988/1989 and some of the area has been paved while other portions remain unpaved with oil-contaminated soil. PRSs 35-003(j and k) are the locations of former above-ground oil siege tanks near the former waste oil treatment facility. The tanks were used for storage of dielectric oil in association with the waste oil treatment facility (PRS 35-015(b)). The tanks were piped to the waste oil treatment facility. PRS 35-014(d) was the location of a dielectric oil spill at the former location of two oil siege tanks at the southwest corner of TA-35-29. Leaks of dielectric oil from the valve system on the siege tanks were the likely source of the release. The tanks were installed in 1974 and removed in the late 1980s. PRS 35-014(b), added to this consolidated unit in FY00, was the location where a 55-gallon drum of dielectric fluid was found to be leaking.



PRS Consolidation Unit 35-003(j)-99

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Tick:
Nevada State Plane Coordinate System,
Central Zone (Transverse Mercator)

Netlesc Information on this map is provisional and has not been checked for accuracy.

Produced by Mavis Jones

FIMAD G106658 17 Jul 00

PRS Consolidation Worksheet

Site Type: Septic System

Proposed PRS Number: 35-004(g)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-004(g)	HSWA	Container storage area - (inactive)	Rad, Metals, SVOCs, VOCs	Middle Mortandad/Ten-Site
35-009(b)	HSWA	Septic system - (inactive)	Rad, Metals, SVOCs, VOCs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

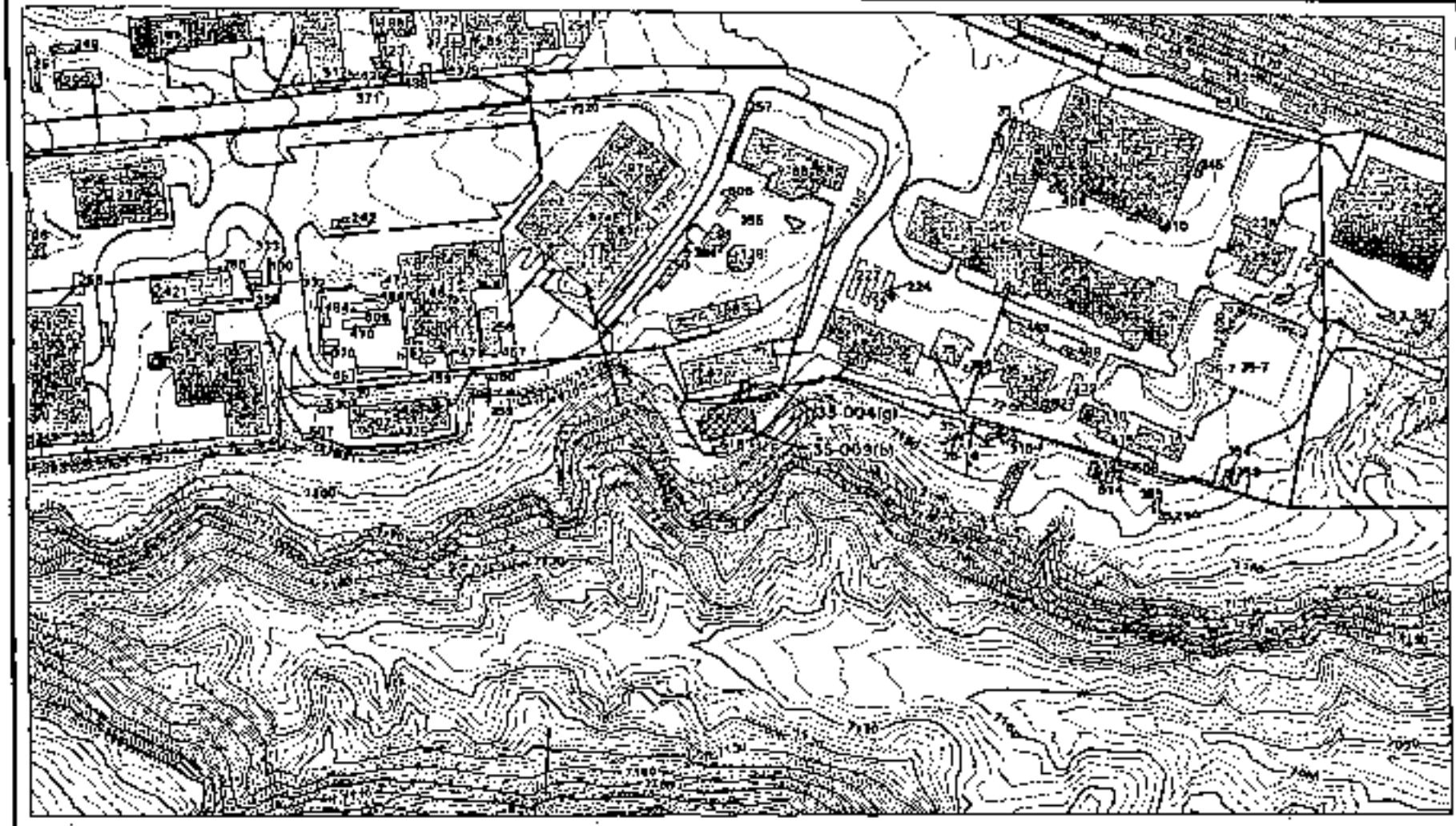
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, indistinguishable source terms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

COPCs from the two PRSs in this consolidated unit are commingled and will be investigated simultaneously. PRS 35-004(b) is a former container storage area adjacent to TA-35-67 which was used as a warehouse. PRS 35-009(b) is an abandoned septic system including drain lines and a leach field which served TA-35-87. Storm water runoff and any spills from PRS 35-004(b) migrated toward PRS 35-009(b) causing COPCs to commingle.



PRS Consolidation Unit 35-004(g)-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FRAAD G106889 17 Jul 00

PRS Consolidation Worksheet

Site Type: Surface Disposal

Proposed PRS Number: 35-008-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-008	HSWA	Surface disposal - (inactive)	Rad, Metals, SVOCs, VOCs, PCBs	Middle Mortandad/Ten-Site
35-014(e)	HSWA	Former Oil Spill Location	SVOCs, PCBs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, commingled contaminants, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 35-008 is a canyonside disposal area located along the rim of Mortandad Canyon. Debris in the area is believed to include scrap metal, paint cans, building materials, asphalt, a 55-gallon drum, etc. PRS 35-014(e), which is the same as 35-014(e1), was an operational release of dielectric fluid possibly contaminated with PCBs which occurred on the north side of TA-35-85. Soil from the spill area was bulldozed over the side of Mortandad Canyon on top of PRS 35-008. As a result, COPCs from both PRSs are commingled.

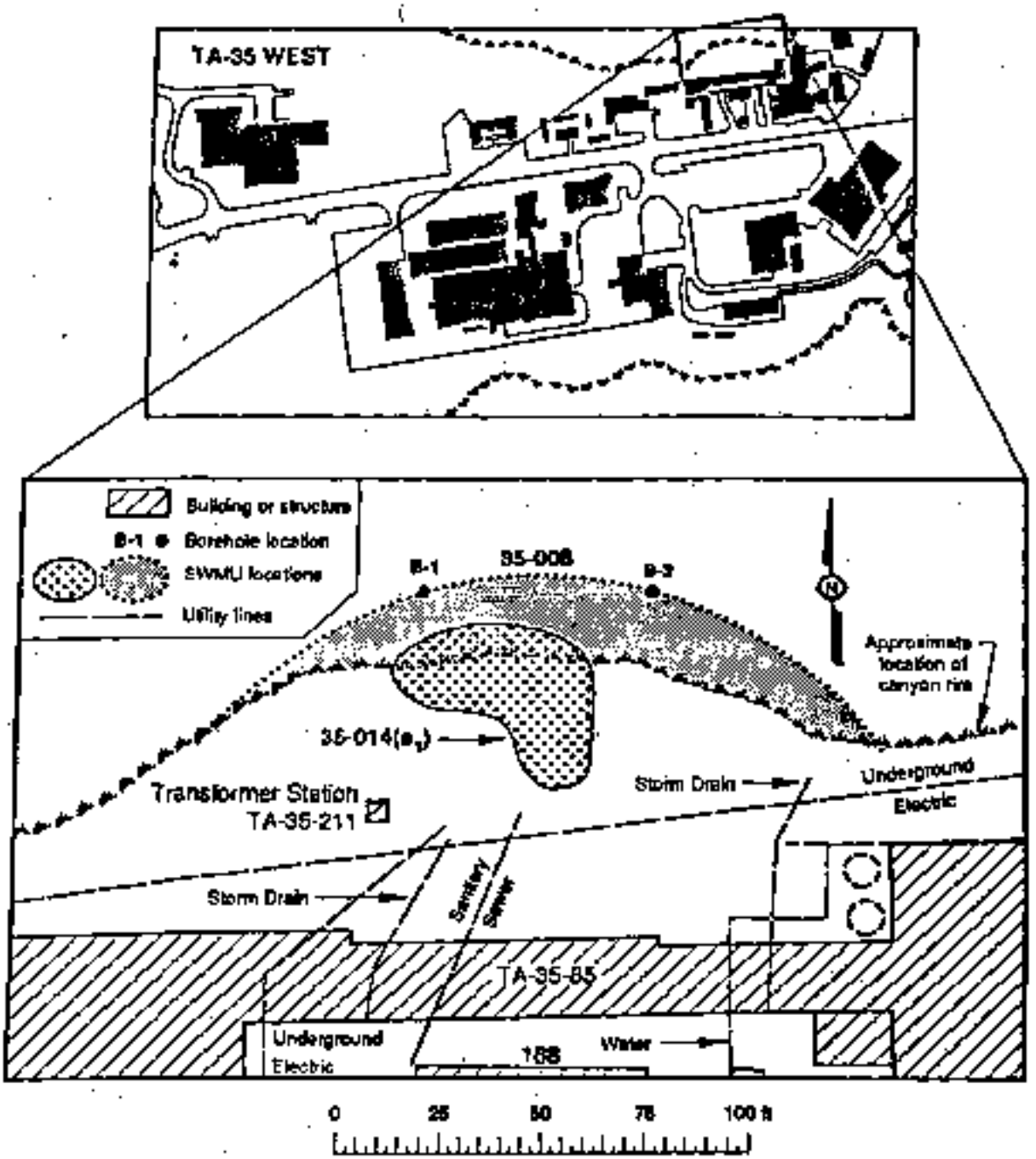


Figure 7-17. Schematic sample location map for SWMU Aggregate E.

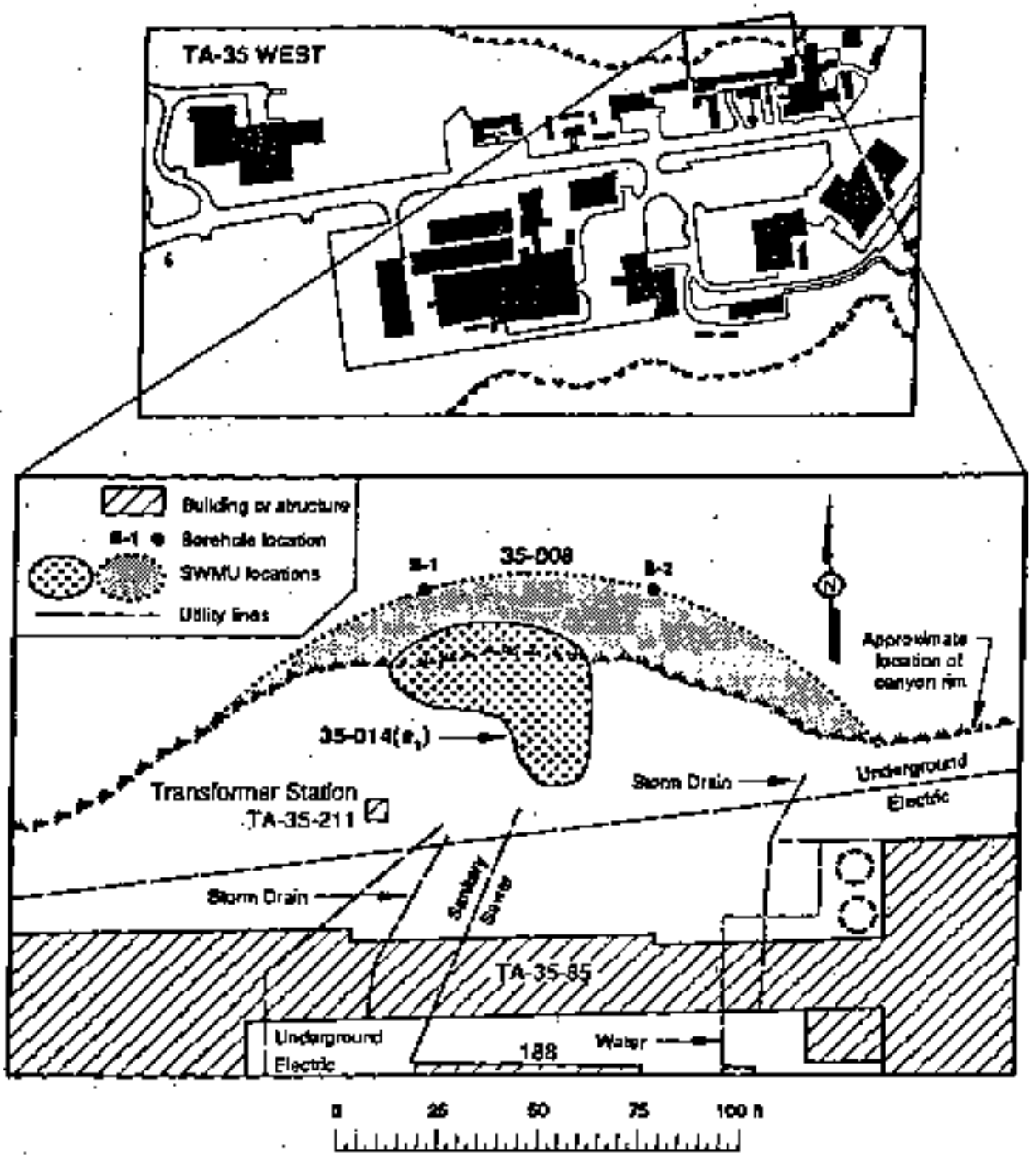


Figure 7-17. Schematic sample location map for SWMU Aggregate E.

PRS Consolidation Worksheet

Site Type: Container Storage Area

Proposed PRS Number: 35-014(g1)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-004(m)	Non-HSWA	Container storage area - (inactive)	Rad, Metals, SVOCs, PCBs/pesticides	Middle Mortandad/Ten Site
35-014(g1)	HSWA	Soil contamination	Rad, Metals, SVOCs, PCBs/pesticides	Middle Mortandad/Ten Site
35-014(g2)	Non-HSWA	Soil contamination	Rad, Metals, SVOCs, PCBs/pesticides	Middle Mortandad/Ten Site
35-016(n)	Non-HSWA	Storm drain and outfall - (inactive)	Rad, Metals, SVOCs, PCBs/pesticides	Middle Mortandad/Ten Site

Consolidation Checklist Criteria:

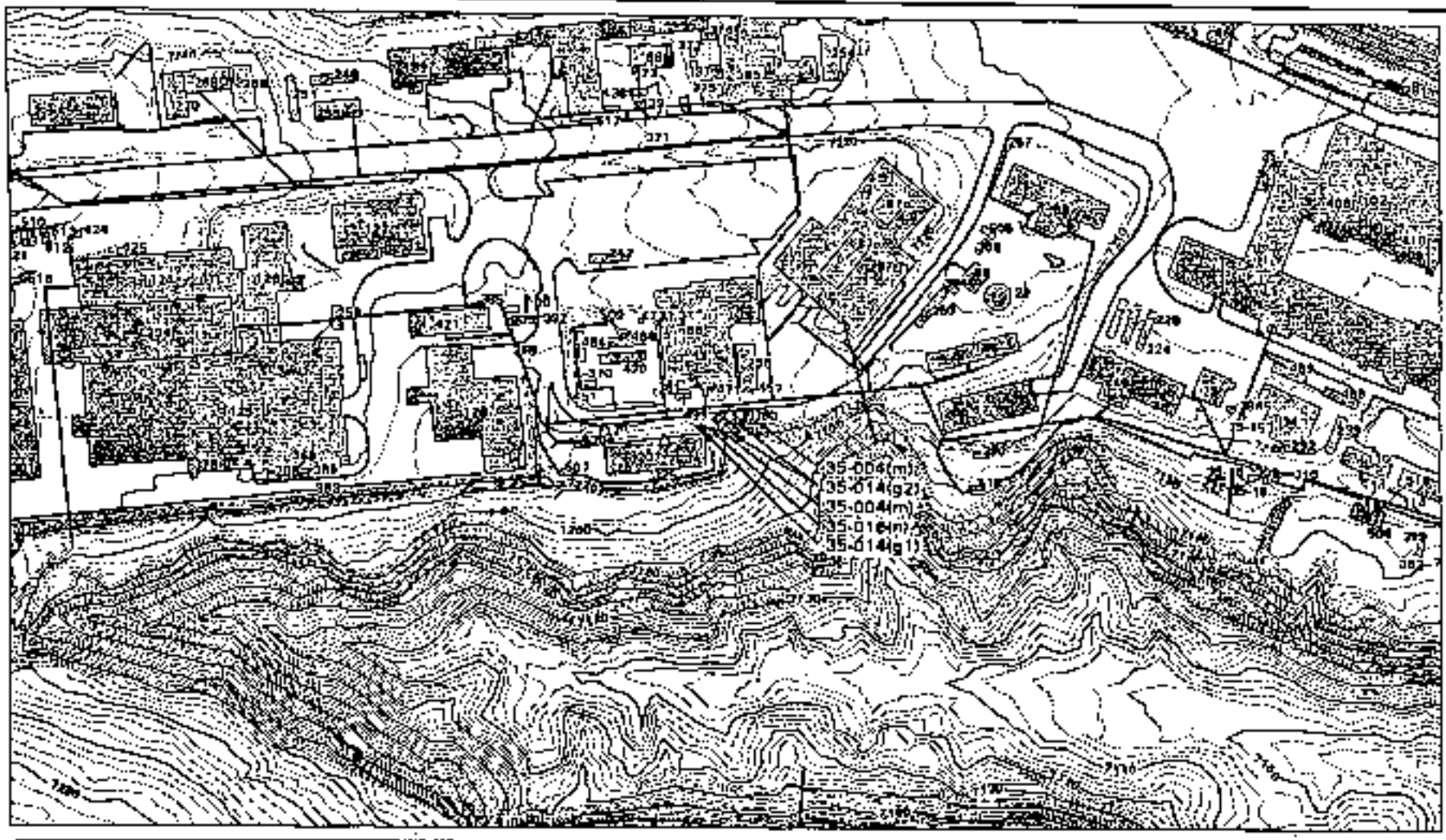
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, commingled contaminants, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 35-014(g1) is an oil-stained area in the vicinity of a storm water outfall near the northeast corner of TA-35-207, the experimental support laboratory. PRS 35-016(n) is a corrugated metal drain line installed in 1977 to channel storm water runoff from the roof and parking lot of TA-35-86 to an outfall in Ten Site Canyon. This outfall also receives surface water runoff from PRS 35-014(g1). PRS 35-004(m) is an inactive container storage area located on the south side of TA-35-86, and PRS 35-014(g2) is an oil-stained asphalt area that resulted from leaking containers stored at PRS 35-004(m). Storm water runoff from these two PRSs flows toward the outfall area of storm drain PRS 35-016(n).



PRS Consolidation Unit 35-014(g1)-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marvin Jones

RMAD 0106980 17 Jul 00

PRS Consolidation Worksheet

Site Type: Drains and Outfalls

Proposed PRS Number: 35-016(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-016(a)	HSWA	Storm drain and outfall - (active)	Rad, Metals, SVOCs, VOCs	Middle Mortandad/Ten-Site
35-016(q)	HSWA	Storm drain and outfall - (active)	Rad, Metals, SVOCs, VOCs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

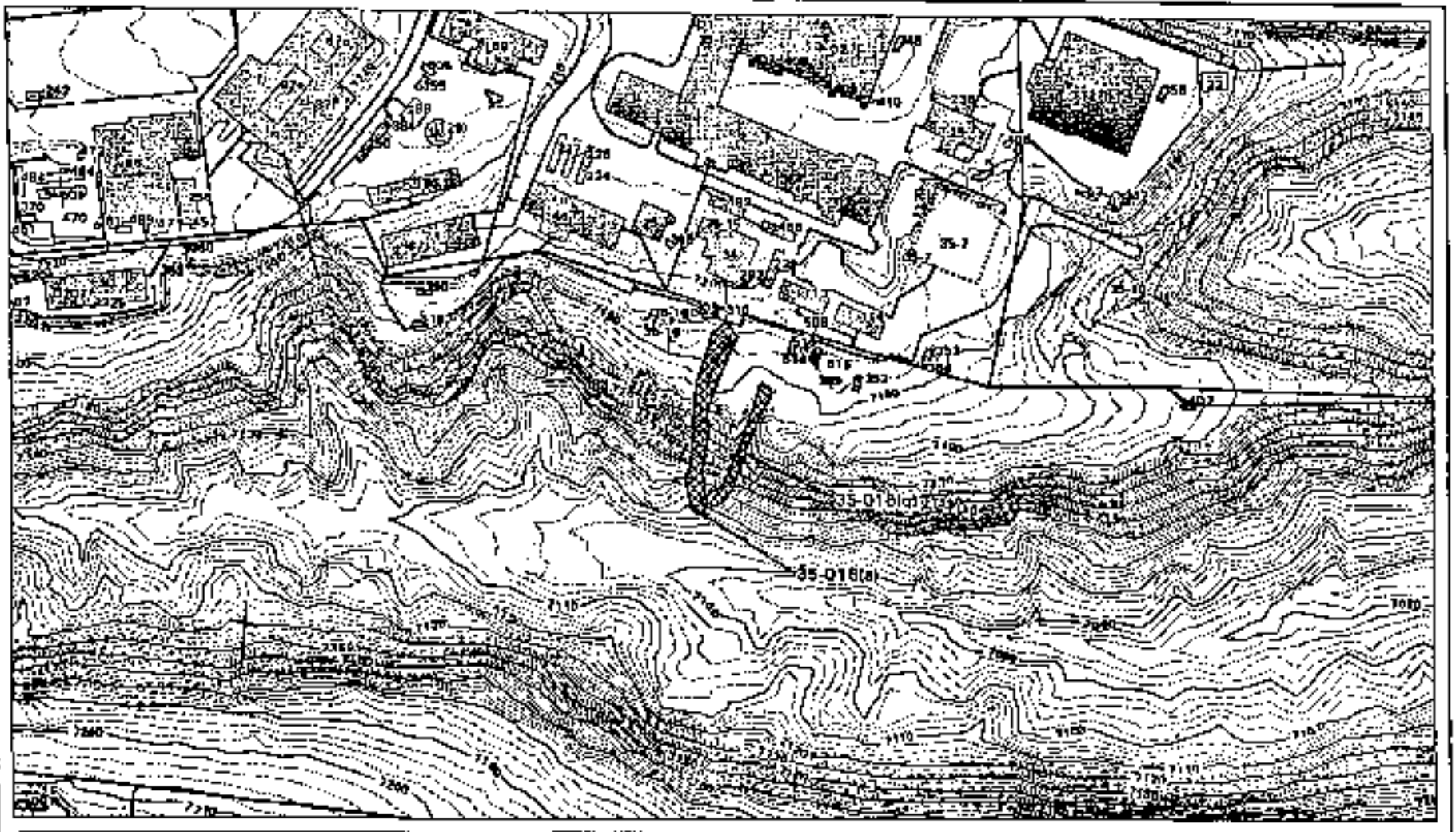
	Yes	No
1. *Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?*	☑	☐
2. *Is the contamination origin non-discernable?*	☑	☐
3. *Are the PRSs in the same geographic proximity?*	☑	☐
4. *Are the transport mechanisms and pathways similar?*	☑	☐
5. *Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?*	☑	☐

Consolidation Rationale:

Since the PRSs are all in close proximity, have the same COPCs, undistinguishable source terms, are part of one system, and the investigation required to assess contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 35-016(a) was established in 1956 to handle noncontact cooling water from the Sodium Testing building (TA-35-34). The PRS originally consisted of a metals pipe placed in a trench cut into the tuff with a valve with a 6-inch VCP outfall that discharged into Ten Site Canyon (NPDES Permit No. 04A089). The drain lines were decommissioned and removed in 1987, and the trench now serves as a storm water collection channel for an area on the south side of Ten Site Mesa. PRS 35-016(q) is a parallel trench eroded into the tuff that discharges storm water from Ten Site mesa in the same outfall area in Ten Site Canyon.



PRS Consolidation Unit 35-016(a)-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is preliminary and has not been checked for accuracy.

Produced by Merdis Jones

RMAD 0106861 17 Jul 00

PRS Consolidation Worksheet

Site Type: Drain lines and outfall

Proposed PRS Number: 35-016(c)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-016(c)	HSWA	Drain line and Outfall - (Inactive)	Rad, Metals, VOCs, SVOCs	Middle Mortandad/Ten-Site
35-016(d)	HSWA	Drain line and Outfall - (Inactive)	Rad, Metals, VOCs, SVOCs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

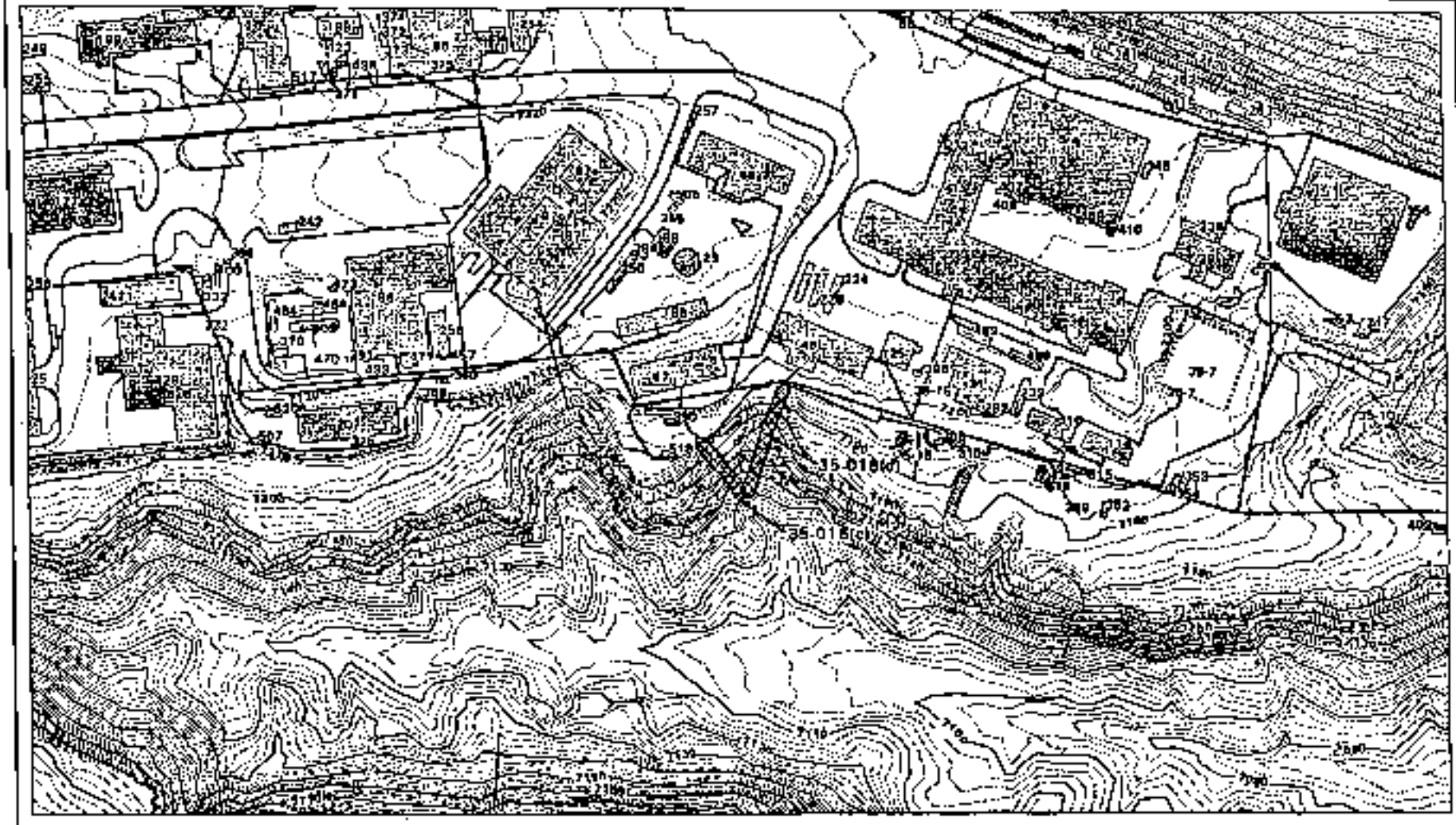
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative affect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, commingled contaminants, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The two PRSs in this consolidated unit are former drain lines that discharged noncontact cooling water to outfalls that overlap thereby allowing COPCs to commingle. PRS 35-016(c) consists of two formerly permitted outfalls established in 1964 to discharge noncontact cooling water from TA-35-67. The drain lines were connected to each other in 1985 and discharged to only one outfall in Ten Site Canyon. The outfall was deactivated in 1987. PRS 35-016(d) is a formerly permitted outfall established in 1962 to discharge noncontact cooling water from TA-35-46. Both buildings housed offices and heating and cooling systems in support of other TA-35 buildings. The noncontact cooling water was from building cooling systems and was not process-specific. The outfall areas of both PRSs overlapped. The date of deactivation of the buildings is not known.



PRS Consolidation Unit 35-016(c)-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Mandy Jones

FMAD G108962 17 Jul 00

PRS Consolidation Worksheet

Site Type: Operational release

Proposed PRS Number: 35-016(i)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-014(e2)	Non-HSWA	Operation releases - (inactive)	Metals, PCBs, SVOCs	Middle Mortandad/Ten-Site
35-016(i)	HSWA	Storm water drain line and outfall - (active)	Metals, PCBs, SVOCs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

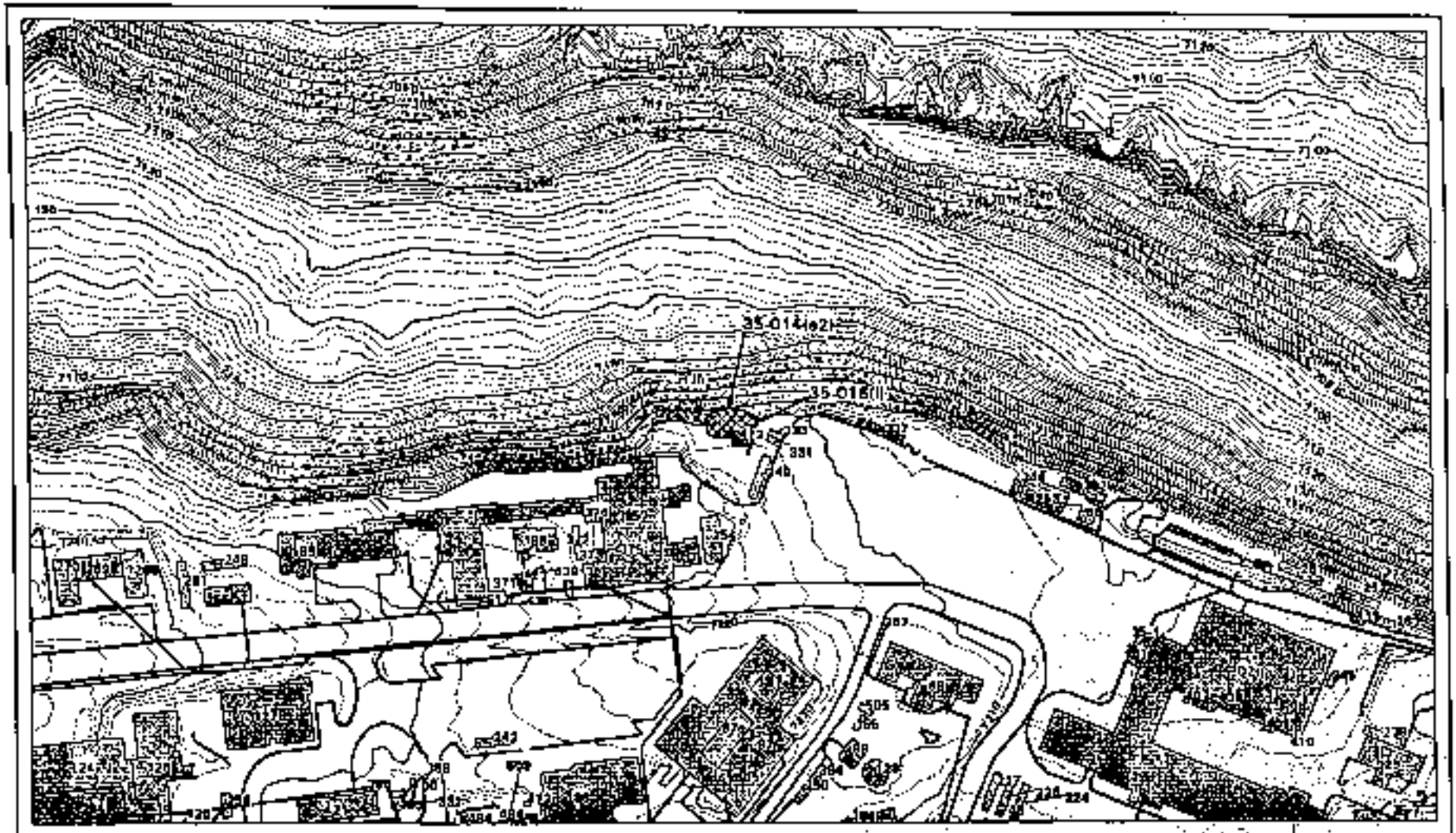
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, commingled contaminants, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 35-016(i) consists of a corrugate metal pipe that collects storm water runoff from drains along Pecos Drive and adjacent to a former waste oil impoundment. The impoundment previously collected dielectric fluid used in TA-35-85, Chemical Laser Facility,and was located just south of the building. The storm drain discharges to an outfall in Mortandad Canyon. PRS 35-014(e2) is the site of an oil spill that originated from overflows of a waste oil impoundment that commingled with the storm water outfall. The impoundment was removed and remediated in 1989. The two PRSs are included in the same decision set for risk.



PRS Consolidation Unit 35-016(i)-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Morris Jones

FMAD 0108863 17 Jul 00

PRS Consolidation Worksheet

Site Type: Drain lines and outfalls

Proposed PRS Number: 35-016(k)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-016(k)	HSWA	Drain lines and outfall - (inactive)	Rad, Metals, PCBs, SVOCs	Middle Mortandad/Ten-Site
35-016(l)	Non-HSWA	Storm drainage channel and outfall - (active)	Rad, Metals, PCBs, SVOCs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

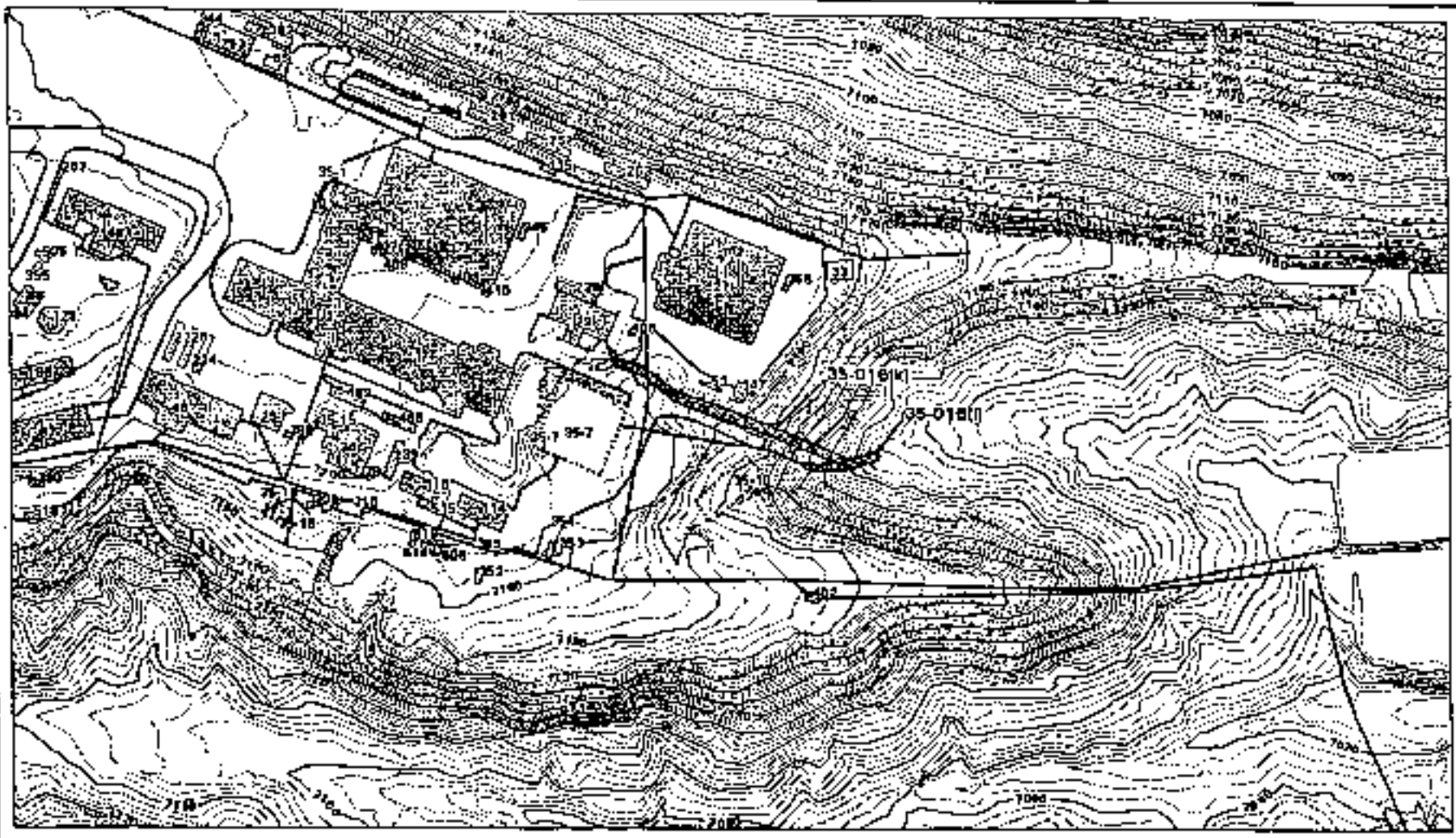
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, commingled contaminants, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 35-016(k) consisted of drains situated in concrete catch basins that collected water leaks from the UV sterilizer and once-through cooling water from a closed heat exchange system in TA-35-29, the Gas Laser Building. The drain line runs eastward and discharged to a shallow tributary of Ten Site Canyon. PRS 35-016(l) is a daylight discharge channel carved in tuff and established in 1981 to handle storm water runoff from TA-35-29 and -7. The channel runs eastward and discharges to the same outfall area as PRS 35-016(k) causing COPCs to be commingled.



PRS Consolidation Unit 35-016(k)-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provided and has not been checked for accuracy.

Produced by Weston Jones

FIMAD G108884 17 Jul 00

PRS Consolidation Worksheet

Site Type: MDA Y

Proposed PRS Number: 39-001(b)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
39-001(b)	HSWA	MDA Y - (Inactive)	Rad, Metals, SVOCs, PCBs, VOCs	North Ancho
39-008	HSWA	Firing range - (Inactive)	Rad, Metals, SVOCs, PCBs, VOCs	North Ancho

Consolidation Checklist Criteria:

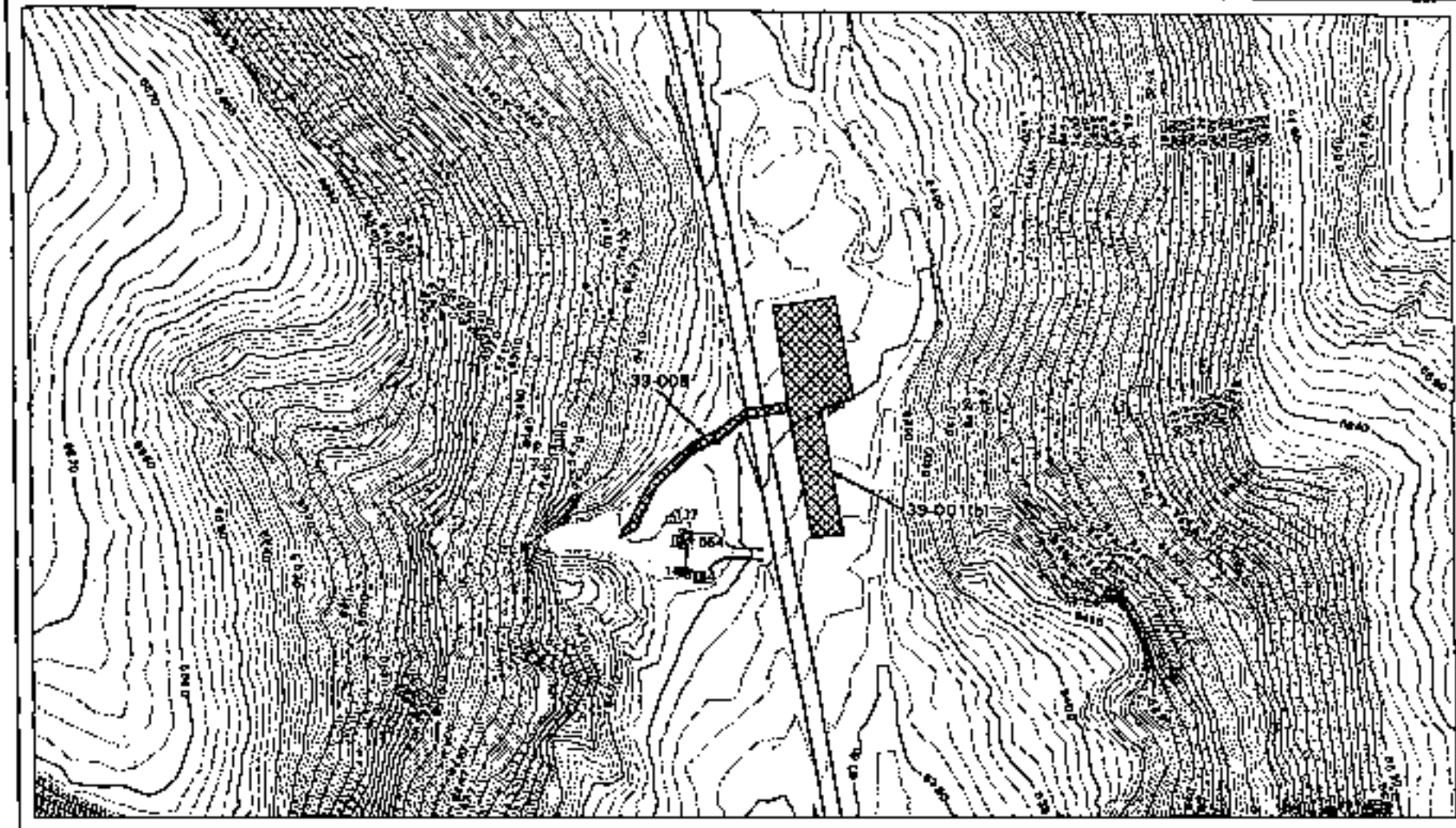
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, commingled contaminants, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 39-001(b), also known as MDA Y, consists of three pits excavated beginning in the late 1960s that were used for the disposal of office waste and debris from former firing range PRS 39-008. PRS 39-008 is soil contamination remaining from TA-39-137 that housed a single-stage gas gun that was used to fire projectiles at targets attached to the end of the gun. Debris scattered around the outside of the building was subsequently pushed to a mound near the test area, and then placed in MDA Y. Therefore, COPCs are commingled.



PRS Consolidation Unit 39-001(b)-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Tick:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Wanda Jones

TIMAD G106865 17 Jul 00

PRS Consolidation Worksheet

Site Type: Waste Water Treatment Plant - TA-45 **Proposed PRS Number:** 45-001-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
01-002(b)-00	HSWA	Outfall Portion - (inactive) - changed FY00	Rad, Metals, SVOCs, VOCs, HE	Pueblo
45-001	HSWA	TA-45 Waste water treatment plant - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Pueblo
45-002	HSWA	Vehicle Decontamination facility - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Pueblo
45-003	HSWA	Waste lines at TA-45 WWTP - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Pueblo
45-004	HSWA	Sanitary Sewer Outfall - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Pueblo
C-45-001	Non-HSWA	Parking lot of Former Treatment Plant	Rad, Metals, SVOCs, VOCs, HE	Rendija/Barranca/Guaje

Consolidation Checklist Criteria:

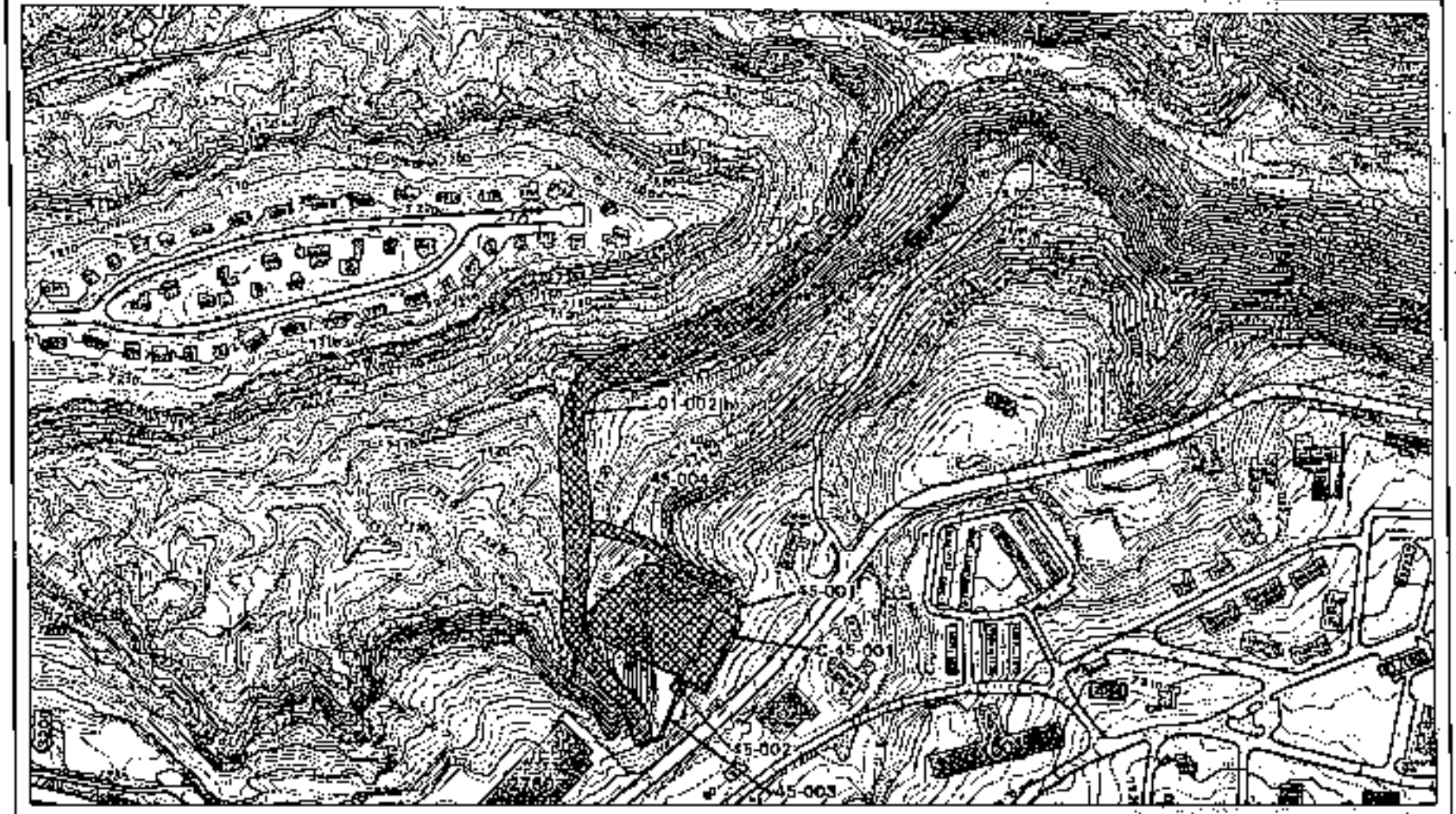
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, commingled waste streams, geographical proximity, similar transport mechanisms, indistinguishable source terms, common human health and ecological exposure areas, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit were all associated with the former TA-45 Waste Water Treatment Plant (WWTP) which received radioactive liquid waste from TA-1 and TA-3. The plant began operation in 1951 and was decontaminated and decommissioned in 1966 and 1967. PRS 45-001 is the former location of the WWTP itself, and PRS 45-003 consists of the former WWTP inlet and outlet drain lines. PRS 45-002 was a vehicle decontamination facility adjacent to PRS 45-001, where large radioactively contaminated items and vehicles were steamed cleaned. Waste water from the facility was initially discharged directly to Acid Canyon, and was subsequently pumped to PRS 45-001. PRS 45-004 is the former location of a sanitary sewer outfall is directly adjacent to PRS 45-001. PRS 1-002 was divided into two PRSs; 01-002(a)-00 - the drain line portion; and 1-002(b)-00 - the outfall portion. The outfall portion was added to this consolidated PRS in FY00, and is described as an outfall that received untreated radioactive waste water from TA-1 prior to construction of the TA-45 WWTP. The outfall areas from PRSs 1-002(b)-00, 45-001, 45-002 and 45-004 overlap and COPCs are commingled. AOC C-45-001was the parking lot of the former WWTP. The drain line component of former PRS 1-002 (now designated as 01-002(a)-00) will be addressed as part of the investigation of consolidated PRS 01-001(a)-99.



PRS Consolidation Unit 45-001-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:4800

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Nothing information on this map is provisional and has not been checked for accuracy.

Produced by Mercia Group

RMAD 0108968 17 Jul 00

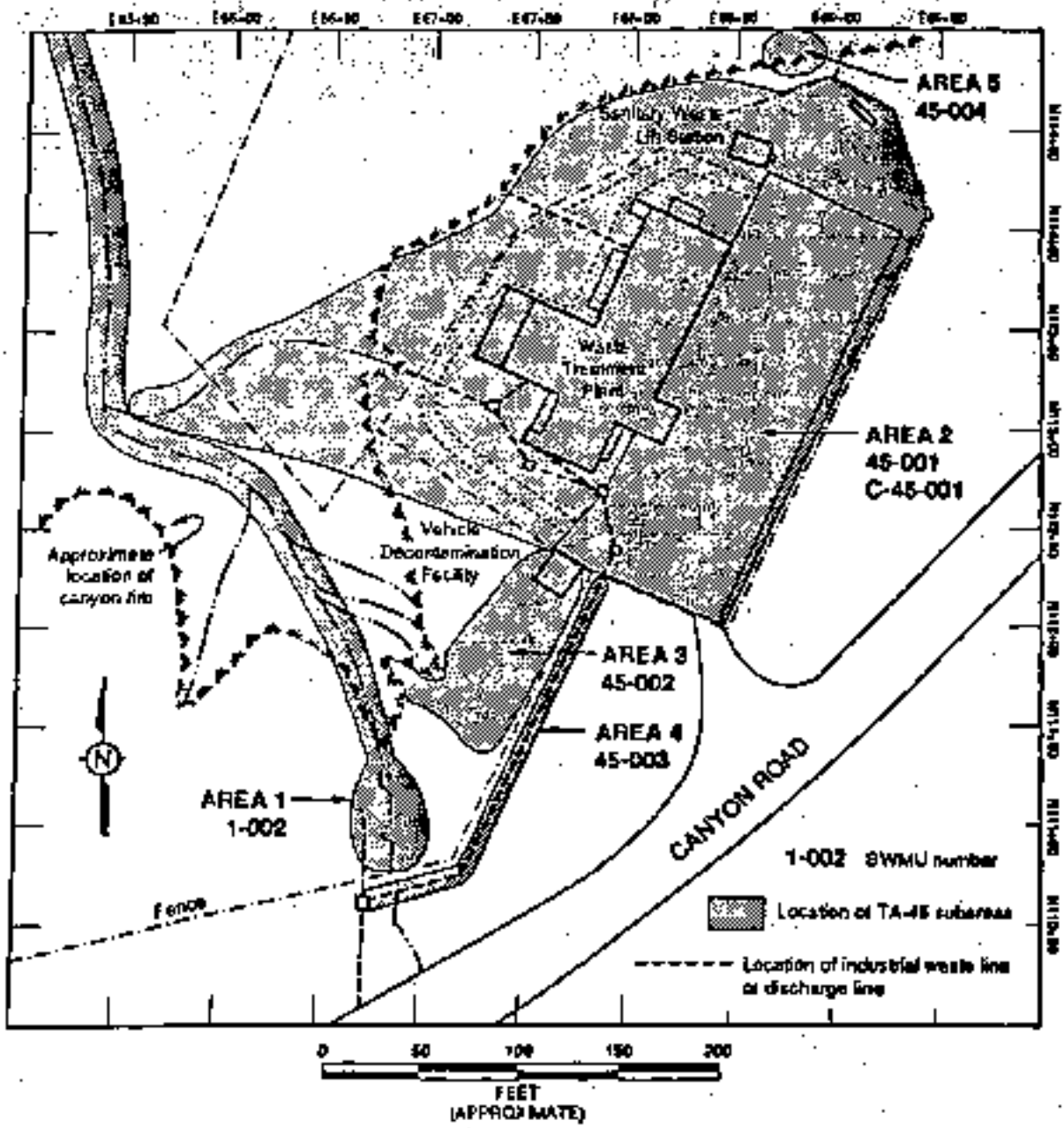


Figure 3.4-9. Location of five geographic areas and related SWMUs at TA-45 (modified from LANL 1981, 0141).

PRS Consolidation Worksheet

Site Type: Drain lines and outfalls

Proposed PRS Number: 48-007(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
48-007(a)	HSWA	Drain line and outfall - (inactive)	Metals, Gross Rad	Upper Mortandad
48-007(d)	HSWA	Drain line and outfall - (inactive)	Rad, Metals	Upper Mortandad
48-010	HSWA	Surface impoundment - (inactive)	Metals, Gross Rad	Upper Mortandad

Consolidation Checklist Criteria:

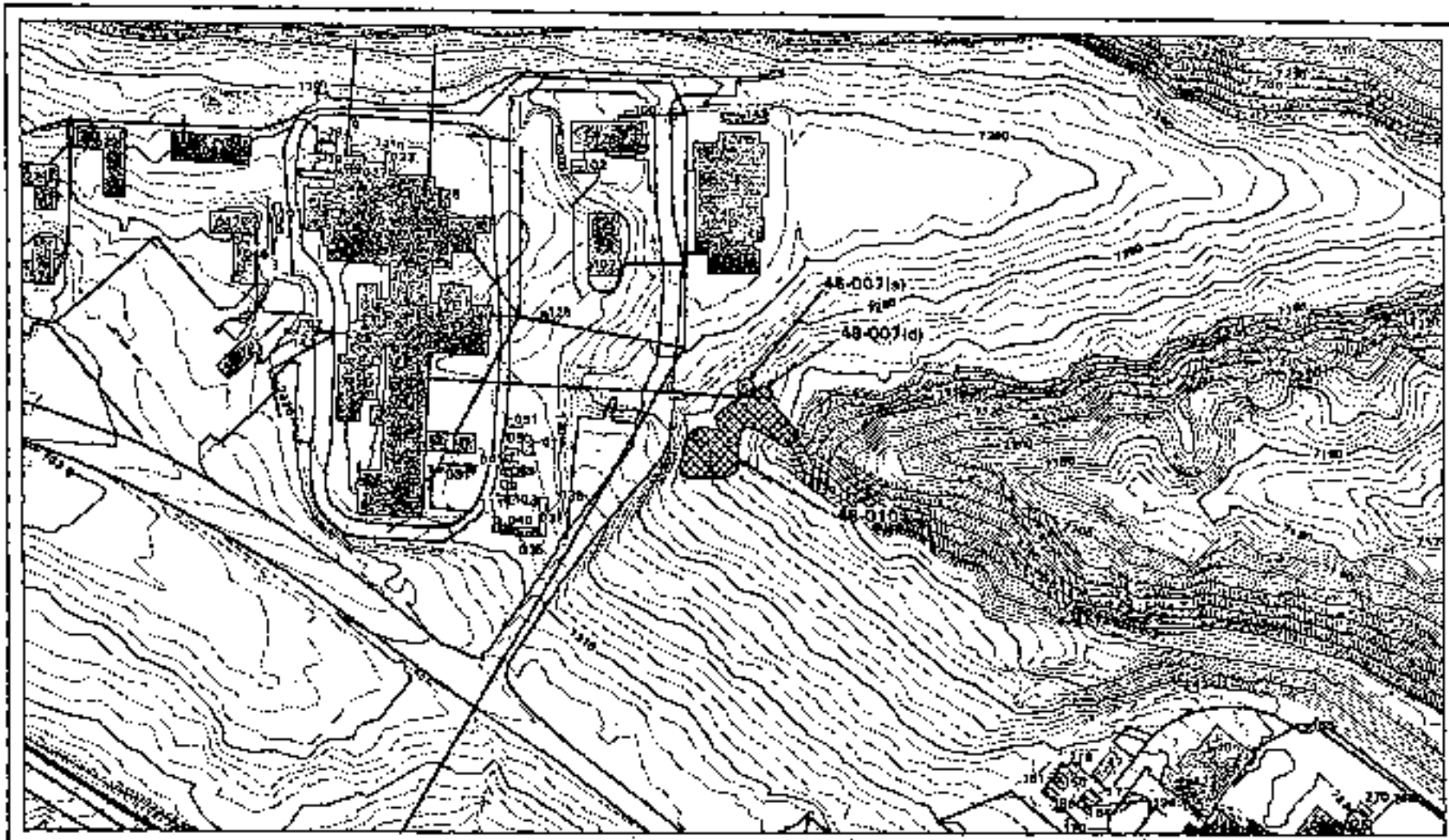
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, same process, commingled contaminants, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 48-007(a) consists of drain lines that collect treated cooling-water blowdown from two "cooling towers" that are part of the air conditioning system on the roof of TA-48-1. Water treatment chemicals were used to control scale, corrosion, and algal/microbial growth. The NPDES-permitted outfall discharged to an unlined surface impoundment PRS (48-010) east of TA-48-1. PRS 48-007(d) consists of a drain line that collects noncontact cooling water used to cool a vacuum pump house at TA-48-1. This outfall also discharged to the surface impoundment designated as PRS 48-010 that is part of this consolidated unit. Outfall areas overlap causing COPCs to be commingled.



PRS Consolidation Unit 48-007(a)-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by the Mid-Jones

FRMAD-G108887 17 Jul 00

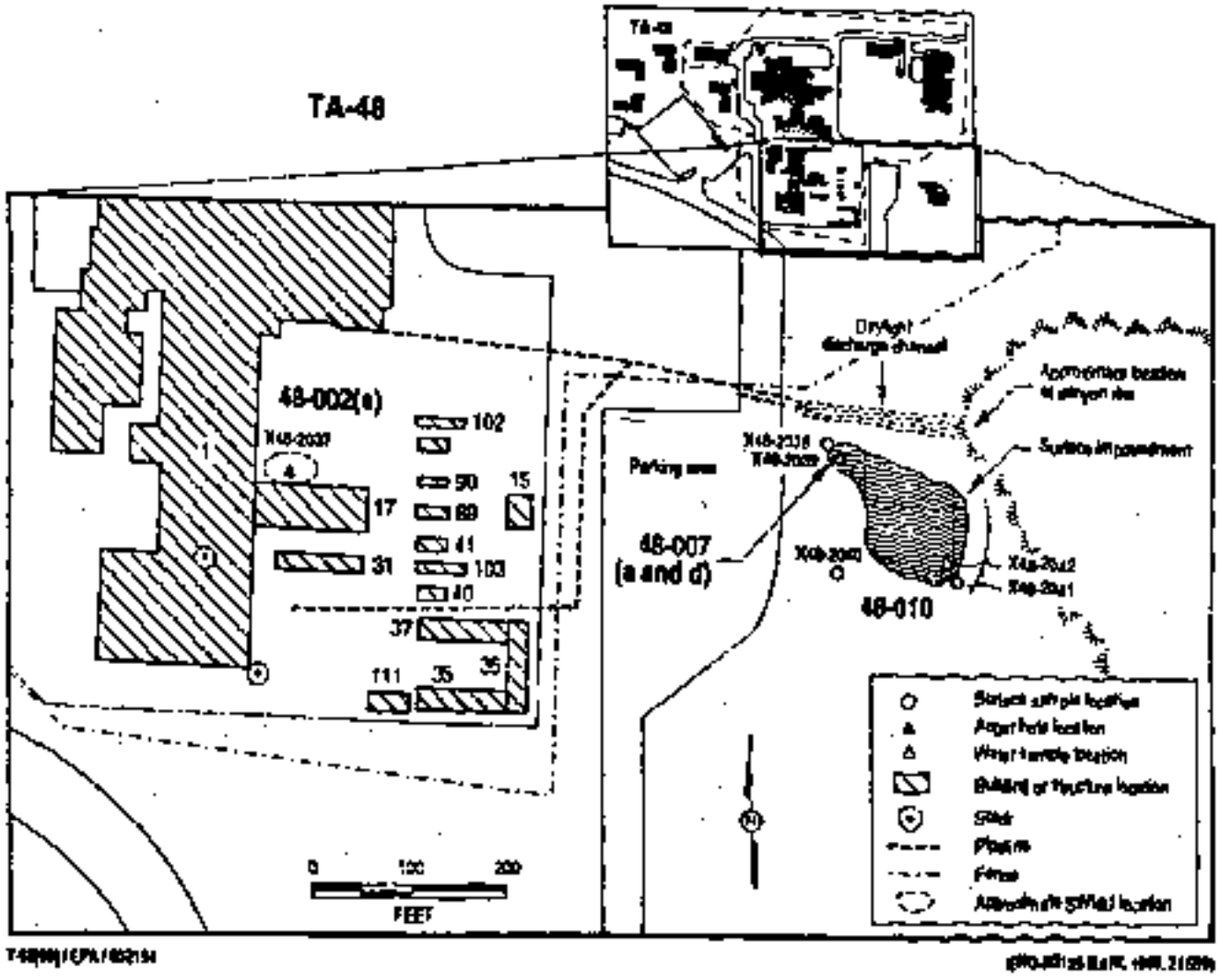


Figure 7-65. Schematic sample location map for SWMU Nos. 48-002(a), 48-007(a and d), and 48-010, Aggregate X.

PRS Consolidation Worksheet

Site Type: MDA AB

Proposed PRS Number: 49-001(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
49-001(a)	HSWA	MDA AB - experimental shafts	Rad, Metals, HE, SVOCs, VOCs	North Ancho
49-001(b)	HSWA	MDA AB - experimental shafts	Rad, Metals, HE, SVOCs, VOCs	North Ancho
49-001(c)	HSWA	MDA AB - experimental shafts	Rad, Metals, HE, SVOCs, VOCs	North Ancho
49-001(d)	HSWA	MDA AB - experimental shafts	Rad, Metals, HE, SVOCs, VOCs	North Ancho
49-001(e)	HSWA	MDA AB - experimental shafts	Rad, Metals, HE, SVOCs, VOCs	South Ancho
49-001(f)	HSWA	MDA AB - experimental shafts	Rad, Metals, HE, SVOCs, VOCs	South Ancho
49-001(g)	HSWA	Surface Contamination - MDA AB	Rad, Metals, HE, SVOCs, VOCs	Lower Water/Indio

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Since the PRSs are in close proximity, have the same COPCs, undistinguishable source terms, identical transport mechanisms, and are part of one site (MDA AB), they are proposed for consolidation.

Description:

This consolidated PRS consists of inactive experimental shafts and related subsurface and surface contamination that are part of MDA AB at TA-49. (PRSs 49-001(a-g)). The Phase 1 RFI was performed on all of the PRSs at the same time and the entire area has subsequently been stabilized and capped as part of an Interim Measure implemented in 1998. Moisture monitoring data from the cap and beneath the cap is currently collected monthly and reported to NMED quarterly. The second phase of the RFI which will address all of the PRSs in this unit is planned for implementation in FY03.

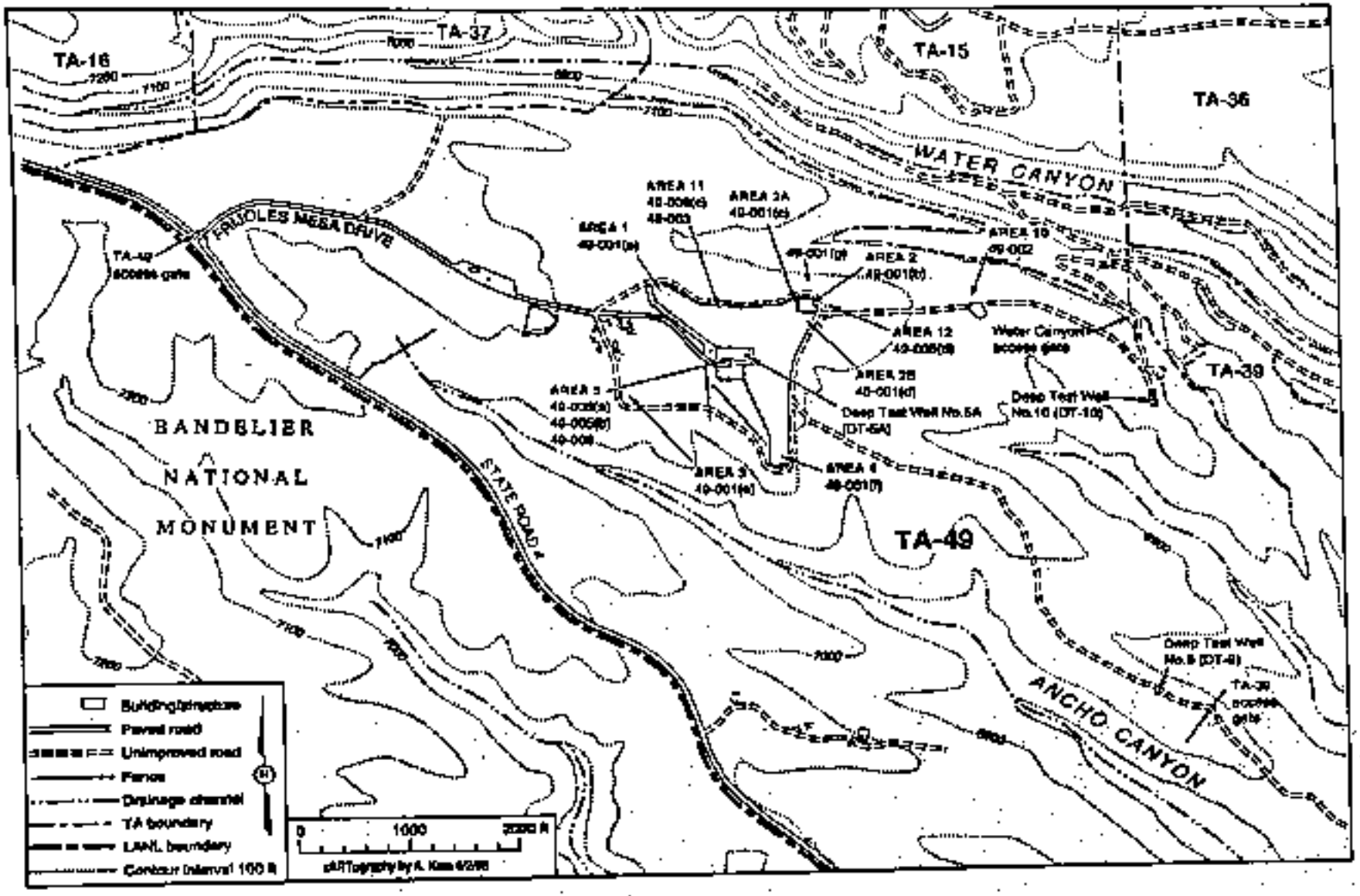


Figure 1-1. Map of TA-49.

PRS Consolidation Worksheet

Site Type: RLWTF Tanks - TA-50

Proposed PRS Number: 50-002(b)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
50-002(b)	HSWA	Acid Waste Underground Tank - (active)	Rad, Metals, VOCs, SVOCs, PCBs, pH	Middle Mortandad/Ten-Site
50-002(c)	HSWA	Caustic Waste Underground Tank - (active)	Rad, Metals, VOCs, SVOCs, PCBs, pH	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Since the PRSs are in close proximity, have the same COPCs, undistinguishable source terms, identical transport mechanisms, and are part of one system, they are proposed for consolidation.

Description:

This consolidated PRS consists of two active waste tanks, TA-50-67 and TA-50-68, contained in an underground concrete vault. The tanks and vault were constructed exclusively to handle radioactive acid and caustic waste from TA-55, because the transuranic wastes are processed separately from other wastes. Inlet and outlet drain lines associated with the tanks are included in the consolidated unit. The tanks, vault and drain lines are considered an active nuclear facility by TA-50.

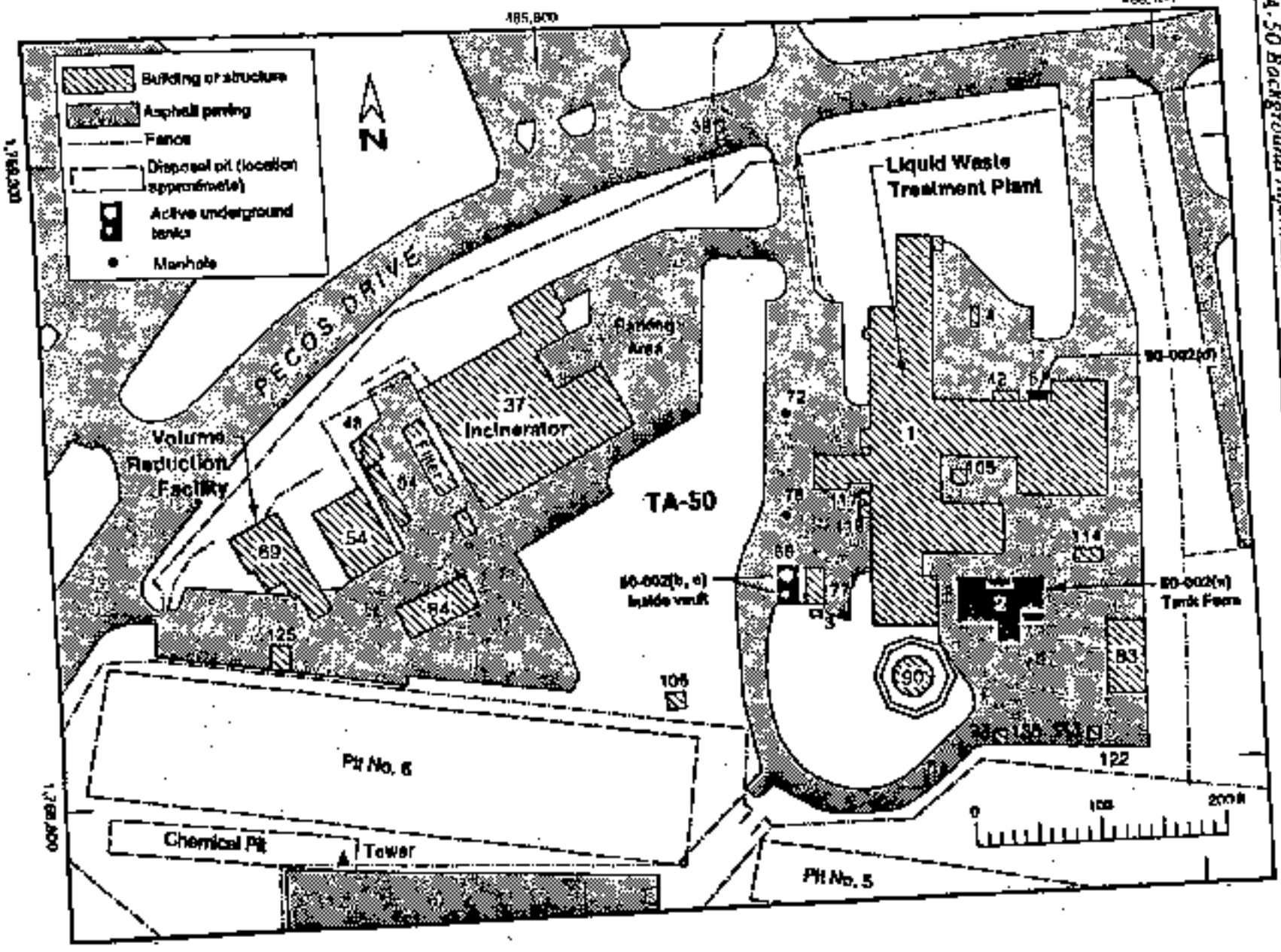


Figure 2-5 Location of active storage tanks at TA-50.

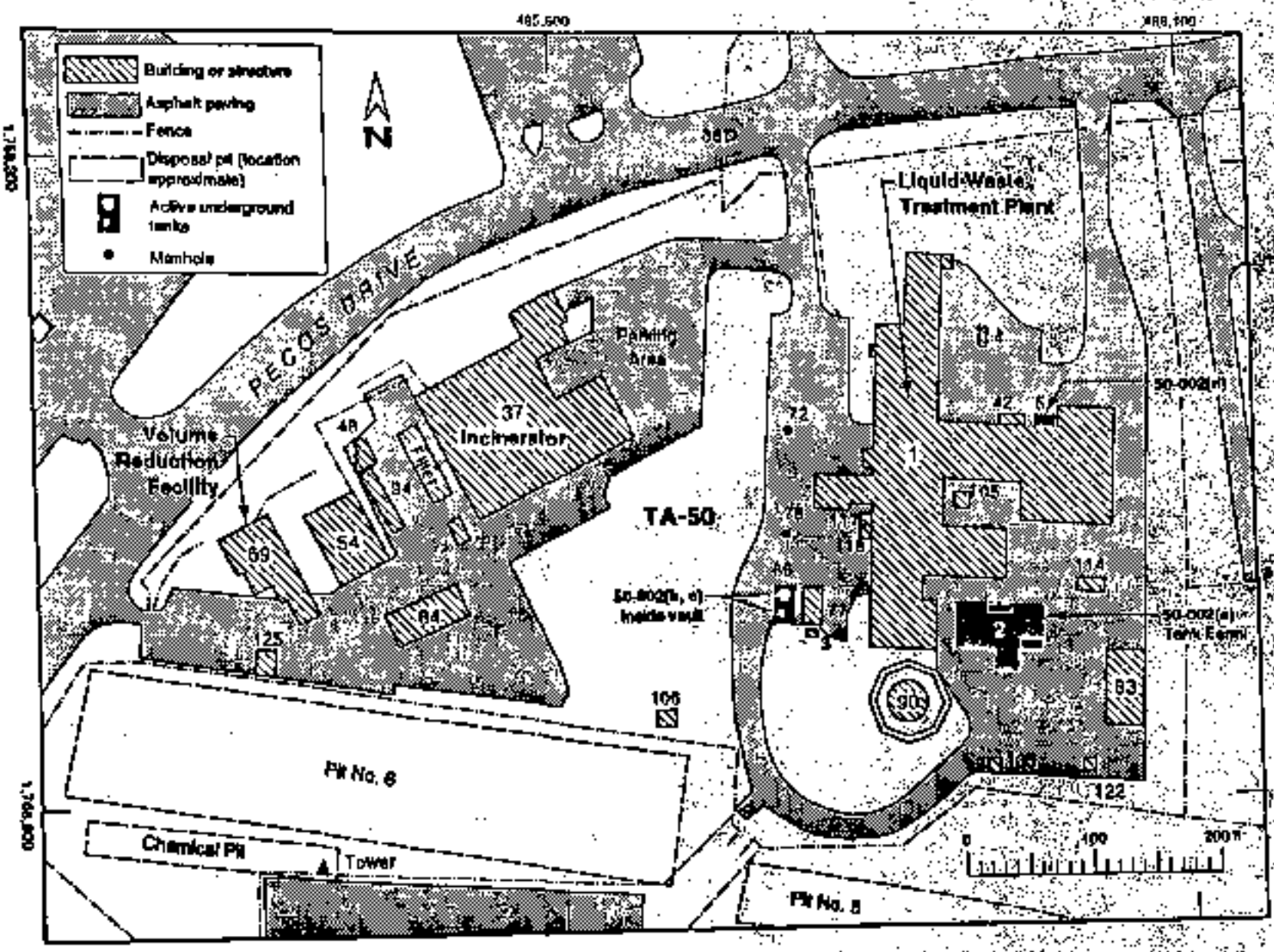


Figure 2-5 Location of active storage tanks at TA-50.

PRS Consolidation Worksheet

Site Type: Former Structures - RLWTF

Proposed PRS Number: 50-004(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
50-004(a)	HSWA	Former Waste lines - (Inactive)	Rad, Metals, SVOCs	Middle Mortandad/Ten-Site
50-004(b)	HSWA	Former rad waste tanks (removed)	Rad, Metals, SVOCs	Middle Mortandad/Ten-Site
50-004(c)	HSWA	Rad waste lines (removed)	Rad, Metals, SVOCs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, identical waste streams, geographical proximity, subsurface transport mechanisms and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

This consolidated PRS consists of the former components of the TA-50 Radioactive Liquid Waste Treatment Facility. PRS 50-004(a) is identified as the former influent drain lines to TA-50, which were removed in 1975. The underground vault, (TA-50-3) that contained three stainless steel-lined concrete tanks is designated as PRS 50-004(b), which used to store waste from the Omega Reactor and other sources. Drain lines and manholes to the collection tank structure included drain line 48 from TA-35 and drain line 50 from the treatment plant itself. Drain line 48, the vault and tanks were all removed in 1989. PRS 50-004(c) consists of 16 drain lines and associated manholes that discharged to TA-50-3 that were removed between 1961 and 1969. The PRSs will be investigated simultaneously.

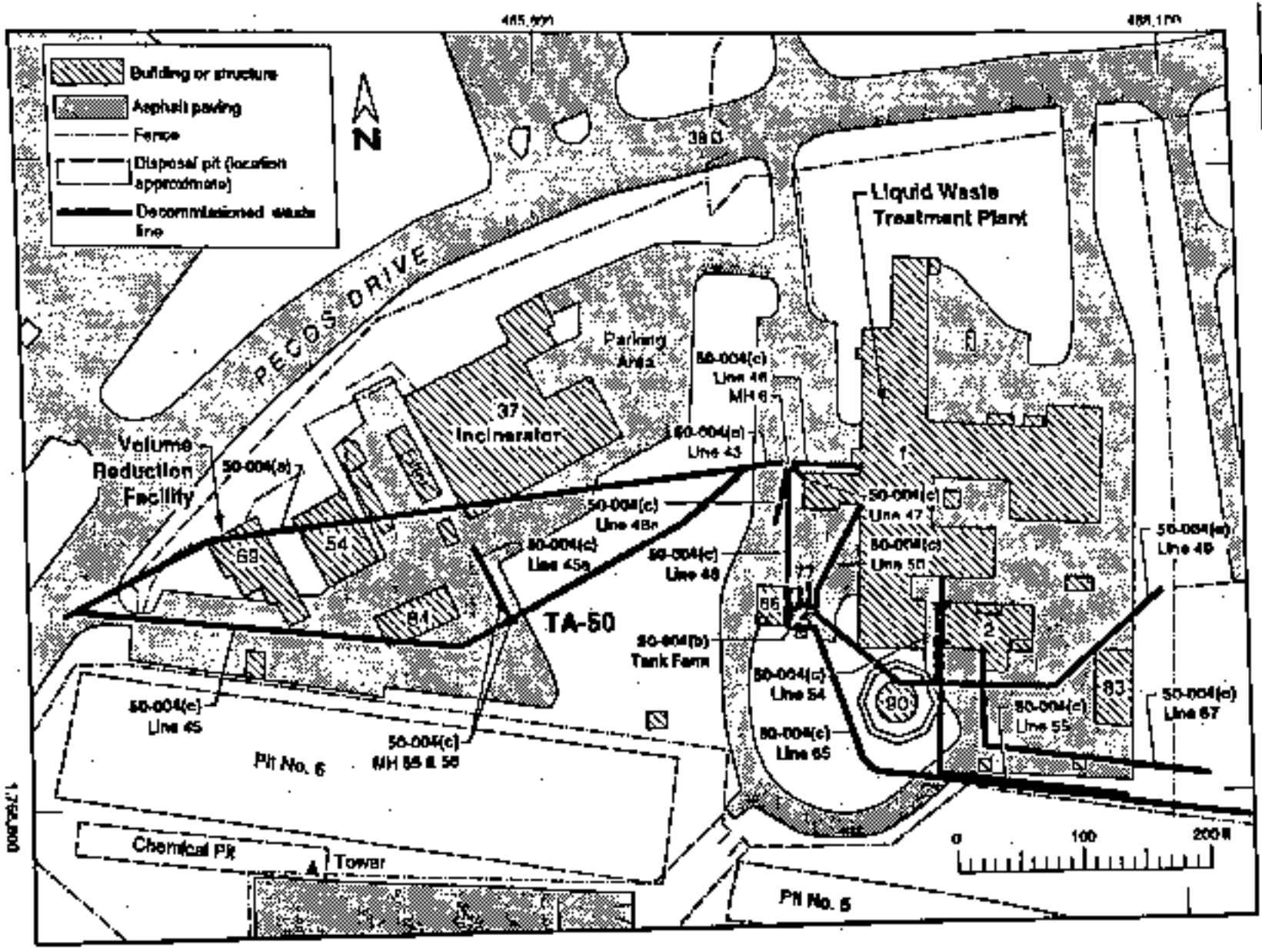


Figure 2-7 Location of decommissioned waste lines, manholes, and tanks at TA-50.

ENCLOSURE 1
CORRECTIVE ACTION UNITS, SUMMARY TABLE
ANNUAL UNIT AUDIT - FY00

Count	TA	FRS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
					Technical Area 0		
1	0	00-001			Sediment Trap Materials	HSWA	$250
2	0	00-003	00-003-99	00-003	Storage Area	HSWA	$250
				00-011	Underground Storage Tank	HSWA	
3	0	00-011(a)			Mortar impact area	HSWA	$250
4	0	00-011(c)			Mortar impact area	HSWA	$250
5	0	00-011(d)			Mortar impact area	HSWA	$250
6	0	00-011(e)			Mortar impact area	HSWA	$250
7	0	00-016			Firing range	HSWA	$250
8	0	00-017			Waste lines	HSWA	$250
9	0	00-018(a)			Sludge bed Wastewater treatment plant Pueblo (decommissioned)	HSWA	$250
10	0	00-019			Water Water Treatment Plant, Central	HSWA	$250
11	0	00-028(a)	00-028(a)-00	00-028(a)	Effluent discharge, golf course	HSWA	$250
				00-028(b)	Effluent discharge, ball fields	HSWA	
12	0	00-030(a)			Septic system, DP Road	HSWA	$250
13	0	00-030(b)	00-030(b)-00	00-030(b)	Septic system - 6th St. Warehouses	HSWA	$250
				00-004	Container storage area, 6th St. Warehouses	Non-HSWA	
				00-030(l)	Septic system 6th St. Warehouses	HSWA	
				00-030(m)	Septic system 6th St. Warehouses	HSWA	
				00-030(n)	Outlet Piping, 6th St. Warehouses	Non-HSWA	
14	0	00-030(g)			Septic system (near old Catholic Church parking lot)	HSWA	$250
15	0	00-033(a)			Warehouses, 6th Street (UST removal)	HSWA	$250
16	0	00-039			Underground tanks	HSWA	$250
					Technical Area 1		
17	1	01-001(a)	01-001(a)-99	01-001(a)	Septic Tank 134	HSWA	$250
				01-001(b)	Septic Tank 135	HSWA	
				01-001(c)	Septic Tank 137	HSWA	
				01-001(d)	Septic Tank 138 (Hillside)	HSWA	
				01-001(e)	Septic Tank 139	HSWA	
				01-001(f)	Septic Tank 140 (Hillside)	HSWA	
				01-001(g)	Septic Tank 141	HSWA	
				01-001(h)	Wastewater treatment equipment	HSWA	
				01-001(i)	Septic System Waste line	HSWA	
				01-001(j)	Septic System	HSWA	
				01-001(k)	Western Sanitary Waste Line	HSWA	
			Outfall portion moved to 01-001-00	01-002(a)-00	Drain Line Portion of FRS 01-001 Only	HSWA	
				01-003(a)	Hillside - Surface Disposal	HSWA	
				01-003(b)	Surface Disposal	Non-HSWA	
				01-003(c)	Surface Disposal	HSWA	
				01-004(a)	Former Structures - Incinerator	Non-HSWA	
				01-004(b)	Former Structures - Incinerator	Non-HSWA	
				01-006	Former Structures - Incinerator	Non-HSWA	
				01-006(a)	Drain lines and outfalls	HSWA	
				01-006(b)	Drain lines and outfalls	HSWA	
				01-006(c)	Drain lines and outfalls	HSWA	
				01-006(d)	Drain lines and outfalls	HSWA	
				01-006(e)	Drain lines and outfalls	Non-HSWA	
				01-006(g)	Drain lines and outfalls	Non-HSWA	
				01-006(h)	Drain lines and outfalls	HSWA	
				01-006(i)	Drain lines and outfalls	HSWA	
				01-006(o)	Drain lines and outfalls	HSWA	
				01-006(p)	Drain lines and outfalls	Non-HSWA	
				01-007(a)	Former Structures - Soil Contamination	HSWA	
				01-007(b)	Former Structures - Soil Contamination	HSWA	
				01-007(c)	Former Structures - Soil Contamination	HSWA	
				01-007(d)	Former Structures - Soil Contamination	HSWA	
				01-007(e)	Former Structures - Soil Contamination	HSWA	
				01-007(f)	Former Structures - Soil Contamination	Non-HSWA	
				01-007(h)	Former Structures - Soil Contamination	Non-HSWA	

ENCLOSURE 1
CORRECTIVE ACTION UNITS, SUMMARY TABLE
ANNUAL UNIT AUDIT - FY00

Count	TA	FFS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
				01-007(b)	Former Structures - Soil Contamination	Non-HSWA	
				01-007(c)	Former Structures - Soil Contamination	HSWA	
				01-007(d)	Former Structures - Soil Contamination	HSWA	
				01-007(e)	Former Structures - Soil Contamination	Non-HSWA	
				01-007(f)	Former Structures - Soil Contamination	Non-HSWA	
18	1	01-001(a)	removed from 01-99(a)-99 in FY00		Septic Tank 279	HSWA	$250
19	1	01-003(d)			Surface Disposal (CDSI	HSWA	$250
					Technical Area 2		
20	2	02-005			Systematic leak Cooling tower blowdown. Cr	HSWA	$250
21	2	02-006(a)			Ind. or san. waste water treat.	HSWA	$250
22	2	02-006(b)			Ind. or san. waste water treat.	HSWA	$250
23	2	02-007	02-007-00	02-007	Former Septic System - Omega West Reactor	HSWA	$250
				02-009(a)	Former Structures - Soil Contamination	HSWA	
				02-009(b)	Former Structures - Soil Contamination	HSWA	
				02-009(c)	Former Structures - Soil Contamination	HSWA	
24	2	02-008(a)			Outfall	HSWA	$250
25	2	02-008(b)			Outfall from cooling tower	HSWA	$250
					Technical Area 3		
26	3	03-001(b)			Storage pad	HSWA	$250
27	3	03-002(a)			Container storage area	HSWA	$250
28	3	03-002(c)			Storage area	HSWA	$250
29	3	03-002(d)			Container storage area	HSWA	$250
30	3	03-003(a)			Storage area (PCB's)	HSWA	$250
31	3	03-003(b)			Storage area (PCB's)	HSWA	$250
32	3	03-003(c)	moved from RCRA Unit List in FY00		Equipment storage area - PCB-Only Site	HSWA	$250
33	3	03-009(a)	03-009(a)-00	03-009(a)	Surface disposal (soil fill) - Asphalt Batch Plant	HSWA	$250
				03-028	Surface impoundment	HSWA	
				03-029	Disposal Area	HSWA	
				03-036(a)	Aboveground tank	HSWA	
				03-036(c)	Aboveground tank	HSWA	
				03-036(d)	Aboveground tank	HSWA	
				03-043(b)	Aboveground tank	Non-HSWA	
				03-043(d)	Aboveground tank	Non-HSWA	
				03-043(h)	Aboveground tank	Non-HSWA	
				03-046(a)	Storm Drain	HSWA	
34	3	03-009(c)			Surface disposal	HSWA	$250
35	3	03-009(d)			Surface disposal site	HSWA	$250
36	3	03-009(g)			Surface disposal	HSWA	$250
37	3	03-009(i)			Surface disposal site	HSWA	$250
38	3	03-009(j)			Surface disposal site	HSWA	$250
39	3	03-010(a)			Systematic release site, (former location of Vacuum Repair Shop)	HSWA	$250
40	3	03-011			Systematic product release	HSWA	$250
41	3	03-012(b)	03-012(b)-00	03-012(b)	Operational release and outfall - TA-3 Power Plant	HSWA	$250
				03-014(g)	Ind. or san. waste water treatment	HSWA	
				03-045(b)	Ind. or san. waste water treatment	HSWA	
				03-045(c)	Outfall	HSWA	
42	3	03-013(a)	03-013(a)-00	03-013(a)	Storm Drain	HSWA	$250
				03-013(f)	Storm drainage	HSWA	
43	3	03-014(a)	03-014(a)-99	03-014(a)	Waste Water Treatment Plant	HSWA	$250
				03-014(b)	Waste Water Treatment Plant	HSWA	
				03-014(b2)	Waste Water Treatment Plant	Non-HSWA	
				03-014(c)	Waste Water Treatment Plant	HSWA	
				03-014(c2)	Waste Water Treatment Plant	Non-HSWA	
				03-014(d)	Waste Water Treatment Plant	HSWA	
				03-014(e)	Waste Water Treatment Plant	HSWA	
				03-014(f)	Waste Water Treatment Plant	HSWA	
				03-014(g)	Waste Water Treatment Plant	HSWA	
				03-014(h)	Waste Water Treatment Plant	HSWA	

ENCLOSURE 1
CORRECTIVE ACTION UNITS, SUMMARY TABLE
ANNUAL UNIT AUDIT - FY00

Count	TA	PRS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
				03-014(a)	Waste Water Treatment Plant	HSWA	
				03-014(j)	Waste Water Treatment Plant	HSWA	
				03-014(k)	Waste Water Treatment Plant	HSWA	
				03-014(l)	Waste Water Treatment Plant	HSWA	
				03-014(m)	Waste Water Treatment Plant	HSWA	
				03-014(n)	Waste Water Treatment Plant	HSWA	
				03-014(o)	Waste Water Treatment Plant	HSWA	
				03-014(p)	Waste Water Treatment Plant	HSWA	
				03-014(q)	Waste Water Treatment Plant	HSWA	
			added in FY00	03-06(bb)	Drum Storage for WWTP	HSWA	
44	3	03-014(r)			Waste water treatment facility	HSWA	$250
45	3	03-014(s)			Waste water treatment facility	HSWA	$250
46	3	03-014(t)			Waste water treatment facility	HSWA	$250
47	3	03-015	03-015-00	03-015	Outfall - Rolling Mill	HSWA	$250
				03-033	Drains and lines	non-HSWA	
48	3	03-019			Septic tank	HSWA	$250
49	3	03-021			Surface disposal site	HSWA	$250
50	3	03-025(a)			Tank and/or assoc. equipment	HSWA	$250
51	3	03-025(b)			Tank and/or assoc. equipment (solidified waste)	HSWA	$250
52	3	03-026(c)			Tank and/or assoc. equipment	HSWA	$250
53	3	03-031			Tank and/or assoc. equipment	HSWA	$250
54	3	03-033			Sump	HSWA	$250
55	3	03-034(a)			Tank and/or assoc. equipment and/or radioactive liquid waste tanks	HSWA	$250
56	3	03-034(b)			Tank and/or assoc. equipment	HSWA	$250
57	3	03-037			Underground tank	HSWA	$250
58	3	03-038(a)	03-038(a)-00	03-038(a) 03-038(b)	Acid tank Acid tank	HSWA HSWA	$250
59	3	03-039(b)			Sumps	HSWA	$250
60	3	03-039(d)			Tank and/or assoc. equipment (sump)	HSWA	$250
61	3	03-042			Tank and/or assoc. equipment	HSWA	$250
62	3	03-043(c)			Tank and/or assoc. equipment	HSWA	$250
63	3	03-043(e)			Underground tank	HSWA	$250
64	3	03-044(a)			Container storage	HSWA	$250
65	3	03-045(a)			Outfall (ind. or san. waste water treatment)	HSWA	$250
66	3	03-045(e)			Outfall (ind. or san. waste water treatment)	HSWA	$250
67	3	03-045(f)			Outfall from Drain (ind. or san. waste water treatment)	HSWA	$250
68	3	03-045(h)	03-045(h)-00	03-045(h) 03-049(c)	Outfall (ind. or san. waste water treatment) Outfall	HSWA HSWA	$250
69	3	03-045(i)			Outfall (ind. or san. waste water treatment)	HSWA	$250
70	3	03-046			Aboveground Storage Tank (physical, chem. &/or bio. Treatment)	HSWA	$250
71	3	03-049(b)	03-049(b)-00	03-049(b) C-03-014	Operational release Storage Area	HSWA non-HSWA	$250
72	3	03-049(c)			Outfall	HSWA	$250
73	3	03-049(d)			Outfall	HSWA	$250
74	3	03-049(e)			Outfall	HSWA	$250
75	3	03-050(a)	03-050(a)-00	03-050(a) 03-050(d) 03-050(f) 03-050(g)	Exhaust emissions Off-gas scrubber of HEPA filter system Exhaust Emissions Off-gas scrubber of HEPA filter system Exhaust Emissions Off-gas scrubber of HEPA filter system Exhaust Emissions Off-gas scrubber of HEPA filter system	HSWA HSWA HSWA HSWA	$250
76	3	03-050(e)			Exhaust Emissions Off-gas scrubber of HEPA filter system	HSWA	$250
77	3	03-052(a)	03-052(a)-00	03-052(a) 03-052(c) 03-054(b)	Storm drainage Storm drainage Outfall	HSWA HSWA HSWA	$250

ENCLOSURE 1
CORRECTIVE ACTION UNITS, SUMMARY TABLE
ANNUAL UNIT AUDIT - FY00

Count	TA	PRS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
78	3	03-032(c)			Storm drainage	HSWA	$250
79	3	03-054(a)	03-054(a)-00	03-054(a) 03-054(e)	Outfall Outfall	HSWA HSWA	$250
80	3	03-054(c)			Outfall	HSWA	$250
81	3	03-054(e)			Outfall	HSWA	$250
82	3	03-055(a)			Outfall	HSWA	$250
83	3	03-055(c)			Outfall	HSWA	$250
84	3	03-055(d)			Outfall	HSWA	$250
85	3	03-056(a)			Storage area	HSWA	$250
86	3	03-056(c)	moved from RCRA Unit list in FY00		Transformer storage area - PCB-Only Site	HSWA	$250
87	3	03-056(l)			Drum Storage	HSWA	$250
88	3	03-056(m)			Drum Storage	HSWA	$250
89	3	03-056(n)			Drum Storage	HSWA	$250
90	3	03-059	03-059-00	03-059 03-059(a)	Storage area Storage area	HSWA non-HSWA	$250
					Technical Area 4		
91	4	04-001	04-001-99 added in FY00	04-001 04-002 04-003(b)	Firing Site Firing Site Outfall	HSWA HSWA HSWA	$250
92	4	04-003(a)	04-003(a)-00	04-003(a) 04-004	Outfall Former Structures - Soil Contamination	HSWA Non-HSWA	$250
					Technical Area 5		
93	5	05-001(a)	05-001(a)-99 added in FY00	05-001(a) 05-001(b) 05-002 05-006(i)	Firing Site Firing Site Disposal Site Former Structure - Soil Contamination	HSWA HSWA HSWA HSWA	$250
94	5	05-003			Former Calibration chamber	HSWA	$250
95	5	05-004			Former Septic system	HSWA	$250
96	5	05-005(a)	05-005(a)-00	05-005(a) 05-005(b) 05-006(c)	Former French drain Former Structures - Soil Contamination Former Structures - Soil Contamination	HSWA HSWA HSWA	$250
97	5	05-005(b)	05-005(b)-00	05-005(b) 05-006(c)	Outfall Former Structures - Soil Contamination	HSWA HSWA	$250
					Technical Area 6		
98	6	06-007(a)			Septic system	HSWA	$250
99	6	06-007(b)			Septic system	HSWA	$250
100	6	06-002	06-002-00	06-002 06-003(c) C-06-005 C-06-006 C-06-016 C-06-020	Septic system Firing Site Building Building Magazine Building	HSWA HSWA Non-HSWA Non-HSWA Non-HSWA Non-HSWA	$250
101	6	06-003(c)	06-003(c)-99	06-003(c) 06-008 C-06-019	Firing Site Firing Site Firing Site	HSWA Non-HSWA Non-HSWA	$250
102	6	06-003(d)			Firing site	HSWA	$250
103	6	06-003(e)			Firing site	HSWA	$250
104	6	06-003(f)			Firing site	HSWA	$250
105	6	06-003(g)	06-003(g)-00	06-003(g) C-06-003 C-06-007 C-06-008 C-06-009 C-06-010 C-06-011 C-06-012 C-06-013 C-06-014 C-06-015	Firing site & building Building Building Magazine Magazine Magazine Magazine Magazine Magazine Magazine Magazine	HSWA Non-HSWA Non-HSWA Non-HSWA Non-HSWA Non-HSWA Non-HSWA Non-HSWA Non-HSWA Non-HSWA Non-HSWA	$250

ENCLOSURE 1
CORRECTIVE ACTION UNITS, SUMMARY TABLE
ANNUAL UNIT AUDIT - FY00

Count	TA	PRS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
				C-06-011	Magazine	Non-HSWA	
				C-06-011	Magazine	Non-HSWA	
				C-06-011	Magazine	Non-HSWA	
106	6	06-003(k)			Firing site	HSWA	$250
107	6	06-007(a)	06-007(a)-99	06-007(a)	MDA F	HSWA	$250
				06-007	MDA F	HSWA	
				06-007(b)	MDA F	HSWA	
				06-007(d)	MDA F	HSWA	
				06-007(e)	MDA F	HSWA	
				06-007(c)	MDA F	HSWA	
108	6	06-006			Storage area	HSWA	$250
109	6	06-007(f)			Surface disposal	HSWA	$250
110	6	06-007(g)			Building & surface disposal	HSWA	$250
					Technical Area 7		
111	7	07-001(a)	07-001(a)-99	07-001(a)	Firing Site	HSWA	$250
				07-001(b)	Firing Site	HSWA	
				07-001(c)	Firing Site	HSWA	
				07-001(d)	Firing Site	HSWA	
					Technical Area 8		
112	8	08-002			Firing site	HSWA	$250
113	8	08-003(a)	08-003(a)-00	08-003(a)	Septic system	HSWA	$250
				08-004(a)	Floor drain	HSWA	
				08-004(b)	Drain Line	HSWA	
				08-004(c)	Drain line and outfall	HSWA	
114	8	08-004(c)			Floor drain	HSWA	$250
115	8	08-004(d)			Drain	HSWA	$250
116	8	08-005			Container storage area	HSWA	$250
117	8	08-006(a)			Material disposal area (MDA Q) Landfill	HSWA	$250
118	8	08-009(d)			Ind. or san. wastewater treat	HSWA	$250
119	8	08-009(e)			Ind. or san. wastewater treat.	HSWA	$250
120	8	C-08-010			Building	HSWA	$250
					Technical Area 9		
121	9	09-001(a)	09-001(a)-99	09-001(a)	Firing Site	HSWA	$250
				09-001(b)	Firing Site	HSWA	
				C-09-005	Firing Site	Non-HSWA	
122	9	09-001(c)			Firing sites	HSWA	$250
123	9	09-001(d)			Firing sites	HSWA	$250
124	9	09-002			Burn pit	HSWA	$250
125	9	09-003(a)	09-003(a)-99	09-003(a)	Former Structures	HSWA	$250
				09-003(b)	Former Structures	HSWA	
				09-003(c)	Former Structures	HSWA	
126	9	09-003(d)			Settling tank	HSWA	$250
127	9	09-003(g)			Settling tank	HSWA	$250
128	9	09-003(h)			Settling tank	HSWA	$250
129	9	09-003(i)			Settling tank	HSWA	$250
130	9	09-004(a)	09-004(a)-99	09-004(a)	Tanks/Sumps/Outfalls	HSWA	$250
				09-004(b)	Tanks/Sumps/Outfalls	HSWA	
				09-004(c)	Tanks/Sumps/Outfalls	HSWA	
				09-004(d)	Tanks/Sumps/Outfalls	HSWA	
				09-004(e)	Tanks/Sumps/Outfalls	HSWA	
				09-004(f)	Tanks/Sumps/Outfalls	HSWA	
				09-004(g)	Tanks/Sumps/Outfalls	HSWA	
				09-004(h)	Tanks/Sumps/Outfalls	HSWA	
				09-004(j)	Tanks/Sumps/Outfalls	HSWA	
				09-004(k)	Tanks/Sumps/Outfalls	HSWA	
				09-004(l)	Tanks/Sumps/Outfalls	HSWA	
				09-004(m)	Tanks/Sumps/Outfalls	HSWA	
				09-004(n)	Tanks/Sumps/Outfalls	HSWA	
131	9	09-004(g)			Settling tank	HSWA	$250
132	9	09-004(o)			Settling tank	HSWA	$250

ENCLOSURE 1
CORRECTIVE ACTION UNITS, SUMMARY TABLE
ANNUAL UNIT AUDIT - FY00

Count	TA	PRS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
135	9	09-005(b)	09-005(b)-99	09-005(b)	Tanks/Sumps/Outfalls	HSWA	$250
				09-005(c)	Tanks/Sumps/Outfalls	HSWA	
				09-005(d)	Tanks/Sumps/Outfalls	HSWA	
134	9	09-005(g)			Septic system	HSWA	$250
137	9	09-006			Septic system	HSWA	$250
136	9	09-009			Surface impoundment	HSWA	$250
151	9	09-013			Material disposal area (MDA M)	HSWA	$250
138	9	CC-09-001			Soil contamination	HSWA	$250
					Technical Area 10		
139	10	10-001(a)	10-001(a)-99	10-001(a)	Firing Site	HSWA	$250
				10-001(b)	Firing Site	HSWA	
				10-001(c)	Firing Site	HSWA	
				10-001(d)	Firing Site	HSWA	
				10-005	Waste Water Treatment Plant	HSWA	
				10-008	Waste Water Treatment Plant	Non-HSWA	
140	10	10-002(a)	10-002(a)-99	10-002(a)	Waste Water Treatment Plant	HSWA	$250
				10-002(b)	Waste Water Treatment Plant	HSWA	
				10-003(a)	Waste Water Treatment Plant	HSWA	
				10-003(b)	Waste Water Treatment Plant	HSWA	
				10-003(c)	Waste Water Treatment Plant	HSWA	
				10-003(d)	Waste Water Treatment Plant	HSWA	
				10-003(e)	Waste Water Treatment Plant	HSWA	
				10-003(f)	Waste Water Treatment Plant	HSWA	
				10-003(g)	Waste Water Treatment Plant	HSWA	
				10-003(h)	Waste Water Treatment Plant	HSWA	
				10-003(i)	Waste Water Treatment Plant	HSWA	
				10-003(j)	Waste Water Treatment Plant	HSWA	
				10-003(k)	Waste Water Treatment Plant	HSWA	
				10-003(l)	Waste Water Treatment Plant	HSWA	
				10-003(m)	Waste Water Treatment Plant	HSWA	
				10-003(n)	Waste Water Treatment Plant	HSWA	
				10-003(o)	Waste Water Treatment Plant	HSWA	
				10-003(p)	Waste Water Treatment Plant	HSWA	
				10-007	Waste Water Treatment Plant	HSWA	
141	10	10-004(a)			Septic system	HSWA	$250
142	10	10-006			Burn site	HSWA	$250
					Technical Area 11		
143	11	11-006(a)	11-006(a)-99	11-006(a)	Tanks/Sumps/Outfalls	HSWA	$250
				11-001(a)	Tanks/Sumps/Outfalls	HSWA	
				11-002	Tanks/Sumps/Outfalls	HSWA	
				11-006(b)	Tanks/Sumps/Outfalls	HSWA	
				11-006(c)	Tanks/Sumps/Outfalls	HSWA	
				11-006(d)	Tanks/Sumps/Outfalls	HSWA	
				C-11-001	Tanks/Sumps/Outfalls	Non-HSWA	
144	11	11-001(b)			Firing site	HSWA	$250
145	11	11-001(c)			Firing site	HSWA	$250
146	11	11-004(a)	11-004(a)-99	11-004(a)	Drop Tower	HSWA	$250
				11-004(b)	Drop Tower	HSWA	
				11-004(c)	Drop Tower	HSWA	
				11-004(d)	Drop Tower	HSWA	
				11-004(e)	Drop Tower	HSWA	
				11-004(f)	Drop Tower	Non-HSWA	
147	11	11-005(a)			Septic system	HSWA	$250
148	11	11-005(b)			Septic system	HSWA	$250
149	11	11-003(c)			Inlt. or sml. wastewater treat.	HSWA	$250
150	11	11-009			Material disposal area (MDA S)	HSWA	$250
151	11	11-011(a)	11-011(a)-00	11-011(a)	Inlt. or sml. wastewater treat.	HSWA	$250
				11-013(b)	Inlt. or sml. wastewater treat.	HSWA	
152	11	11-011(c)			Storm Vent Line	HSWA	$250
153	11	11-011(d)			Inlt. or sml. wastewater treat.	HSWA	$250

ENCLOSURE 1
CORRECTIVE ACTION UNITS, SUMMARY TABLE
ANNUAL UNIT AUDIT - FY00

Count	TA	PRS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
					Technical Area 12		
154	12	12-001(a)	12-001(a)-99	12-001(a)	Firing Site	HSWA	$250
				12-001(b)	Firing Site	HSWA	
				12-002	Firing Site	HSWA	
				C-12-006	Firing Site	Non-HSWA	
					Technical Area 13		
155	13	13-001	13-001-99	13-001	Firing Site	HSWA	$250
				13-002	Firing Site	HSWA	
				16-036	Firing Site	HSWA	
				16-036	Firing Site	HSWA	
156	13	13-003(a)	13-003(a)-99	13-003(a)	Former Structures	HSWA	$250
				13-003(b)	Former Structures	Non-HSWA	
157	13	13-004			Disposal pit	HSWA	$250
					Technical Area 14		
158	14	14-002(a)	14-002(a)-99	14-001(a)	Firing Site	HSWA	$250
				14-001(b)	Firing Site	Non-HSWA	
				14-001(c)	Firing Site	HSWA	
				14-001(f)	Firing Site	HSWA	
				14-007	Firing Site	HSWA	
				14-010	Firing Site	HSWA	
				C-14-004	Firing Site	Non-HSWA	
159	14	14-002(c)	14-002(c)-00	14-001(c)	Firing Site	HSWA	$250
				14-001(d)	Firing Site	HSWA	
				14-001(e)	Firing Site	HSWA	
160	14	14-003			Open burning ground	HSWA	$250
161	14	14-005			Incinerator (active)	HSWA	$250
162	14	14-006			Tank and/or asso. equip	HSWA	$250
163	14	14-007			Septic system	HSWA	$250
					Technical Area 15		
164	15	15-002	15-002-00	15-001	Disposal pit and burn pit - R40	HSWA	$250
				15-001(a)	Material Disposal Area (MDA N) Landfill	HSWA	
165	15	15-003	15-003-00	15-005	Active Firing Site - (PHERMEX)	HSWA	$250
				15-006(a)	Active Firing Site - (PHERMEX)	HSWA	
166	15	15-004(a)			Firing site C	HSWA	$250
167	15	15-004(b)	15-004(b)-99	15-004(a)	Firing Site - R-193	HSWA	$250
				15-004(c)	Firing Site	HSWA	
168	15	15-004(f)	15-004(f)-99	15-004(f)	Firing Site - E/F Site	HSWA	$250
				15-006(c)	Firing Site	HSWA	
169	15	15-004(g)	15-004(g)-00	15-004(g)	Mobile firing site - G Site	HSWA	$250
				15-006(e)	Surface disposal	HSWA	
170	15	15-004(i)			Detonation ground	HSWA	$250
171	15	15-006(b)			Firing site - Ecom (active)	HSWA	$250
172	15	15-006(c)	15-006(c)-99	15-006(c)	Firing Site - R44	HSWA	$250
				15-008(b)	Firing Site	HSWA	
173	15	15-006(d)	15-006(d)-99	15-006(d)	Firing Site	HSWA	$250
				15-008(g)	Firing Site	Non-HSWA	
174	15	15-007(b)			MDA Z	HSWA	$250
175	15	15-007(c)	15-007(c)-00	15-001(c)	Shaft - R45	HSWA	$250
				15-001(d)	Shaft	HSWA	
176	15	15-008(d)			Surface disposal	HSWA	$250
177	15	15-009(a)	15-009(a)-00	15-009(a)	Septic system - The Hollow	HSWA	$250
				15-011(a)	Sump	HSWA	
				15-011(b)	Dry well	HSWA	
				15-011(c)	Outfall	HSWA	
				15-014(i)	Outfall	HSWA	
				15-014(j)	Outfall	HSWA	
				15-014(k)	Outfall	HSWA	
178	15	15-009(b)			Septic system	HSWA	$250
179	15	15-009(r)			Septic tank	HSWA	$250
180	15	15-009(r)			Septic system	HSWA	$250

Count	TA	PRS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
181	15	15-009(f)	15-009(f)-00	15-009(f)	Septic unit - R-3R3	HSWA	$250
				15-009(n)	Septic unit	HSWA	
182	15	15-009(g)			Septic unit (PIN[RMEX - active)	HSWA	$250
183	15	15-009(h)			Septic unit - Ecier (active)	HSWA	$250
184	15	15-009(i)			Septic tank	HSWA	$250
185	15	15-009(j)			Septic tank	HSWA	$250
186	15	15-010(a)			Former Septic system	HSWA	$250
187	15	15-010(b)			Septic system	HSWA	$250
188	15	15-010(c)			Operational release (still active)	HSWA	$250
189	15	15-012(a)			Surface disposal (not located)	HSWA	$250
190	15	15-012(b)			Surface disposal site	HSWA	$250
191	15	15-014(a)	15-014(a)-00	15-014(a)	Outfall and drain lines - R-3R3	HSWA	$250
				15-014(b)	Outfall and drain lines	HSWA	
192	15	15-014(f)			Outfall (still active)	HSWA	$250
					Technical Area 16		
193	16	16-001(a)	16-001(a)-99	16-001(a)	Tanks/Sumps/Outfalls	HSWA	$250
				16-001(b)	Dry Wells	HSWA	
				16-001(c)	Vent	HSWA	
194	16	16-001(d)			Dry well	HSWA	$250
195	16	16-003(d)	16-003(d)-99	16-003(d)	Tanks/Sumps/Outfalls	HSWA	$250
				16-003(e)	Tanks/Sumps/Outfalls	HSWA	
				16-003(f)	Tanks/Sumps/Outfalls	HSWA	
				16-003(g)	Tanks/Sumps/Outfalls	HSWA	
				16-003(p)	Tanks/Sumps/Outfalls	HSWA	
196	16	16-003(a)			Sump	HSWA	$250
197	16	16-003(b)			Sump	HSWA	$250
198	16	16-003(c)	16-003(c)-99	16-003(c)	Tanks/Sumps/Outfalls	HSWA	$250
				16-026(c)	Tanks/Sumps/Outfalls	HSWA	
199	16	16-003(h)	16-003(h)-99	16-003(h)	Tanks/Sumps/Outfalls	HSWA	$250
				16-030(b)	Tanks/Sumps/Outfalls	Non-HSWA	
200	16	16-003(i)			Sump	HSWA	$250
201	16	16-003(j)			Sump	HSWA	$250
202	16	16-021(c)	16-021(c)-99	16-021(c)	Tanks/Sumps/Outfalls	HSWA	$250
				16-003(k)	Tanks/Sumps/Outfalls	HSWA	
203	16	16-003(l)	16-003(l)-99	16-003(l)	Tanks/Sumps/Outfalls	HSWA	$250
				16-030(h)	Tanks/Sumps/Outfalls	HSWA	
204	16	16-003(m)	16-003(m)-99	16-003(m)	Tanks/Sumps/Outfalls	HSWA	$250
				16-006(f)	Tanks/Sumps/Outfalls	HSWA	
				16-030(g)	Tanks/Sumps/Outfalls	Non-HSWA	
205	16	16-003(n)	16-003(n)-99	16-003(n)	Tanks/Sumps/Outfalls	HSWA	$250
				16-029(l)	Tanks/Sumps/Outfalls	HSWA	
206	16	16-003(o)			Sump	HSWA	$250
207	16	16-029(h)	16-029(h)-99	16-029(h)	Tanks/Sumps/Outfalls	HSWA	$250
				16-030(a)	Tanks/Sumps/Outfalls	Non-HSWA	
208	16	16-004(a)	16-004(a)-99	16-004(a)	Waste Water Treatment Plant	HSWA	$250
				16-004(b)	Waste Water Treatment Plant	HSWA	
				16-004(c)	Waste Water Treatment Plant	HSWA	
				16-004(d)	Waste Water Treatment Plant	HSWA	
				16-004(e)	Waste Water Treatment Plant	HSWA	
				16-004(f)	Waste Water Treatment Plant	HSWA	
209	16	16-005(a)			Septic tank	HSWA	$250
210	16	16-005(b)			Decommissioned septic system	HSWA	$250
211	16	16-026(q)	16-026(q)-99	16-026(q)	Former Structures - 10's Line	HSWA	$250
				16-006(d)	Former Structures	HSWA	
				16-037(b)-99	Former Structures	HSWA	
				16-017(e)-99	Former Structures	HSWA	
				16-025(l)	Former Structures	HSWA	
				16-025(l)	Former Structures	HSWA	
				16-029(l)	Former Structures	HSWA	
				16-029(l)	Former Structures	HSWA	

ENCLOSURE 1
CORRECTIVE ACTION UNITS, SUMMARY TABLE
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Count	TA	PRS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
				16-031(d)	Former Structures	HSWA	
				16-031(e)	Former Structures	HSWA	
				16-034(e)	Former Structures	HSWA	
				C-16-806	Former Structures	Non-HSWA	
				C-16-666	Former Structures	Non-HSWA	
212	16	16-029(c2)	16-029(c2)-99	16-029(d)	Former Structures - bldg. 37	HSWA	$250
				16-001(c)	Former Structures	HSWA	
				16-025(c)	Former Structures	Non-HSWA	
				16-025(x)	Former Structures	HSWA	
223	16	16-010(h)	16-010(h)-99	16-010(h)	Burn Site	HSWA	$250
				16-005(g)	Burn Site	HSWA	
			moved from RCRA Unit list in FY00	16-010(e)	Pitch Bed	HSWA	
			moved from RCRA Unit list in FY00	16-010(f)	Pitch Bed	HSWA	
				16-010(c)	Burn Site	HSWA	
			moved from RCRA Unit list in FY00	16-010(o)	Burn Site	HSWA	
				16-010(k)	Burn Site	HSWA	
				16-010(n)	Burn Site	HSWA	
				16-010(m)	Burn Site	HSWA	
				16-010(p)	Burn Site	HSWA	
214	16	16-003(k)			Septic tank	HSWA	$250
215	16	16-034(b)	16-034(b)-99	16-034(b)	Former Structures - T Site	HSWA	$250
				16-035(j)	Former Structures	HSWA	
				16-035(m)	Former Structures	HSWA	
			added in FY00	16-035(n)	Former Structures - Cell Communication	HSWA	
			added in FY00	16-035(p)	Former Structures - Cell Communication	HSWA	
			added in FY00	16-035(o)	Former Structures - Cell Communication	HSWA	
				16-034(c)	Former Structures	HSWA	
				16-034(d)	Former Structures	HSWA	
				16-034(e)	Former Structures	HSWA	
				16-034(f)	Former Structures	HSWA	
216	16	16-003(h)			Septic tank	HSWA	$250
217	16	16-003(i)			Grease trap	HSWA	$250
218	16	16-003(m)			Septic system	HSWA	$250
219	16	16-003(a)			Septic system	HSWA	$250
220	16	16-006(c)	16-006(c)-00	16-006(c)	Septic system - TA-16-370	HSWA	$250
				16-036(c)	Outfall	HSWA	
221	16	16-016(c)	16-016(c)-99	16-016(c)	Landfill	HSWA	$250
				16-008(c)	Septic System	HSWA	
				16-010(c)	Burn Site	HSWA	
222	16	16-029(z)	16-029(z)-99	16-029(z)	Former Structures - V-Site Subsurface	HSWA	$250
				16-009(g)	Former Structures	HSWA	
				16-017(v)-99	Former Structures	HSWA	
				16-029(x)	Former Structures	HSWA	
				16-029(w)	Former Structures	HSWA	
				16-031(c)	Former Structures	HSWA	
223	16	16-013	16-013-99	16-013	Former Structures - V-Site Courtyard	HSWA	$250
				16-006(f)	Former Structures	HSWA	
				16-017(q)-99	Former Structures	HSWA	
				16-017(r)-99	Former Structures	HSWA	
				16-031(o)-99	Former Structures	HSWA	
				16-031(j)-99	Former Structure	HSWA	
				16-037(a)-99	Former Structures	HSWA	
				16-039(g)	Former Structure	HSWA	
				C-16-068	Former Structure	Non-HSWA	
				C-16-074	Former Structure	Non-HSWA	
224	16	16-007(a)	16-007(a)-99	16-007(a)	Former Structures - 30s List	HSWA	$250
				16-024(d)	Former Structure	Non-HSWA	
				16-024(e)	Former Structure	HSWA	
				16-025(c)	Former Structures	HSWA	
				16-025(f)	Former Structures	HSWA	

ENCLOSURE 1
CORRECTIVE ACTION UNITS, SUMMARY TABLE
ANNUAL UNIT AUDIT - FY00

Count	TA	PHS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
215	16	16-008(a)	16-008(a)-99	16-008(a)	Former Structures - 90s Line	HSWA	$250
				16-011(a)-99	Former Structures	HSWA	
				16-011(b)-99	Former Structures	HSWA	
				16-011(c)-99	Former Structures	HSWA	
				16-011(d)-99	Former Structures	HSWA	
				16-016(m)	Former Structures	HSWA	
				16-018(a)	Former Structures	HSWA	
				16-018(c)	Former Structures	HSWA	
				16-018(j)	Former Structures	HSWA	
				16-029(b)	Tanks/Sumps/Outfalls	HSWA	
				16-029(i)	Tanks/Sumps/Outfalls	HSWA	
				16-029(k)	Tanks/Sumps/Outfalls	HSWA	
				16-029(o)	Tanks/Sumps/Outfalls	HSWA	
				16-029(u)	Tanks/Sumps/Outfalls	HSWA	
				C-16-047	Tanks/Sumps/Outfalls	Non-HSWA	
216	16	16-009(a)			Burn site	HSWA	$250
217	36	16-029(z)	16-029(z)-00 added to FY00	16-029(z)	Former Structures - 40s Line	HSWA	$250
				16-029(c)	Former Septic Tank	HSWA	
				16-031	Former Structures	Non-HSWA	
				16-032(c)	Former Structures	Non-HSWA	
				16-032(j)	Former Structures	HSWA	
				16-032(q)	Former Structures	HSWA	
				16-032(r)	Former Structures	HSWA	
				16-032(u)	Former Structures	HSWA	
				16-032(v)	Former Structures	HSWA	
				16-032(w)	Former Structures	HSWA	
				16-032(x)	Former Structures	HSWA	
				16-032(a)	Former Structures	HSWA	
				16-032(b)	Former Structures	HSWA	
				16-032(y)	Former Structures	HSWA	
218	36	16-015(a)			Operational facility	HSWA	$250
219	36	16-015(b)			Operational facility	HSWA	$250
220	36	16-029(v)	16-029(v)-99	16-029(v)	Former Structures - GMX-2	HSWA	$250
				16-013(c)	Former Structures	Non-HSWA	
				16-029(ad)	Former Structures	HSWA	
				16-029(bd)	Former Structures	HSWA	
				16-029(cd)	Former Structures	HSWA	
				16-029(cc)	Former Structures	HSWA	
				16-029(o)	Former Structures	HSWA	
221	36	16-016(a)			Landfill	HSWA	$250
222	36	16-016(b)			Landfill	HSWA	$250
223	36	16-016(d)			Surface disposal site	HSWA	$250
224	36	16-016(e)			Surface disposal site	HSWA	$250
225	36	16-016(g)			Surface disposal site	HSWA	$250
226	36	16-029(q)	16-029(q)-99	16-029(q)	Former Structures - Bldg. 99	HSWA	$250
				16-017(f)-99	Former Structures	HSWA	
				C-16-064	Former Structures	Non-HSWA	
227	16	16-017(g)-99	16-017(g)-99		Former Structures - Storage Magazine	HSWA	$250
228	16	16-017(i)-99	16-017(i)-99	16-017(i)-99	Former Structures - Admin Area	HSWA	$250
				C-16-025	Former Structures	HSWA	
				C-16-026	Former Structures	HSWA	
229	16	16-017(j)-99	16-017(j)-99		Former Structures - Storage Magazine	HSWA	$250
230	16	16-017(k)-99	16-017(k)-99		Former Structures - Storage Magazine	HSWA	$250
231	16	16-017(l)-99	16-017(l)-99		Former Structures - Storage Magazine	HSWA	$250
232	16	16-017(m)-99	16-017(m)-99		Former Structures - Storage Magazine	HSWA	$250
233	16	16-017(n)-99	16-017(n)-99		Former Structures - Storage Magazine	HSWA	$250
234	16	16-017(o)-99	16-017(o)-99		Former Structures - Storage Magazine	HSWA	$250
235	16	16-017(p)-99	16-017(p)-99		Former Structures - Storage Magazine	HSWA	$250
236	16	16-017(w)-99	16-017(w)-99		Former Structures - Storage Magazine	HSWA	$250
237	16	16-019			Material disposal area (MDA R)	HSWA	$250

ENCLOSURE I
CORRECTIVE ACTION UNITS, SUMMARY TABLE
ANNUAL UNIT AUDIT – FY00

Count	TA	PRS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
248	16	16-020			[illegible]	HSWA	$250
249	16	16-025(ff)			Abandoned building & appurtenances	HSWA	$250
250	16	16-025(b)			Abandoned building & appurtenances	HSWA	$250
251	16	16-025(r2)			Abandoned building & appurtenances	HSWA	$250
252	16	16-029(h2)	16-029(h2)-99	16-029(h2)	Former Structure - NSEW Line	HSWA	$250
				16-025(i)	Former Structure	HSWA	
				16-025(j)	Former Structure	HSWA	
				16-025(n)	Former Structure	HSWA	
				16-025(o)	Former Structure	HSWA	
				16-025(l)	Former Structure	HSWA	
				16-029(m)	Former Structure	HSWA	
				16-029(t)	Former Structure	HSWA	
				16-029(u)	Former Structure	HSWA	
				16-029(y)	Former Structure	HSWA	
253	16	16-025(d2)			Abandoned building & appurtenances	HSWA	$250
254	16	16-025(e2)			Abandoned building & appurtenances	HSWA	$250
255	16	16-025(f)			Abandoned building & appurtenances	HSWA	$250
256	16	16-025(h2)			Abandoned building & appurtenances	HSWA	$250
257	16	16-029(y)	16-029(y)-99	16-029(y)	Former Structure	HSWA	$250
				16-025(t)	Former Structure	HSWA	
258	16	16-025(w)			Abandoned building & appurtenances	HSWA	$250
259	16	16-025(y)	16-025(y)-99	16-025(y)	Former Structure	HSWA	$250
				16-029(ab)	Former Structure	HSWA	
260	16	16-026(p2)			Outfall	HSWA	$250
261	16	16-026(b)	16-026(b)-99	16-026(b)	Tanks/Sumps/Outfalls - 300s Line	HSWA	$250
				16-026(w)	Tanks/Sumps/Outfalls	HSWA	
				16-026(d)	Tanks/Sumps/Outfalls	HSWA	
				16-026(e)	Tanks/Sumps/Outfalls	HSWA	
				16-029(c)	Tanks/Sumps/Outfalls	HSWA	
				16-029(d)	Tanks/Sumps/Outfalls	HSWA	
				16-029(e)	Tanks/Sumps/Outfalls	HSWA	
				16-029(f)	Tanks/Sumps/Outfalls	HSWA	
				16-029(o)	Tanks/Sumps/Outfalls	HSWA	
				16-029(s)	Tanks/Sumps/Outfalls	HSWA	
263	16	16-026(b2)	16-026(b2)-00	16-026(b2)	Outfall - Bldg. 16-202	HSWA	$250
				16-029(d)	Drain Line and Outfall	HSWA	
263	16	16-026(c2)			Outfall	HSWA	$250
264	16	16-026(d2)			Outfall	HSWA	$250
265	16	16-026(e2)			Outfall	HSWA	$250
266	16	16-026(f)			Outfall	HSWA	$250
267	16	16-026(f2)			Outfall	HSWA	$250
268	16	16-026(g)			Outfall	HSWA	$250
269	16	16-026(g2)			Outfall	HSWA	$250
270	16	16-026(h)			Outfall	HSWA	$250
271	16	16-029(a)	16-029(a)-99	16-029(a)	Tanks/Sumps/Outfalls	HSWA	$250
				16-026(h2)	Tanks/Sumps/Outfalls	HSWA	
272	16	16-026(i)			Outfall	HSWA	$250
273	16	16-026(j)			Outfall	HSWA	$250
274	16	16-026(j2)			Outfall	HSWA	$250
275	16	16-026(k)			Outfall	HSWA	$250
276	16	16-026(l)	16-026(l)-00	16-026(l)	Outfall	HSWA	$250
				16-029(c)	Drain Line and Outfall	HSWA	
277	16	16-026(r)			Outfall	HSWA	$250
278	16	16-026(s)			Outfall	HSWA	$250
279	16	16-026(t)			Outfall	HSWA	$250
280	16	16-026(u)			Outfall	HSWA	$250
281	16	16-026(x)			Outfall	HSWA	$250
282	16	16-026(y)			Outfall	HSWA	$250
283	16	16-026(z)			Outfall	HSWA	$250
284	16	16-026(p)			South Drainage	HSWA	$250
285	16	16-026(b)			Ind. or sani. waste water treatment	HSWA	$250
286	16	16-029(g)	16-029(g)-99	16-029(g)	Tanks/Sumps/Outfalls	HSWA	$250
			added in FY00	16-021(a)	Systematic release site	HSWA	
				16-026(e)	Tanks/Sumps/Outfalls	HSWA	

ENCLOSURE 1
CORRECTIVE ACTION UNITS, SUMMARY TABLE
ANNUAL UNIT AUDIT - FY00

Count	TA	FRS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
287	16	16-029(62)	16-029(62)-99	16-029(62) C-16-003	Former Structures Former Structures	HSWA Non-HSWA	$250
288	16	16-029(f)			Sump	HSWA	$250
289	16	16-029(j)	16-029(j)-99	16-029(j) 16-029(k2)	Tanks/Sumps/Outfalls Tanks/Sumps/Outfalls	HSWA HSWA	$250
290	16	16-030(a)			Inf. or san. waste water treatment	HSWA	$250
291	16	16-030(b)			Inf. or san. waste water treatment	HSWA	$250
292	16	16-030(c)			Inf. or san. waste water treatment	HSWA	$250
293	16	16-030(e)			Inf. or san. waste water treatment	HSWA	$250
294	16	16-030(f)			Inf. or san. waste water treatment	HSWA	$250
295	16	16-031(a)			Inf. or san. waste water treatment	HSWA	$250
296	16	16-031(b)			Inf. or san. waste water treatment	HSWA	$250
297	16	16-031(e)			Inf. or san. waste water treatment	HSWA	$250
298	16	16-031(f)			Inf. or san. waste water treatment	HSWA	$250
299	16	16-031(h)			Inf. or san. waste water treatment	HSWA	$250
300	16	16-034(h)			Soil contamination area	HSWA	$250
301	16	16-034(i)			Soil contamination area	HSWA	$250
302	16	16-034(j)			Soil contamination area	HSWA	$250
303	16	16-034(k)			Soil contamination area	HSWA	$250
304	16	16-034(m)			Soil contamination area	HSWA	$250
305	16	16-034(n)			Soil contamination area	HSWA	$250
Technical Area 18							
306	18	18-001(a)	18-001(a)-00	18-001(a) 18-001(b)	Lagoon Sewer line	HSWA HSWA	$250
307	18	18-001(c)	18-001(c)-00	18-001(c) 18-002(c)	Sump Outfall	HSWA HSWA	$250
308	18	18-002(a)			Firing site	HSWA	$250
309	18	18-002(b)			Firing site	HSWA	$250
310	18	18-003(a)	18-003(a)-00	18-003(a) 18-003(b)	Settling pit Septic system	HSWA HSWA	$250
311	18	18-003(c)			Septic system	HSWA	$250
312	18	18-003(d)			Septic system	HSWA	$250
313	18	18-003(e)			Septic system	HSWA	$250
314	18	18-003(f)			Septic system	HSWA	$250
315	18	18-003(g)			Septic system	HSWA	$250
316	18	18-003(k)			Septic system	HSWA	$250
317	18	18-004(a)	18-004(a)-00	18-004(a) 18-004(b)	Waste lines containment Tanks and Vault	HSWA HSWA	$250
318	18	18-005(a)			Storage area	HSWA	$250
319	18	18-007			Buried armored vehicle (does not exist)	HSWA	$250
320	18	18-012(a)			Outfall	HSWA	$250
Technical Area 19							
321	19	19-001	19-001-99	19-001 19-002 19-003 C-19-001	Former Structures Former Structures Former Structures Former Structures	HSWA HSWA HSWA Non-HSWA	$250
Technical Area 20							
322	20	20-001(a)			Landfill	HSWA	$250
323	20	20-001(b)	20-001(b)-00	20-001(b) 20-003(c) 20-003(c)	Landfill Firing site Firing site	HSWA HSWA Non-HSWA	$250
324	20	20-001(c)	20-001(c)-00	20-001(c) 20-003(a) 20-003(b)	Landfill Firing site Firing site	HSWA HSWA HSWA	$250
325	20	20-002(d)			Firing site	HSWA	$250
326	20	20-003(a)			Control Building at a Firing site	HSWA	$250
327	20	20-005			Septic tank	HSWA	$250
Technical Area 21							
328	21	21-002(a)			Container Storage Areas - Statewide	HSWA	$250
329	21	21-016(a)	21-016(a)-99 added in FY00	21-016(a) 21-001 21-001	MDA T Waste Water Treatment Plant Former Incinerators	HSWA Non-HSWA HSWA	$250

ENCLOSURE 1
CORRECTIVE ACTION UNITS, SUMMARY TABLE
ANNUAL UNIT AUDIT - FY00

Count	TA	PRS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
				21-010(a)	Waste Water Treatment Plant	HSWA	
				21-010(b)	Waste Water Treatment Plant	HSWA	
				21-010(c)	Waste Water Treatment Plant	HSWA	
				21-010(d)	Waste Water Treatment Plant	HSWA	
				21-010(e)	Waste Water Treatment Plant	HSWA	
				21-010(f)	Waste Water Treatment Plant	HSWA	
				21-010(g)	Waste Water Treatment Plant	HSWA	
				21-010(h)	Waste Water Treatment Plant	HSWA	
				21-011(a)	Waste Water Treatment Plant	HSWA	
				21-011(c)	Tank and Sump	HSWA	
				21-011(d)	Waste Water Treatment Plant	HSWA	
				21-011(e)	Waste Water Treatment Plant	HSWA	
				21-011(f)	Waste Water Treatment Plant	HSWA	
				21-011(g)	Waste Water Treatment Plant	HSWA	
				21-011(h)	Waste Water Treatment Plant	Non-HSWA	
				21-011(i)	Waste Water Treatment Plant	HSWA	
				21-011(j)	Waste Water Treatment Plant	HSWA	
				21-016(a)	MDA T	HSWA	
				21-016(b)	MDA T	HSWA	
				21-018(a)	Contaminated spring	Non-HSWA	
				C-21-001	Diesel spill	Non-HSWA	
				C-21-002	Diesel spill	Non-HSWA	
330	21	21-003	21-003-99	21-003	Waste Storage Area	HSWA	$250
				21-003(f)	Surface disposal site	Non-HSWA	
331	21	21-004(f)	21-004(f)-99	21-004(f)	Drainline and Outfall	HSWA	$250
				21-004(o)	Aboveground Storage Tank	Non-HSWA	
			added in FY00	21-004(o)	Sump	HSWA	
332	21	21-004(b)	21-004(b)-99	21-004(b)	Tanks/Sumps/Outfalls	HSWA	$250
				21-004(c)	Tanks/Sumps/Outfalls	HSWA	
				21-004(d)	Drainline	Non-HSWA	
333	21	21-005			Disposal pit	HSWA	$250
334	21	21-006(c)	21-006(c)-99	21-006(c)	Disposal Pit	HSWA	$250
				21-006(d)	Disposal Pit	HSWA	
			added in FY00	21-006(e)	Disposal pit Bldg 21-2	HSWA	
			added in FY00	21-006(b)	Disposal pit	HSWA	
335	21	21-006(e)	21-006(e)-99	21-006(a)	Surface disposal site	HSWA	$250
				21-006(f)	Surface disposal site	Non-HSWA	
336	21	21-011(b)			Sump	HSWA	$250
337	21	21-011(k)			Waste Water Treatment Plant	HSWA	$250
338	21	21-012(b)			Dry well	HSWA	$250
339	21	21-026(a)	21-026(a)-99	21-026(a)	Waste Water Treatment Plant	HSWA	$250
				21-013(a)	Waste Water Treatment Plant	HSWA	
				21-026(b)	Waste Water Treatment Plant	HSWA	
				21-026(c)	Waste Water Treatment Plant	Non-HSWA	
				21-026(d)	Outfall	Non-HSWA	
340	21	21-018(a)	21-018(a)-99	21-018(a)	MDA V	HSWA	$250
				21-018(b)	MDA V	HSWA	
				21-018(g)	MDA V	Non-HSWA	
				21-018(h)	MDA V	HSWA	
			added in FY00	21-018(c)	Septic system	HSWA	
341	21	21-013(c)			Surface disposal site	HSWA	$250
342	21	21-013(d)	21-013(d)-99	21-013(d)	Surface disposal site	HSWA	$250
				21-013(e)	Surface disposal site	HSWA	
343	21	21-014			Material disposal area (MDA A)	HSWA	$250
344	21	21-015			Material disposal area (MDA B)	HSWA	$250
345	21	21-017(a)	21-017(a)-99	21-017(a)	MDA U	HSWA	$250
				21-017(b)	MDA U	HSWA	
				21-017(c)	MDA U	HSWA	
				21-017(f)	MDA U	HSWA	
346	21	21-021	21-021-99	21-021	Systemwide Release - Sitewide	HSWA	$250
				21-019(a)	Filter House/Exhaust System	Non-HSWA	
				21-019(b)	Filter House/Exhaust System	Non-HSWA	

ENCLOSURE 1
CORRECTIVE ACTION UNITS, SUMMARY TABLE
ANNUAL UNIT AUDIT - FY00

Count	TA	PRS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
				21-019(c)	Filter House/Exhaust Systems	Non-HSWA	
				21-019(d)	Filter House/Exhaust Systems	Non-HSWA	
				21-019(e)	Filter House/Exhaust Systems	Non-HSWA	
				21-019(f)	Filter House/Exhaust Systems	Non-HSWA	
				21-019(g)	Filter House/Exhaust Systems	Non-HSWA	
				21-019(h)	Filter House/Exhaust Systems	Non-HSWA	
				21-019(i)	Filter House/Exhaust Systems	Non-HSWA	
				21-019(j)	Filter House/Exhaust Systems	Non-HSWA	
				21-019(k)	Filter House/Exhaust Systems	Non-HSWA	
				21-019(l)	Filter House/Exhaust Systems	Non-HSWA	
				21-019(m)	Filter House/Exhaust Systems	Non-HSWA	
				21-020(c)	Filter House	Non-HSWA	
				21-020(d)	Filter House	Non-HSWA	
347	21	21-022(b)	21-022(b)-99	21-022(b)	Former Structures	HSWA	$250
				21-022(c)	Former Structures	HSWA	
				21-022(d)	Former Structures	HSWA	
				21-022(e)	Former Structures	HSWA	
				21-022(g)	Former Structures	HSWA	
348	21	21-022(h)	21-022(h)-99	21-022(h)	Former Structures	HSWA	$250
				21-022(i)	Former Structures	HSWA	
				21-022(j)	Former Structures	HSWA	
349	21	21-023(a)	21-023(a)-99	21-023(a)	Former Structures	HSWA	$250
				21-023(b)	Former Structures	HSWA	
				21-023(d)	Former Structures	HSWA	
350	21	21-024(a)			Septic system	HSWA	$250
351	21	21-024(b)			Septic system	HSWA	$250
352	21	21-024(c)			Septic system	HSWA	$250
353	21	21-024(d)			Septic system	HSWA	$250
354	21	21-024(e)			Septic system	HSWA	$250
355	21	21-024(f)			Septic system	HSWA	$250
356	21	21-024(g)			Septic system	HSWA	$250
357	21	21-024(h)			Septic system	HSWA	$250
358	21	21-024(i)			Septic system	HSWA	$250
359	21	21-024(j)			Septic system	HSWA	$250
360	21	21-024(k)			Septic system	HSWA	$250
361	21	21-024(m)			Drain line	HSWA	$250
362	21	21-024(o)			Drain line	HSWA	$250
363	21	21-027(a)			Ind. or san. waste water treat.	HSWA	$250
364	21	21-027(c)			Ind. or san. waste water treat.	HSWA	$250
365	21	21-027(d)	21-027(d)-99	21-027(d)	Former Structures	HSWA	$250
				C-21-028	Former Structures	Non-HSWA	
366	21	21-029			Soil contamination area	HSWA	$250
					Technical Area 22		
367	22	22-010(a)			Septic system	HSWA	$250
368	22	22-013(d)	22-013(d)-99	22-013(d)	Tanks/Sumps/Outfalls	HSWA	$250
				22-010(b)	Tanks/Sumps/Outfalls	HSWA	
				22-402	Tanks/Sumps/Outfalls	HSWA	
				22-403(c)	Tanks/Sumps/Outfalls	HSWA	
				22-406	Tanks/Sumps/Outfalls	HSWA	
369	22	22-011			Disposal pit	HSWA	$250
370	22	22-014(a)			Ind. or san. wastewater treat.	HSWA	$250
371	22	22-014(b)			Sump	HSWA	$250
372	22	22-015(a)			Drain lines and dry wells	HSWA	$250
373	22	22-015(b)			Sump and outfall	HSWA	$250
374	22	22-015(c)			Outfall	HSWA	$250
					Technical Area 26		
375	26	26-001			Surface disposal site	HSWA	$250
376	26	26-002(a)			Tank trailer assoc. equip.	HSWA	$250
377	26	26-002(b)			Ind. or san. waste water treat.	HSWA	$250
378	26	26-003			Septic tank	HSWA	$250

ENCLOSURE 1
CORRECTIVE ACTION UNITS, SUMMARY TABLE
ANNUAL UNIT AUDIT - FY00

Count	TA	PRS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
					Technical Area 27		
379	27	27-001			Buried naval guns	HSWA	$250
380	27	27-002			Firing sites	HSWA	$250
381	27	27-003			Bazooka impact area	HSWA	$250
					Technical Area 31		
382	31	31-001			Outfall from sanitary Septic system	HSWA	$250
					Technical Area 32		
383	32	32-001			Incinerator (former location)	HSWA	$250
384	32	32-002(a)			Septic tank (former location), drain lines	HSWA	$250
385	32	32-002(b)			Septic system	HSWA	$250
					Technical Area 33		
386	33	33-001(a)	33-001(a)-99	33-001(a)	MDA E	HSWA	$250
				33-001(b)	MDA E	HSWA	
				33-001(c)	MDA E	HSWA	
				33-001(d)	MDA E	HSWA	
				33-001(e)	MDA E	HSWA	
387	33	33-002(a)	33-002(a)-99	33-002(a)	MDA K	HSWA	$250
				33-002(b)	MDA K	HSWA	
				33-002(c)	MDA K	HSWA	
				33-002(d)	MDA K	HSWA	
				33-002(e)	MDA K	HSWA	
			added in FY00	33-002(f)	Surface disposal	HSWA	
388	33	33-003(a)	33-003(a)-99	33-003(a)	MDA D	HSWA	$250
				33-003(b)	MDA D	HSWA	
389	33	33-004(a)	33-004(a)-00	33-004(a)	Septic system - Main Site	HSWA	$250
				33-004(b)	Outfall	HSWA	
				33-004(f)	Outfall	HSWA	
				33-004(d)	Storage area	HSWA	
				33-015	Incinerator	HSWA	
				33-017	Operational release/Drainage	HSWA	
390	33	33-004(b)			Septic system - South Site	HSWA	$250
391	33	33-004(c)			Septic system - East Site	HSWA	$250
392	33	33-006(b)	33-006(b)-00	33-006(b)	Firing range - Bank Site	HSWA	$250
				33-007(a)	Firing range	HSWA	
				33-006(a)	Landfill	HSWA	
				33-016(a)	Surface disposal	HSWA	
393	33	33-004(d)			Septic system - Area 6	HSWA	$250
394	33	33-004(g)	33-004(g)-00	33-004(g)	Outfall - Area 6	HSWA	$250
				33-007(c)	Firing range	HSWA	
395	33	33-004(j)	33-004(j)-00	33-004(j)	Outfall - South Site	HSWA	$250
				33-004(n)	Firing site	HSWA	
				33-007(b)	Firing range	HSWA	
				33-004(o)	Surface disposal	HSWA	
				33-034(c)	Surface disposal	HSWA	
				33-034(d)	Surface disposal	HSWA	
				33-033(c)	Storage area	HSWA	
				33-014	Burn site	HSWA	
396	33	33-004(k)			Outfall	HSWA	$250
397	33	33-004(m)			Septic system	HSWA	$250
398	33	33-005(a)	33-005(a)-00	33-005(a)	Septic system - Main Site Process Bldgs.	HSWA	$250
				33-005(b)	Septic system	HSWA	
				33-005(c)	Septic system	HSWA	
				33-011(a)	Storage area	HSWA	
399	33	33-009	moved from RCRA this list in FY00		Surface disposal - PCB Only Site	HSWA	$250
400	33	33-010(b)			Surface disposal	HSWA	$250
401	33	33-010(d)			Surface disposal	HSWA	$250
402	33	33-010(g)			Surface disposal	HSWA	$250
403	33	33-011(e)			Drum storage	HSWA	$250
404	33	33-012(a)	moved from RCRA this list in FY00		Drum storage - PCB-Only Site	HSWA	$250

ENCLOSURE 1
CORRECTIVE ACTION UNITS, SUMMARY TABLE
ANNUAL UNIT AUDIT - FY00

Count	TA	PRS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
405	33	33-013			Storage tank	HSWA	$250
406	33	33-016			Sump	HSWA	$250
					Technical Area 35		
407	35	35-002			Material disposal area (MDA X)	HSWA	$250
408	35	35-003(a)	35-003(a)-99	35-003(a) -	Mesa Top Portion of TA-35 Waste Water Treatment Plant Only - Canyon portion designated as new PRS in FY00	HSWA	$250
				35-003(b)	Waste Water Treatment Plant	HSWA	
				35-003(c) -	Waste Water Treatment Plant	HSWA	
				35-003(c)	Waste Water Treatment Plant	HSWA	
				35-003(f)	Waste Water Treatment Plant	HSWA	
				35-003(g)	Waste Water Treatment Plant	HSWA	
				35-003(h) -	Waste Water Treatment Plant	HSWA	
				35-003(m)	Waste Water Treatment Plant	HSWA	
				35-003(non)	Waste Water Treatment Plant	Non-HSWA	
				35-003(n)	Waste Water Treatment Plant	HSWA	
				35-003(o)	Waste Water Treatment Plant	HSWA	
			added in FY00	35-003(p)	Waste Water Treatment Plant	HSWA	
409	35	35-003(d)	35-003(d)-00	35-003(d)	TA-35 Waste Water Treatment Plant - Pratt Canyon Pumps removed from 35-003(a)-99 in FY00	HSWA	$250
				35-003(f)	Waste Water Treatment Plant	HSWA	
				35-003(g)	Waste Water Treatment Plant	HSWA	
				35-003(r)	Waste Water Treatment Plant	Non-HSWA	
410	35	35-003(j)	35-003(j)-99	35-003(j)	Former Structures	HSWA	$250
				35-003(k)	Former Structures	HSWA	
			added in FY00	35-014(b)	Former Leaking Drum	HSWA	
				35-014(d)	Former Structures	Non-HSWA	
				35-015(b)	Former Structures	HSWA	
411	35	35-004(a)			Storage area	HSWA	$250
412	35	35-004(b)			Storage area	HSWA	$250
413	35	35-004(e)			Container storage area	HSWA	$250
414	35	35-004(g)	35-004(g)-00	35-004(g)	Container storage area - Ten Site	HSWA	$250
				35-009(b)	Septic system	HSWA	
415	35	35-004(h)			Container storage area	HSWA	$250
416	35	35-008	35-008-00	35-008	Surface disposal and landfill	HSWA	$250
				35-014(d1) -	Former Oil Spill	HSWA	
417	35	35-009(a)			Septic system	HSWA	$250
418	35	35-009(c)			Septic system	HSWA	$250
419	35	35-009(d)			Septic system	HSWA	$250
420	35	35-009(e) -			Septic system	HSWA	$250
421	35	35-010(a)	35-010(a)-00	35-010(a)	Surface impoundments	HSWA	$250
				35-010(b)	Surface impoundments	HSWA	
				35-010(c)	Surface impoundments	HSWA	
				35-010(d)	Surface impoundments	HSWA	
				35-010(e)	Surface impoundments	Non-HSWA	
422	35	35-011(a)			Underground storage tank	HSWA	$250
423	35	35-013(a)			Sump	HSWA	$250
424	35	35-013(b)			Sump	HSWA	$250
425	35	35-013(c)			Sump	HSWA	$250
426	35	35-013(d)			Floor Drains	HSWA	$250
427	35	35-014(a)			Operational release	HSWA	$250
428	35	35-014(g)	35-014(g)-00	35-014(g1)	Soil contamination	HSWA	$250
				35-004(e)	Container storage area	Non-HSWA	
				35-014(g2)	Soil contamination	Non-HSWA	
				35-014(r)	Drains and outfalls	Non-HSWA	
429	35	35-015(a)			Soil contamination	HSWA	$250
430	35	35-016(a)	35-016(a)-00	35-016(a)	Drains and outfalls	HSWA	$250
				35-016(g)	Drains and outfalls	HSWA	
431	35	35-016(c)	35-016(c)-00	35-016(c)	Outfall	HSWA	$250
				35-016(e)	Outfall	HSWA	
432	35	35-016(f)	35-016(f)-00	35-016(f)	Drains and outfalls	HSWA	$250
				35-014(d)	Oil Spill	Non-HSWA	

ENCLOSURE 1
CORRECTIVE ACTION UNITS, SUMMARY TABLE
ANNUAL UNIT AUDIT - FY00

Count	TA	PRS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
433	35	35-016(k)	35-016(k)-00	35-016(k) 35-016(l)	Drains and outfalls Storm Drain	HSWA Non-HSWA	$250
434	35	35-016(m)			Drains and outfalls	HSWA	$250
435	35	35-016(o)			Drains and outfalls	HSWA	$250
436	35	35-016(p)			Outfall	HSWA	$250
				Technical Area 36			
437	36	36-001			Material disposal area (MDA AA)	HSWA	$250
438	36	36-002			Sump	HSWA	$250
439	36	36-003(a)			Septic system	HSWA	$250
440	36	36-003(b)			Septic system 1-2 site	HSWA	$250
441	36	36-006	36-006-99	36-006 36-006(c)	Firing Site Firing Site	HSWA Non-HSWA	$250
442	36	36-006(d)			Firing site (Lower Stabonia, Skunk works, Burn pit)	HSWA	$250
443	36	36-007			Surface disposal site	HSWA	$250
444	36	C-36-003			Storm drainages	HSWA	$250
				Technical Area 39			
445	39	39-001(a)			Landfill	HSWA	$250
446	39	39-001(b)	39-001(b)-00	39-001(b) 39-006	Material disposal area (MDA V) Firing range	HSWA HSWA	$250
447	39	39-002(a)			Storage area	HSWA	$250
448	39	39-004(a)			Firing site	HSWA	$250
449	39	39-004(b)			Firing site	HSWA	$250
450	39	39-004(c)			Firing site	HSWA	$250
451	39	39-005			Seepage pit	HSWA	$250
452	39	39-006(a)			Septic system	HSWA	$250
453	39	39-007(a)			Storage area	HSWA	$250
				Technical Area 40			
454	40	40-001(b)			Septic system	HSWA	$250
455	40	40-001(c)			Septic system	HSWA	$250
456	40	40-004			Oper. release	HSWA	$250
457	40	40-005			Sump	HSWA	$250
458	40	40-006(a)			Firing site	HSWA	$250
459	40	40-006(b)			Firing site	HSWA	$250
460	40	40-006(c)			Firing site	HSWA	$250
461	40	40-009			Landfill	HSWA	$250
462	40	40-010			Surface disposal site	HSWA	$250
				Technical Area 41			
463	41	41-001			Septic system	HSWA	$250
464	41	41-002(a)	41-002(a)-00	41-002(a) 41-002(b) 41-002(c)	Waste Water Treatment Plant Waste Water Treatment Plant Waste Water Treatment Plant	HSWA HSWA HSWA	$250
				Technical Area 42			
465	42	42-001(a)	42-001(a)-99	42-001(a) 42-001(b) 42-001(c) 42-002(a) 42-002(b) 42-003	Former Structures Former Structures Former Structures Former Structures Former Structures Former Structures	HSWA HSWA HSWA Non-HSWA HSWA HSWA	$250
				Technical Area 43			
466	43	43-001(a)			Waste Area (Pre 1981)	HSWA	$250
467	43	43-002			Incinerator	HSWA	$250
				Technical Area 45			
468	45	45-001	45-001-00	45-004 45-005 45-006 45-004 C-45-001 01-002(c)-99	Waste water treatment plant Vehicle decontamination facility Wash Trap Sanitary sewer outfall Former parking lot of WWTP Outfall Portion of PRS 01-002 Only	HSWA HSWA HSWA HSWA Non-HSWA HSWA	$250
			Outfall portion removed from 01-002(c)-99 in FY00				

ENCLOSURE 1
CORRECTIVE ACTION UNITS, SUMMARY TABLE
ANNUAL UNIT AUDIT – FY00

Count	TA	PRS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
					Technical Area 46		
469	46	46-002			Surface impoundment	HSWA	$250
470	46	46-003(a)			Septic system	HSWA	$250
471	46	46-003(b)			Septic system	HSWA	$250
472	46	46-003(c)			Septic system	HSWA	$250
473	46	46-003(d)			Septic system	HSWA	$250
474	46	46-003(e)			Septic system	HSWA	$250
475	46	46-003(f)			Septic system	HSWA	$250
476	46	46-003(g)			Septic system	HSWA	$250
477	46	46-003(h)			Operational release	HSWA	$250
478	46	46-004(a)			Waste line	HSWA	$250
479	46	46-004(a2)			Outfall	HSWA	$250
480	46	46-004(b)			Operational release	HSWA	$250
481	46	46-004(b2)			Operational release	HSWA	$250
482	46	46-004(c)			Sump	HSWA	$250
483	46	46-004(c2)			Outfall	HSWA	$250
484	46	46-004(d)	46-004(d)-99	46-004(d) 46-004(e)	Sump Sump	HSWA HSWA	$250
485	46	46-004(d2)	46-004(d2)-99	46-004(d1) 46-004(g) 46-004(h) C-46-007 C-46-008	Stack Emissions Outfall/Stack Emissions Outfall/Stack Emissions Stack Emissions Stack Emissions	HSWA HSWA HSWA Non-HSWA Non-HSWA	$250
486	46	46-004(f)			Outfall	HSWA	$250
487	46	46-004(m)			Outfall	HSWA	$250
488	46	46-004(n)			Sump	HSWA	$250
489	46	46-004(q)			Outfall	HSWA	$250
490	46	46-004(r)			Outfall	HSWA	$250
491	46	46-004(s)			Outfall	HSWA	$250
492	46	46-004(t)			Outfall	HSWA	$250
493	46	46-004(u)			Outfall	HSWA	$250
494	46	46-004(v)			Outfall	HSWA	$250
495	46	46-004(w)			Outfall	HSWA	$250
496	46	46-004(x)			Outfall	HSWA	$250
497	46	46-004(y)			Outfall	HSWA	$250
498	46	46-004(z)			Outfall	HSWA	$250
499	46	46-005			Surface impoundment	HSWA	$250
500	46	46-006(a)			Operational release	HSWA	$250
501	46	46-006(b)			Operational release	HSWA	$250
502	46	46-006(c)			Operational release	HSWA	$250
503	46	46-006(d)			Operational Release	HSWA	$250
504	46	46-006(f)			Storage area	HSWA	$250
505	46	46-006(g)			Operational Release	HSWA	$250
506	46	46-007			Operational Release	HSWA	$250
507	46	46-008(a)			Storage area	HSWA	$250
508	46	46-008(b)			Storage area	HSWA	$250
509	46	46-008(d)			Storage area	HSWA	$250
510	46	46-008(e)			Storage area	HSWA	$250
511	46	46-008(f)			Storage area	HSWA	$250
512	46	46-008(g)			Storage area	HSWA	$250
513	46	46-009(a)			Surface disposal	HSWA	$250
514	46	46-009(b)			Surface disposal	HSWA	$250
515	46	46-010(d)			Operation release	HSWA	$250
					Technical Area 48		
516	48	48-002(a)			Container storage area	DSWA	$250
517	48	48-002(b)			Container storage area	DSWA	$250
518	48	48-003			Septic system	DSWA	$250
519		48-004(a)	48-004(a)-99	48-004(a) 48-004(b) 48-004(c)	Tanks/Sumps/Outfalls Tanks/Sumps/Outfalls Tanks/Sumps/Outfalls	DSWA DSWA DSWA	$250
520	48	48-005			Waste lines and outfalls	DSWA	$250

ENCLOSURE 1
CORRECTIVE ACTION UNITS, SUMMARY TABLE
ANNUAL UNIT AUDIT - FY00

Count	TA	PRS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
521	48	48-007(a)	48-007(a)-00	48-007(a) 48-007(d) 48-010	Drains and outfalls Drains and outfalls Surface impoundment	HSWA HSWA HSWA	$250
522	48	48-007(b)			Drains and outfalls	HSWA	$250
523	48	48-007(c)			Drains and outfalls	HSWA	$250
524	48	48-007(f)			Drains and outfalls	HSWA	$250
					Technical Area 49		
525	49	49-001(a)	49-001(a)-00	49-001(a) 49-001(b) 49-001(c) 49-001(d) 49-001(e) 49-001(f) 49-001(g)	Material disposal area (MDA AB) (experimental shafts) Material disposal area (MDA AB) (experimental shafts) Material disposal area (MDA AB) (experimental shafts) Material disposal area (MDA AB) (experimental shafts) Material disposal area (MDA AB) (experimental shafts) Material disposal area (MDA AB) (experimental shafts) Material disposal area (MDA AB) (miscellaneous)	HSWA HSWA HSWA HSWA HSWA HSWA HSWA	$250
526	49	49-003			Leach field (Area 11 Radiochem and small shot area)	HSWA	$250
527	49	49-004			Huntsite and landfill (Area 6)	HSWA	$250
528	49	49-005(a)			Landfill (part of Area 10)	HSWA	$250
529	49	49-006			Sump (Area 5)	HSWA	$250
					Technical Area 50		
530	50	50-002(a)			Underground tanks	HSWA	$250
531	50	50-002(b)	50-002(b)-00	50-002(b) 50-002(c)	Underground tank Underground tank	HSWA HSWA	$250
532	50	50-004(a)	50-004(a)-00	50-004(a) 50-004(b) 50-004(c)	Former waste lines Former underground tanks Former waste lines	HSWA HSWA HSWA	$250
533	50	50-006(a)			Operational release	HSWA	$250
534	50	50-006(c)			Operational release	HSWA	$250
535	50	50-006(d)			Effluent discharge	HSWA	$250
536	50	50-009			Material disposal area (MDA C)	HSWA	$250
537	50	50-011(a)			Septic system	HSWA	$250
					Technical Area 52		
538	52	52-001(d)			UNTREX equip.	HSWA	$250
539	52	52-002(a)			Septic system	HSWA	$250
					Technical Area 53		
540	53	53-001(a)	moved from RCRA Unit list in FY00		Storage area - PCB Only Site	HSWA	$250
541	53	53-001(b)			Storage area	HSWA	$250
542	53	53-002(a)	53-002(a)-99	53-002(a) 53-002(b)	Surface impoundment Surface impoundment	HSWA HSWA	$250
543	53	53-005			Disposal pit	HSWA	$250
544	53	53-006(b)	53-006(b)-99	53-006(b) 53-006(c) 53-006(e)	Tanks/Sumps/Outfalls Tanks/Sumps/Outfalls Tanks/Sumps/Outfalls	HSWA Non-HSWA HSWA	$250
545	53	53-006(d)	53-006(d)-99	53-006(d) 53-006(f)	Tanks/Sumps/Outfalls Tanks/Sumps/Outfalls	HSWA HSWA	$250
546	53	53-006(f)			Underground tank	HSWA	$250
547	53	53-007(e)			Aboveground neutralizer tank	HSWA	$250
					Technical Area 54		
548	54	54-001(a)			Storage area surface	HSWA	$250
549	54	54-004			Material deposit area (MDA H) (except sh. 9)	HSWA	$250
550	54	54-005			Material deposit area (MDA J) (Pits 1-5, Shafts 1-4)	HSWA	$250
551	54	54-006			Material deposit area (MDA L) (All subsurface areas including Pits A, B1 B/C,D and Shafts 1-28, 29-34)	HSWA	$250
552	54	54-007(a)			Septic systems (tank and seepage trench)	HSWA	$250

ENCLOSURE 1
CORRECTIVE ACTION UNITS, SUMMARY TABLE
ANNUAL UNIT AUDIT - FY00

Count	TA	PRS ID	Consolidated Unit Number	Consolidated Units	Unit Type	Regulatory Driver	Annual Fee
553	54	54-007(b)			Septic system	HSWA	$250
554	54	54-007(c)	54-007(c)-99	54-001(c) 54-007(c)	Tanks/Sumps/Outfalls Tanks/Sumps/Outfalls	HSWA Non-HSWA	$250
555	54	54-012(b)			Reduction etc	HSWA	$250
556	54	54-013(b)	54-013(b)-99	54-013(b) 54-014(b) 54-014(c) 54-014(d) 54-015(b) 54-017 54-018 54-019 54-020	MDA G MDA G MDA G MDA G MDA G MDA G MDA G MDA G MDA G	HSWA HSWA HSWA HSWA HSWA HSWA HSWA HSWA HSWA	$250
557	54	54-015(h)			Storage area (drums)	HSWA	$250
					Technical Area 55		
558	55	55-008			Sumps and tanks	HSWA	$250
559	55	55-009			Sumps and tanks	HSWA	$250
					Technical Area 59		
560	59	59-001			Septic system	HSWA	$250
					Technical Area 60		
561	60	60-002			Storage area	HSWA	$250
562	60	60-003(a)			Surface impoundment - formerly 3-029(a)	HSWA	$250
563	60	60-006(a)			Septic tank	HSWA	$250
564	60	60-007(a)			Systematic or intent. prod. release	HSWA	$250
565	60	60-007(b)			Systematic or intent. prod. release	HSWA	$250
					Technical Area 61		
566	61	61-002	moved from RCRA Unit list in FY00		Transformer storage area - PCB-Only Site	HSWA	$250
567	61	61-004(a)			Septic tank	HSWA	$250
568	61	61-005			Landfill (LA County Municipal)	HSWA	$250
569	61	61-006			Waste oil tank	HSWA	$250
570	61	61-007	moved from RCRA Unit list in FY00		Transformer site - systematic leak - PCB-Only Site	HSWA	$250
					Technical Area 63		
571	63	63-001(a)			Septic system	HSWA	$250
572	63	63-001(b)			Septic system	HSWA	$250
					Technical Area 69		
573	69	69-001			Incinerator and assoc. equip.	HSWA	$250
					Technical Area 73		
574	73	73-001(a)	73-001(a)-99	73-001(a) 73-004(f)	Former Landfill Former Landfill	HSWA HSWA	$250
575	73	73-001(b)	73-001(b)-99	73-001(b) 73-001(c) 73-001(d)	Surface Disposal Former Landfill Former Landfill	HSWA HSWA HSWA	$250
576	73	73-002	73-002-99	73-002 73-003 73-004(a) 73-004(b) 73-004	Incinerator Surface Disposal Former Structures Former Structures Former Structures Former Structure	HSWA Non-HSWA HSWA HSWA HSWA	$250
577	73	73-004(c)			Septic tank	HSWA	$250
578	73	73-005	73-005-99	73-005 73-007 C-73-005(a) C-73-005(b) C-73-005(c) C-73-005(d) C-73-005(e) C-73-005(f)	Surface Disposal Former Structures Excavation, unlined septic tank Excavation, unlined septic tank Excavation, unlined septic tank Excavation, unlined septic tank Excavation, unlined septic tank Excavation, unlined septic tank	HSWA Non-HSWA Non-HSWA Non-HSWA Non-HSWA Non-HSWA Non-HSWA Non-HSWA	$250
578					Total Annual Fee:		$144,500

PRS Consolidation Worksheet

Site Type: Storage Area

Proposed PRS Number: 00-003-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
00-003	HSWA	Product Storage Area	Waste Oil, Algicides	Under Investigation
00-012	HSWA	Underground Storage Tank		Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on operational history, geographic proximity, transport mechanisms (surface and subsurface), and the single investigation needed to assess these PRSs, they are proposed for consolidation.

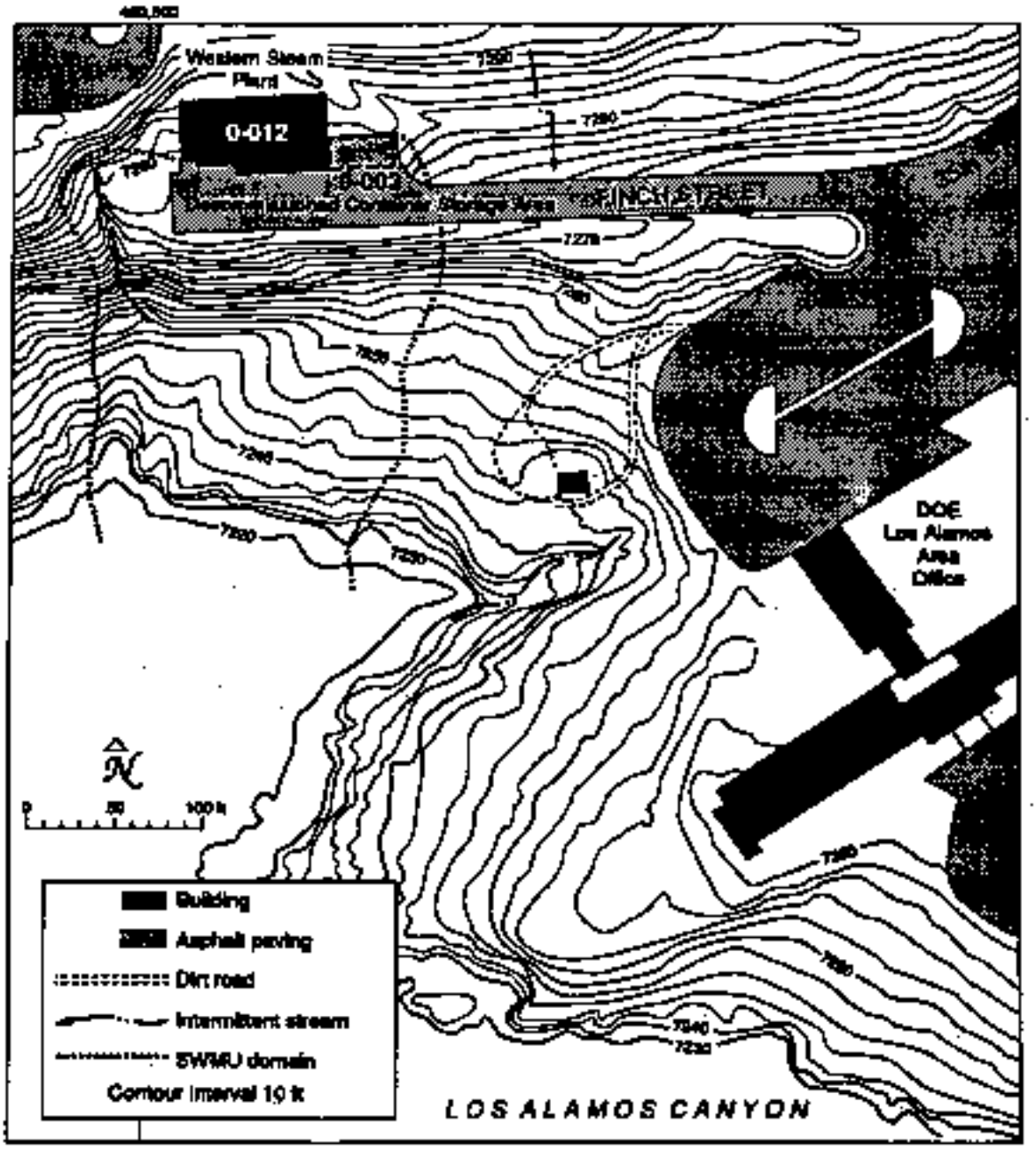
Description of Aggregate:

PRS 00-003 was a 100 square foot product storage area located directly east of the Western Steam Plant. This area housed chemicals used for boiler water treatment and was decommissioned in 1987. PRS 00-012 was an underground filtration tank (blow-off tank) receiving blow down steam and water from the boilers at the plant.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____



Sources: LA-FM-104 Sheet L6-NW-2; LA-FM 113 Sheet L6-NW-3, 1" = 50', 1992

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

PRS Consolida[illegible] Worksheet

Site Type: Miscellaneous

Proposed PRS Number: 01-001(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
01-001(a)	HSWA	Former Septic Tank 134	Pu, Cs, Am, U, metals, and SVOCs	NFA Criterion 5
01-001(b)	HSWA	Former septic tank 135	rad, metals	NFA Criterion 5
01-001(c)	HSWA	Former Septic Tank 137 Outfall	Radionuclides and metals	NFA Criterion 5
01-001(d)	HSWA	Former septic tank 138	rad, metal	Under investigation
01-001(e)	HSWA	Former Septic Tank 139 Outfall	Rad, metals	NFA Criterion 5
01-001(f)	HSWA	Former septic tank 140	U, metals	NFA Criterion 5
01-001(g)	HSWA	Former Septic Tank 141 Outfall	Radionuclides and metals	NFA Criterion 5
01-001(m)	HSWA	Former septic tank 275	rad, metals	NFA Criterion 5
01-001(o)	HSWA	Former Sanitary Waste Line	Rad, metals	NFA Criterion 5
01-001(s)	HSWA	Western Sanitary Waste Line	Rad, metals	NFA Criterion 4
01-001(t)	HSWA	Former septic system	rad, metals	NFA Criterion 5
01-001(u)	HSWA	Sanitary Waste Line	Rad, metals	NFA Criterion 4
01-002(a)	HSWA	Former acid waste line	rad, metals	NFA Criterion 5
01-003(a)	HSWA	Former Bailey Bridge Landfill Hillside	Rad, metals	NFA Criterion 5
01-003(b)	Non-HSWA	Surface disposal	rad, metals	NFA Criterion 5
01-003(e)	HSWA	Surface disposal	rad, metals	NFA Criterion 5
01-004(a)	Non-HSWA	Former incinerator building	Rad, metals	NFA Criterion 5
01-004(b)	Non-HSWA	Former incinerator	rad, metals	NFA Criterion 5
01-005	Non-HSWA	Former incinerator		NFA Criterion 5
01-006(a)	HSWA	Former Drain Lines and Hillside Outfalls	Radionuclides and metals	NFA Criterion 5
01-006(b)	HSWA	Former Drain Lines and Hillside Outfalls	Radionuclides	NFA Criterion 5
01-006(c)	HSWA	Former Drain Lines and Hillside Outfalls	Radionuclides	NFA Criterion 5
01-006(d)	HSWA	Former Drain Lines and Hillside Outfalls	Radionuclides	NFA Criterion 5
01-006(e)	Non-HSWA	Former drain lines and outfall	metals, rad	NFA Criterion 5
01-006(g)	Non-HSWA	Former Drain Lines and Hillside Outfalls	Radionuclides and metals	NFA Criterion 5
01-006(h)	HSWA	Former drain lines and outfall	rad, metals	NFA Criterion 2
01-006(n)	HSWA	Former storm drain	Rad, metals	NFA Criterion 5
01-006(o)	HSWA	Former storm drain	Rad, metals	NFA Criterion 5
01-006(p)	Non-HSWA	Former drainlines	rad, metals	Under Investigation
01-007(a)	HSWA	Subsurface soil contamination	Rad, metals	NFA Criterion 5
01-007(b)	HSWA	Subsurface soil contamination	Rad, metals	NFA Criterion 5
01-007(c)	HSWA	Subsurface soil contamination	Rad, metals	NFA Criterion 5
01-007(d)	HSWA	Subsurface soil contamination	Rad, metals	NFA Criterion 5
01-007(e)	HSWA	Subsurface soil contamination	Rad, metals	NFA Criterion 5
01-007(f)	Non-HSWA	Subsurface soil contamination	Rad, metals	NFA Criterion 5
01-007(h)	Non-HSWA	Subsurface contamination	rad, metals	NFA Criterion 5
01-007(i)	Non-HSWA	Subsurface soil contamination	metals, rad	Under Investigation
01-007(j)	HSWA	Subsurface soil contamination	Rad, metals	NFA Criterion 5
01-007(l)	HSWA	Suspected soil contamination	rad, metals	NFA Criterion 4
01-007(m)	Non-HSWA	Subsurface soil contamination	Rad, metals	NFA Criterion 5

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

PRS Consolidation Worksheet

Site Type: Miscellaneous

Proposed PRS Number:

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
01-007(b)	Non-HSWA	Subsurface soil contamination	Rad, metals	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity? *4. Are the transport mechanisms and pathways similar?*	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms (surface and shallow subsurface), and the investigation needed to assess the contamination, it is proposed that these PRSs be consolidated.

Description of Aggregate:

The consolidated PRSs are associated with former TA-1 operations and D&D activities. TA-1 was the site of Manhattan Project activities involving basic chemical operations including wet chemistry experimentation and wet and dry chemistry processing. TA-1 also housed several mechanical operations, such as casting, machining, powder metallurgy.

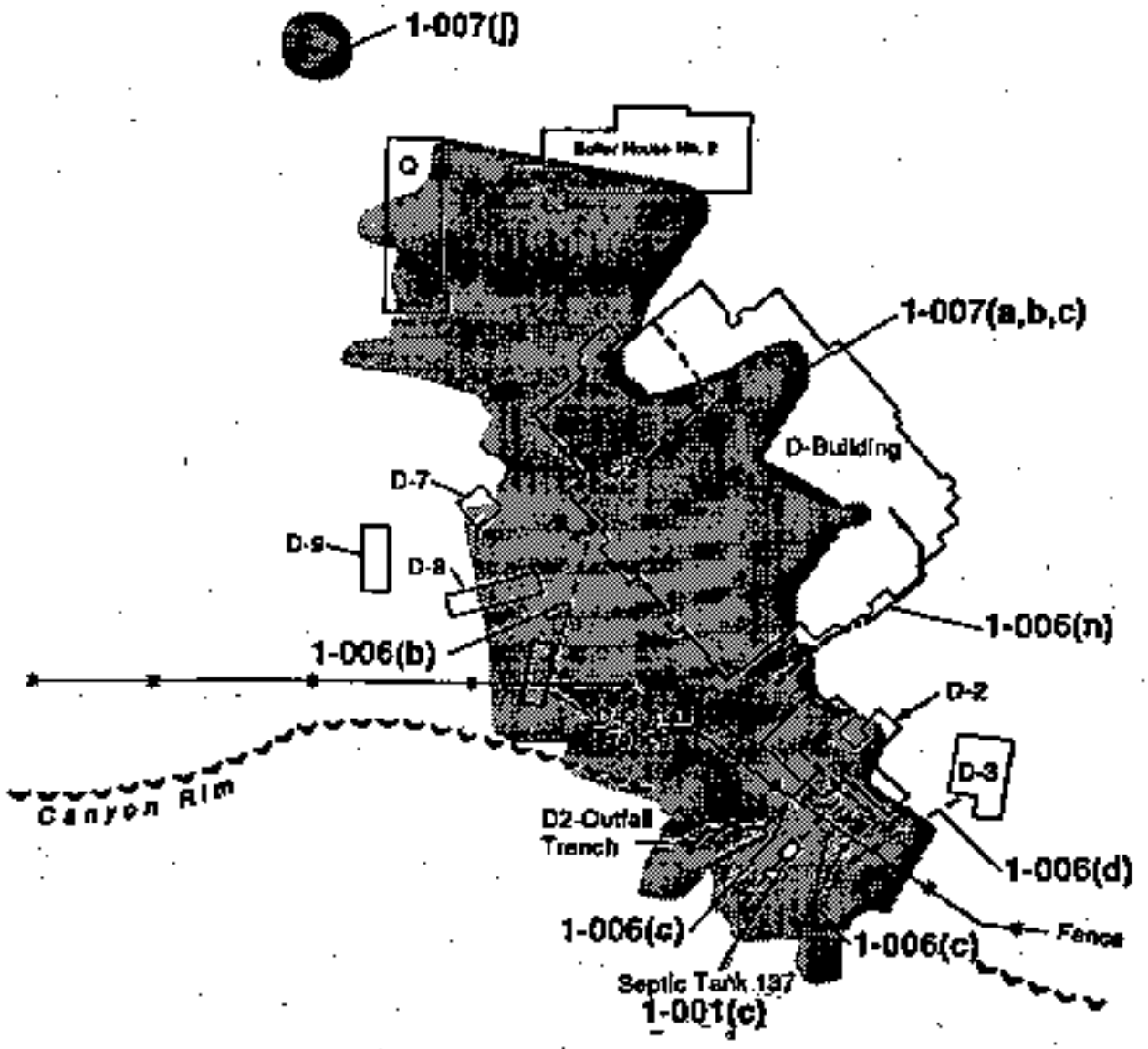
Structures at TA-1 were served by an industrial waste line (PRS 1-002) and three sanitary wastes lines (PRSs 1-001(s,u and t). All of these waste lines discharged (via outfalls, septic tanks, and/or treatment plants) outside of TA-1 boundaries and are being addressed as part of other single or consolidated units.

As operations gradually relocated to new technical areas, phased decommissioning and decontamination activities occurred. All former TA-1 buildings have been removed. Soils surrounding the buildings, within the former building footprints, and adjacent to former plumbing structures were radiologically surveyed; any identified radioactively-contaminated soil was excavated and disposed and replaced with clean fill. Backfilling and recontouring was completed on the mesa-top area where considerable excavation of contaminated soils and volcanic tuff occurred during D&D activities in the 1970s. This area has been subject to substantial private and commercial development consisting of various retail stores, office buildings, and residences.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____



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.

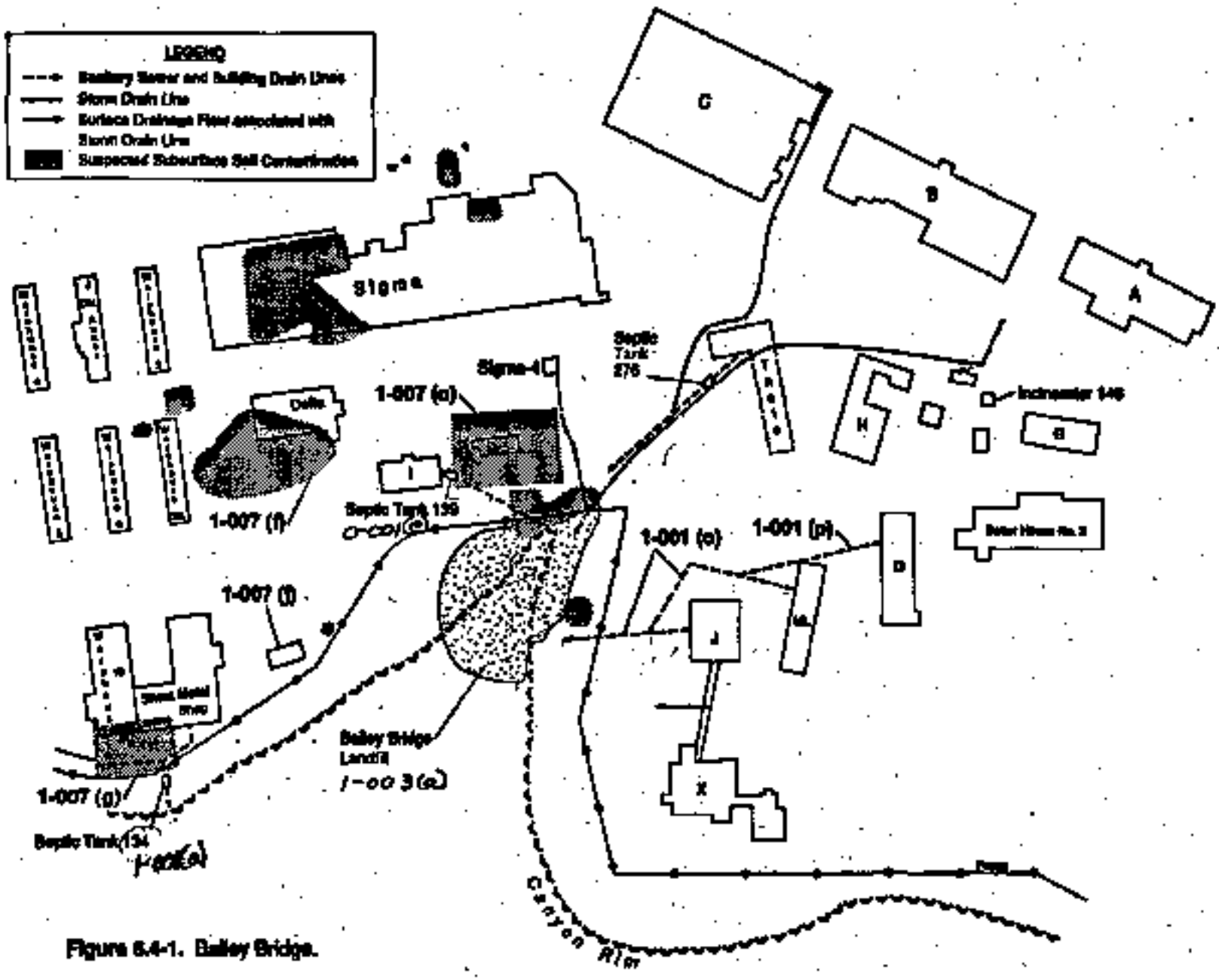


Figure 6.4-1. Bailey Bridge.

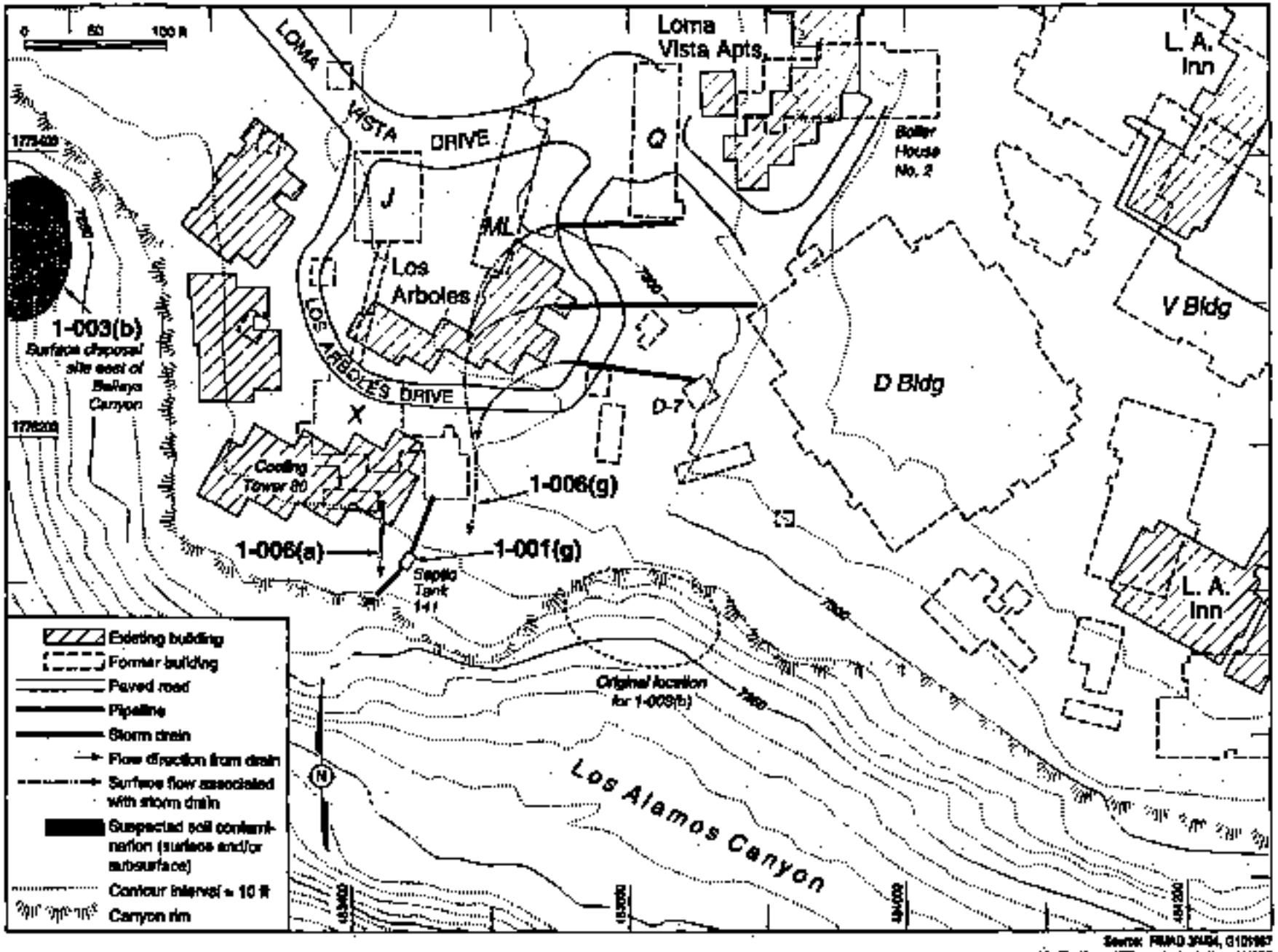


Fig. 1.1-4. Aggregate E (Cooling Tower 80).

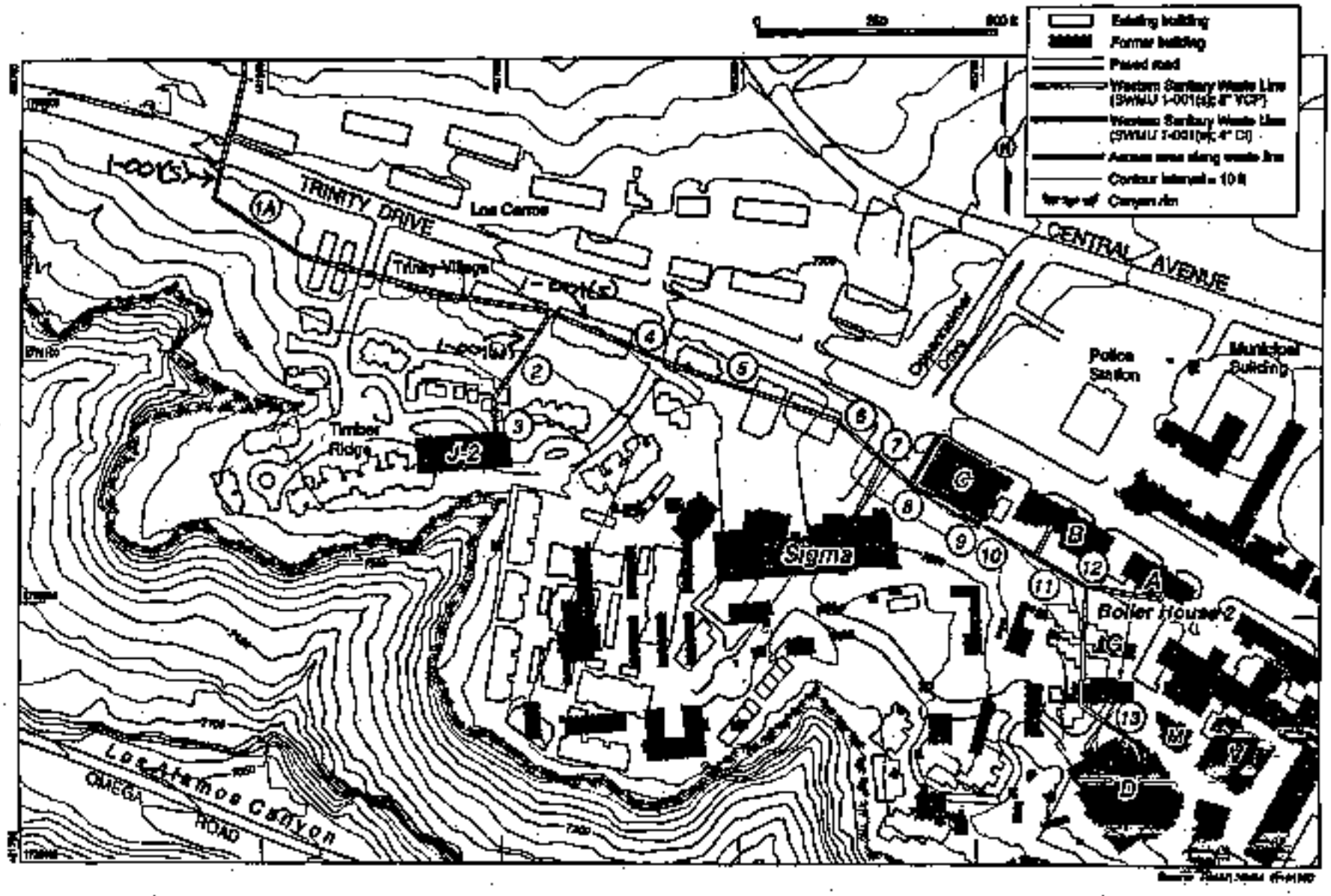
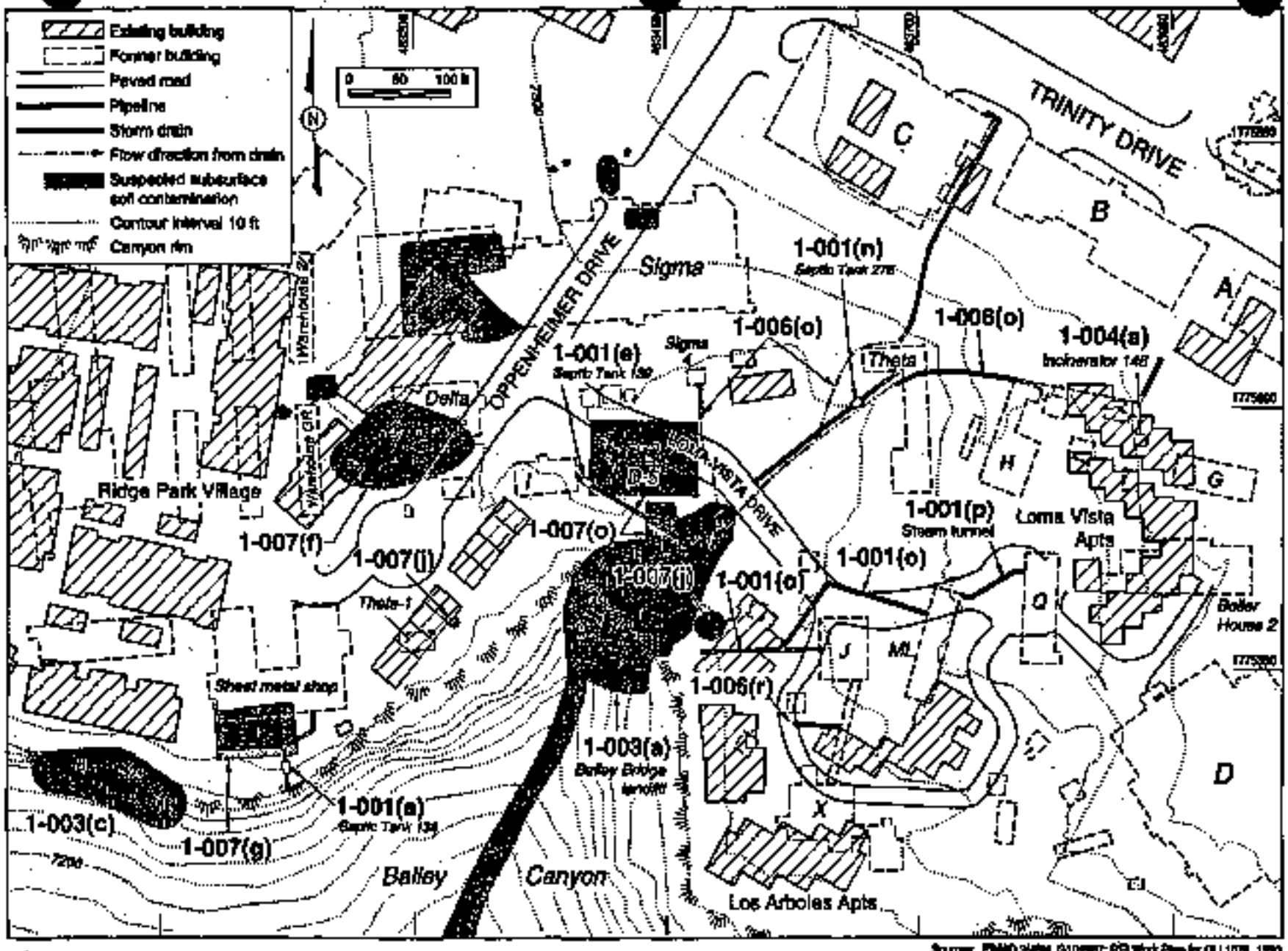
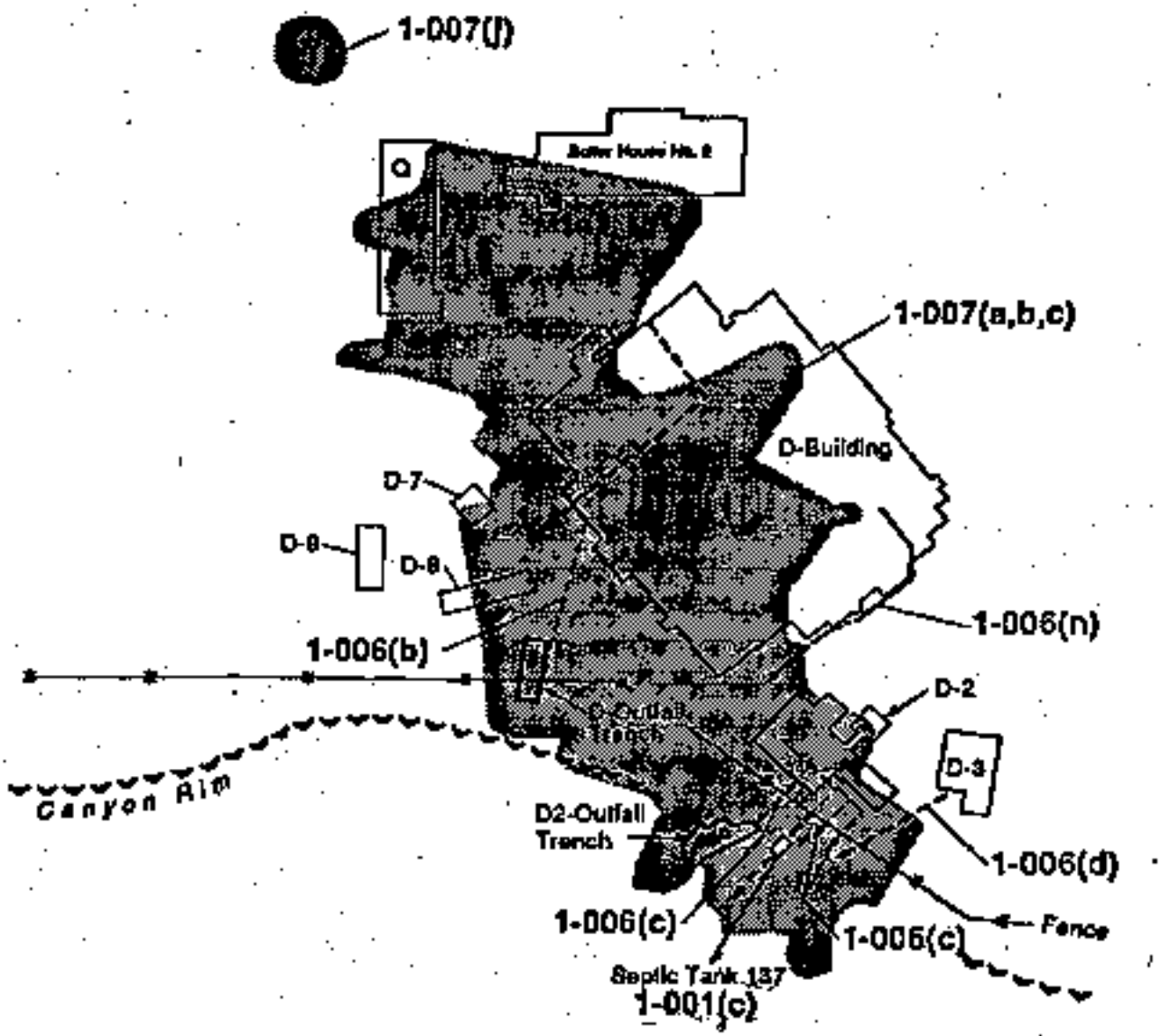


Fig. 5.1.1-1. Location of Western Sanitary Waste Line (highlights former Laboratory buildings).



Sources: PMMD data, 6/10/92; RFI Work Plan for OU 1076, 1993
Modified by: cARTography by A. Kane 9/1/96

Fig. 5.2-1. Aggregate B PRS locations.



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.

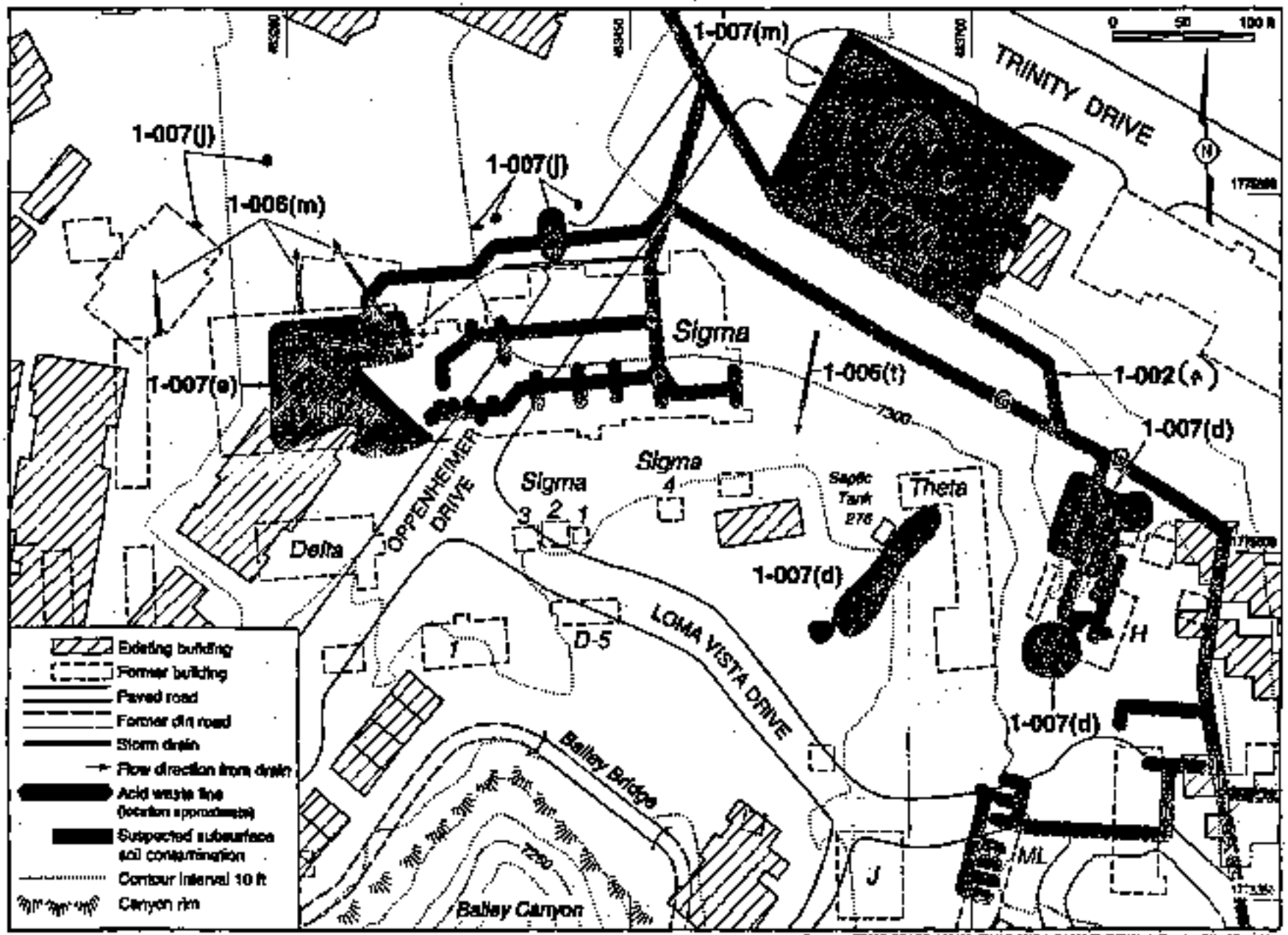


Fig. 5.1-1. Aggregate A PRS locations.

PRS Consolidation Worksheet

Site Type: Waste Water Treatment Plant **Proposed PRS Number:** 03-014(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
03-014(a)	HSWA	Imhoff tanks	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	NFA Criterion 5
03-014(b)	HSWA	Dosing siphons	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	NFA Criterion 5
03-014(b2)	Non-HSWA	Outfall	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	NFA Criterion 5
03-014(c)	HSWA	Trickling filters	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	NFA Criterion 5
03-014(c2)	Non-HSWA	Outfall	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	Under Investigation
03-014(d)	HSWA	Secondary clarifiers	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	NFA Criterion 5
03-014(e)	HSWA	Imhoff tanks	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	NFA Criterion 5
03-014(f)	HSWA	Dosing siphons	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	NFA Criterion 5
03-014(g)	HSWA	Trickling filters	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	NFA Criterion 5
03-014(h)	HSWA	Secondary clarifiers	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	NFA Criterion 5
03-014(i)	HSWA	Communitor and bar rack	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	NFA Criterion 5
03-014(j)	HSWA	Effluent pump pit	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	NFA Criterion 5
03-014(k)	HSWA	Drying beds	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	Under Investigation
03-014(l)	HSWA	Drying beds	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	Under Investigation
03-014(m)	HSWA	Drying beds	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	Under Investigation
03-014(n)	HSWA	Drying beds	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	Under Investigation
03-014(o)	HSWA	Drying beds (3)	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	Under Investigation
03-014(p)	HSWA	Sewage lift station from adjacent building	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	NFA Criterion 5
03-014(u)	HSWA	Holding tank	Rad, metals, cyanide, PCBs, pest, herb,SVOC,VOC	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history of the WWTP, the proximity of all the PRS components, the common waste streams managed, transport mechanisms (surface and shallow subsurface) of identical contaminants, and the investigation need to assess the contamination, it is proposed that these PRSs be consolidated.

Description of Aggregate:

The TA-3 waste water treatment plant (WWTP) is a large operation and consists of two plants, designated as plant 1 (built in 1951) and plant 2 (built in 1965). The components of each plant are similar. The plants were used for the biological treatment of sanitary waste from TA-3, TA-43, and liquids from septic tanks. The 1990 SWMU report also notes that floor and sink drains from some industrial areas within TA-3 are also connected to the sanitary sewer. It is expected that contamination at the WWTP will not be discernable between the two plants and the ancillary equipment including interconnecting piping and drain lines between WWTP components. One former sewage lift station (PRS 3-014(p)) and associated drain line which served Building TA-3-265 located approximately 100 feet east of the plant is also included in this consolidated unit. The plant is currently inactive since the sewer lines were tied into the Laboratory SWSC in the early 1990s.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

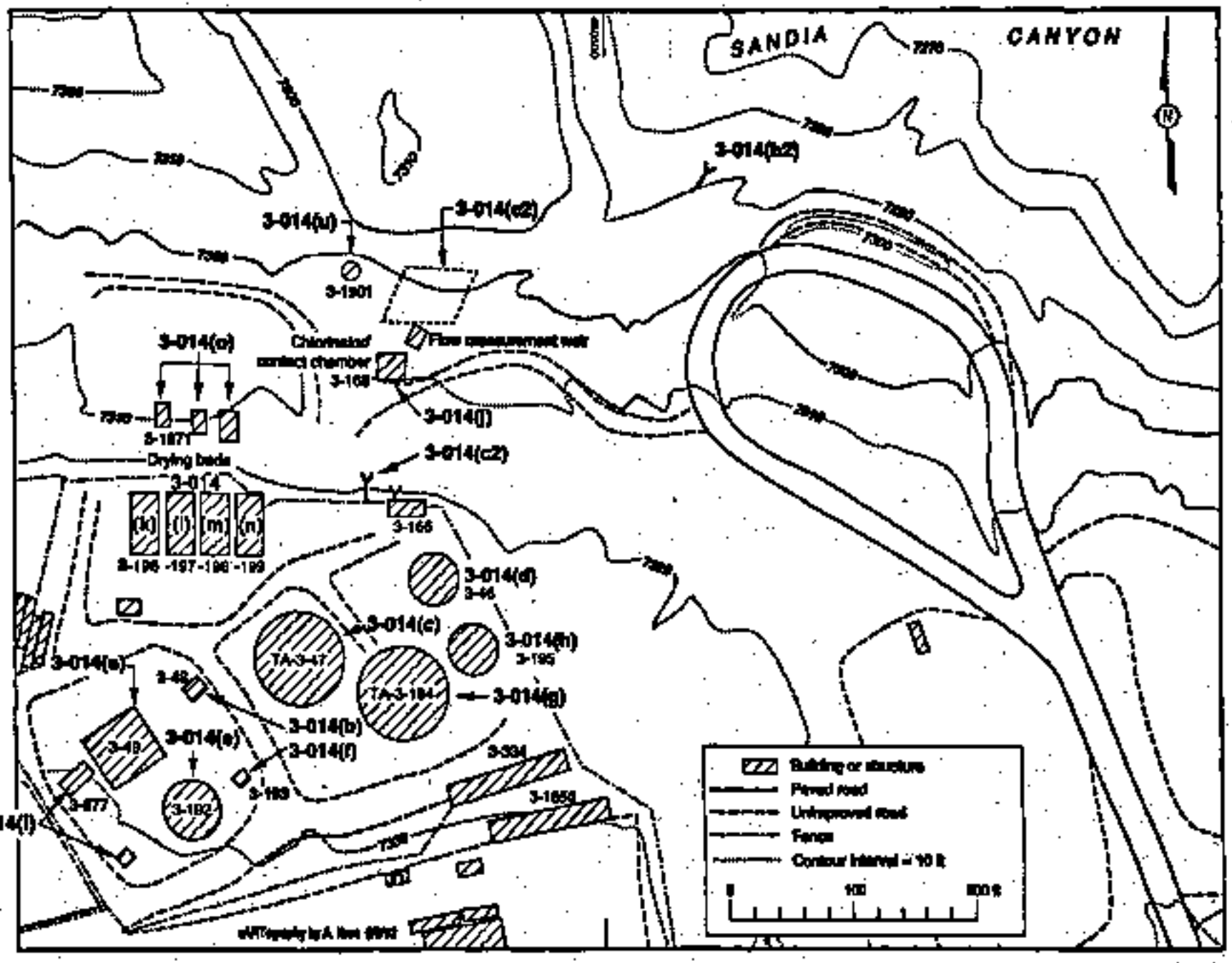


Fig. E-6. Locations of PRSs in the sanitary treatment system at TA-3.

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 04-001-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
04-001	HSWA	Firing Site	Rad, Metals	Under Investigation
04-002	HSWA	Surface Disposal Site	Rad, Metals	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history and geographic proximity of the firing site and disposal site, the common waste streams managed,, transport mechanisms (surface and shallow subsurface) of similar contaminants, and the investigation required to assess the potential contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

PRSs 4-001 and 4-002 consist of an inactive firing site and its associated surface disposal site. After a shot, residual material was bulldozed over the edge of the canyon. The site was constructed in 1945 and abandoned in 1948.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

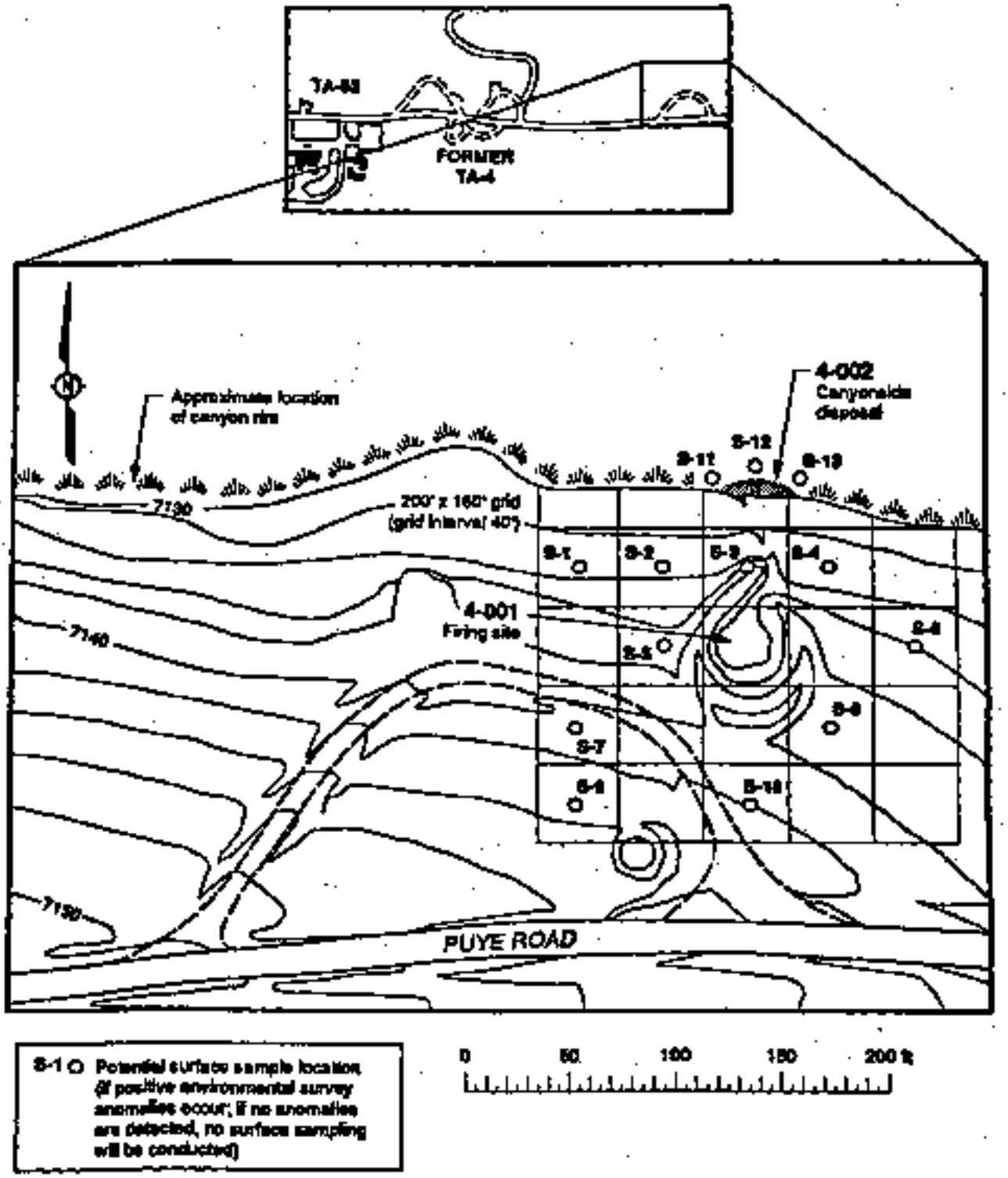


Figure 7-4. Schematic sample location map for SWMU Aggregate A.

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 05-001(a)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
05-001(a)	HSWA	Firing Site	Rad, Metals	Under Investigation
05-001(b)	HSWA	Firing Site	Rad, Metals	Under Investigation
05-002	HSWA	Disposal Site	Rad, Metals	Under Investigation

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity transport mechanisms (surface and shallow subsurface) and the investigation required to assess the potential contamination at the firing sites and the canyon side disposal area, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

Firing Sites 5-001(a and b) are inactive. PRS 5-002 is the canyon side disposal area for both firing sites. After a shot, residual material was bulldozed over the side of the mesa.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

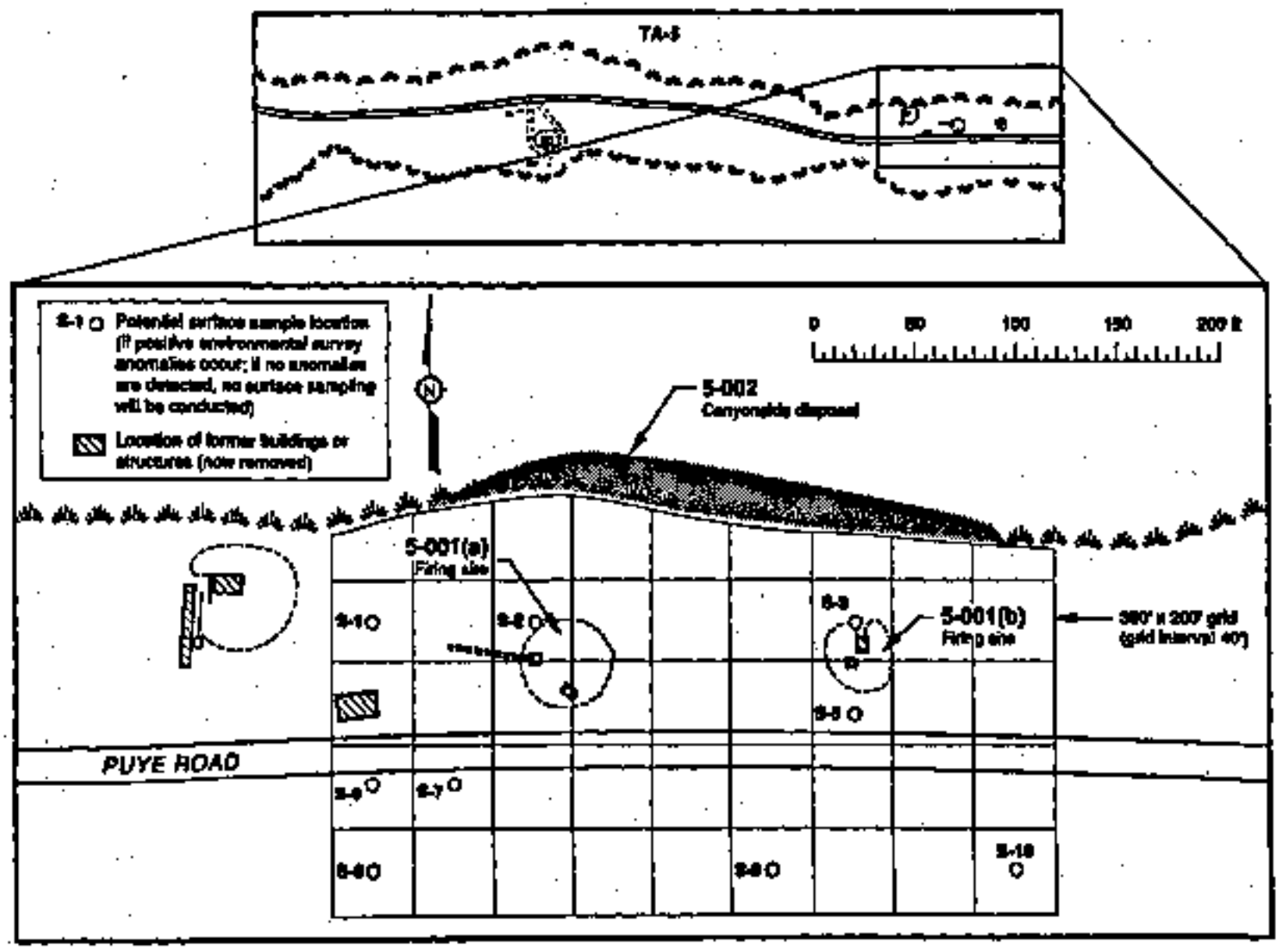


Figure 7-6. Schematic sample location map for SWMU Aggregate B.

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 06-003(a)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
06-003(a)	HSWA	Concrete Bowl	HE, organics, metals, Rad	NFA Criterion 5
06-006	Non-HSWA	Former Underground Storage Tank	HE, organics, metals, Rad	NFA Criterion 5
C-06-019	Non-HSWA	Former Generator Building Site	HE, organics, metals, Rad	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Since these PRS's received the same contaminants and were part of the same experiments, they are recommended for consolidation.

Description of Aggregate:

PRS 6-003(a) consists of a concrete bowl, 100 feet in radius, used for water recovery shots in 1944 and1945. PRS 6-006 was an underground storage tank that received material washed out of the concrete bowl and was removed in 1987. C-6-019 is the former site of a generator building that was intentionally burned down in 1950.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

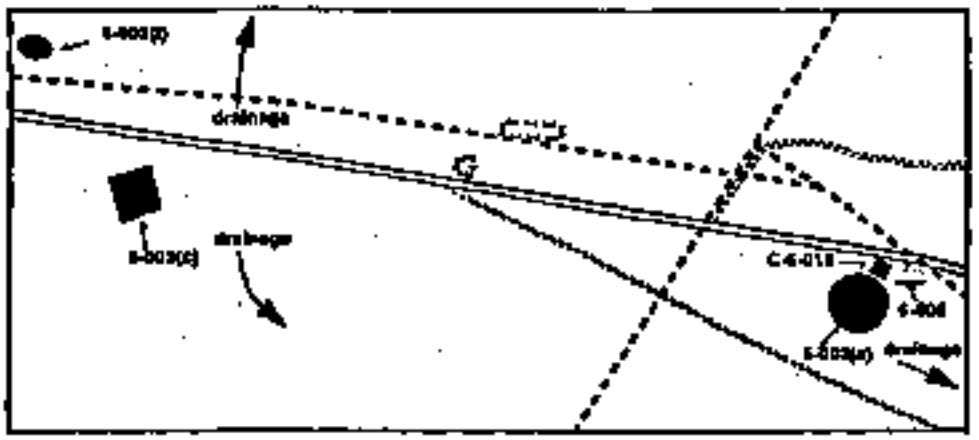


Figure 5-14. Locations of 6-003(a, c, f), 6-008, and C-6-019.

60 ft, with a rectangular concrete-lined pit (2 ft by 5 ft by 2 ft deep) located toward the east side (Catlett 1992, 19-0113). The pit may have been used to catch metal fragments when the pad was washed down after a shot. The asphalt is now badly cracked and deteriorating, the pit contains metal and wood, and some of the concrete around the edge of the pit appears to have been chiseled away, possibly in an attempt to remove contaminants (Catlett 1992, 19-0113). Metal plates are present on the pad and nearby (Catlett 1992, 19-0113). Cobalt (LASL 1944, 19-0094) and depleted uranium were used as tracers in these shots. The pad was monitored in 1978 and found to contain 3 to 6 times background uranium (Elliot 1978, 19-0093). A part of the pad was monitored with a highly sensitive alpha radiation detector during the summer of 1992 (Catlett 1992, 19-0113; Rofer 1992, 19-0080). Results show low levels of uranium and cesium-137 present on the asphalt.

A large concrete bowl [TA-6-37, 6-003(a)], 100 ft in radius, was constructed for water recovery shots in late 1944 (Schaffer 1944, 19-0122). Testing continued until spring 1945. SWMU 6-008, an underground storage tank that received material washed out of this structure, was removed in 1987 (McInroy 1993, 19-0106). C-6-019 is the former site of a generator building that was removed by burning in 1960 (LANL 1990, 0145). These PRSs are included in this aggregate because they are located near the concrete bowl. The locations of 6-003(a), 6-008, and C-6-019 are shown in Figure 5-14. The water recovery shots used depleted uranium (Schaffer 1946, 19-0027). Recovery of the uranium from individual shots ranged from 50% to percentages higher than 100%, the latter apparently resulting from incomplete recovery from previous shots (Schaffer 1945, 19-0027). Sample plates placed outside the bowl showed that approximately 10% of the uranium was distributed up to 160 ft beyond the concrete bowl (Schaffer 1945, 19-0027). Shake tests, probably of explosives assemblies, were conducted in this structure in 1945 (LASL 1945, 19-0095). Distribution of hazardous materials is unlikely from this operation. This area was monitored with a Phoswich counter in 1978 (Elliot 1978, 19-0093). No radiation above background was found.

PRS Consolidation Worksheet

Site Type: MDA

Proposed PRS Number: 06-007(a)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
06-005	HSWA	Disposal Pit	Rad, HE, SVOCs, VOCs	Under Investigation
06-007(a)	HSWA	Disposal Pit	Rad, HE, SVOCs, VOCs	Under Investigation
06-007(b)	HSWA	Disposal Pit	Rad, HE, SVOCs, VOCs	Under Investigation
06-007(c)	HSWA	Disposal Pit	Rad, HE, SVOCs, VOCs	Under Investigation
06-007(d)	HSWA	Disposal Pit	Rad, HE, SVOCs, VOCs	Under Investigation
06-007(e)	HSWA	Disposal Pit	Rad, HE, SVOCs, VOCs	Under Investigation

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms (subsurface), and the investigation required to assess the potential contamination at MDA F, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

MDA F is located north of Two-mile Mesa Road in TA-6. Two fenced areas are designated as MDA F. The fenced areas are designated as PRS 6-007(a) and PRSs 6-007(b,c,d, and e) are disposal pits in and around the fenced areas. PRS 6-005 is a timbered pit near MDA F and will be included because of its close proximity. The pits were mainly used for the disposal of large classified objects. In addition, three shafts were drilled for the disposal of spark gaps containing cesium-137. The shafts were drilled within MDA F. The pits may also have been used for the disposal of HE and rad-contaminated items.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

5.0 EVALUATION OF POTENTIAL RELEASE SITES

5.1 Aggregate 1, Materials Disposal Area F and Adjacent Pit

The following solid waste management units (SWMUs) are included in this aggregate.

- 6-005
- 6-007(a)
- 6-007(b)
- 6-007(c)
- 6-007(d)
- 6-007(e)

5.1.1 Background

5.1.1.1 Description and History

Aggregate 1 is located north of Two-Mile Mesa Road in Technical Area (TA) 6 (Figure 5-1). The two fenced areas [6-007(a)] are commonly designated as Materials Disposal Area (MDA) F. In this work plan, we have designated the gray area shown in Figure 5-1 as MDA F. SWMUs located in MDA F are the two

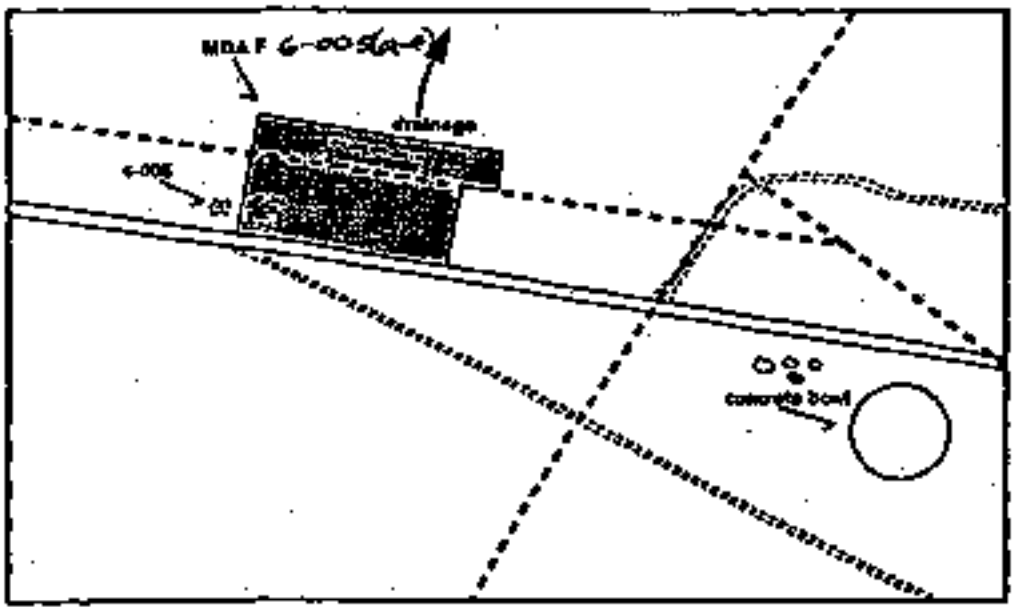


Figure 5-1. Locations of Aggregate 1 PRSs.

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 07-001(a)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
07-001(a)	HSWA	Firing Site	HE, Metals, SVOC's	NFA Criterion 5
07-001(b)	HSWA	Firing Site	HE, Metals, SVOC's	NFA Criterion 5
07-001(c)	HSWA	Inactive Firing Site	HE, Metals	NFA Criterion 5
07-001(d)	HSWA	Inactive Firing Site	HE, Metals	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms (surface and shallow subsurface) and the investigation required to assess the potential contamination at the firing sites, it is proposed that the above PRS's be consolidated.

Description of Aggregate:

PRSs 7-001(a) and (b) are former firing sites used in the 1960s for the destruction of scrap detonators and explosives. The firing sites are located in a close geographical proximity and had overlapping blast zone. Note: PRSs 7-001(c and d) were not included due to the distance between sites and the radius of influence was not crossed.

These inactive firing sites were the location of explosives and ballistics testing during the 1950s. PRS 7-001(c) is in an amphitheater-type area where soft metal disks imbedded with bullets were discovered. PRS 7-001(d) is a large crater where detonator parts have been found. The crater appears to have been formed by explosives testing and is located adjacent to PRS 7-001(c).

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

were moved to TA-40 (Creamer 1993, 19-0107). TA-6-8 was used for experiments with UF_6 from 1972 through 1976 (Schott 1993, 19-0125).

SWMUs 7-001(a) and 7-001(b), located east of the concrete bowl (Figure 5-16), are two areas surrounded by annular berms that are about 4 ft high. Their original use is unknown. One reference notes that Gomez Ranch (the name at that time for TA-7) was used "very seldom" (LASL 1944, 19-0123). In the 1950s, these sites were used for destruction of scrap detonators and explosives. Scrap detonators and explosives were mixed with Composition B scraps or flaked TNT, and the mixture was detonated (Spaulding 1959, 19-0091). Experiments were also performed to determine optimum conditions for disposing of scrap detonators (Spaulding 1959, 19-0091). Explosives fragments were found around both pits in 1959, and detonators have washed out of the soil berms during rainstorms (Spaulding 1959, 19-0091). The waste operation was moved to a burning and detonation area about 450 ft east of Building TA-40-15 in the 1950s (Spaulding 1959, 19-0091).

In an amphitheater-like area [7-001(c)] located about 0.25 mile east of SWMUs 7-001(a, b) (Figure 5-16), soft metal disks with imbedded bullets have been found. It is possible that ballistic tests carried out at 7-001(c) were related to the development of nuclear initiators. If this is the case, the only hazardous material used was lead. Full testing of initiators was considered sufficiently hazardous that an enclosed facility was built for this purpose (McMillan 1944, 19-0092).

SWMU 7-001(d) is a large crater slightly to the west of 7-001(c) (Figure 5-16). This crater may have been formed by explosives testing. Detonator parts have been found in the vicinity of the crater.

During early testing activities, blasting caps were used and may be found in any of these areas.

5.4.1.2 Conceptual Exposure Model

5.4.1.2.1 Nature and Extent of Contamination

Because the purpose of many of the tests carried out at the inactive firing sites was the recovery of metal fragments, few contaminants should remain in those

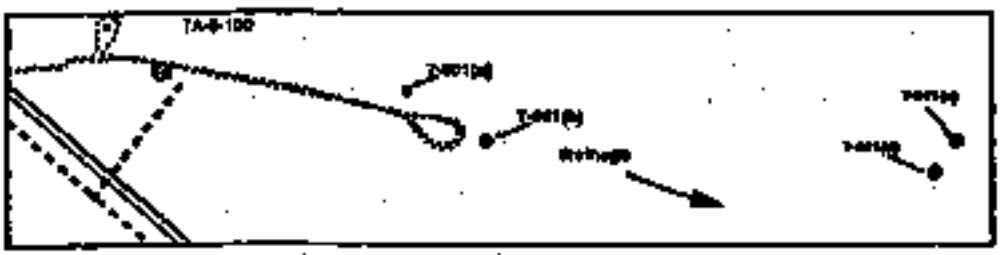
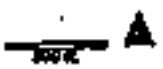
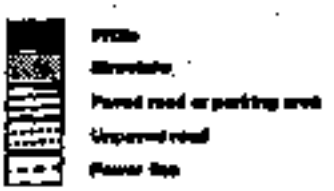


Figure 5-16. Locations of 7-001(a, b, c, d).





were moved to TA-40 (Creamer 1993, 19-0107). TA-8-8 was used for experiments with UF_6 from 1972 through 1976 (Schott 1993, 19-0126).

SWMUs 7-001(a) and 7-001(b), located east of the concrete bowl (Figure 5-16), are two areas surrounded by annular berms that are about 4 ft high. Their original use is unknown. One reference notes that Gomez Ranch (the name at that time for TA-7) was used "very seldom" (LASL 1944, 19-0123). In the 1950s, these sites were used for destruction of scrap detonators and explosives. Scrap detonators and explosives were mixed with Composition B scraps or flaked TNT, and the mixture was detonated (Spaulding 1959, 19-0091). Experiments were also performed to determine optimum conditions for disposing of scrap detonators (Spaulding 1959, 19-0091). Explosives fragments were found around both pits in 1959, and detonators have washed out of the soil berms during rainstorms (Spaulding 1959, 19-0091). The waste operation was moved to a burning and detonation area about 450 ft east of Building TA-40-15 in the 1950s (Spaulding 1959, 19-0091).

In an amphitheater-like area [7-001(c)] located about 0.25 mile east of SWMUs 7-001(a, b) (Figure 5-16), soft metal disks with imbedded bullets have been found. It is possible that ballistic tests carried out at 7-001(c) were related to the development of nuclear initiators. If this is the case, the only hazardous material used was lead. Full testing of initiators was considered sufficiently hazardous that an enclosed facility was built for this purpose (McMillan 1944, 19-0092).

SWMU 7-001(d) is a large crater slightly to the west of 7-001(c) (Figure 5-16). This crater may have been formed by explosives testing. Detonator parts have been found in the vicinity of the crater.

During early testing activities, blasting caps were used and may be found in any of these areas.

5.4.1.2 Conceptual Exposure Model

5.4.1.2.1 Nature and Extent of Contamination

Because the purpose of many of the tests carried out at the inactive firing sites was the recovery of metal fragments, few contaminants should remain in those

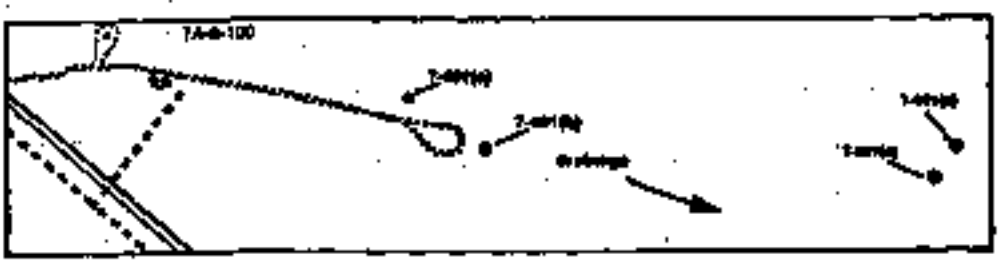


Figure 5-16. Locations of 7-001(a, b, c, d).

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 09-001(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
09-001(a)	HSWA	Former Firing Chamber, Far Point	HE, metals, Rad	NFA Criterion 5
09-001(b)	HSWA	Former Firing Chamber, Far Point	HE, metals, Rad	NFA Criterion 5
C-09-005	Non-HSWA	Former Chamber, Far Point	HE, metals, Rad	NFA Criterion 4

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Because these sites would have the same contaminants from the firing site with an undistinguishable source term, it is proposed that the three PRSs be consolidated.

Description of Aggregate:

PRS 9-001(a) is former firing control chamber Building TA-9-4. PRS 9-001(b) is former firing control chamber Building TA-9-5. PRS C-9-005 is the former x-unit chamber, Building TA-9-56, at the firing site where Cs-137 experiments were performed. All three buildings were removed in 1955. Explosive shots were conducted in an open meadow between the control chambers. Contaminants were spread over the entire area from the firing site, TA-9-57.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

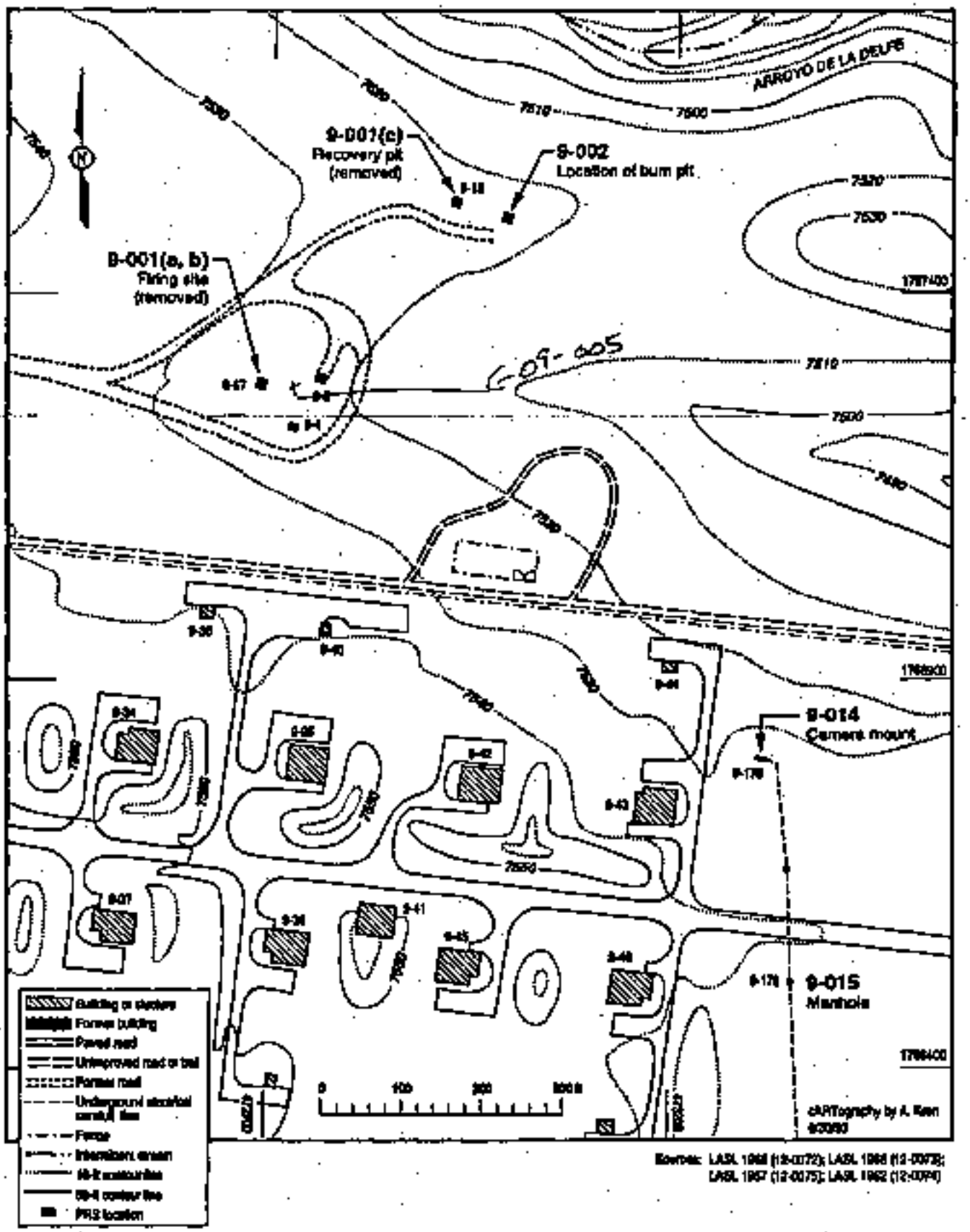


Figure 5-12. Locations of PRSs in Group 6, firing sites in TA-9 and former TA-23.

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 09-003(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
09-003(a)	HSWA	Decommissioned Settling Tank	U, Be, Ba, HE	NFA Criterion 5
09-003(b)	HSWA	Decommissioned Settling Tank	U, Be, Ba, HE	NFA Criterion 5
09-003(e)	HSWA	Decommissioned Basket Pit	U, Be, Ba, HE	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history of Building 9-14, the geographic proximity of these former structure locations, transport mechanisms (subsurface) of identical contaminants, and the investigation needed to assess these PRSs and confirm completion of removal and cleanup activities, they are proposed for consolidation.

Description of Aggregate:

PRSs 9-003(a,b and e) were structures that served building 9-14, a heavily used HE process and development laboratory. Each structure was designed to remove (by settling) contaminiants (primarily U and HE) from the wastewater generated from processing and development activities within the building. Building 9-14 was destroyed by burning in 1965. PRS 9-003(a) and 9-003(b) were both settling tanks that were removed after the building burned(1965). PRS 9-003(e) was a basket pit also serving building 9-14. This PRS was also removed in 1965, after the building burned. It is not known if the lines serving the settling pits were also removed in 1965 or if they are still in place.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

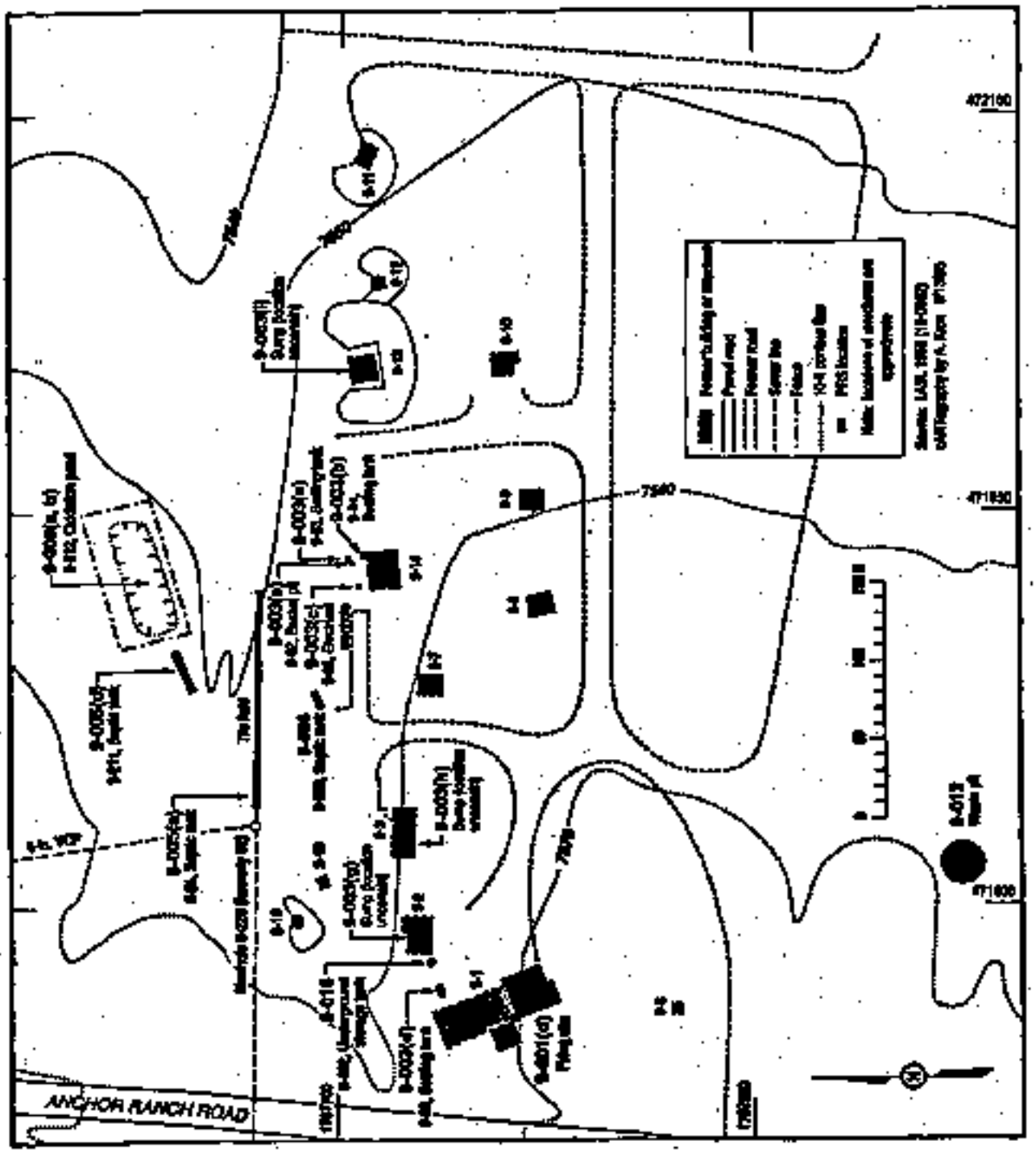


Figure 5-10. Location of PRSs in Group 5, decommissioned TA-9.

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls **Proposed PRS Number:** 09-004(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
09-004(a)	HSWA	HE Settling Sump, serves Bldg. 9-21	HE, Organics, Metals	Deferred until Decommissioning
09-004(b)	HSWA	HE Settling Sump, serves Bldg. 9-21	HE, Organics, Metals	Deferred until Decommissioning
09-004(c)	HSWA	HE Settling Sump, serves Bldg. 37	HE, Organics, Metals	Deferred until Decommissioning
09-004(d)	HSWA	HE Settling Sump, serves Bldg. 38	HE, Organics, Metals	Deferred until Decommissioning
09-004(e)	HSWA	HE Settling Sump, serves Bldg. 45	HE, Organics, Metals	Deferred until Decommissioning
09-004(f)	HSWA	HE Settling Sump, serves Bldg. 46	HE, Organics, Metals	Deferred until Decommissioning
09-004(h)	HSWA	HE Settling Sump, serves Bldg. 9-32	HE, Organics, Metals	Deferred until Decommissioning
09-004(i)	HSWA	HE Settling Sump, serves Bldg. 9-33	HE, Organics, Metals	Deferred until Decommissioning
09-004(j)	HSWA	HE Settling Sump, serves Bldg. 34	HE, Organics, Metals	Deferred until Decommissioning
09-004(k)	HSWA	HE Settling Sump, serves Bldg. 36	HE, Organics, Metals	Deferred until Decommissioning
09-004(l)	HSWA	HE Settling Sump, serves Bldg. 9-40	HE, Organics, Metals	Deferred until Decommissioning
09-004(m)	HSWA	HE Settling Sump, serves Bldg. 42	HE, Organics, Metals	Deferred until Decommissioning
09-004(n)	HSWA	HE Settling Sump, serves Bldg. 43	HE, Organics, Metals	Deferred until Decommissioning

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on geographical proximity, common contaminants, common processes and transport mechanisms in a single drainage system, these PRSs are proposed for consolidation.

Description of Aggregate:

These settling tanks are located outside buildings performing HE operations and have a common drain line to NPDES outfalls 05A066 and 05A067. The settling tanks are externally submerged concrete basins designed to trap HE residues. PRSs 9-004(a and b) receive wastewater from laboratories in building 21 performing HE synthesis and testing on a laboratory scale. PRS 9-004(h) receives wastewater from building 32 performing analytical work on HE. PRS 9-004(i) receives wastewater from building 33 performing compressed gas reactions. PRS 9-004(l) is a sump installed outside building 40 for potential HE operations inside the building.

HE synthesis, processing, casting, pressing, mixing and machining activities previously conducted in these buildings contributed HE contaminated wastewater to the settling tanks. The wastewater was subsequently discharged through drain lines to one of the two outfalls which are approximately 100 feet apart.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

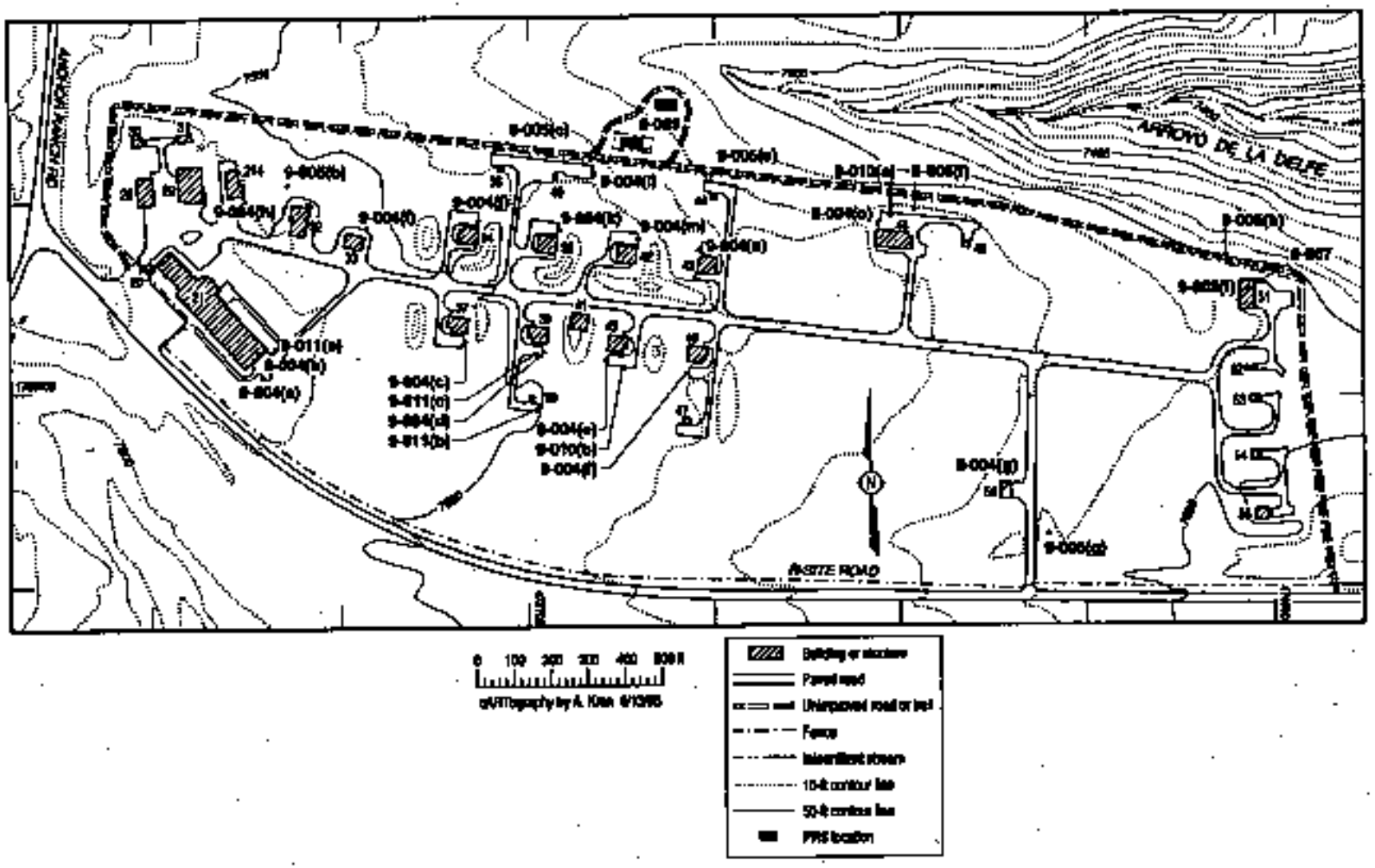


Figure 5-6. Locations of PRSs in Group 4, active TA-9.

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 09-008(b)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
09-005(a)	HSWA	Decommissioned Sanitary Septic Tank	HE, organics, metals, Rad	NFA Criterion 5
09-005(d)	HSWA	Abandoned Sanitary Septic Tank	HE, organics, metals, Rad	NFA Criterion 5
09-008(b)	HSWA	Sanitary Sewage Oxidation Pond	HE, organics, metals, Rad	NFA Criterion 2

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Since these PRS's received the same contaminants and are part of one drainage system, they are recommended for consolidation.

Description of Aggregate:

PRS 9-005(a) is a decommissioned septic tank built in 1950 and served buildings TA-8-20, -21,-22,-23 and 24 until a new system was installed in 1970. Building operations involved radiography including film processing and development. An Sr-90 spill occurred at TA-8-24 in 1954 potentially contaminating the septic system. The septic tank was abandoned in place in 1970 and later removed during a sewage system upgrade in 1985. PRS 9-005(d) is a 4,000-gallon septic tank built in 1970 as part of the sanitary system upgrade and abandoned in place in 1986. The outlet from the septic tank discharged to the sewage oxidation pond PRS 9-008(b). PRS 9-008(b) received sanitary waste from TA-8 and was abandoned in place in 1988.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

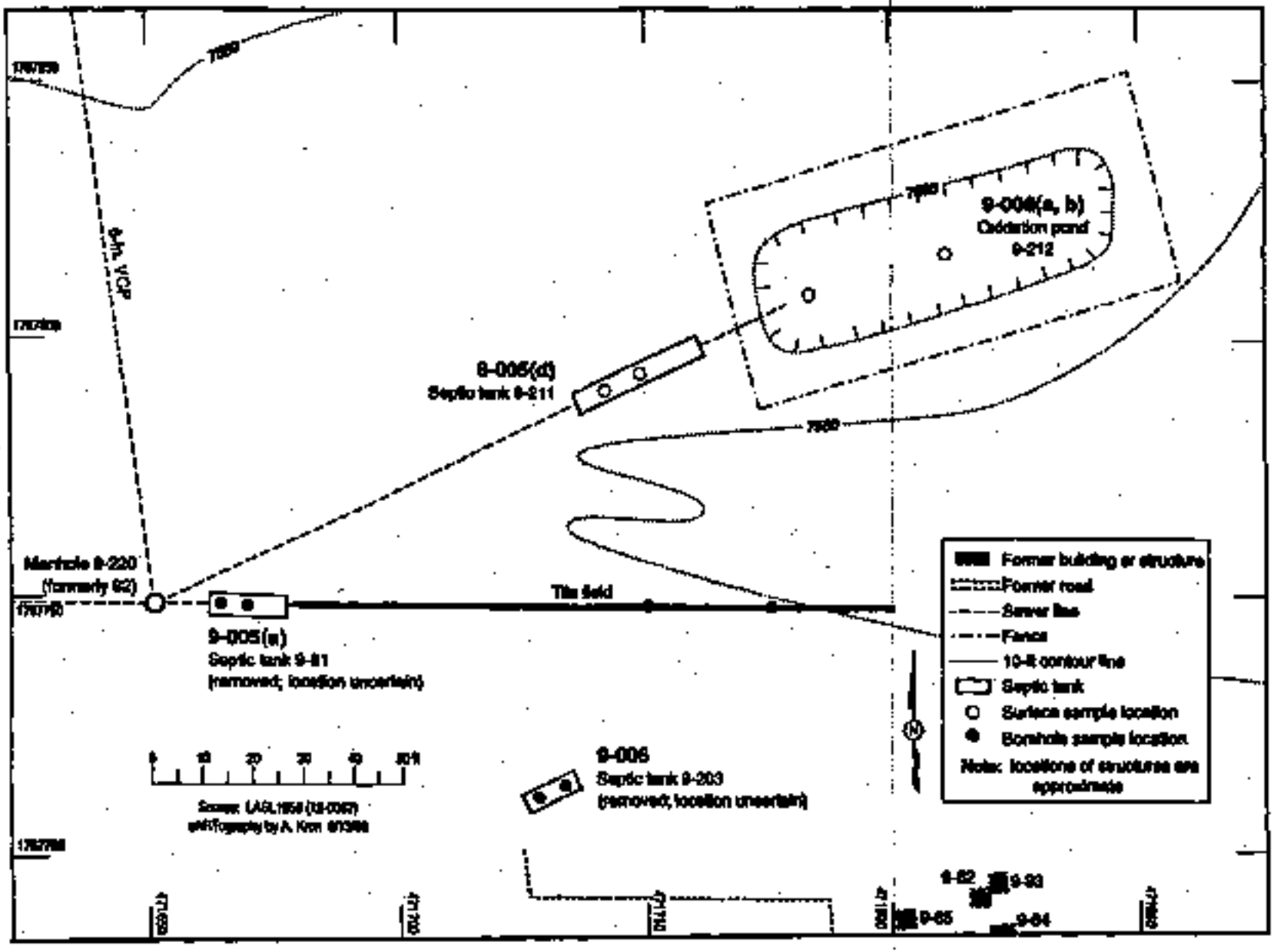


Figure 6-11. PRS Group 5 septic tank sampling locations.

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 10-001(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
10-001(a)	HSWA	Firing Site	U,Strontium-90,HE,Lead,Beryllium	NFA Criterion 5
10-001(b)	HSWA	Firing Site	U,Strontium-90,HE,Lead,Beryllium	NFA Criterion 5
10-001(c)	HSWA	Firing Site	U,Strontium-90,HE,Lead,Beryllium	NFA Criterion 5
10-001(d)	HSWA	Firing Site	U,Strontium-90,HE,Lead,Beryllium	NFA Criterion 5
10-005	HSWA	Surface Disposal	U,Strontium-90,HE,Lead,Beryllium	NFA Criterion 5
10-008	Non-HSWA	Firing Site	U,Strontium-90,HE,Lead,Beryllium	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanism (surface and shallow subsurface) and the investigation required to assess the contamination at the Bayo Canyon firing sites its proposed that the above PRSs be consolidated.

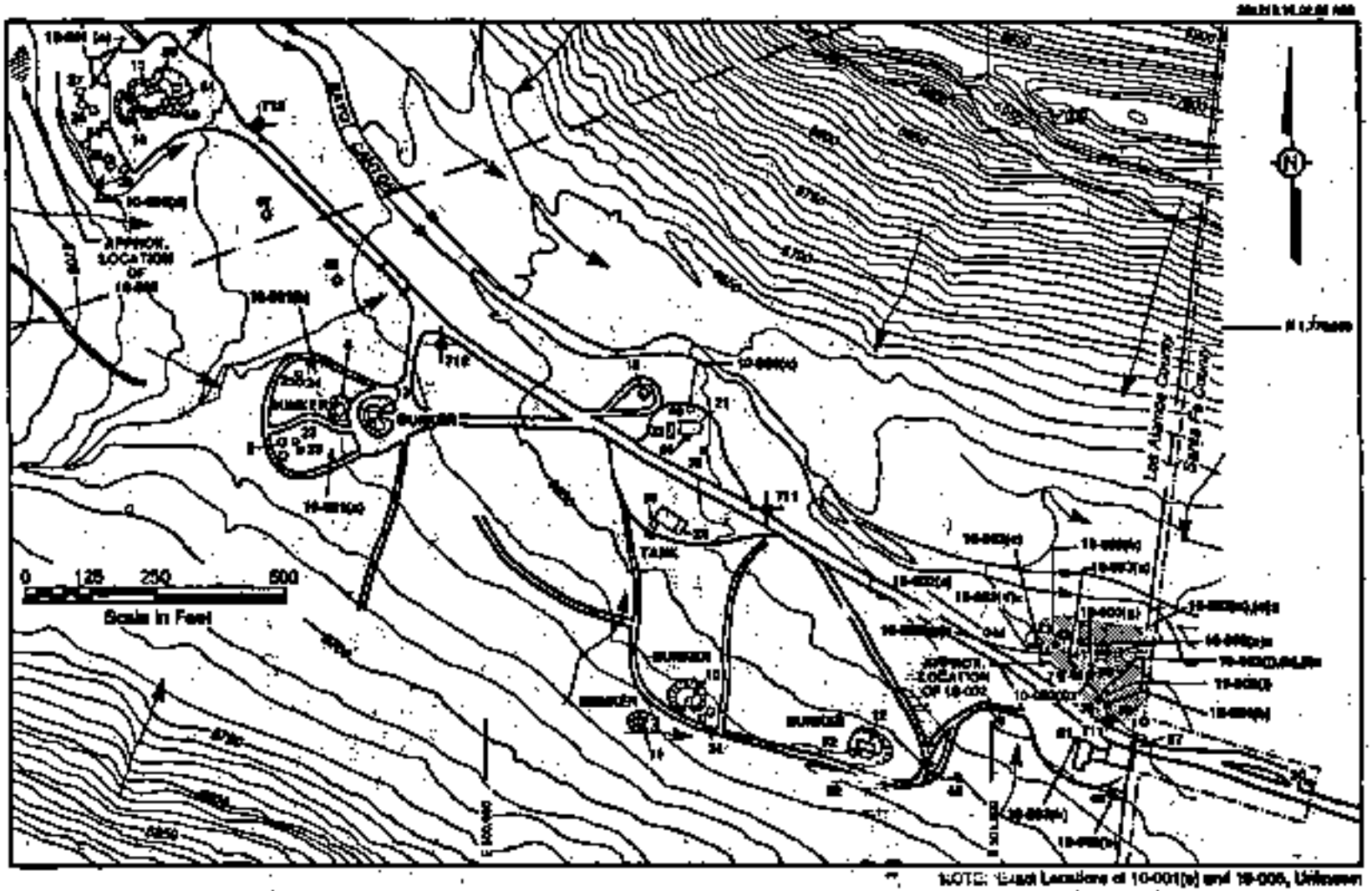
Description of Aggregate:

The firing sites (PRSs 10-001(a-d), 10-008) were used to test assemblies containing conventional high explosives (HE) that included components fashioned from depleted or natural uranium. The firing sites were in close proximity in Bayo Canyon and were rotated in use. After a shot, residual material was reportedly moved to a disposal pit (10-005) near the firing sites (the use of the disposal pit is unconfirmed). Due to the close proximity and overlapping dispersion areas of the firing sites and the use of the disposal pit, source terms cannot be separated by PRS.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____



LEGEND

10 – TA Structure Number

10-001(a) – SWMU Number

– Probable Extent of 08-007

– Fence

Figure 3.1-1. TA-10 site map and associated SWMU locations (modified from LANL 1990, 0145; AEC 1963, 06-0045; AEC 1963, 06-0044; AEC 1963, 06-0046; AEC 1963, 06-0047; AEC 1963, 06-0048; AEC 1963, 06-0049; AEC 1963, 06-0050; LASL 1961, 06-0056; LASL 1961, 06-0057; LASL 1962, 06-0058).

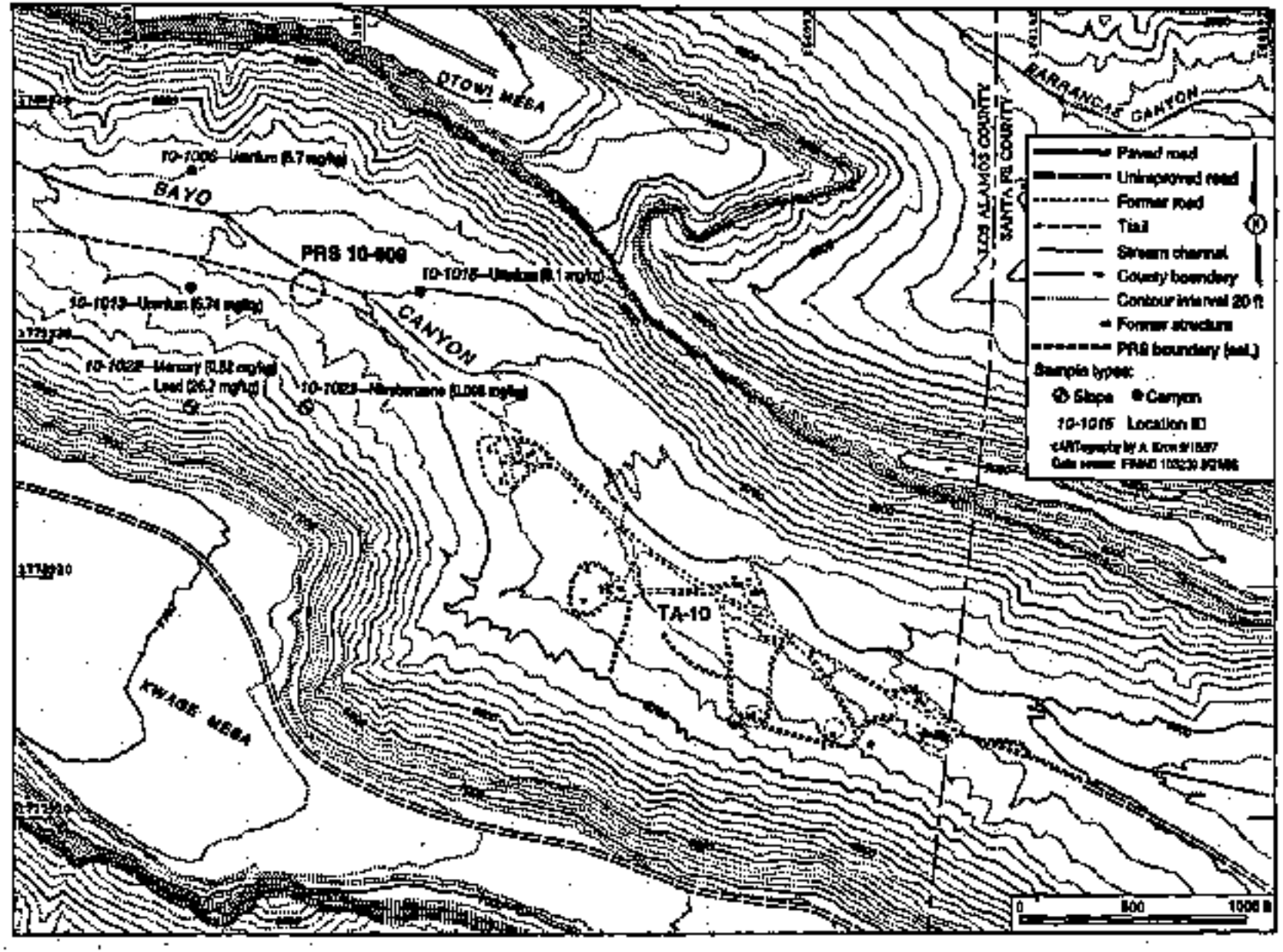


Fig. 5.1.5-1 Locations of detected organic analytes and inorganic analytes and radionuclides detected at levels exceeding background screening values at PRS 10-009.

PRS Consolidation Worksheet

Site Type: Waste Water Treatment Plant

Proposed PRS Number: 10-002(a)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
10-002(a)	HSWA	Liquid disposal pits	SVOCs, Rad, Metals	Under Investigation
10-002(b)	HSWA	Liquid disposal pits	SVOCs, Rad, Metals	Under Investigation
10-003(a)	HSWA	Liquid disposal pits	SVOCs, Rad, Metals	Under Investigation
10-003(b)	HSWA	Liquid disposal pits	SVOCs, Rad, Metals	Under Investigation
10-003(c)	HSWA	Liquid disposal pits	SVOCs, Rad, Metals	Under Investigation
10-003(d)	HSWA	Liquid disposal pits	SVOCs, Rad, Metals	Under Investigation
10-003(e)	HSWA	Liquid Disposal Pit	SVOC's, Rad, Metal	Under Investigation
10-003(f)	HSWA	Liquid disposal pits	SVOCs, Rad, Metals	Under Investigation
10-003(g)	HSWA	Manhole	SVOCs, Rad, Metals	Under Investigation
10-003(h)	HSWA	Manhole	SVOCs, Rad, Metals	Under Investigation
10-003(i)	HSWA	Septic tank	SVOCs, Rad, Metals	Under Investigation
10-003(j)	HSWA	Stainless steel tank	SVOCs, Rad, Metals	Under Investigation
10-003(k)	HSWA	Stainless steel tank	SVOCs, Rad, Metals	Under Investigation
10-003(l)	HSWA	Stainless steel tank	SVOCs, Rad, Metals	Under Investigation
10-003(m)	HSWA	Clay drain pipe	SVOCs, Rad, Metals	Under Investigation
10-003(n)	HSWA	Leach field	SVOCs, Rad, Metals	Under Investigation
10-003(o)	HSWA	Decontamination hole	SVOCs, Rad, Metals	Under Investigation
10-004(b)	HSWA	Liquid disposal pits	SVOCs, Rad, Metals	Under Investigation
10-007	HSWA	Landfill	SVOCs, Rad, Metals	Under Investigation

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms (subsurface), and the investigation and needed to assess the contamination, it is proposed that these PRSs be consolidated.

Description of Aggregate:

This consolidation consists of PRSs 10-002(a-b), 10-003(a-o), and 10-004(b). These PRSs are associated with the former liquid disposal complex serving the radiochemistry laboratory at TA-10 in Bayo Canyon. The entire complex discharged to leach fields and pits. The entire Bayo complex underwent D&D in 1953. All above and below ground structures, lines, pits, etc. were removed and the majority taken to MDA C at TA-50. The remaining material was placed in a pit within TA-10. Source terms cannot be separated by PRS and the remaining contaminated structures were disposed in the landfill (PRS 10-008).

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

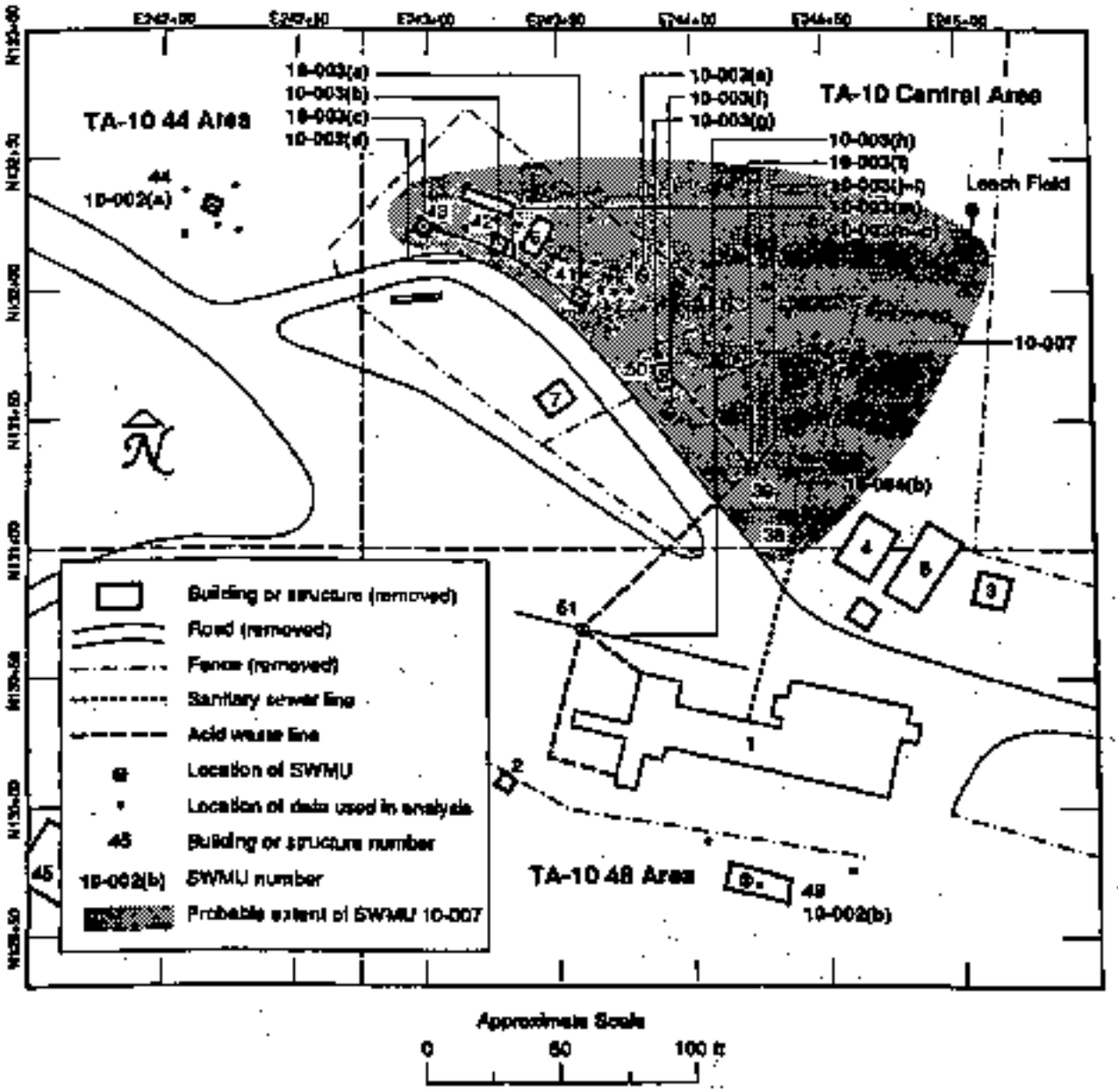
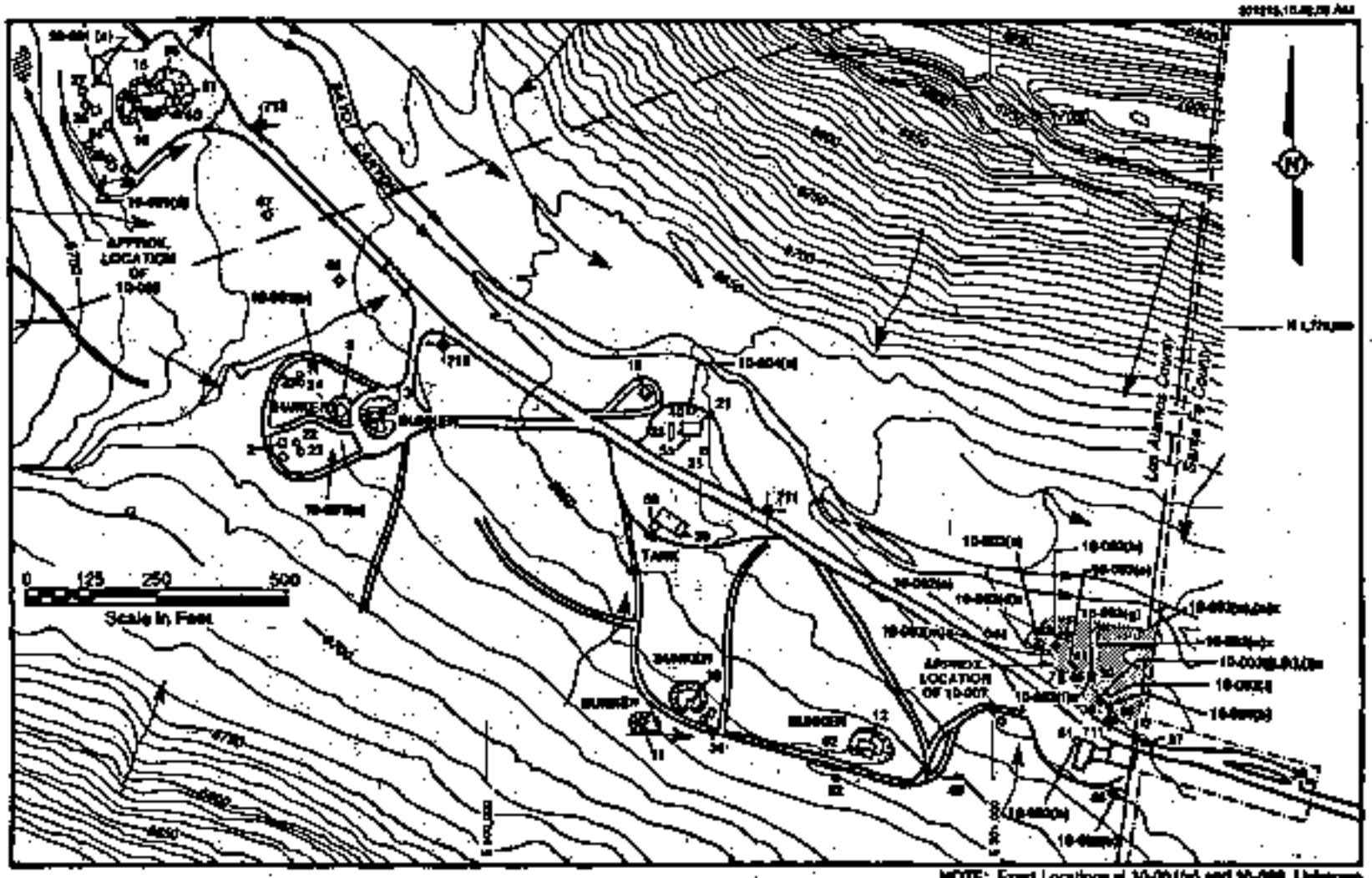


Figure 3.1-14. Location of Subsurface Disposal SWMU Aggregate and samples used in data analysis (modified from Mayfield et al. 1979, 06-0041; LANL 1990, 0145).



LEGEND

10 – TA Structure Number

10-001(a) – SWMU Number

– Probable Extent of 10-007

– Fence

Figure 3.1-1. TA-10 site map and associated SWMU locations (modified from LANL 1990, 0145; AEC 1953, 06-0045; AEC 1953, 06-0044; AEC 1953, 06-0046; AEC 1953, 06-0047; AEC 1953, 06-0048; AEC 1953, 06-0049; AEC 1953, 06-0050; LASL 1961, 06-0056; LASL 1961, 06-0057; LASL 1962, 06-0058).

PRS Consolidation Worksheet

Site Type: Miscellaneous

Proposed PRS Number: 11-004(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
11-004(a)	HSWA	Drop Tower	HE, U, Beryllium	Under Investigation
11-004(b)	HSWA	Concrete Pad	HE, U, Beryllium	Under Investigation
11-004(c)	HSWA	Hoist	HE, U, Beryllium	Under Investigation
11-004(d)	HSWA	Hoist	HE, U, Beryllium	Under Investigation
11-004(e)	HSWA	Drop Pad	HE, U, Beryllium	Under Investigation
11-004(f)	Non-HSWA	Drop Pad	HE, U, Beryllium	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms (surface and shallow subsurface) and the investigation needed to assess the contamination at the drop tower complex, it is proposed the above PRSs be consolidated.

Description of Aggregate:

The TA-11 drop tower complex has been used for high explosive drop experiments since the mid-1950s. The components of the complex consist of a 165-foot. drop tower, a concrete pad, two hoists, and two drop pads [PRSs 11-004(a-f)]. Drop tests have included experiments containing various types of HE, depleted uranium, and beryllium. It is expected that contamination will not be discernable between the different components of the complex.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

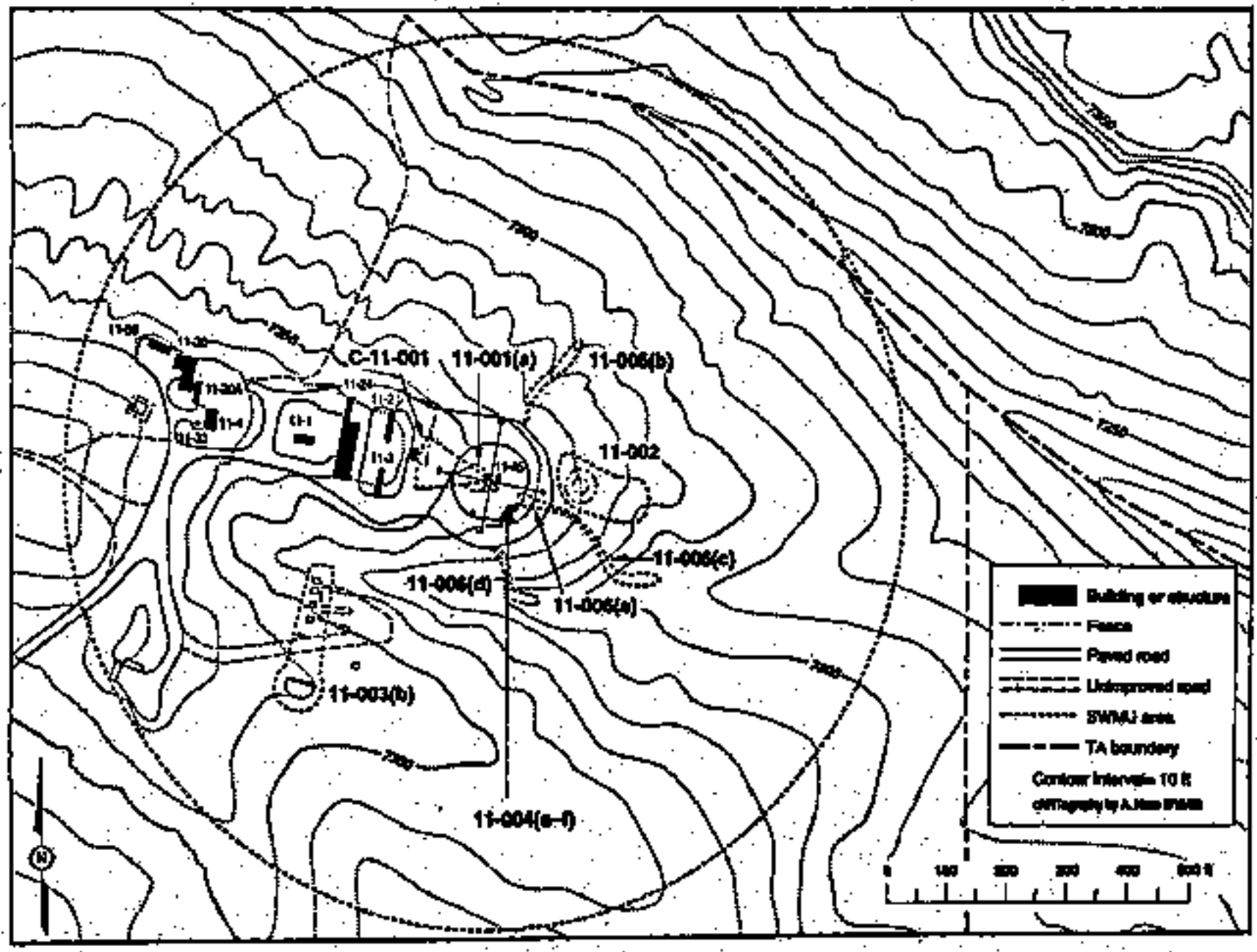


Fig. 5-48. Firing site.

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls **Proposed PRS Number:** 11-006(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
11-001(a)	HSWA	Former HE Firing Pit	HE, Barium	Under Investigation
11-002	HSWA	Active Burn Area	HE, Uranium, Barium, Metals	Under Investigation
11-006(a)	HSWA	HE Sump, TA-11-39	HE, U, and Be	Under Investigation
11-006(b)	HSWA	Catch Basin, TA-11-50	HE, U, and Be	Under Investigation
11-006(c)	HSWA	Catch Basin, TA-11-51	HE, U, and Be	Under Investigation
11-006(d)	HSWA	Catch Basin, TA-11-52d	HE, U, and Be	Under Investigation
CTI-001	Non-HSWA	Former Laboratory/Dark Room	Uranium, Plutonium, Cyanide	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Contaminants will not be discernable between the sump and catch basins at the complex. Based on the operational history, waste streams, geographical proximity, transport mechanisms (surface and subsurface) and the investigation needed to assess the contamination at the drop tower complex, it is proposed the above PRSs be consolidated.

Description of Aggregate:

TA-11 (K-Site) PRSs include sites that are integral components of the active firing site operations or that are physically covered by the active firing site. PRS 11-001(a) was an HE firing pit located southeast of TA-11-2. The firing pit was demolished during construction of the drop tower complex in 1956, and is now covered by the concrete apron of the drop tower. PRS 11-002 is an active burn area east of the drop tower at the edge of the asphalt apron. The area was initially the site of HE and propellant burns from 1948 - 1992. Non-experimental burns of depleted uranium and HE-contaminated material have also occurred. The site remains an active experimental area. The TA-11 drop tower complex is served by a sump and three catch basins to separate liquid wastes from entrained high explosives. After a drop occurred, the large pieces of HE were removed and the pad hosed down. The water was directed to the sump and catch basins [PRSs [11-006(a-d)]. Drop tests have included experiments containing various types of HE, depleted uranium, and beryllium. ACG-11-001 is the former location of TA-11-5, a wood frame building constructed in 1945 and removed prior to 1956. The building may have housed a laboratory used to prepare samples for photofission experiments on uranium and plutonium. TA-11-5 may also have been used as a darkroom. This site is also covered the asphalt apron of the drop tower.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

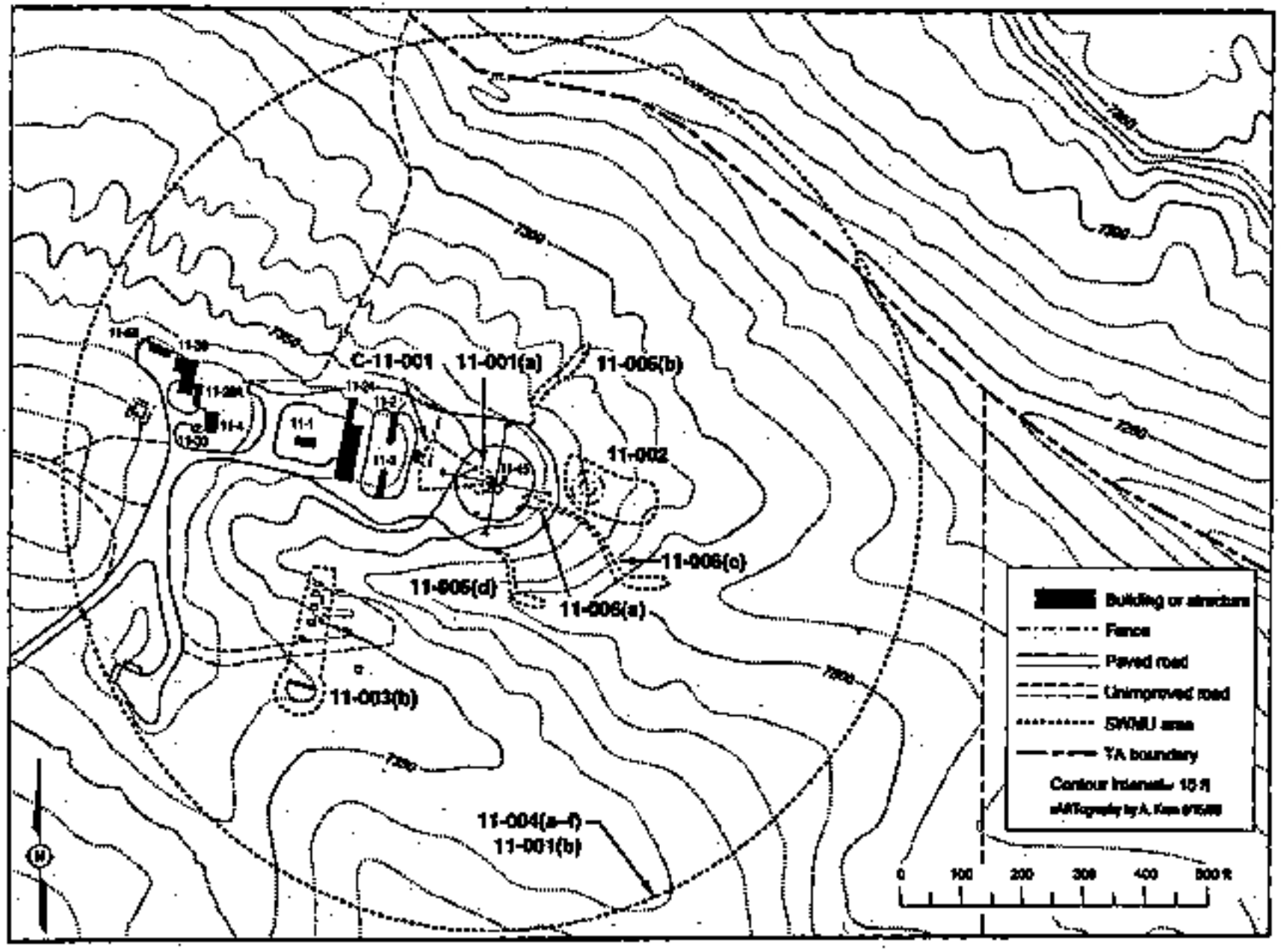


Fig. 5-49. Firing site.

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 12-001(a)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
12-001(a)	HSWA	Decommissioned Firing Site	Rad, metals, HE	Under Investigation
12-001(b)	HSWA	Inactive Firing Site	Rad, metals, HE	Under Investigation
12-002	HSWA	Inactive Burn Site	HE	NFA Criterion 1
C-12-005	Non-HSWA	Firing Site Junction Box	Rad, HE, metals	Under Investigation

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Due to the geographic location and the overlap of contamination of the sites, the migration pathways, and common CPOCs, the PRSs above are proposed for consolidation.

Description of Aggregate:

PRS 12-001(a) is a decommissioned firing site located within former TA-12 (now TA-67), known as L-Site. The principal structure of this PRS is a below-ground, steel-lined firing pit. PRS 12-001(b) is also a decommissioned firing site located approximately 175 feet east of PRS 12-001(a) where up to 600 shots per month were performed. This firing site consists of an unlined open pit. PRS 12-002 is located approximately 50 feet southeast of PRS 12-001(b), and was a one-time burn site for one-half pound of HE. PRS 12-002 lies within the firing radius of PRSs 12-001(a and b). PRS C-12-005 is a former junction box for both firing sites.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

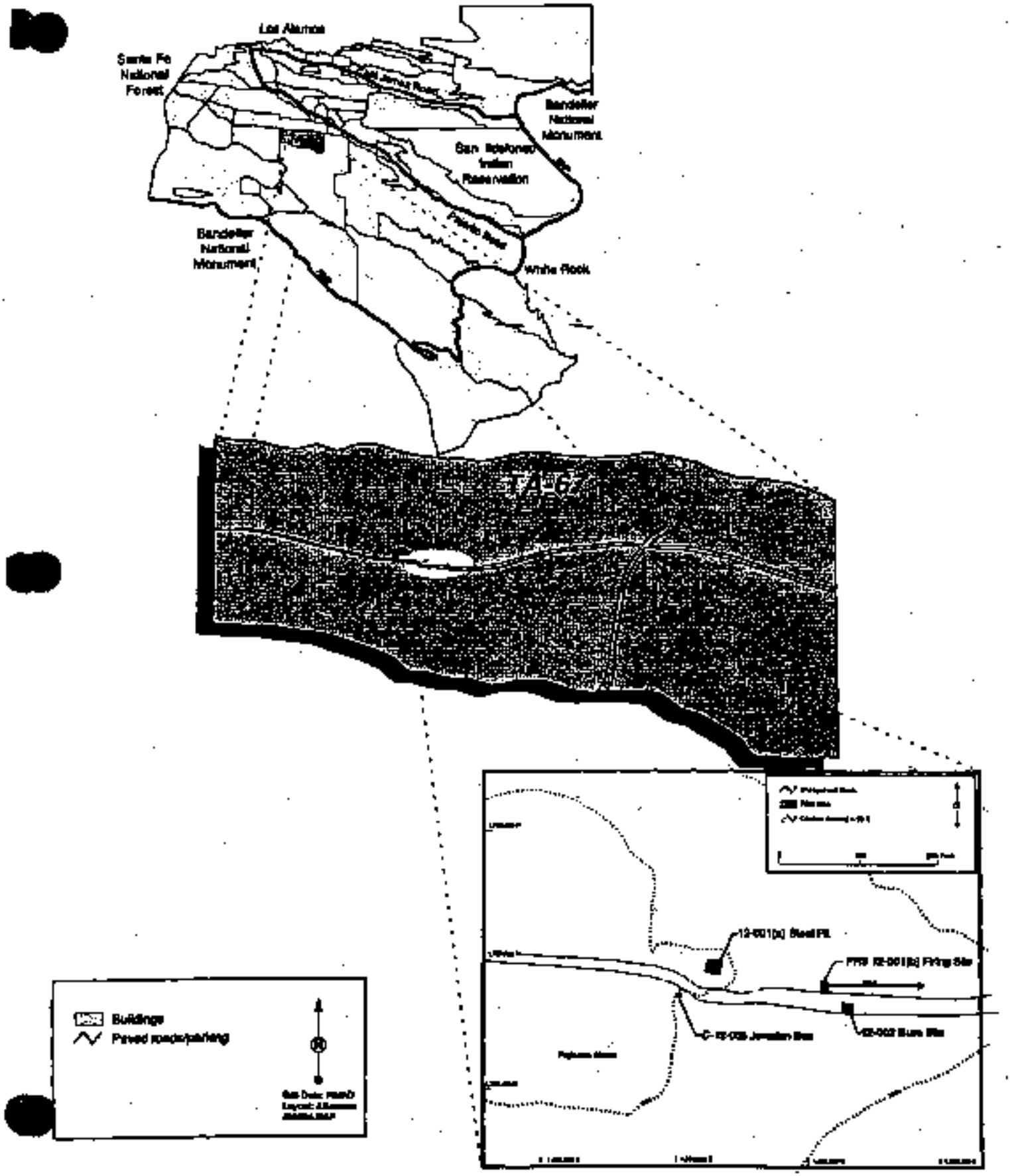


Figure 2.1-1. Location of PRS 12-001(a), PRS 12-001(b), and SWMU 12-002 with Laboratory Boundary.

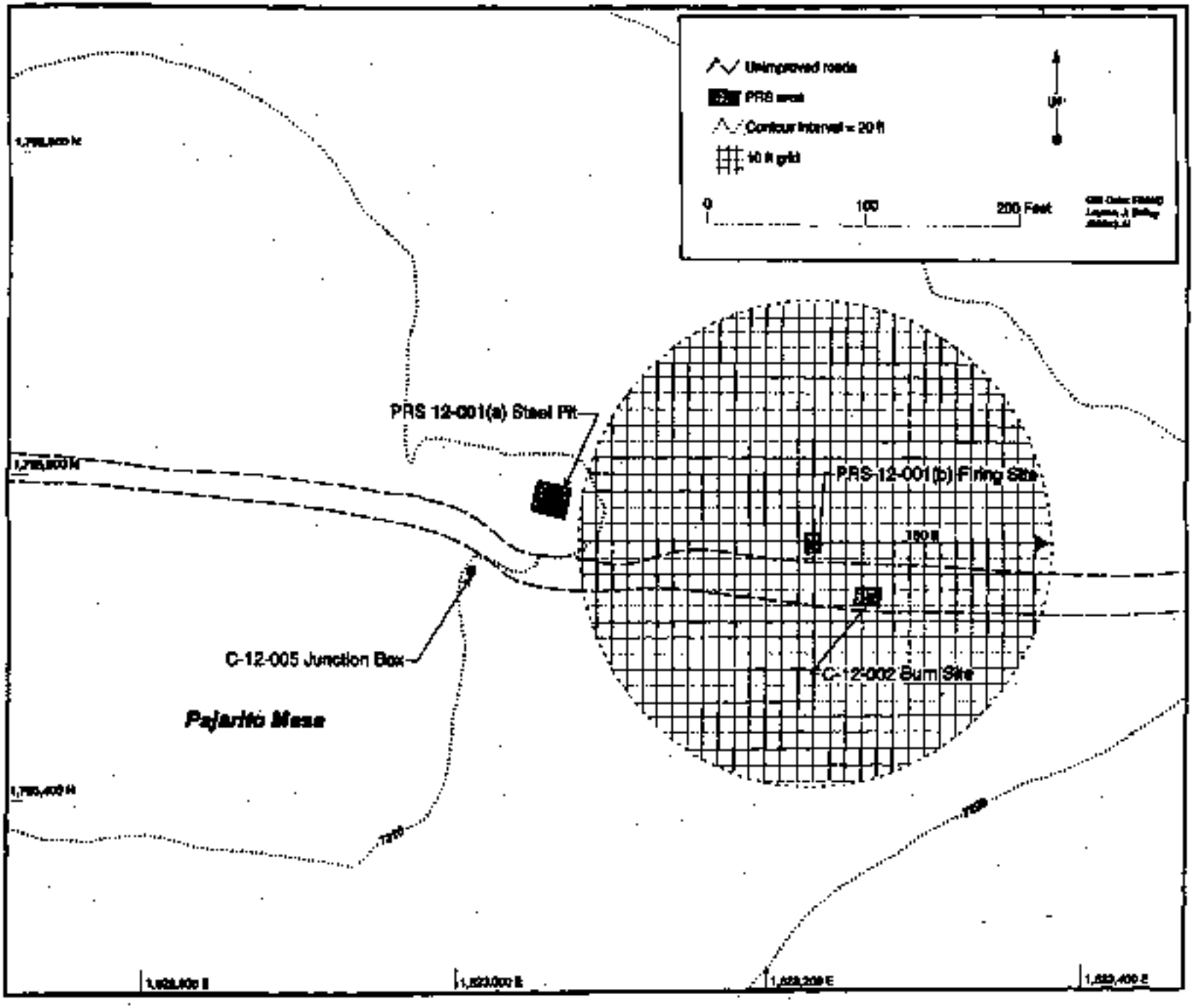


Figure 3.1-1. Decommissioned Firing Sites at TA-12(67), Field Analytical Grid at PRS 12-001(b)

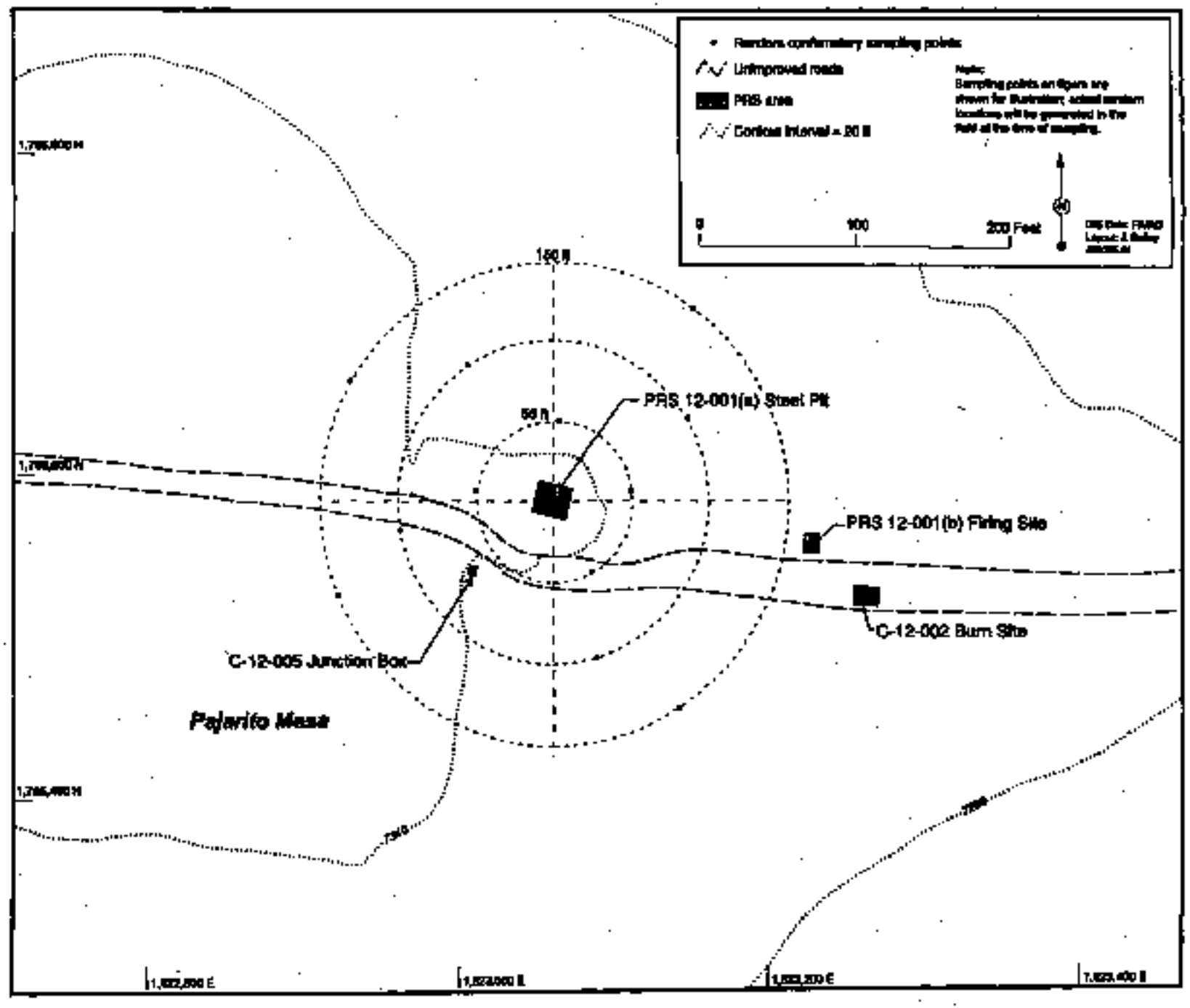


Figure 5.0-1. Confirmation Sampling at PRS 12-001(a)

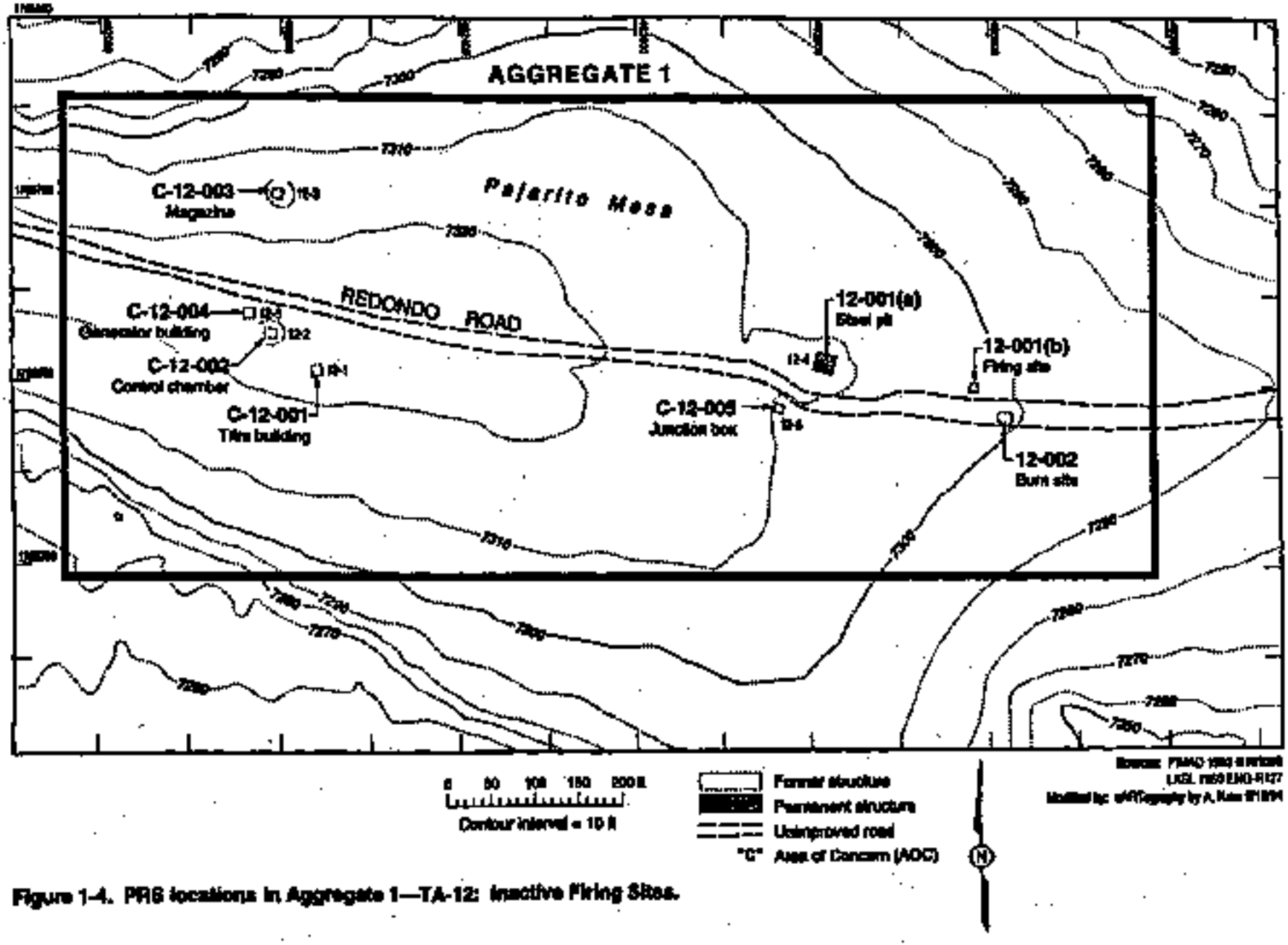


Figure 1-4. PRS locations in Aggregate 1—TA-12: Inactive Firing Sites.

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 13-001-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
13-001	HSWA	Inactive Firing Site	HE, metals, uranium, asbestos	Under Investigation
13-002	HSWA	Inactive Landfill	HE, metals, uranium, asbestos	Under Investigation
16-035	HSWA	Inactive HE Detonation Site	HE, metals, uranium, asbestos	Under Investigation
16-036	HSWA	Inactive HE Detonation Site	HE, metals, uranium, asbestos	Under Investigation

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?		
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface, subsurface and sediments), geographical proximity, overlapping dispersion areas, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS contains three inactive HE detonation sites and an associated debris disposal site within TAs-13 and –16. TA-13 was formerly located within TA-16; they are now considered one in the same. PRS 13-001 is the former firing site located between the battleship bunkers (TA-13-3 and TA-13-4) and soil contaminated by the firing activities to a radius of 300 feet. The area contains a large amount of debris and shrapnel including firing cables, lead belts, and chunks of steel and copper. PRS 13-002 consists of a landfill running 500 feet from the firing site and includes a large amount of debris and shrapnel scattered around the two battleship bunkers. PRSs 16-035 and 16-036 involve soil contamination associated with the adjoining control bunkers (TA-13-2, -3, and –4).

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

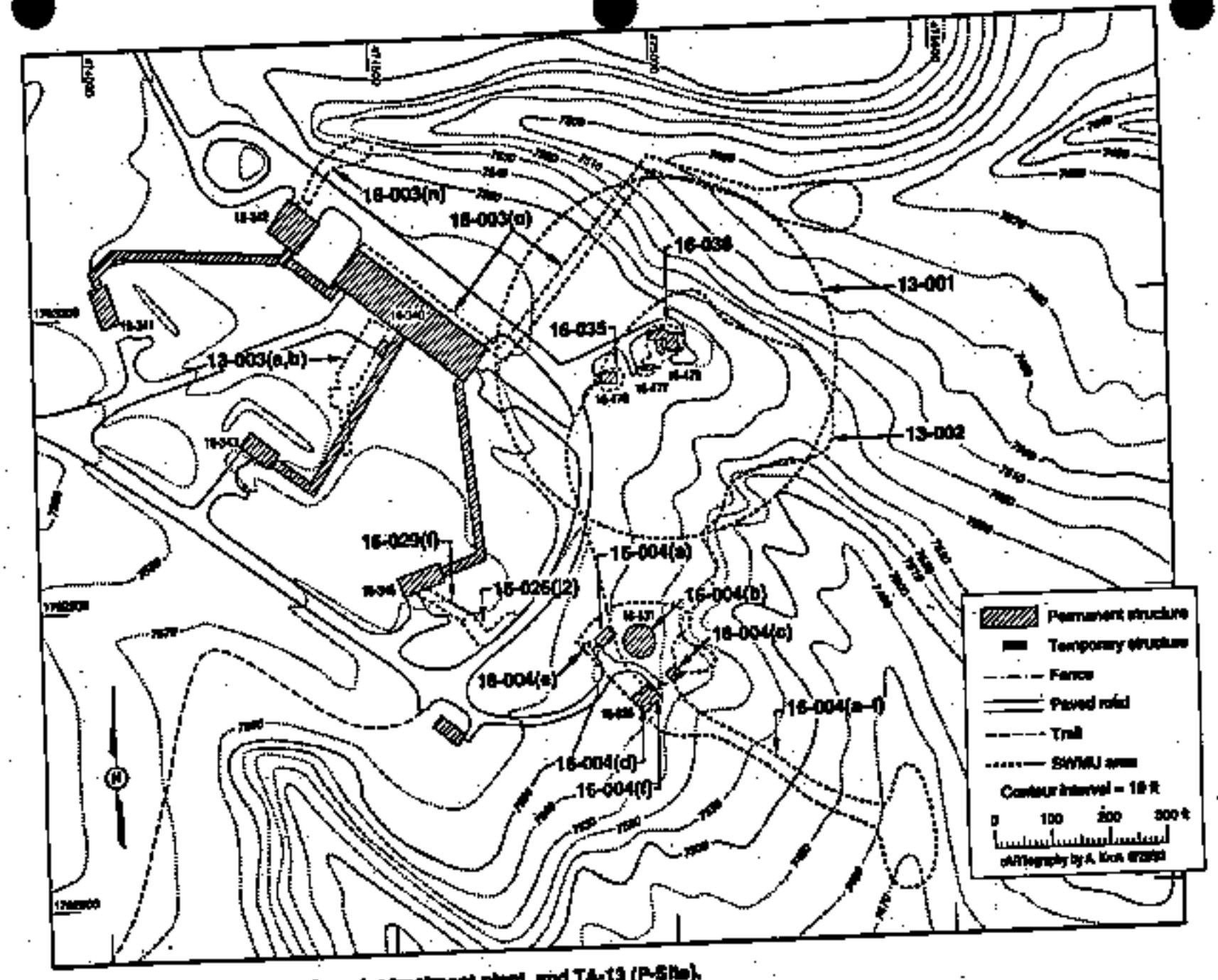


Fig. 5-9. TA-16-340 line, waste water treatment plant, and TA-13 (P-Site).

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 13-003(a)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
13-003(a)	HSWA	Decommissioned Septic Tank	HE, Ba, Rad, Silver, Cyanide	NFA Criterion 1
13-003(b)	Non-HSWA	Drainfield	HE, Ba, Rad, Silver, Cyanide	Under Investigation

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Because the septic tank and drain field are part of the same septic system, have received the same waste streams and involve the same transport mechanism, these PRSs are proposed for consolidation.

Description of Aggregate:

PRS 13-003(a) is the location of a decommissioned septic tank that served an office and shop building associated with early implosion and initiator testing. The tank was decommissioned and removed in 1951. PRS 13-003(b) is the drain field associated with the former septic tank. There are no records documenting that the drain field was removed.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

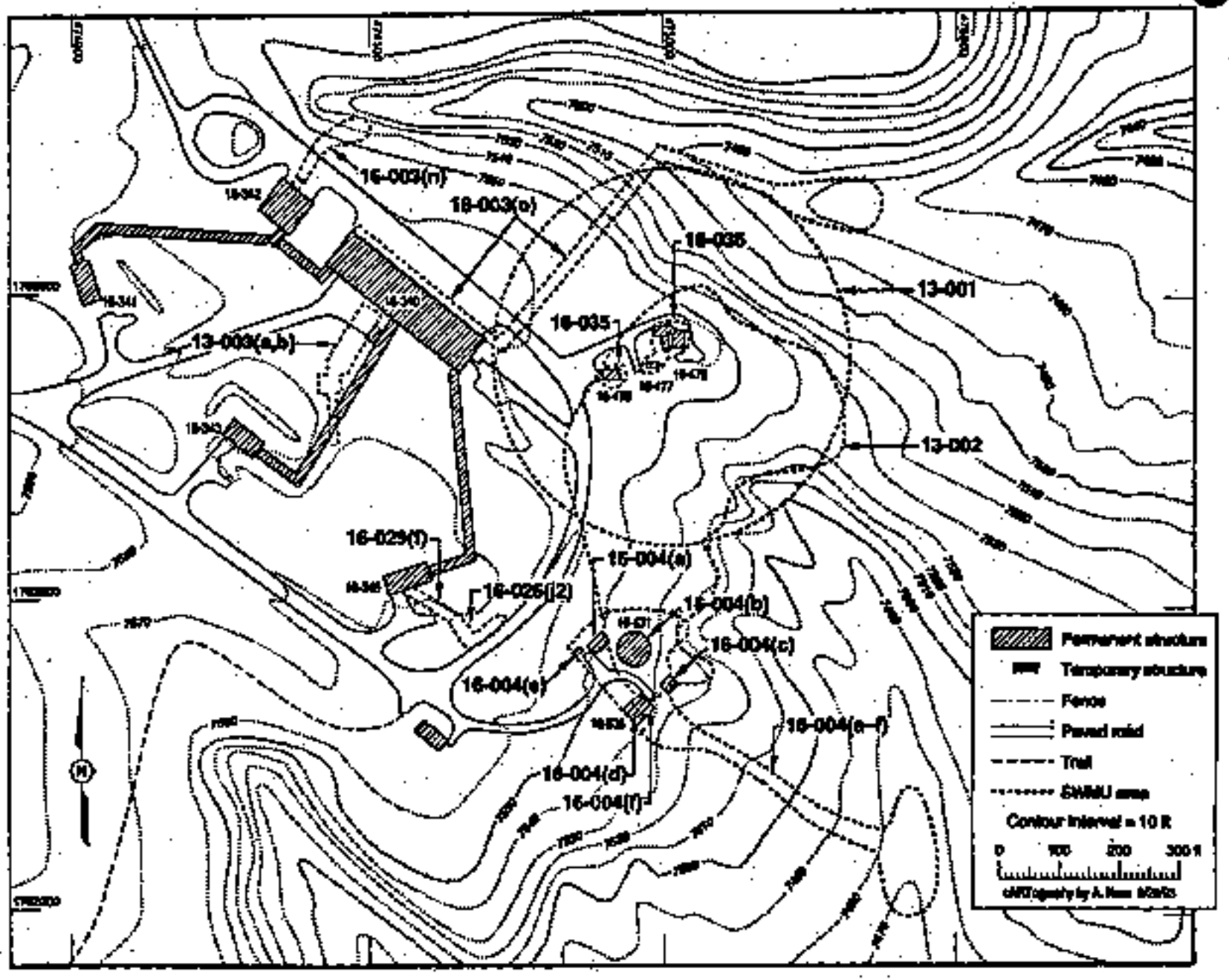


Fig. 5-9. TA-16-340 line, waste water treatment plant, and TA-13 (P-Site).

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 14-002(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
14-001(f)	Non-HSWA	Bullet test facility	Rad, metals, HE	NFA Criterion 5
14-002(a)	HSWA	Closed firing chamber (decommissioned)	Rad, metals, HE	Under Investigation
14-002(b)	HSWA	Open firing pedestal	Rad, metals, HE	NFA Criterion 1
14-002(f)	HSWA	Junction box	Rad, metals, HE	NFA Criterion 1
14-009	HSWA	Surface Disposal	Rad, metals, HE	Under Investigation
14-010	HSWA	Explosive waste sump (decommissioned)	Rad, metals, HE	Under Investigation
C-14-008	Non-HSWA	Decommissioned Magazine	Rad, metals, HE	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Because of their common geographic location, COPCs, sources, overlapping dispersion areas, migration pathway and characterization requirements, the PRSs listed above are proposed for consolidation.

Description of Aggregate:

The PRSs associated with this consolidated unit include integral components of an active firing site. The PRSs are all located within close proximity of each other resulting in overlapping dispersion areas from contaminants scattered from detonation activities at the site. PRS 14-001(f) is an active site and will not be remediated until the site is decommissioned. All the other PR's are typical of a firing site. PRS 14-002(a) was used as a closed chamber, which failed structurally after several charges had been fired within it. PRS 14-002(b) was an open firing pedestal, it was decommissioned and replaced by the bullet test facility (PRS 14-001(f)) in 1957. PRS 14-002(f) is a former junction box shelter (6'x6'x6') decommissioned in 1952 and may be contaminated because of its close proximity to other areas. PRS 14-009 is a surface disposal area consisting of ruptured sandbags used to contain detonators. PRS 14-010 is a decommissioned explosive waste sump. AOC-14-002 and AOC-14-008 were former structure locations used in early detonations at the site; both were removed in 1952. Because of their location the area may have residual contamination.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

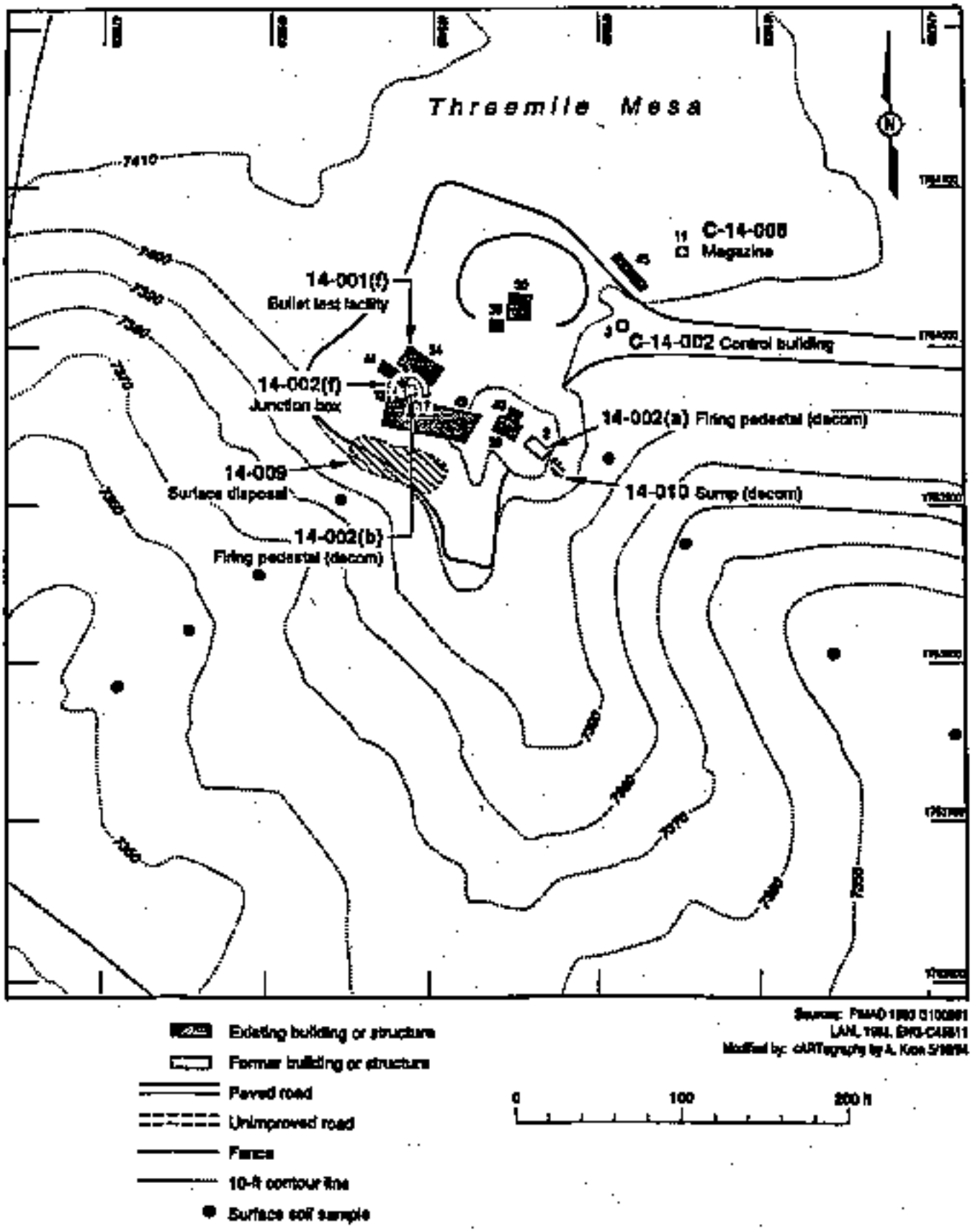


Figure 5-7. Sampling locations in Aggregate 3—TA-14: Western Area.

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 14-002(c)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
14-002(c)	HSWA	Control Building	Rad, Metals, HE	NFA Criterion 5
14-002(d)	HSWA	Firing Pad	Rad, Metals, HE	NFA Criterion 5
14-002(e)	HSWA	Firing Pad	Rad, Metals, HE	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Because of their common geographic location, CPOCs, migration pathway, and characterization investigations, the PRSs listed above are proposed for consolidation.

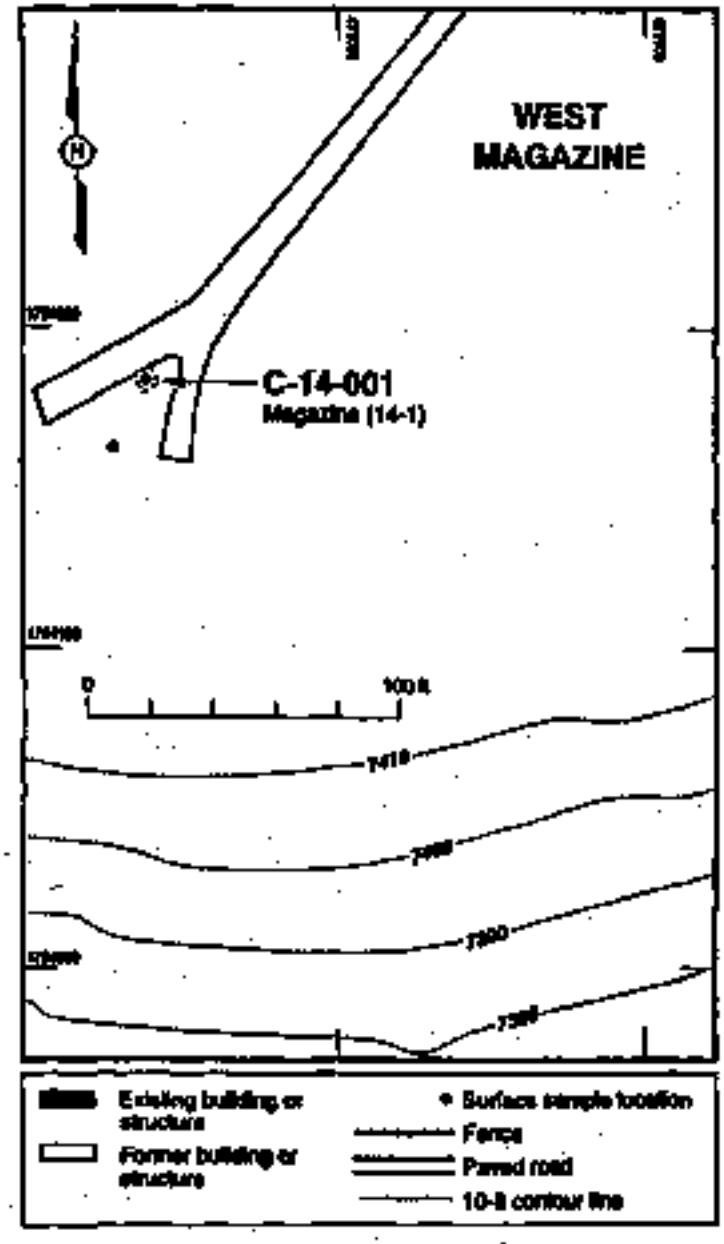
Description of Aggregate:

PRSs 14-002(d) and 14-002(e) are former firing pads located next to each other 35 feet apart. PRS 14-002(c) was the control building later converted to a storage building and then a large scale thermal test laboratory.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____



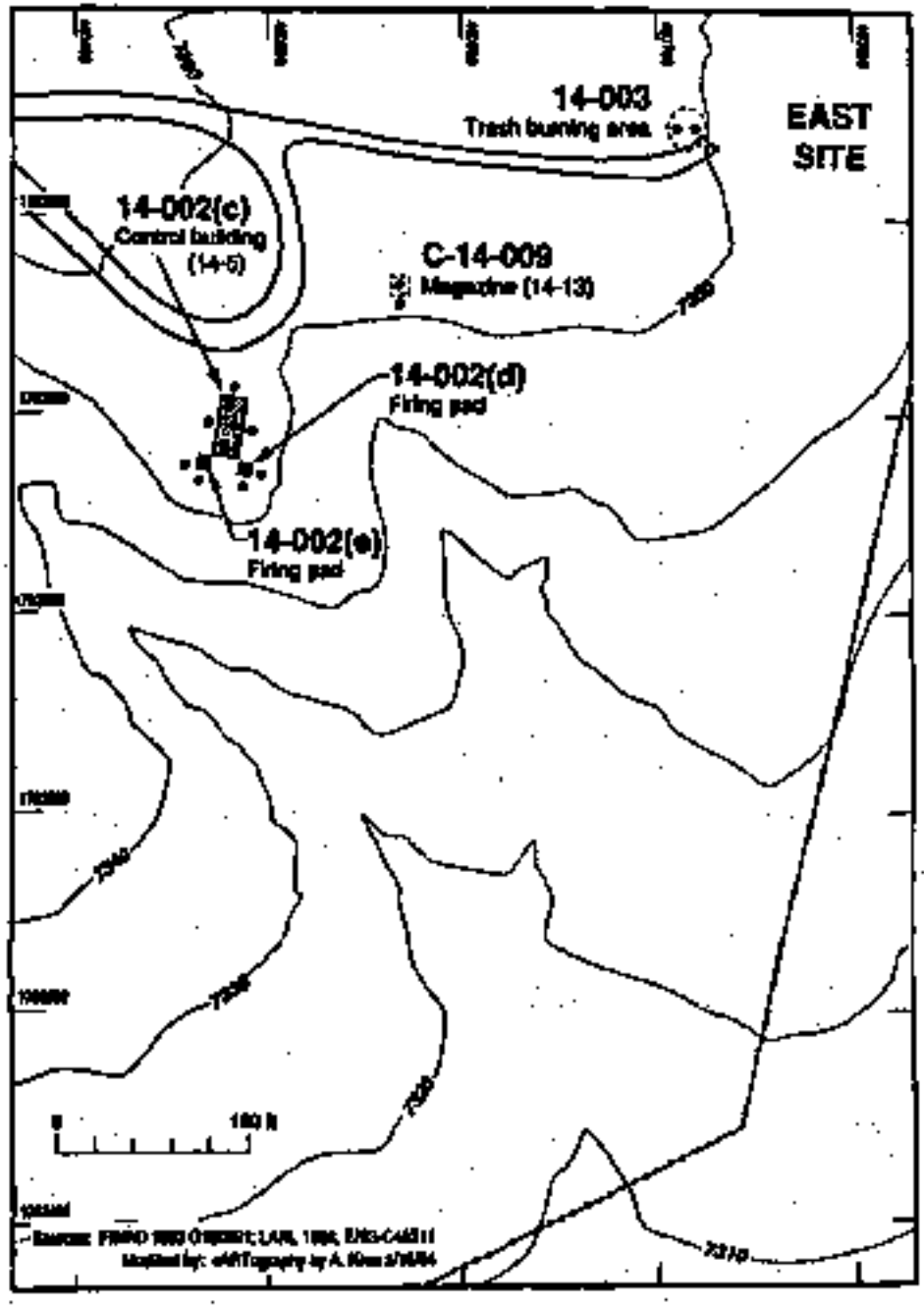


Figure 5-13. Sampling locations for Aggregate 6—TA-14: East Site and West Magazine.

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 15-004(b)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
15-004(b)	HSWA	Firing Point A	Uranium, Beryllium, lead, HE	NFA Criterion 5
15-004(c)	HSWA	Firing Point B	Uranium, Beryllium, lead, HE	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Since the PRSs are located 200 feet apart, have comingled contamination, and identical transport mechanisms, these PRSs are recommended for consolidation.

Description of Aggregate:

The consolidated PRS consists of two former firing sites. PRSs 15-004(b and c) were among the first firing sites at the Laboratory. The sites were small and were used from 1945 through 1952. The sites were subsequently decommissioned and the land regraded in 1967.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

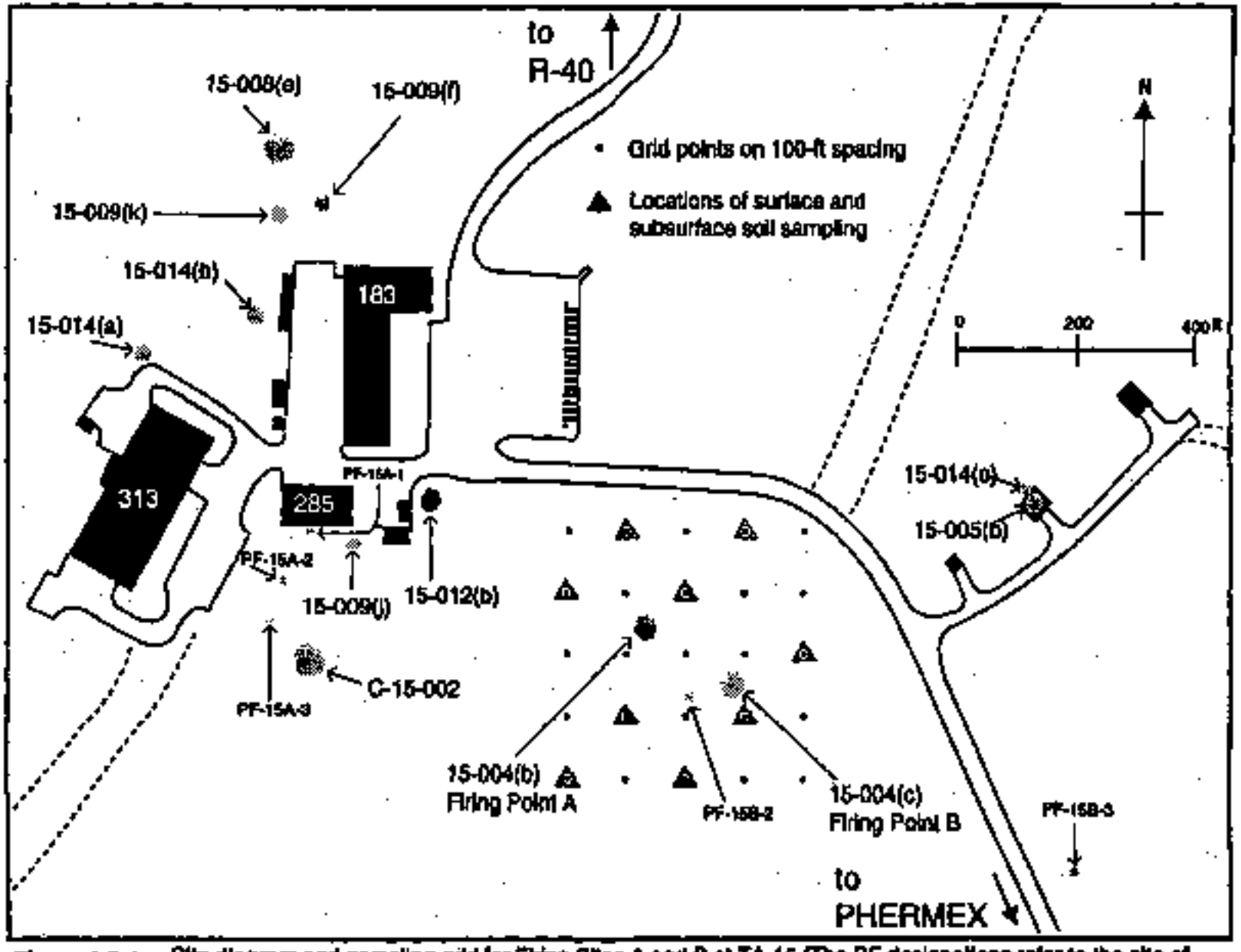


Figure 8.3-1 Site diagram and sampling grid for Firing Sites A and B at TA-15.(The PF designations refer to the site of samples taken prior to the installation of a new sewage line, June 1992. See Fresquez 1991,0003.)

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 15-004(f)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
15-004(f)	HSWA	Firing Site E-F	Uranium, beryllium, lead, HE, rad	Under Investigation
15-006(a)	HSWA	Surface Disposal Site	Uranium, beryllium, lead, HE, rad	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical, proximity, transport mechanisms and characterization at both sites its is proposed that the PRSs above be consolidated.

Description of Aggregate:

PRS 15-004(f) and 15-006(a) consist of an inactive firing site E-F and its associated disposal site. PRS 15-006(a) consists of metal pieces, soil, plastics, electrical cable and miscellaneous debris from explosions at E-F firing site.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

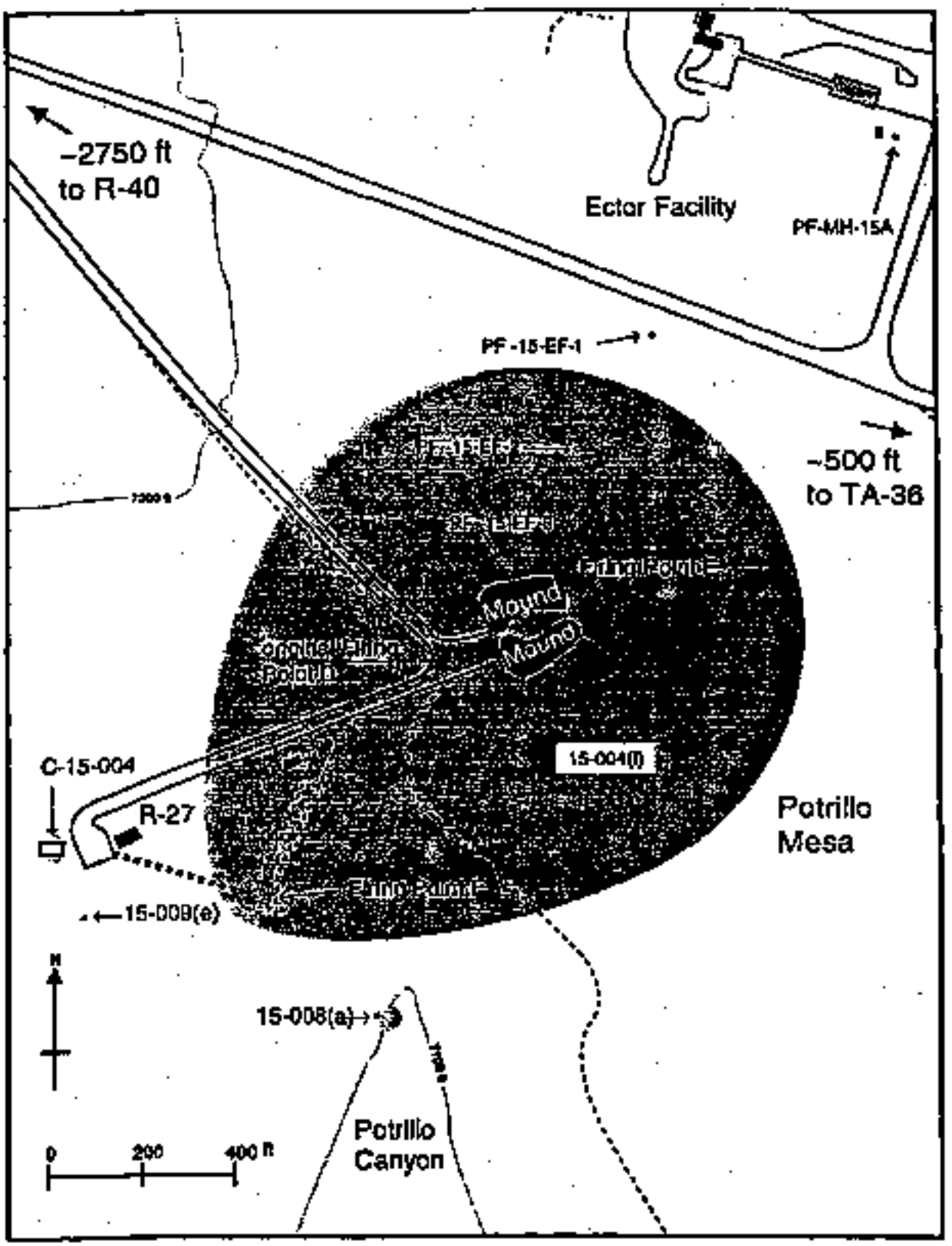


Figure 7.3-1 Site diagram for Firing Site E-F; shaded area shows SWMU 15-004(f).

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 15-006(c)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
15-006(c)	HSWA	Firing Site R-44	Rad, Metals, HE	Under Investigation
15-006(b)	HSWA	Surface Disposal	Rad, Metals, HE	Under Investigation

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms, and the characterization at the firing site and the disposal area it is proposed that these sites be consolidated

Description of Aggregate:

PRS 15-006(c) and 15-006(b) consist of an active firing site and its associated disposal site. PRS 15-006(b) consists of soil and debris on the north side of the firing site where remnants and debris from shots were pushed into this area for disposal.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

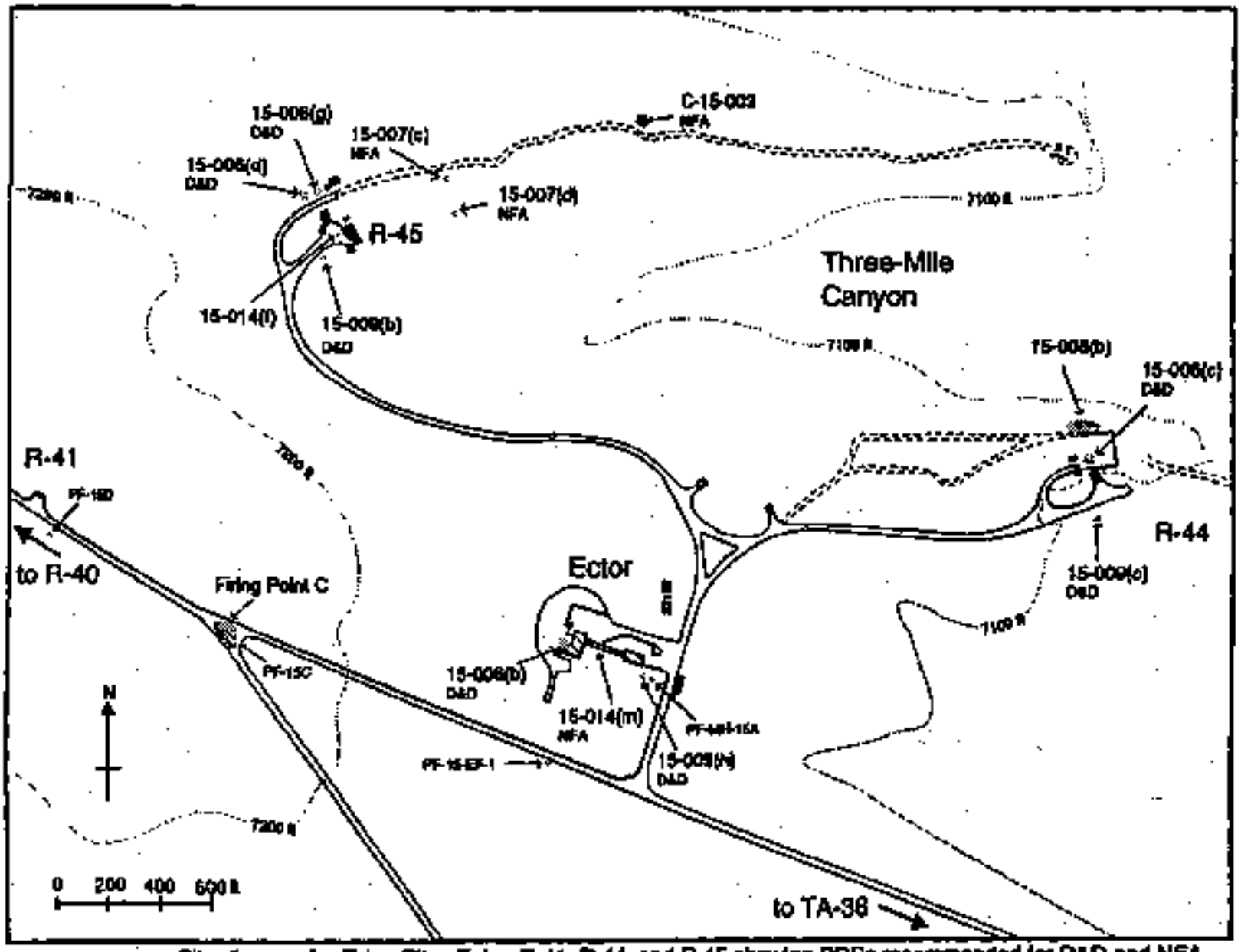


Figure 6.3-1 Site diagram for Firing Sites Ector, R-41, R-44, and R-45 showing PRSs recommended for D&D and NFA and and SWMU 15-008(b).

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 15-006(d)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
15-006(d)	HSWA	R-45 Firing Site	U, Beryllium, Lead, HE	NFA Criterion 5
15-008(g)	Non-HSWA	R-45 Sand Bags	U, Beryllium, Lead, HE	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

These PRSs are at the same location, have the same transport mechanisms and COPCs. The sand bags at the firing site will have the same contaminents as those associated with the explosive shots at the remainder of the firing site.

Description of Aggregate:

Firing site R-25, (PRS 15-006(d)) was built in 1951 and used only for small quantity explosive shots. Sandbags (PRS 15-008(g)) are considered to be part of the firing site.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

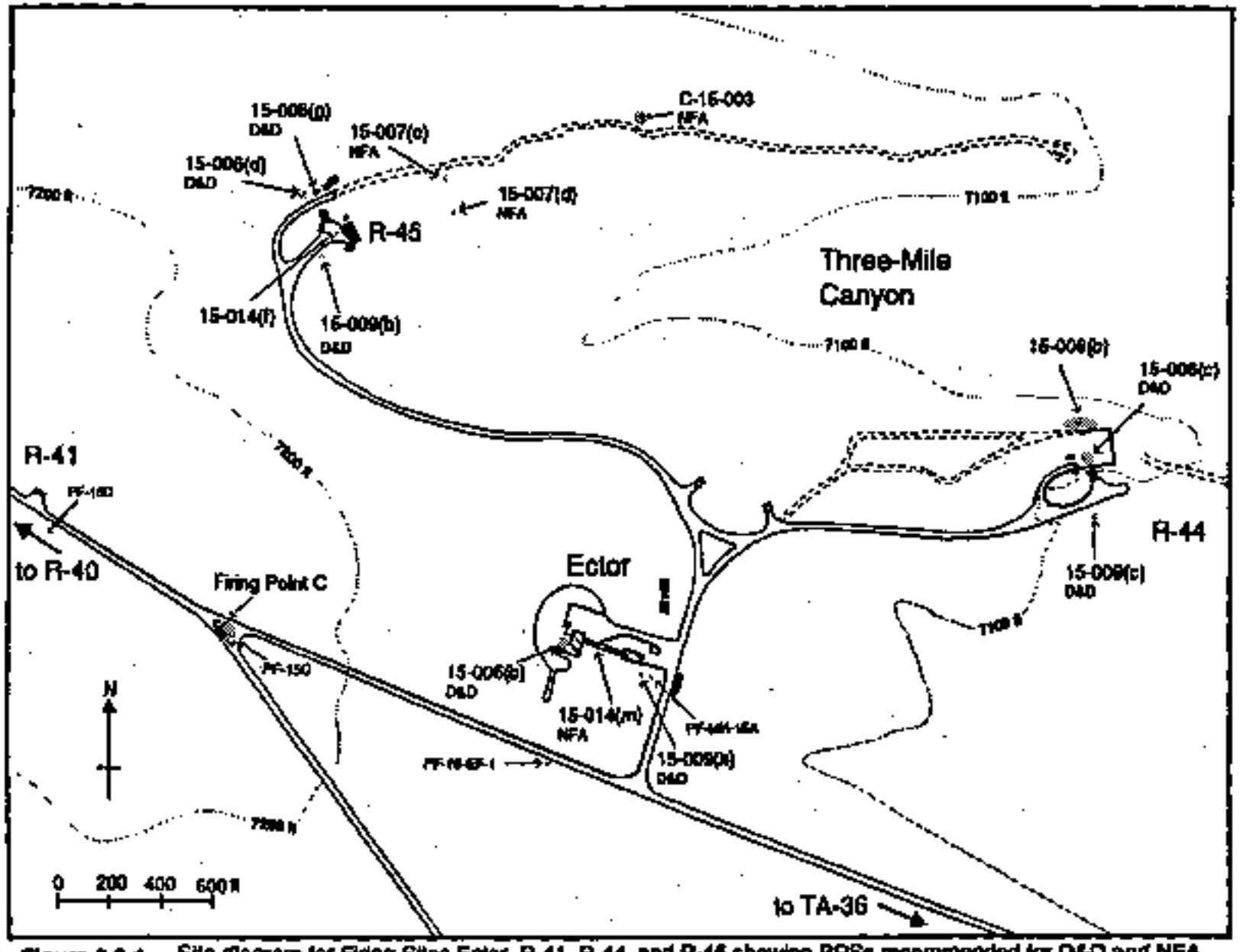


Figure 6.3-1 Site diagram for Firing Sites Ector, R-41, R-44, and R-45 showing PRSs recommended for D&D and NFA and and SWMU 15-008(b).

PRS Consolidation Worksheet

Site Type: Miscellaneous

Proposed PRS Number: 16-001(a)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
16-001(a)	HSWA	Blowdown Tank (TA-16-456)	Metals (chromates), VOCs, SVOCs	Under Investigation
16-001(b)	HSWA	Dry Wells	Metals (chromates), VOCs, SVOCs	Under Investigation
16-001(c)	HSWA	Blowdown Tank (TA-16-208)	Metals (chromates), VOCs, SVOCs	Under Investigation

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms (subsurface) and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated

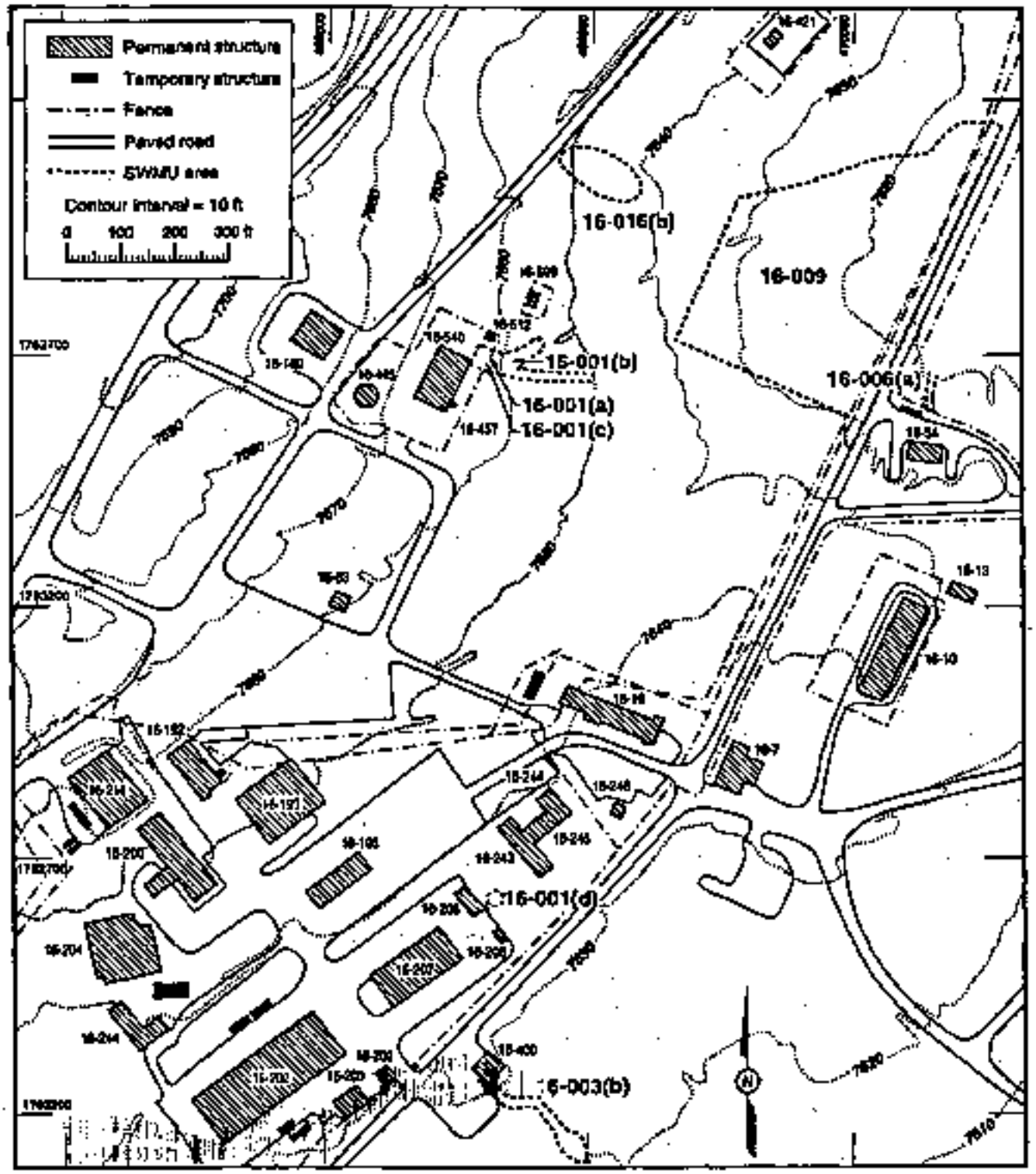
Description of Aggregate:

The consolidated PRS contains two blowdown tanks and two dry wells. The tanks previously received blowdown from the TA-16 steam plant boilers. The tanks were interconnected and the dry wells received blowdown from the main blowdown tank and were designed to allow the blowdown effluent to seep into the ground. The primary blowdown tank (TA-16-456) was replaced in 1986 and is active. Blowdown to the secondary tank (TA-16-541) was diverted to the primary blowdown tank in 1968 and the tank is inactive. The dry wells were bypassed in 1988 due to inadequate capacity and are inactive.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____



cARTography by A. Kron 8/12/93

Fig. 5-1. TA-16 administration area.

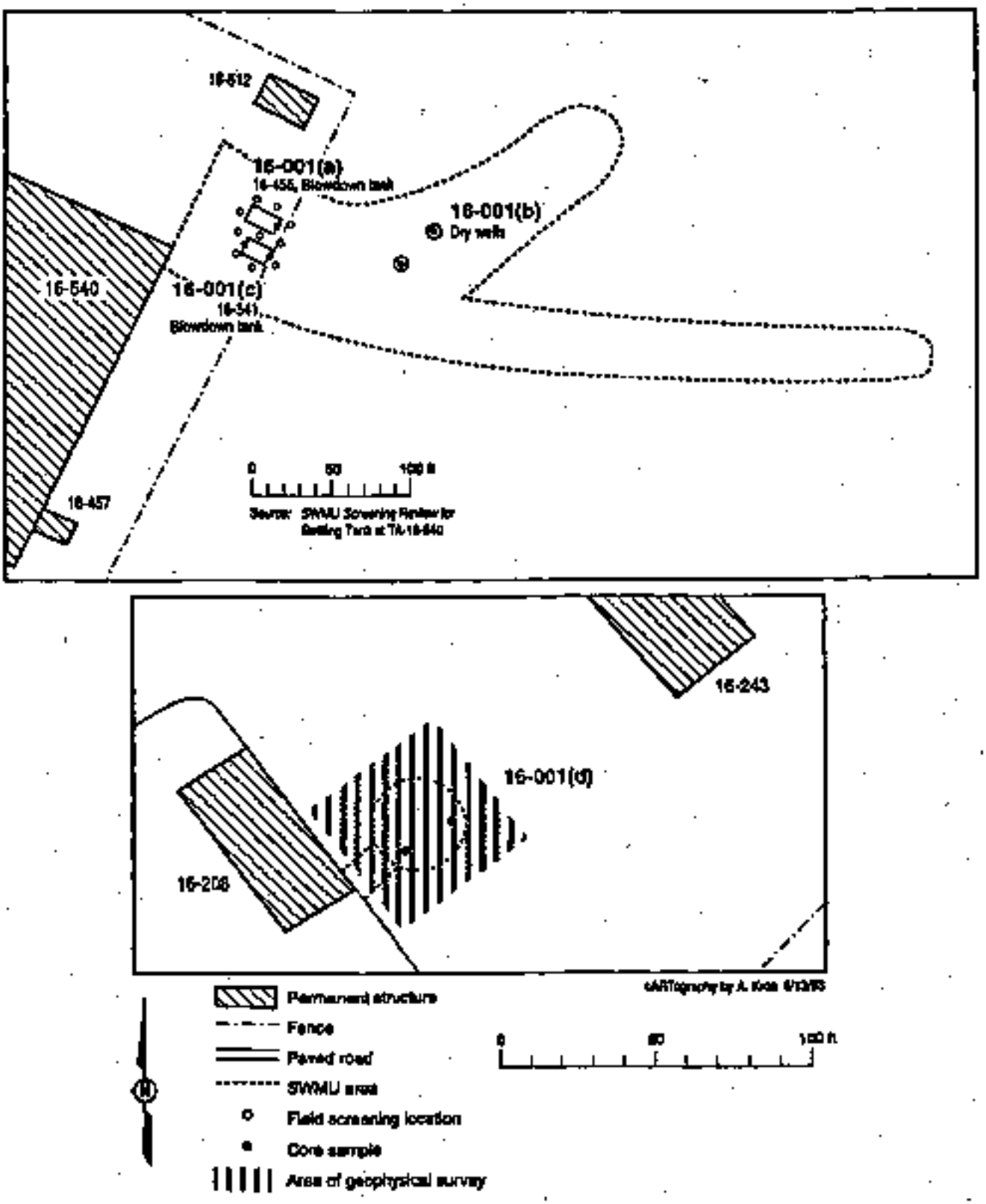


Fig. 5-3. Schematic administration area sampling maps.

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 16-003(c)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
16-003(c)	HSWA	One Active HE Sump and Drain Line	HE, barium, metals, uranium, VOCs, SVOCs, cyanide	Under Investigation
16-026(v)	HSWA	Outfall from Active HE Sump	HE, barium, metals, uranium, VOCs, SVOCs, cyanide	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface and subsurface), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS contains one active HE sump, associated drain line and outfall from TA-16-460, an analytical chemistry laboratory. Only small quantities of HE were used in the building; however, small quantities of solvents and other chemicals were previously discharged to the sump. Currently the waste solvents are drummed. The outfall, NPDES EPA 05A072, receives effluent from the sump and building floor drains, bench-sink cup drains, steam cup drains, sink drains and a drinking fountain.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

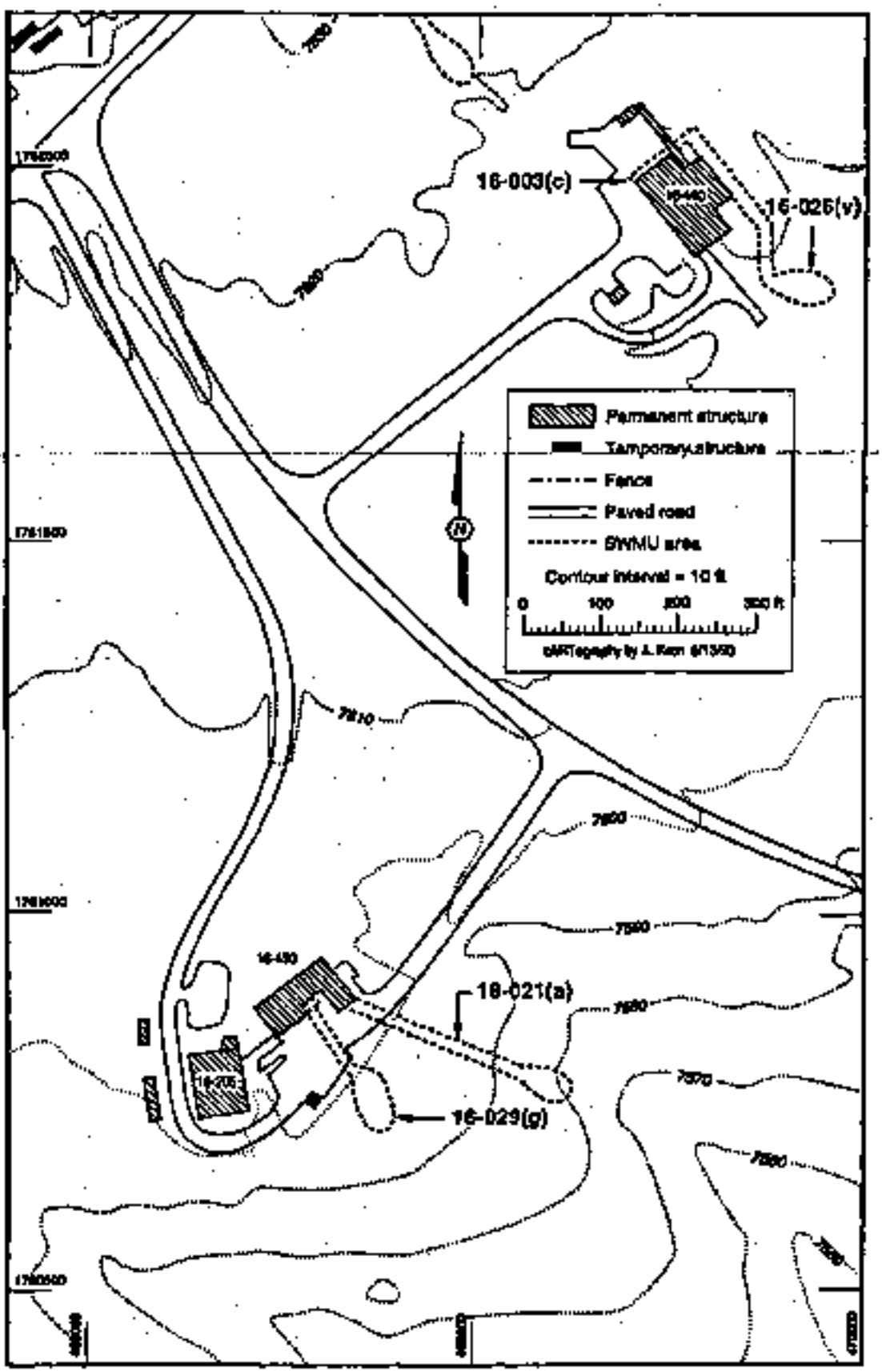


Fig. 5-8. TA-16-460 and TA-16-450 area.

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 16-003(d)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
16-001(a)	HSWA	Inactive Dry Well	HE, barium, VOCs, SVOCs, cyanide	Under Investigation
16-003(d)	HSWA	Two Inactive HE Sumps	Barium, VOCs, SVOCs, cyanide	Under Investigation
16-003(e)	HSWA	Two Inactive HE Sumps	HE, barium, VOCs, SVOCs	Under Investigation
16-003(f)	HSWA	Two Inactive HE Sumps	VOCs, SVOCs	Under Investigation
16-003(g)	HSWA	Two Inactive HE Sumps	VOCs, SVOCs, HE	Under Investigation

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface and subsurface), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS contains seven inactive HE sumps and the associated inactive dry well located along the 300-Line. The 300-Line consists of process buildings TA-16-300, 302, 304 and 306, each discharging to two of the HE sumps listed above. The 300-Line was built in late 1951 for casting HE. The buildings were converted to other uses when casting explosives were replaced by plastic-bonded explosives, with the exception of TA-16-302, which remains a casting facility. TA-16-300 is a mock (inert) explosives preparation facility where wash-down water was drained to the sumps (16-003(d)). TA-16-302 is an HE casting facility where equipment wash-down water was drained to the sumps (16-003(e)). TA-16-304 functions as a plastics and plastic components development facility where solvents may have been previously discharged to the sumps (16-003(f)). TA-16-306 also houses a plastic components development and production facility where solvents may have previously been discharged to the sumps. The dry well was installed in the early 1960s, but never worked properly because it drained to impermeable tuff. The 300-Line sumps previously discharged to the dry well; however, they now discharge to an NPDES outfall (EPAA058). The dry well is currently filled with soil. PRS 16-003(g) consists of two inactive HE sumps associated with TA-16-306.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

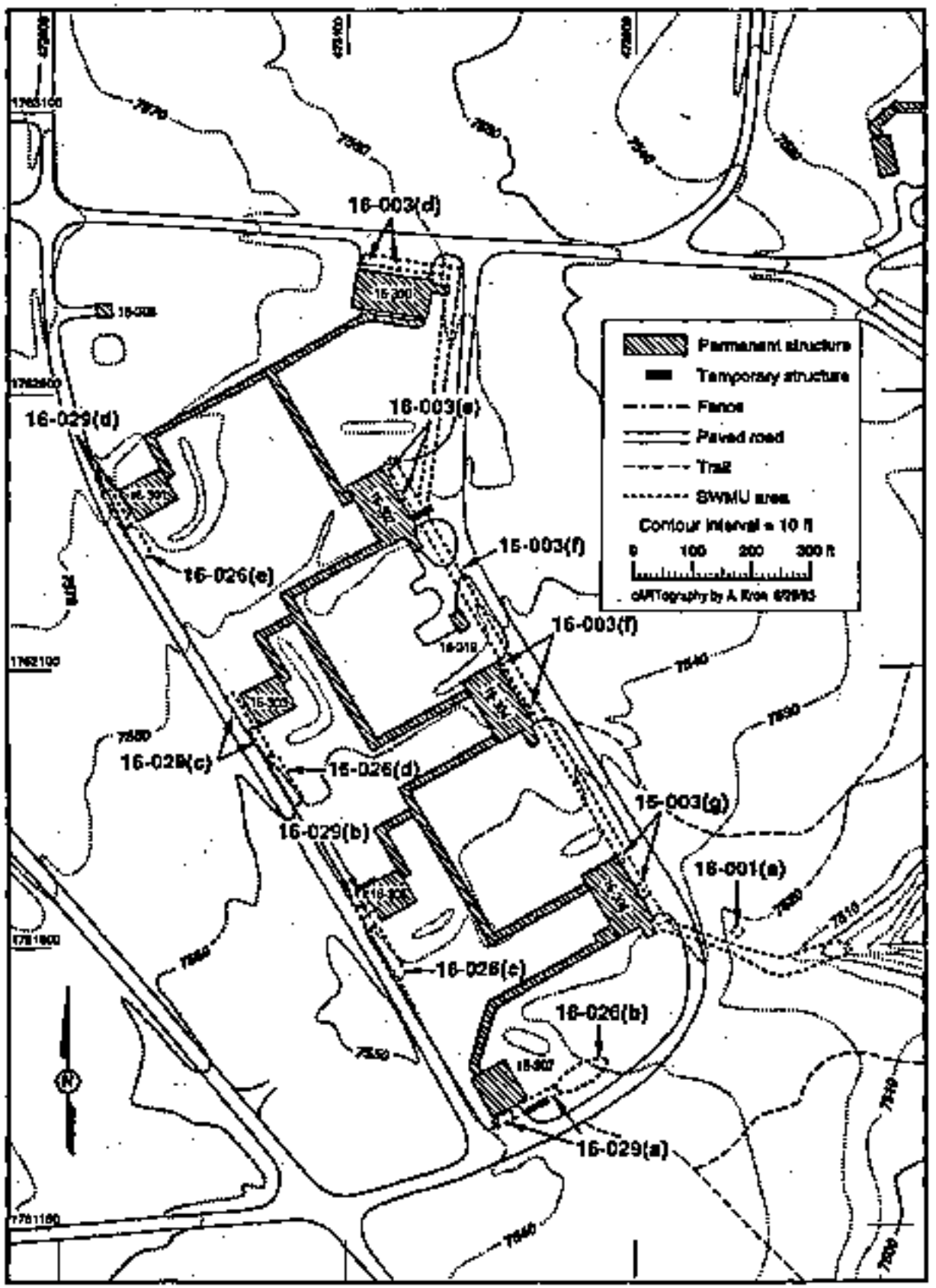


Fig. 5-5. TA-16 300 line.

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 16-003(h)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-003(h)	HSWA	One Inactive HE Sump and Drain Line	HE, barium, uranium VOCs, SVOCs	Under Investigation
16-030(d)	Non-HSWA	Outfall from Inactive HE Sump and Drain Line	HE, barium, uranium VOCs, SVOCs	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface, subsurface and sediments), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS contains one inactive HE sump, drain line and outfall associated with TA-16-280, a physical inspection and metrology laboratory for HE and other weapon components, including depleted uranium products. The building also serves as a staging facility for test device components to be assembled. Solvents may have previously been discharged to the sump. The sump received effluent from a room in which HE testing was conducted and from two roof drains. No other effluent sources were discharged to the outfall.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

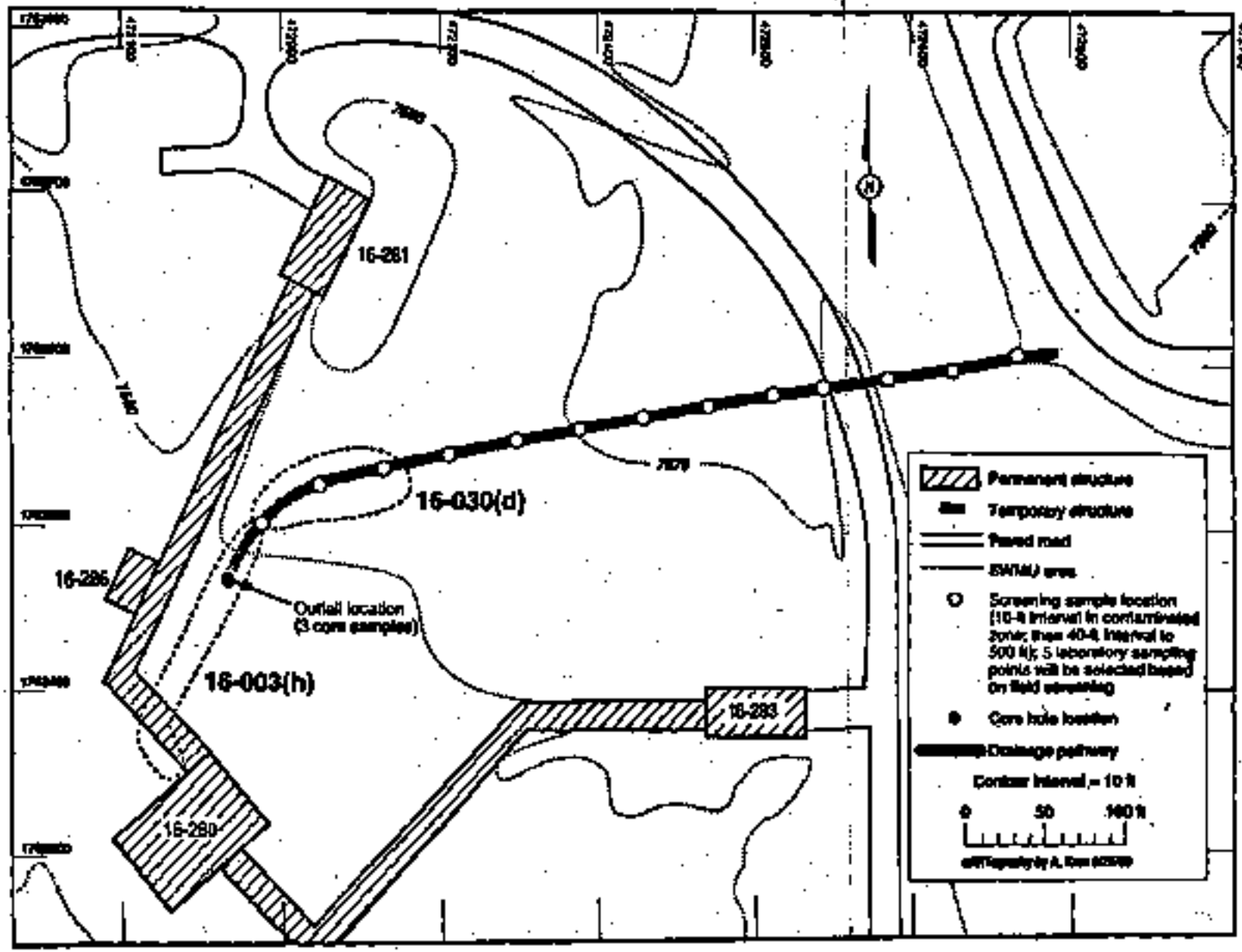


Fig. 5-16. Schematic field screening sampling locations for SWMUs 16-003(h) and 16-030(d).

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 16-003(l)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-003(l)	RSWA	Three Inactive HE Sumps and Drain Lines	HE, barium, VOCs, SVOCs	Under Investigation
16-030(h)	RSWA	Three Outfalls from Inactive HE Sumps	HE, barium, VOCs, SVOCs	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface and subsurface), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS contains three inactive HE sumps associated withdrain lines and outfalls from TA-16-430, an HE pressing facility where plastic-bonded explosive and mock HE powders were pressed to shape. Waste consists primarily of small quantities of HE powder and solvent. The majority of the solvent and HE collected in the sumps were removed and burned. The three sumps received effluent from five pressing bays. Each outfall received effluent from the sumps. The effluent from each outfall flows to the west in a common drainage ditch and is discharged to a single drainage channel as depicted on the attached map.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

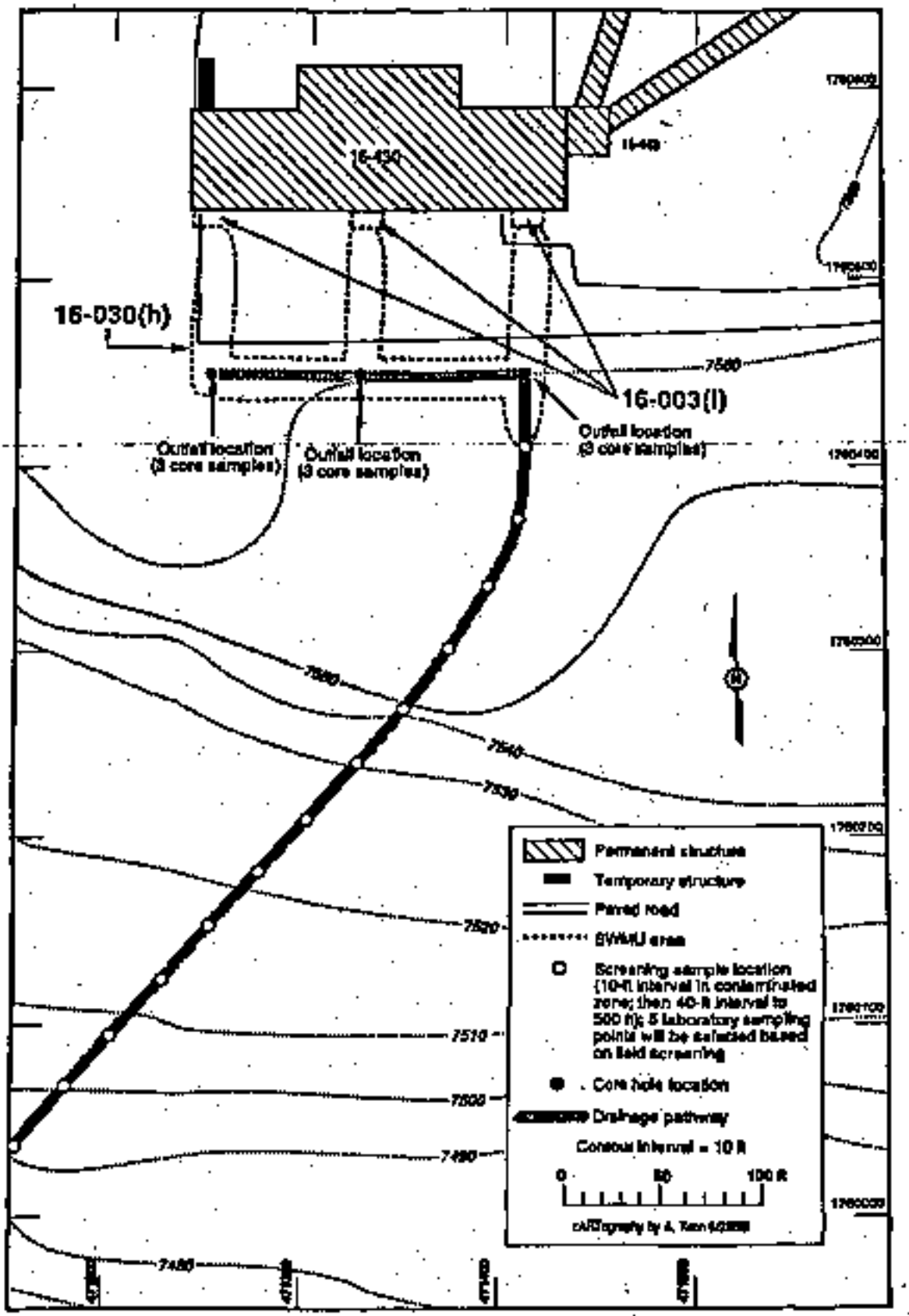


Fig. 5-15. Schematic field screening sampling locations for SWMUs 16-003(l) and 16-030(h).

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 16-003(m)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-003(m)	HSWA	One Inactive HE Sump	HE, Barium, VOCs, SVOCs	Under Investigation
16-006(d)	HSWA	Septic System	HE, Barium, VOCs, SVOCs	Under Investigation
16-030(g)	HSWA	Inactive Outfall from HE Sump	HE, Barium, VOCs, SVOCs	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface and subsurface), and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS contains one inactive HE sump, outfall and septic system associated with TA-16-380. TA-16-380 is a former inspection site for raw HE powder brought to TA-16. The sump receives wash-down water from cleaning activities. The outfall receives effluent from the sump, two roof drains and a drop inlet from a parking lot. PRS 16-006(d) is a septic system including drain lines and a tile drain field that served TA-16-380. Five floor drains, two water closets and one deep sink discharged to the septic tank.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

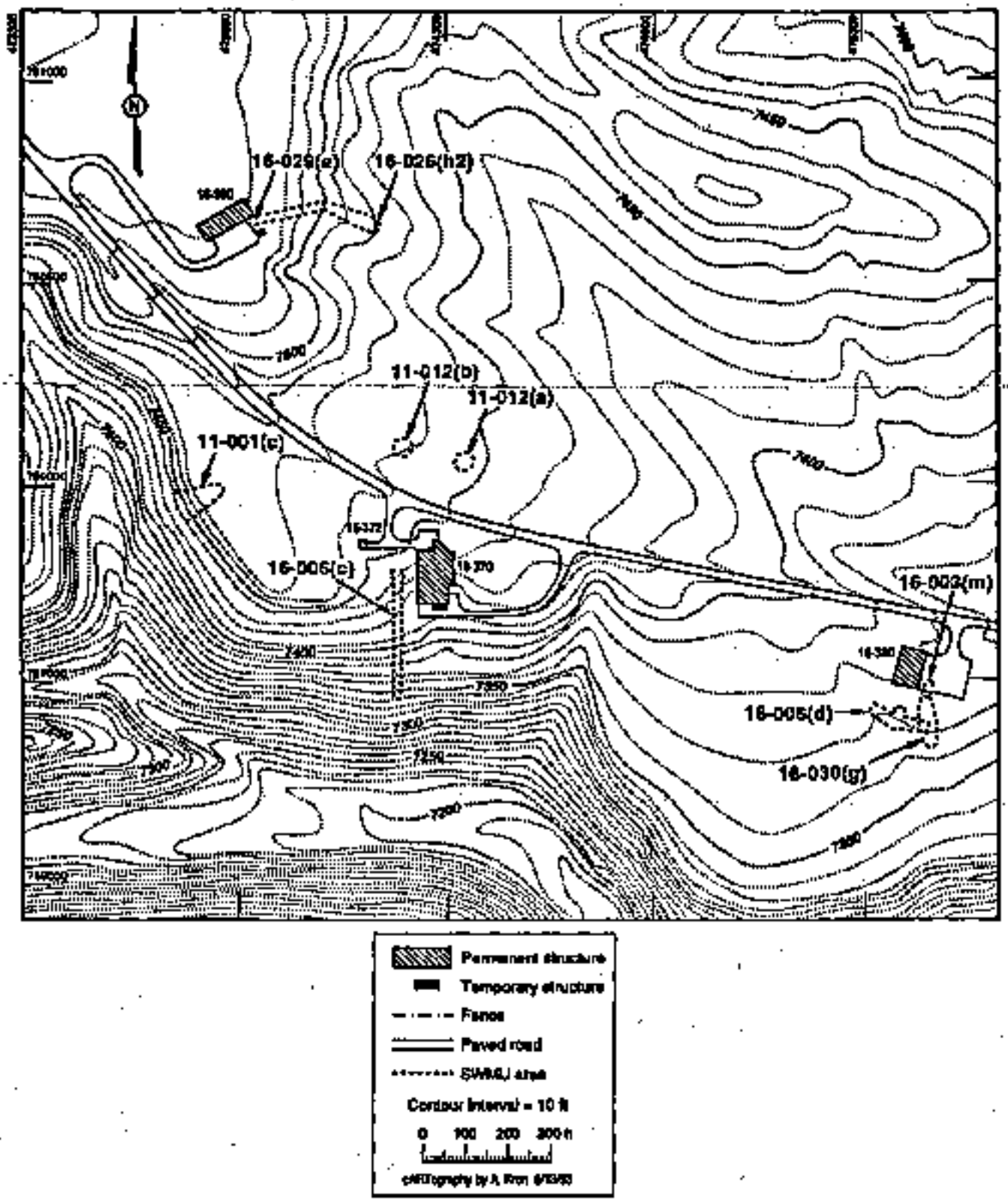


Fig. 5-7. TA-16-360, TA-16-370, and TA-16-380 area.

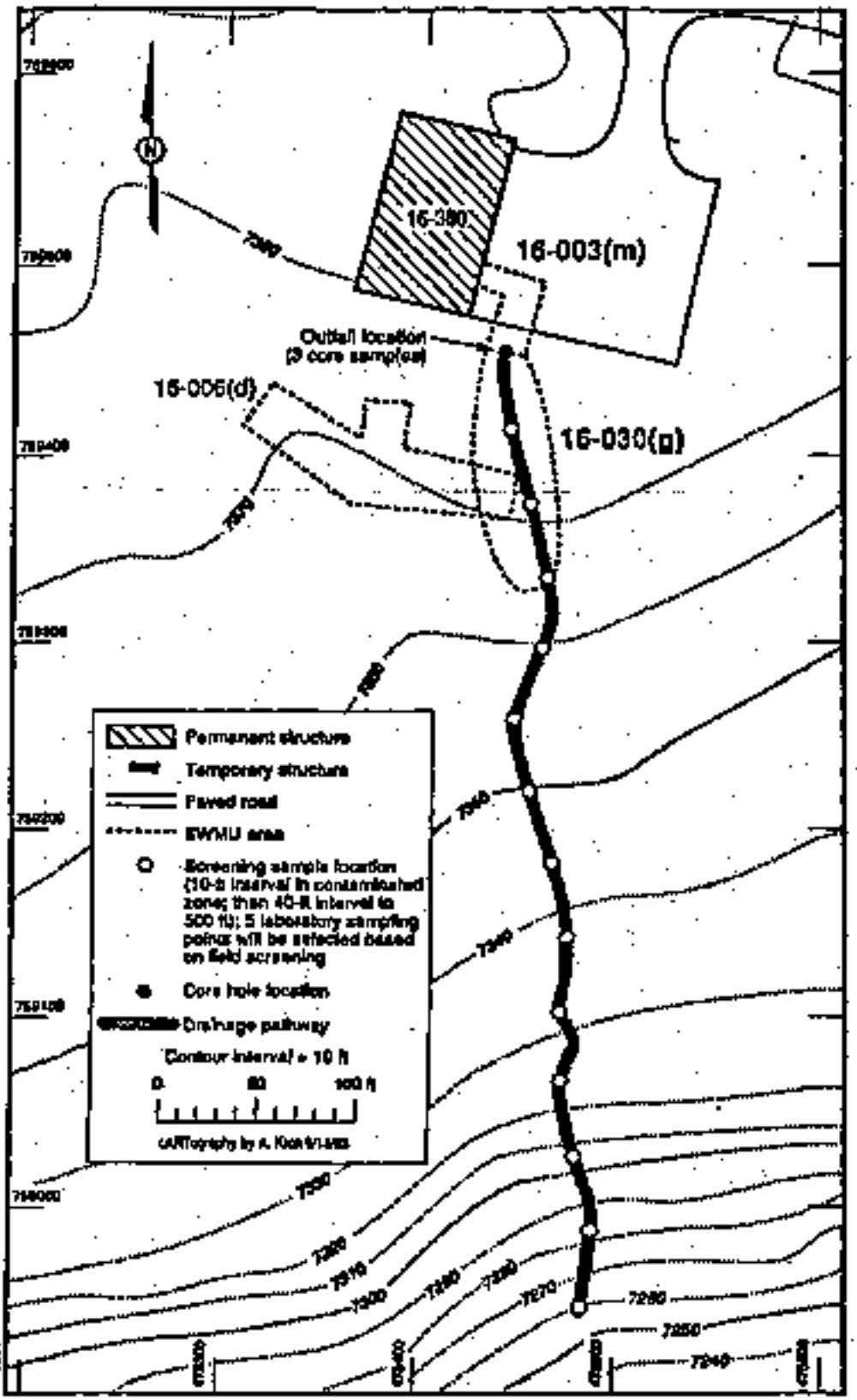


Fig. 5-19. Schematic field screening sampling locations for SWMUs 16-003(m) and 16-030(g).

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls *Proposed PRS Number:* 16-003(n)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-003(n)	HSWA	One Inactive HE Sump/Outfall	HE, Barium, metals VOCs, SVOCs, uranium	Under investigation
16-029(l)	HSWA	Inactive HE Sump/Outfall	HE, Barium, metals VOCs, SVOCs, uranium	NFA Criterion 1

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface and subsurface), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS contains one inactive HE sump and the associated drainline and outfall from TA-16-342, is a facility used for mixing and blending the constituents of plastic-bonded explosive formulations. Natural uranium was previously used in the building. The sump and outfall receive process and wash-down water from cleaning activities. The outfall (NPDES EPA 05A062) discharges to a tributary of Canon de Valle. PRS 16-029(l) is a duplicate of 16-003(n).

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

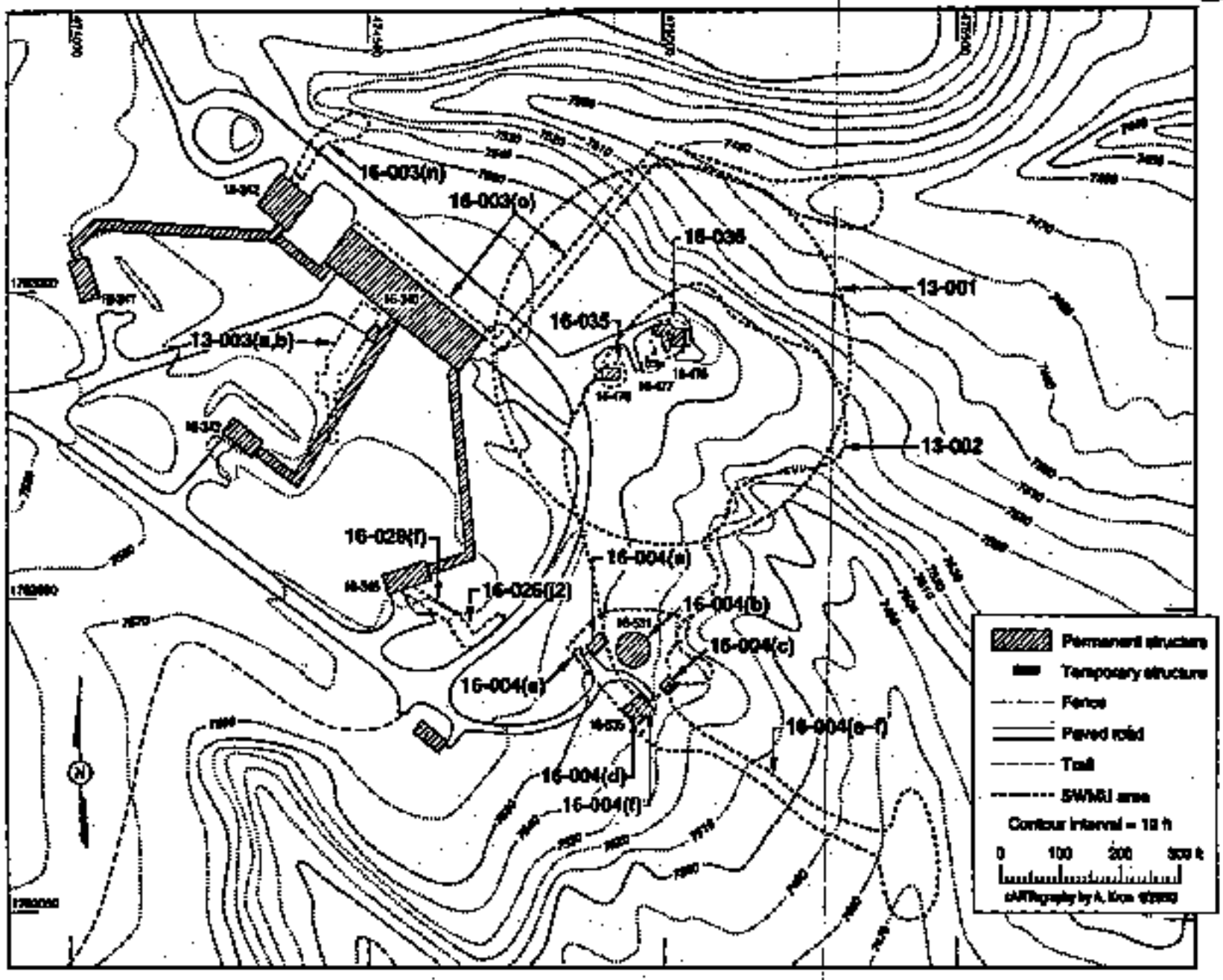


Fig. 5-9. TA-16-340 line, waste water treatment plant, and TA-13 (P-Site).

PRS Consolidation Worksheet

Site Type: Waste Water Treatment Plant

Proposed PRS Number: 16-004(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-004(a)	HSWA	Imhoff tank	Rad, Metals, sanitary, industrial	Under Investigation
16-004(b)	HSWA	Trickling filter	Rad, Metals, sanitary, industrial	Under Investigation
16-004(c)	HSWA	Clarifier	Rad, Metals, sanitary, industrial	Under Investigation
16-004(d)	HSWA	Sludge bed	Rad, Metals, sanitary, industrial	Under Investigation
16-004(e)	HSWA	Screen	Rad, Metals, sanitary, industrial	Under Investigation
16-004(f)	HSWA	Sludge bed	Rad, Metals, sanitary, industrial	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms (surface and shallow subsurface), and the investigation needed to assess the contamination of the ancillary equipment and piping at the WWTP, it is proposed that these PRSs be consolidated.

Description of Aggregate:

These PRSs consist of the components of the inactive TA-16 sanitary waste water treatment plant (WWTP). The sanitary WWTP received wastewater from the TA-16 sanitary sewer system. The WWTP was built in 1953 during the expansion of TA-16. The plant was disconnected when the Laboratory sanitary waste system consolidation (SWSC) was placed in service in 1992. PRSs 16-004(a-f) include an Imhoff tank used as a settling tank; a trickling filter for filtering and digestion; a network of piping and drainlines; final tank for clarifying; sludge beds for drying and a screen.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

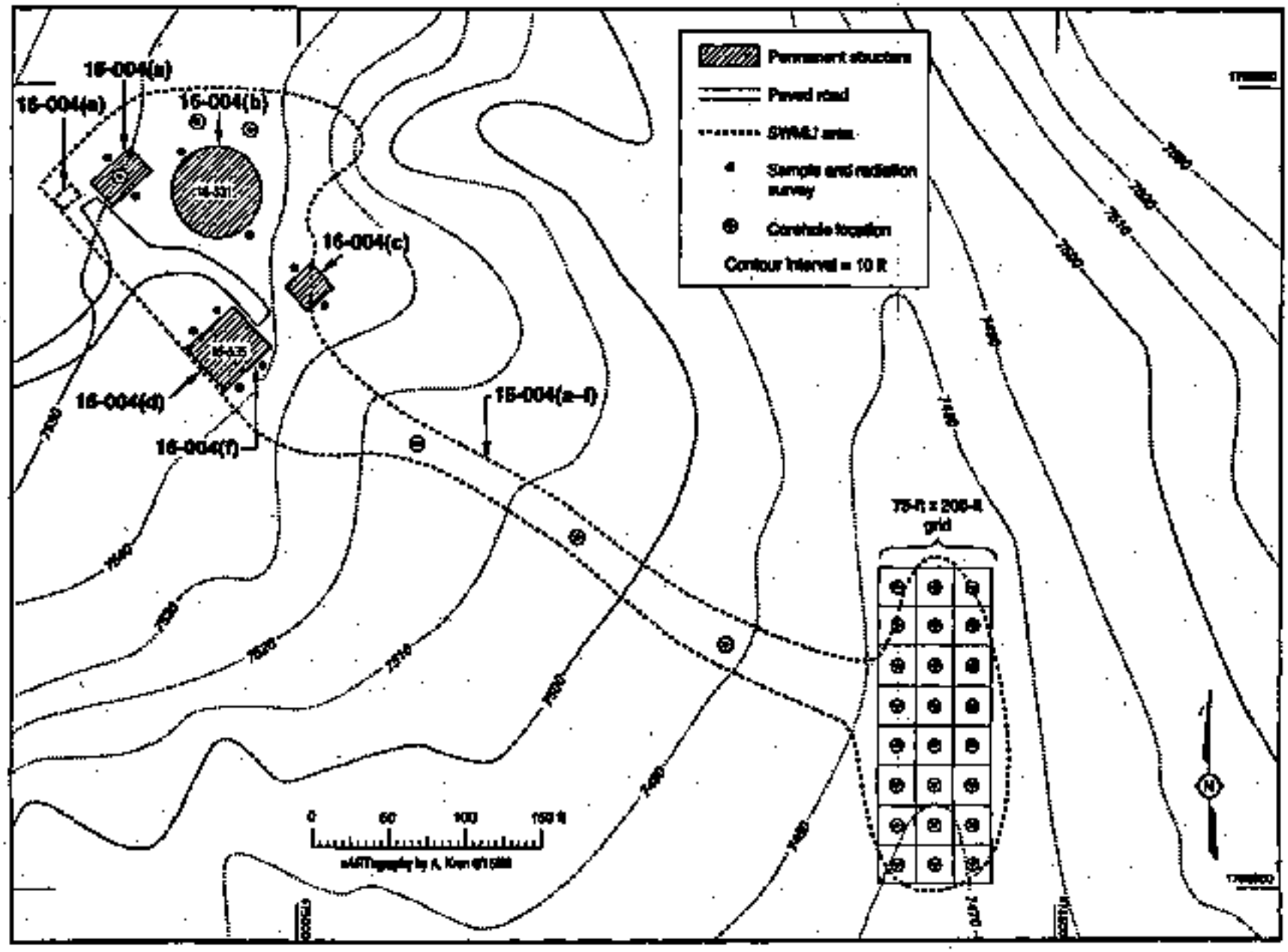


Fig. 5-33. Schematic sampling plan for sanitary waste treatment aggregate.

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 16-007(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-007(a)	HSWA	Former Settling Ponds	HE and barium	Under Investigation
16-024(d)	Non-HSWA	Former Magazine	HE and barium	Under Investigation
16-024(e)	HSWA	Former HE Machining Building	HE and barium	Under Investigation
16-025(e)	HSWA	Former HE Machining Building	HE and barium	Under Investigation
16-025(f)	HSWA	Former HE Machining Building	HE and barium	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams (primarily residual HE and barium), transport mechanisms (primarily surface and near surface contamination with some potential subsurface contamination), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS encompasses an area which was formerly the location of three identical HE machining buildings (TA-16-31, -32- and –33) including sumps and drain lines which discharged to a series of four waste impoundments, the former waste ponds or impoundments, and a former magazine. The buildings were part of a row of structures referred to as the 30s-Line which also included magazines, radiographic facilities, and utility buildings. Each building was constructed of wood on a concrete slab and consisted of two chambers for machining and a separate control room. Pipes connected to the control rooms to the machining chambers. The structures were almost entirely buried. A sump that received effluent from troughs in the machining chambers was located between each building. Each sump had a drain line that passed beneath the adjacent road to a row of four settling ponds. The buildings were converted to other uses in the 1950s, but were listed as having HE contamination in 1959 and were subsequently decommissioned and destroyed by burning in early 1960. PRS 16-007(a) consists of four backfilled settling ponds, and as previously stated, drains from the HE machining buildings discharged to the ponds. The ponds were excavated as part of the S-Site demolition and restoration activities in 1967. The former magazine, TA-16-34 stored machined product for physical and x-ray examination and had no plumbing. TA-16-34 [PRS 16-024(d)] caved in during 1960, but has no documented destruction date. The other magazines in the vicinity were burned during 1960.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

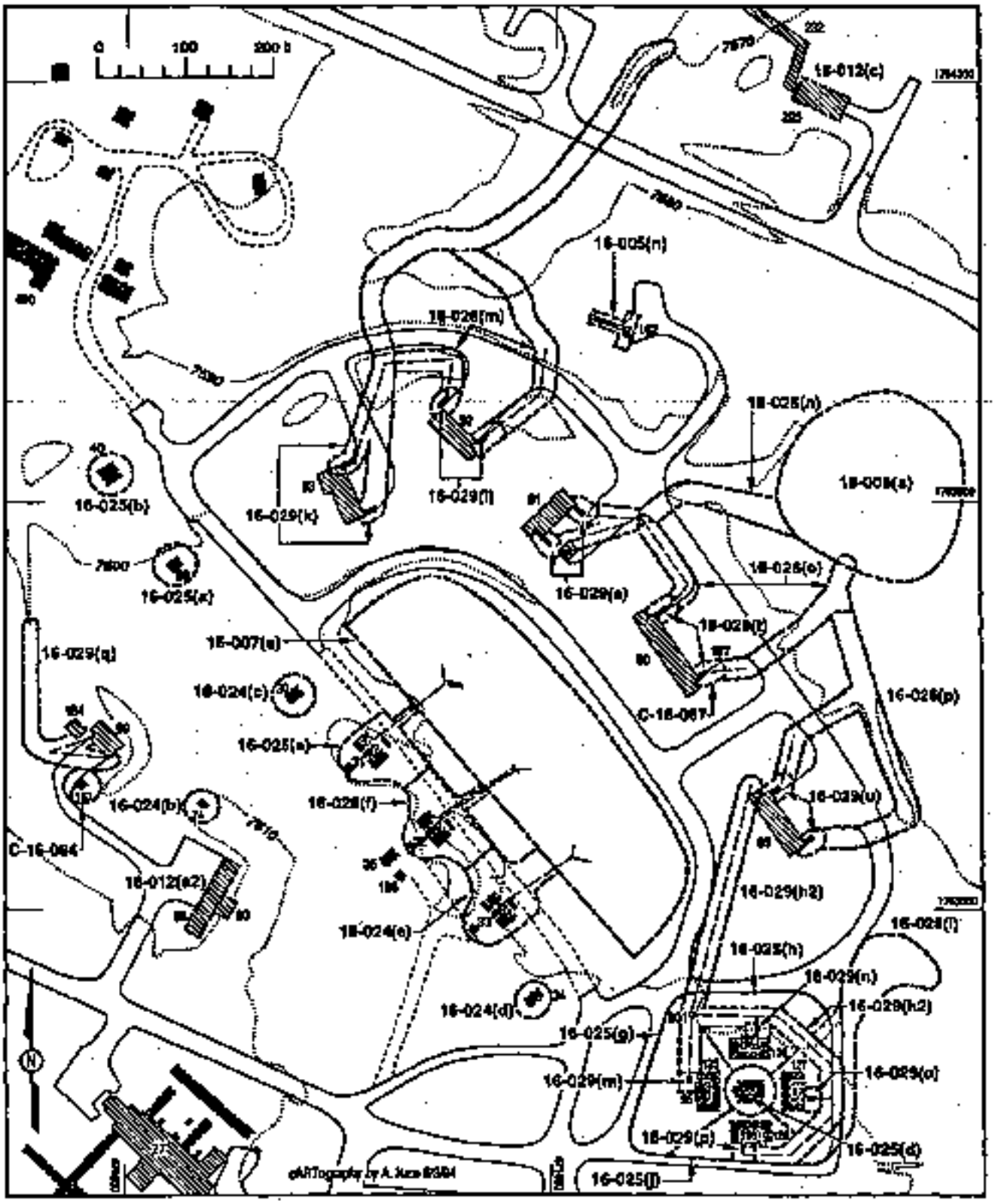


Fig. 5-68. Locations of PRSs at GMX-3, north.

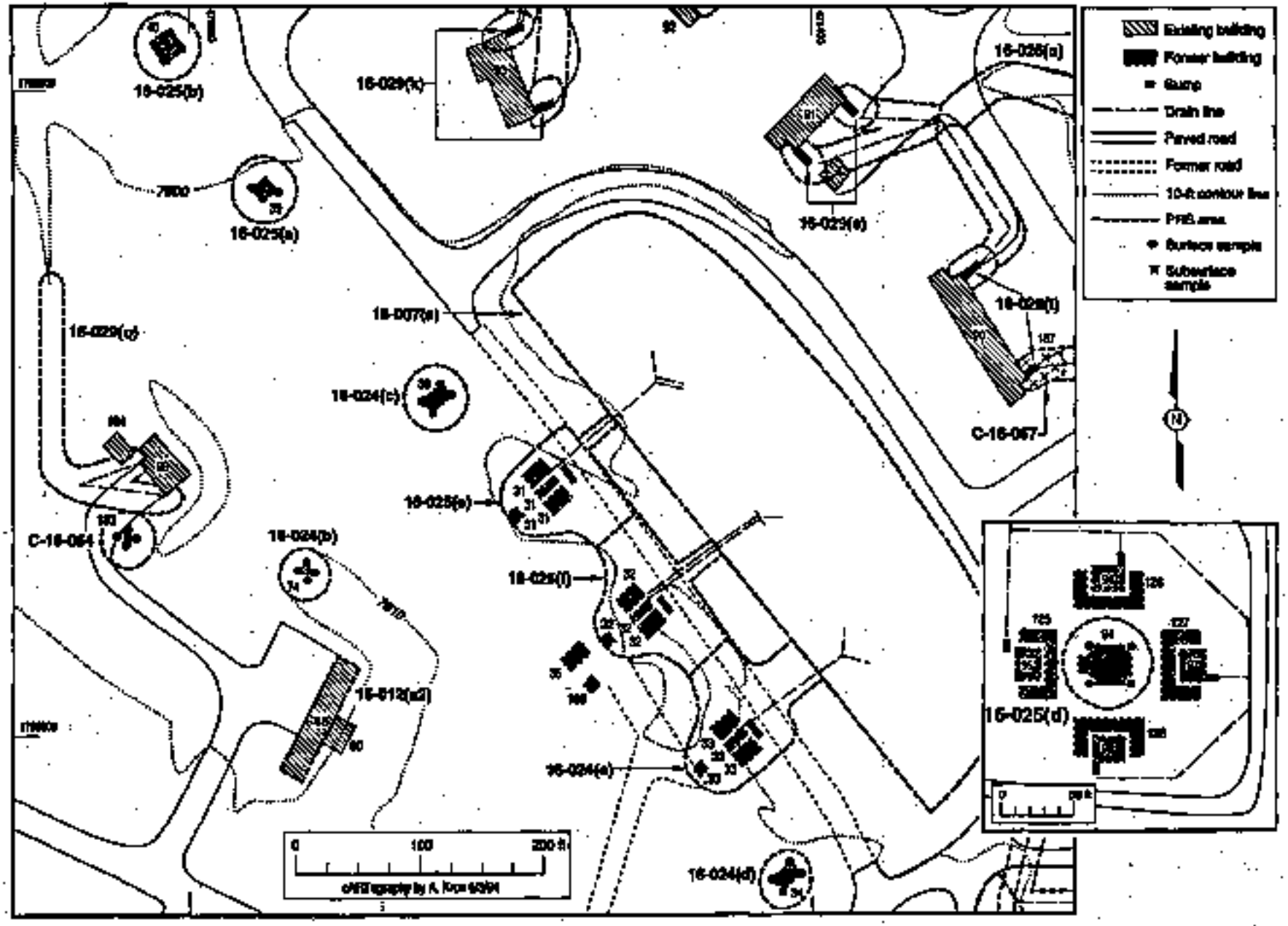


Fig. 5-79. Sampling locations at GMX-3 without sumps, north.

Site Type: Former Structures

Proposed PRS Number: 16-008(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-008(a)	HSWA	Inactive Pond	HE, barium, uranium, VOCs, SVOCs	Under Investigation
16-017(a)-99	HSWA	Former HE Machining Building	HE, barium, SVOCs	Under Investigation
16-017(b)-99	HSWA	Former HE Electroplating Building	HE, barium, SVOCs	Under Investigation
16-017(c)-99	HSWA	Former HE Machining Building	HE, barium, SVOCs	Under Investigation
16-017(d)-99	HSWA	Former HE Machining Building	HE, barium, SVOCs	Under Investigation
16-017(e)-99	HSWA	Former HE Machining Building	HE, barium, SVOCs	Under Investigation
16-026(m)	HSWA	Former HE Drain Line and Outfall	HE, barium, SVOCs	NFA Criterion 5
16-026(n)	HSWA	Former HE Drain Line and Outfall	HE, barium, SVOCs	NFA Criterion 5
16-026(o)	HSWA	Former HE Drain Line and Outfall	HE, barium, SVOCs	NFA Criterion 5
16-026(p)	HSWA	Former HE Drain Line and Outfall	HE, barium, SVOCs	NFA Criterion 5
16-029(k)	HSWA	Former HE Drain Line and Outfall	HE, barium, metals, VOCs, SVOCs, cyanide	NFA Criterion 5
16-029(l)	HSWA	Two Former HE Sumps	HE, barium, SVOCs	NFA Criterion 5
16-029(s)	HSWA	Two Former HE Sumps	HE, VOCs, SVOCs, metals, barium, cyanide	NFA Criterion 5
16-029(t)	HSWA	Two Former HE Sumps	HE, barium, VOCs, SVOCs	NFA Criterion 5
16-029(u)	HSWA	Two Former HE Sumps	HE, barium, VOCs, SVOCs	NFA Criterion 5
C-16-067	Non-HSWA	Former Drum Storage Platform	VOCs and SVOCs	NFA Criterion 5

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls **Proposed PRS Number:**

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history (90s-Line), waste streams (primarily residual HE, metals, barium, and SVOCs), transport mechanisms (primarily surface and near surface contamination with potential subsurface contamination), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated

Description of Aggregate:

The consolidated PRS encompasses an area which is the location of footprints of former HE process buildings, former materials storage buildings, sumps, drain lines, and outfall systems (drainages) associated with the 90s-Line of HE process buildings. All of the former structures are related to and located along or in close proximity to the 90s-Line of HE process buildings. The majority of the structures in this consolidated PRS were constructed in 1950 for HE machining. Shortly after these buildings were constructed, LANL began using HE pressing techniques rather than casting which reduced the volume of HE removed by machining. As a result, HE machining in the 90s-Line was at a smaller, more experimental level than in the 30s-Line. Machining operations continued in some of these buildings for several years. After 1970, all of the buildings were used for storage until being totally abandoned by 1991. The structures were removed during various D&D efforts during the 1990s.

PRS 16-017 consists of a group of 23 intact, abandoned structures associated with S-Site. These structures were proposed for NFA and deferral until D&D in the work plan. The structures to be consolidated in this PRS include only the former HE process and storage buildings described above (TA-16-89 through-93). Due to consolidation, each of the 23 former structures in the series has been given an alpha identifier. PRS 16-017(a) is the former HE machining building TA-16-92. PRS 16-017(b) is the former HE electroplating building TA-16-93. PRS 16-017(c) is the former HE machining building TA-16-91. PRS 16-017(d) is the former HE machining building TA-16-90. PRS 16-017(e) is the former HE machining building TA-16-89. PRS 16-026(m) is the drain line and outfall from the sump in TA-16-89, a former HE machining building that was converted to a storage facility PRS 16-026(n) is the drain line and outfall from the sump in TA-16-90, a former HE machining building that was converted to a storage facility. PRS 16-026(o) is the drain line and outfall from the sump in TA-16-91, a former HE machining building that was converted for cleaning and refurbishing HE-contaminated equipment. PRS 16-026(p) is the drain line and outfall from the sump in TA-16-92, a former HE machining building was also converted for cleaning and refurbishing HE-contaminated equipment. Operations at TA-16-92 may have resulted in uranium contamination from the handling of disassembled items containing uranium. In addition to effluent from the building sumps, drainage from driveways, roof drains, and building wash-down discharged to these drain lines and outfalls. Each outfall/drainage consists of a buried VCP from the sump(s), drainage channel along the road where the pipes daylight, buried VCP beneath the road, and an open air drainage channel

PRS 16-029(k) consists of two former sumps, drain line, and outfall from TA-16-93, a former HE machining and electroplating facility. PRS 16-029(l) consists of two former sumps in TA-16-89; PRS 16-029(s) consists of two former sumps in TA-16-90; PRS 16-029(t) consists of two former sumps in TA-16-91; and PRS 16-029(u) consists of two former sumps in TA-16-92. Each building is equipped with two sumps which received effluent from drain troughs in the concrete slab floors. The sumps are remain in place, filled with gravel. Initially, the sumps contained filter baskets, but were subsequently converted to conventional concrete sumps which were cleaned by vacuum removal of wastewater All of the sumps were abandoned in 1970.

PRS C-16-067 was a drum storage platform adjacent to the HE machining building TA-16-90. The platform was constructed in 1950 along with the 90s-Line and was used for the storage of oils and solvents The platform was subsequently decommissioned along with the 90s-Line in 1970.

PRS 16-008(a) is an inactive, unlined settling pond that previously received liquid waste from the HE sumps at process buildings TA-16-89, -90, and -91. TA-16-92 and -93 did not discharge to the pond.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

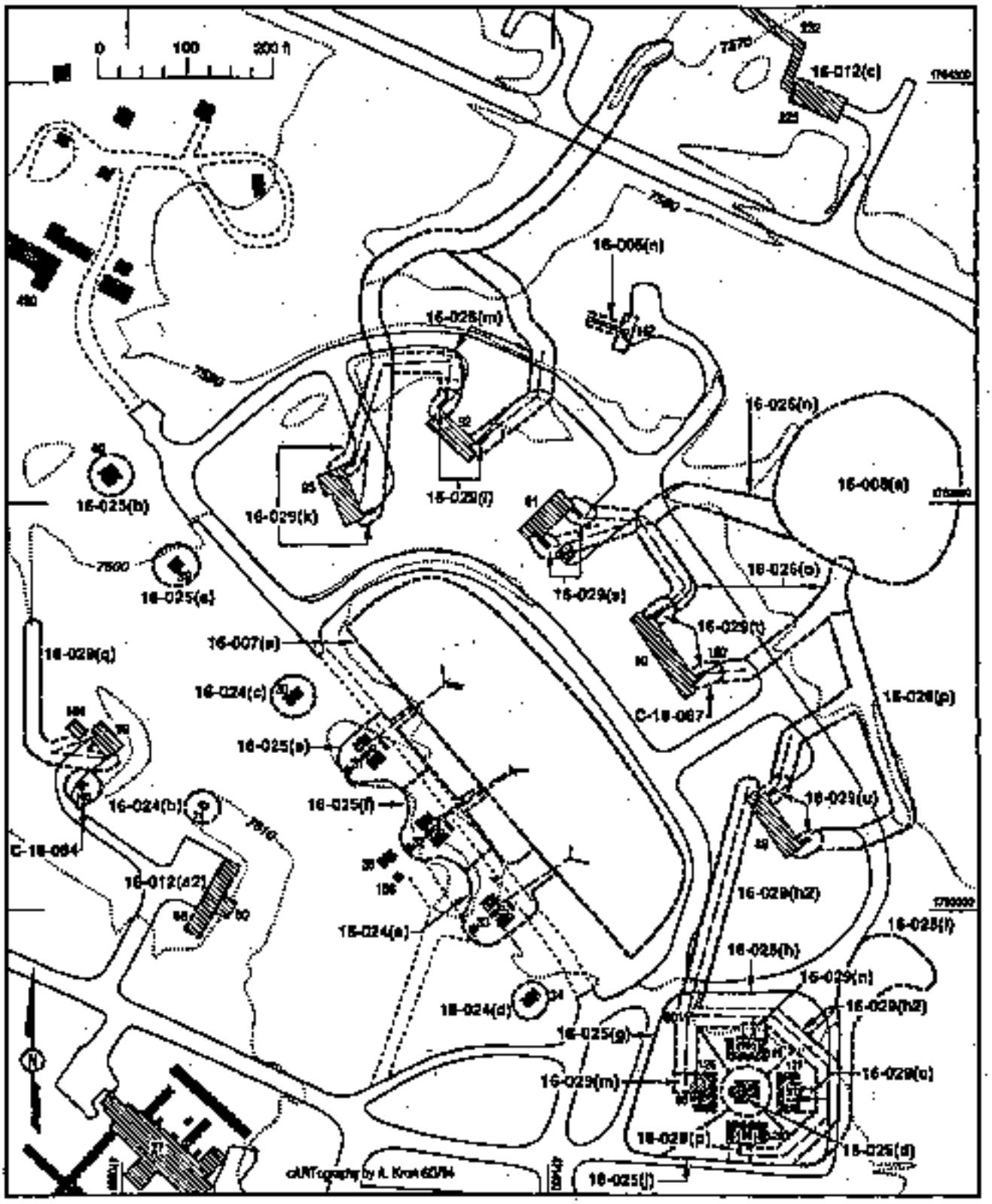
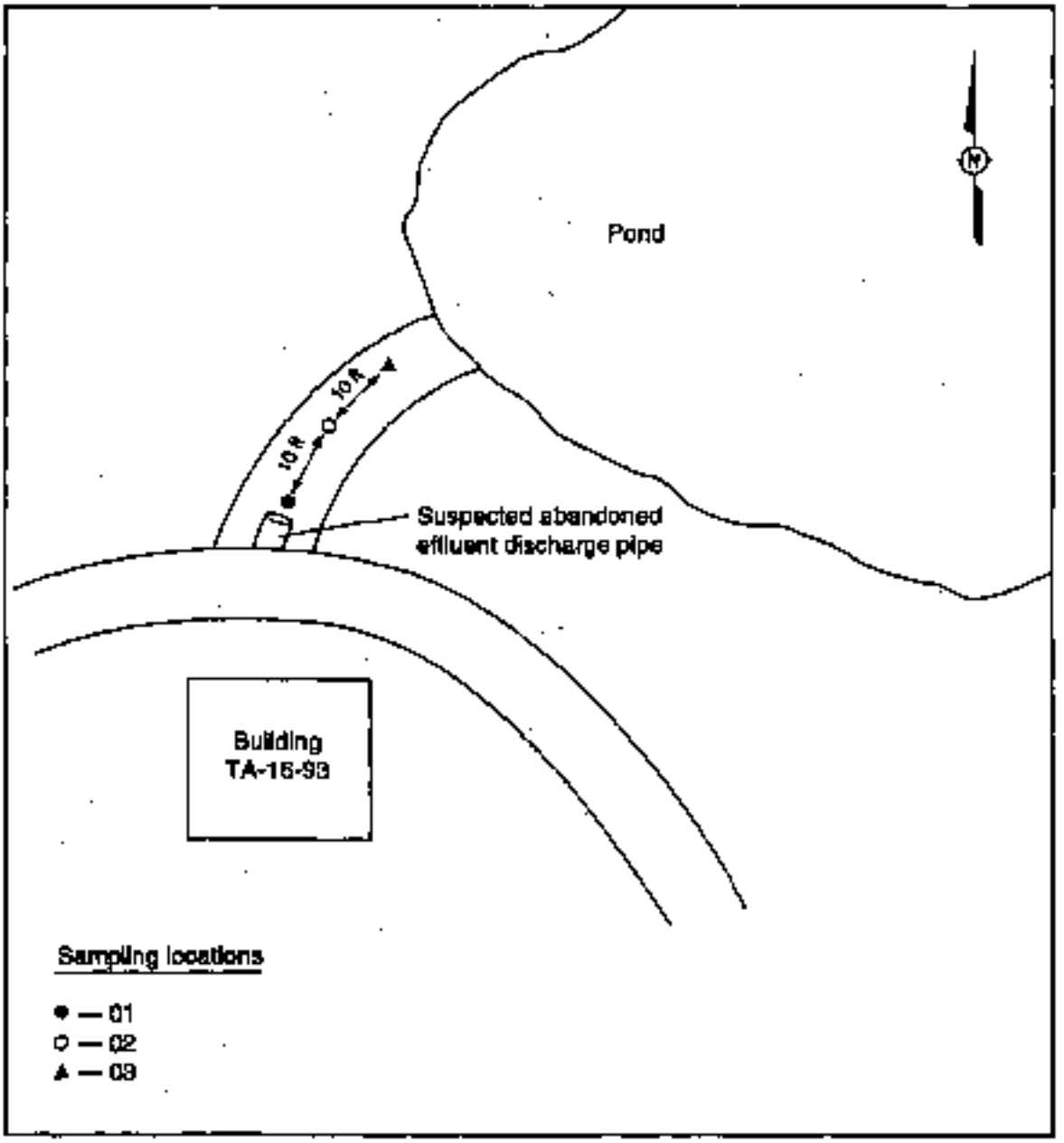


Fig. 5-58. Locations of PRSs at GMX-3.



Source: LANL 1989, 0425
Modified by: cMRTopography by A. Kron 4/3/94

Fig. 5-89. Sampling locations at TA-16-93 outfall from Environmental Problem #24 (LANL 1989, 0425).

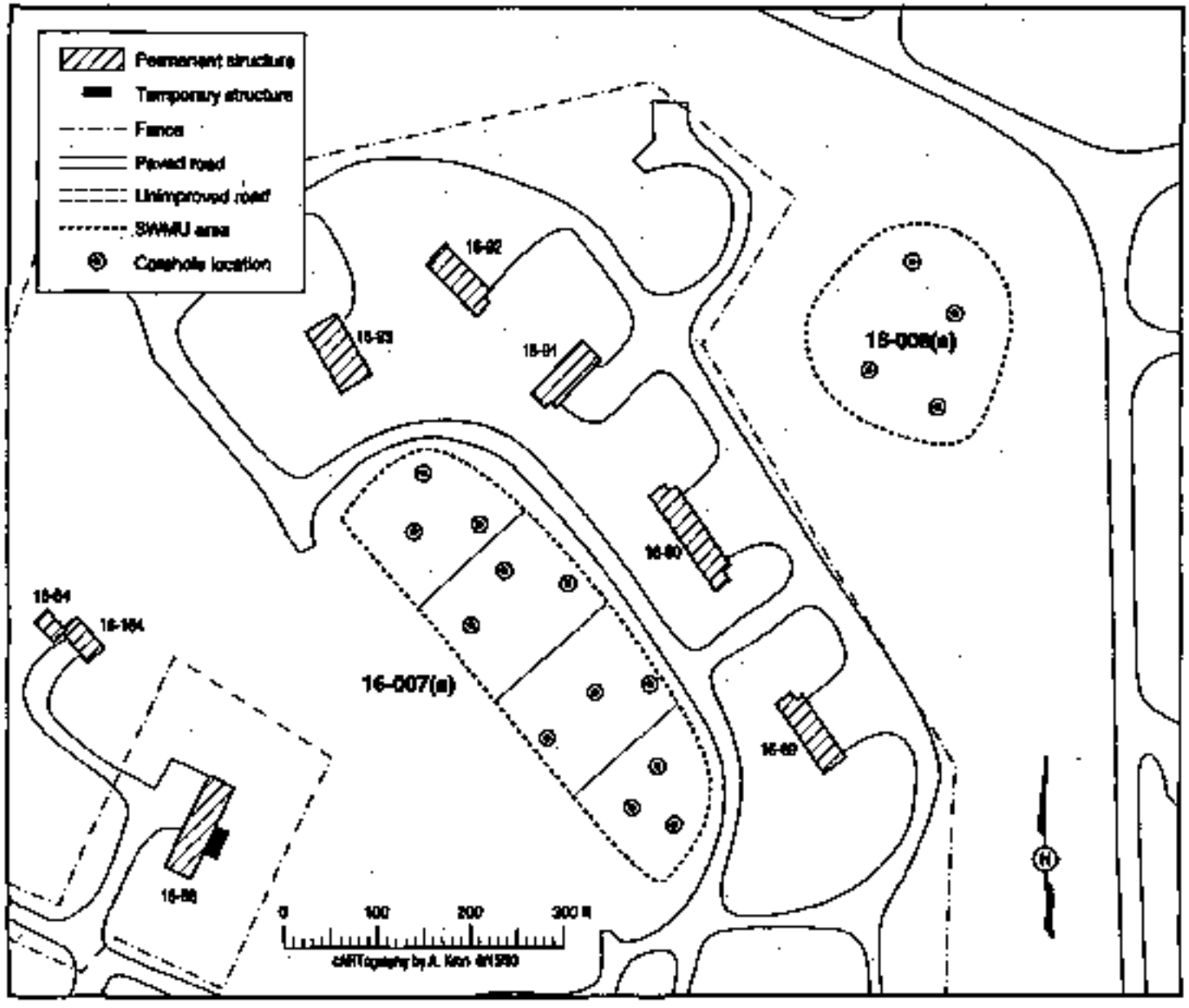


Fig. 5-46. Schematic sampling plan for ponds.

PRS Consolidation Worksheet

Site Type: Miscellaneous

Proposed PRS Number: 16-010(h)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-005(g)	HSWA	Former HE Filter Bed, 16-393	HE, Uranium, Barium	Under Investigation
16-010(h)	HSWA	Decommissioned HE Basket Wash Facility, 16-390	HE, Uranium, Barium	Under Investigation
16-010(j)	HSWA	Former HE Filter Bed/Burn Pad, 16-392	HE, Uranium, Barium	Under Investigation
16-010(k)	HSWA	Former HE Washwater Steel Trough, 16-1129	HE, Uranium, Barium	Under Investigation
16-010(l)	HSWA	Former HE Washwater Steel Trough, 16-1134	HE, Uranium, Barium	Under Investigation
16-010(m)	HSWA	Former HE Washwater Steel Trough, 16-1135	HE, Uranium, Barium	Under Investigation
16-010(n)	HSWA	Former HE Washwater Steel Trough, 16-1136	HE, Uranium, Barium	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the historical operation of the burn ground, the geographical proximity of all the associated PRSs and undistinguishable source terms, the transport mechanisms (surface and shallow subsurface) of common contaminants, and the investigation needed to assess the burn ground, these PRSs are proposed for consolidation.

Description of Aggregate:

These PRSs are part of the TA-16 burn ground operation that are not RCRA permitted under Part A application. PRS 16-005(g) is the former location of filter bed 16-393, which was decommissioned. The unit was built to receive HE residue washwater from the basket facility. Structure 16-406 was built on top the decommissioned facility 16-393. PRS 16-010(h), basket wash facility, was in operation from 1951-1966 and was used to clean filters from HE sumps and divert residual wash water to troughs (PRSs 16-010(k-n), then to pressure filter tanks, next to filter beds and last to a burn pad. The basket wash facility and troughs have not been used since 1966. The basket wash facility, TA-16-390, is currently used for storage.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

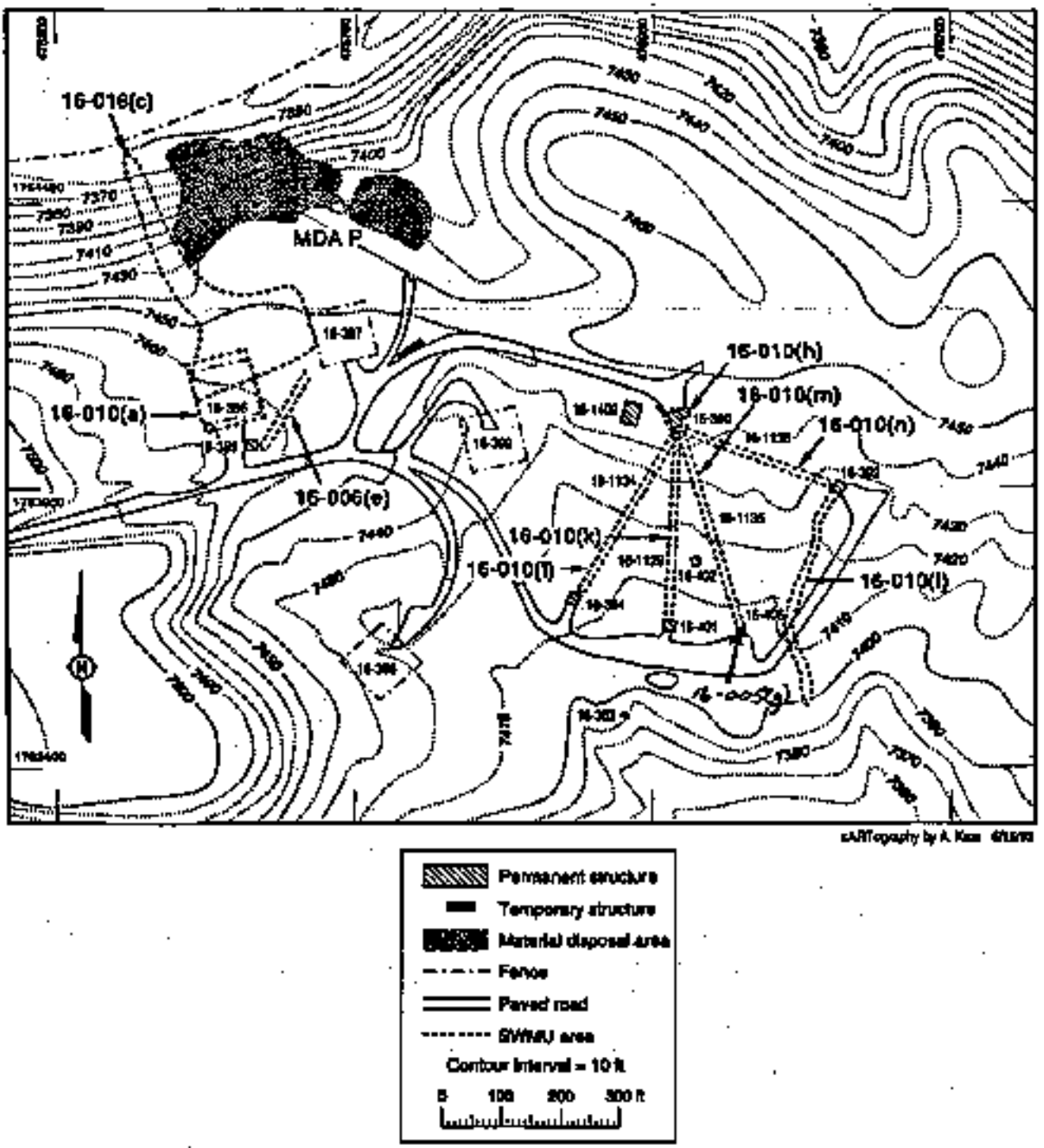


Fig. 5-34. TA-16 burning ground map.

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 16-013-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-006(h)	HSWA	Inactive Steam Heating Distribution Pump Pit	HE, barium, metals, SVOCs, asbestos	Under Investigation
16-013	HSWA	Former V-Site Waste Storage Area	HE, uranium, metals, VOCs, SVOCs	NFA Criterion 5
16-017(q)-99	HSWA	Former Storage Magazine	HE, barium, metals, SVOCs	Under Investigation
16-017(r)-99	HSWA	Former Nuclear Assembly Site/Storage Building	HE, uranium, barium, SVOCs, metals	Under Investigation
16-017(s)-99	HSWA	Former Nuclear Assembly Site/Storage Building	HE, uranium, barium, SVOCs, metals	Under Investigation
16-017(t)-99	HSWA	Former Laboratory/Equipment Storage Building	HE, metals, barium, uranium, VOCs, SVOCs	Under Investigation
16-017(u)-99	HSWA	Former HE Processing Building	HE, barium, SVOCs, uranium	Under Investigation
16-029(g2)	HSWA	Former HE Pit with Shake Table	HE, barium, metals, beryllium	Under Investigation
C-16-068	Non-HSWA	Former Building	HE, barium, metals, SVOVs, metals	Under Investigation
C-16-074	Non-HSWA	Former Drum Storage Area	HE, barium, metals, uranium, SVOCs	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history of the V-Site Courtyard Structure waste streams (primarily residual HE, metals, barium, and SVOCs), transport mechanisms (primarily surface and near surface contamination with some potential subsurface contamination), geographical proximity and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS encompasses an area, which was formerly the location of the V-Site Courtyard which was the location of miscellaneous activities in support of site HE testing and processing.

PRS 16-006(h) is the former steam heating distribution pump pit, TA-16-526 located against the berm retaining wall near TA-16-517. The pit was constructed in 1945 and houses a condensate pump. Condensate from radiators in the area was routed to the pump pit to be returned to the source boiler. The system served TA-16-515, -516, -519, and –520. Some pipes in the pit may be insulated with asbestos. PRS 16-029(g2) was pit TA-16-523. The concrete pit was constructed in 1944 and abandoned in place in 1945, filled with dirt and covered with a concrete slab. The pit held a shake table used in vibration tests on the Fat Man device, which had an HE component. No radioactive material was used at the site.

PRS 16-013 is a former waste storage area located in the V-Site Courtyard. The area is not an SAA for hazardous waste; drums of unusable material and other items were stored in the area. The area was once part of V-Site, constructed in 1944 for testing components of implosion devices. It later housed an X-ray system used to inspect explosive charges. In 1945, the entire V-Site area was absorbed into TA-16. The buildings and courtyard have been used for programmatic activities and storage since that time. PRS C-16-074 is the location of a decommissioned drum storage area located east of TA-16-517. Drums containing residual HE-contaminated hydraulic oil were stored at this site. Note: PRSs 16-006(h) and 16-029(g2) are not illustrated on any available maps; however they served the same building and process. AOC-16-068 is an area of potential soil contamination associated with former structure TA-16-522. The building has not been located on Laboratory engineering drawings or on aerial photographs; however, it is believed to be the unidentified building foundation west of TA-16-518.

PRS 16-017 consists of a group of 23 intact, abandoned structures associated with S-Site. These structures were proposed for NFA and deferral until D&D in the work plan. Due to consolidation, each of the 23 former structures in the series has been given an alpha identifier. PRS 16-017(q) is a former storage magazine associated with V-Site. PRSs 16-017(r and s) are the former sites of the final varnishing and assembly of the Fat Man device. Both buildings were later used for storage. PRS 16-017(t), (TA-16-518) initially housed a laboratory and was later used for equipment storage. PRS 16-017(u) (TA-16-516) was an HE processing building and the site of testing activities for the Trinity device. V-Site and all of the associated structures are considered an historical site. The entire site is inactive and any additional work will be deferred until the site's future as an historic site is determined.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

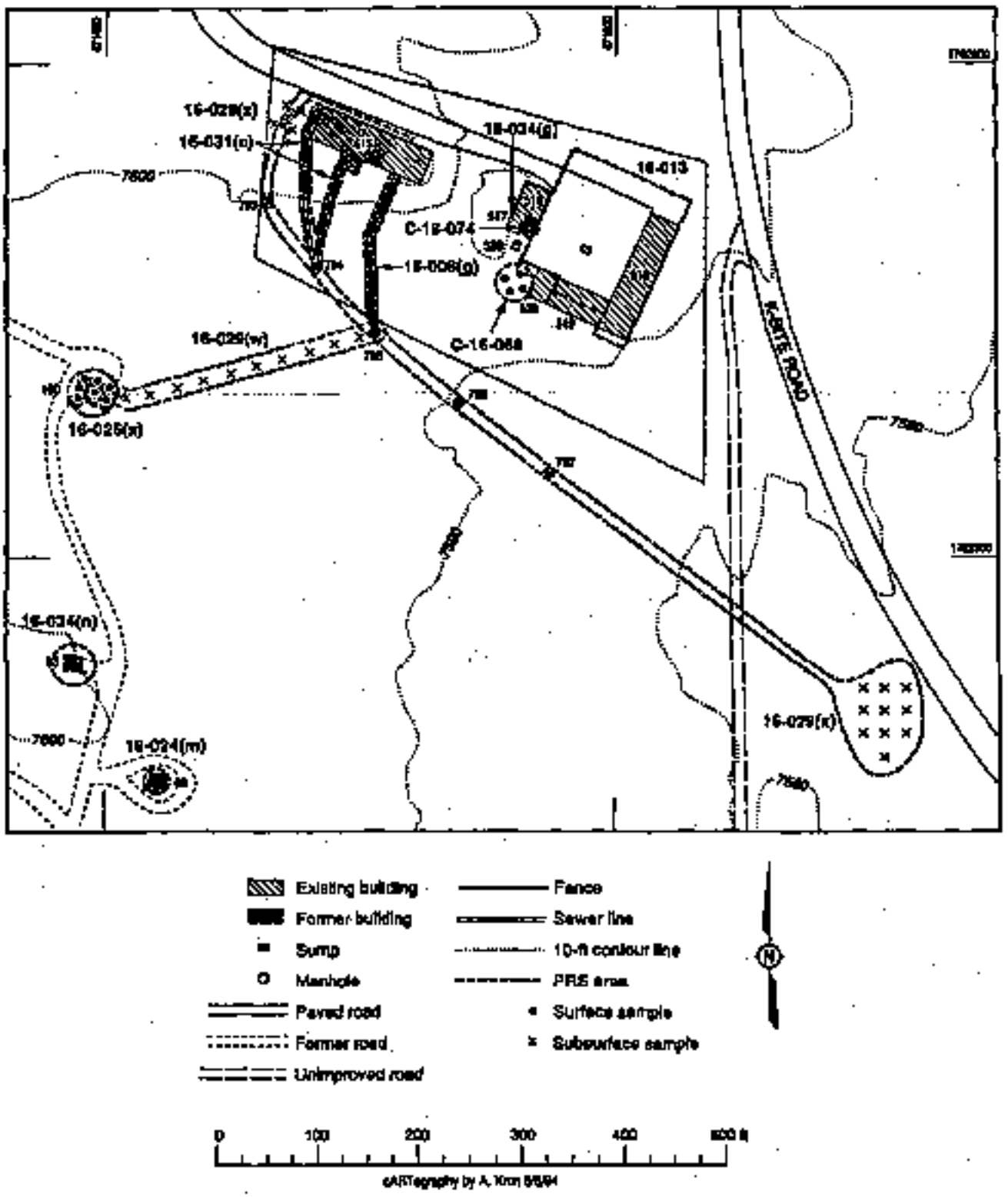


Fig. 5-95. Sampling locations at V-Site.

PRS Consolidation Worksheet

Site Type: Septic System

Proposed PRS Number: 16-016(c)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
16-006(e)	HSWA	Former Septic Tank, Drain Field and Outfall	HE, Barium, VOCs	Under Investigation
16-010(a)	HSWA	Former HE Flash Pad, 16-386	HE, Uranium, Barium	NFA Criterion 5
16-016(c)	HSWA	Former Barium Nitrate Storage Pile	HE, Barium	Under Investigation

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the historical operation of the burn ground, the geographical proximity of all the associated PRSs and undistinguishable source terms, the transport mechanisms (surface and shallow subsurface) of common contaminants, and the investigation needed to assess the burn ground, these PRSs are proposed for consolidation.

Description of Aggregate:

The consolidated PRSs are part of the TA-16 burn ground operation that are not RCRA permitted under the Part Application. PRS 16-006(e) is a septic tank constructed in 1963 including a drain field, outfall, and associated piping that served TA-16-389, a control shelter for the burn ground. The water closet, lavatory and floor drain in the control shelter discharged to the septic tank. PRS 16-010(a) is former HE flash pad 16-386 which is now used for materials storage. This structure was also designated as a barium storage site. PRS 16-016(c) is a former barium nitrate storage area/pile located near the decommissioned burn pad (TA-16-386). The pile was removed in the early 1970s.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

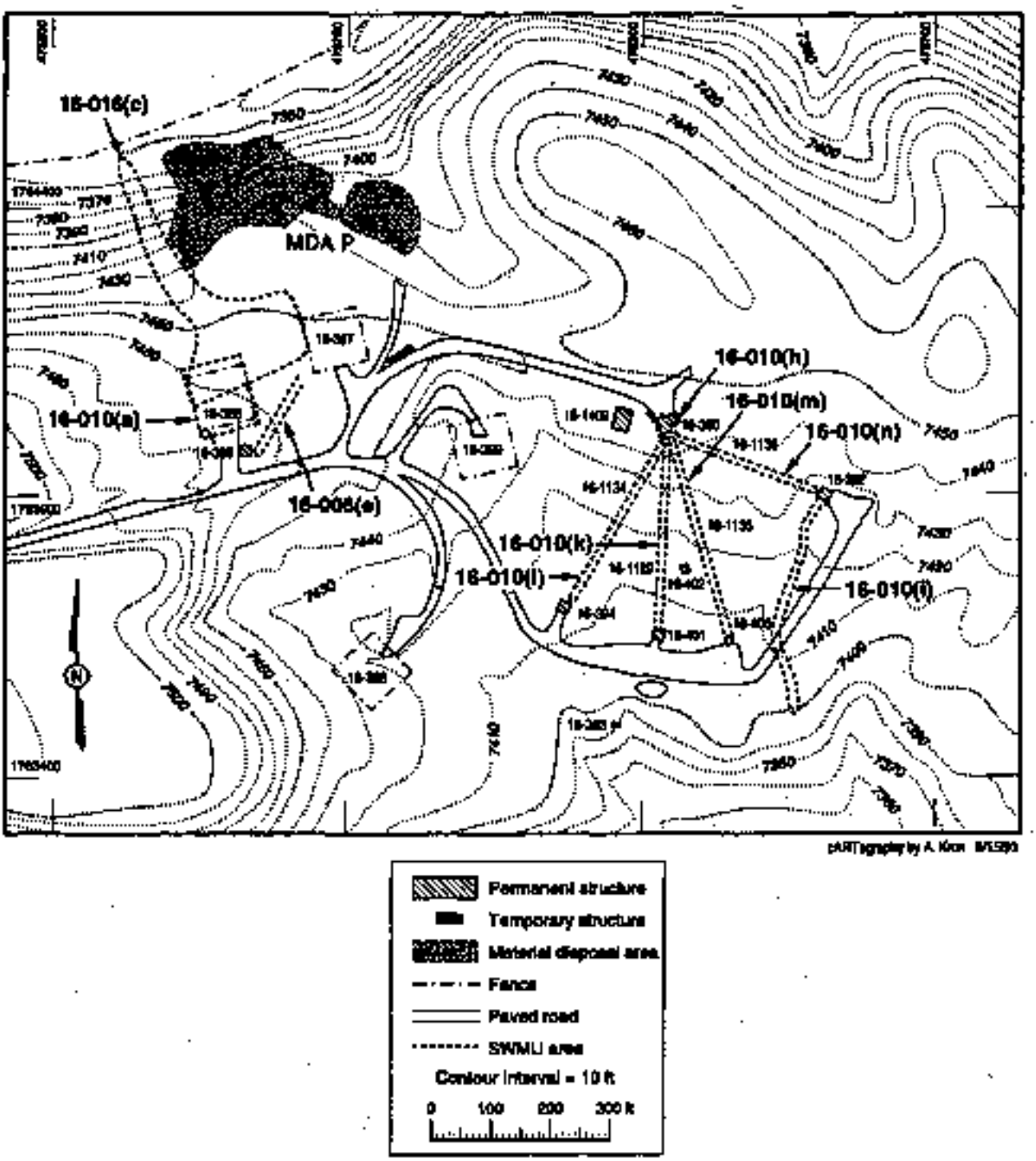


Fig. 5-34. TA-16 burning ground map.

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 16-017(I)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-017(I)-99	HSWA	Former Warehouse	HE, metals, SVOCs	Under Investigation
C-16-025	HSWA	Former Zia Cabinet Shop	Metals, SVOCs	NFA Criterion 3
C-16-026	HSWA	Former Zia Repair Shop	metals, SVOCs	NFA Criterion 3

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms (primarily surface and near surface), and the type of investigation needed to assess any residual contamination, it is proposed that the PRSs listed above be consolidated.

Description of Aggregate:

The consolidated PRS consists of a former warehouse, repair shop and cabinet shop in what was known as the administrative area of TA-16, east of Anchor Road. The administrative support area was used by the S-Site groups primarily for activities that did not involve HE processing

PRS 16-017 consists of a group of 23 intact, abandoned structures associated with S-Site. These structures were proposed for NFA and deferral until D&D in the work plan. Due to consolidation, each of the 23 former structures in the series has been given an alpha identifier. PRS 16-017(I) was warehouse TA-16-10 and was used primarily for the storage of materials used in the S-Site administrative support buildings. Casting molds were washed out in the north end of the building. The structure was removed in 1998. PRS C-16-025 was the ZIA cabinet and carpentry shop (TA-16-8) which was constructed in 1945 and removed in 1956. It consisted of wooden-frame construction and was located just west of TA-16-10. PRS C-16-026 was a Zia repair shop (TA-16-8) and was used primarily for the storage of tools and supplies. The building was also constructed in 1945 and removed in 1956 and was located just south of TA-16-10.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

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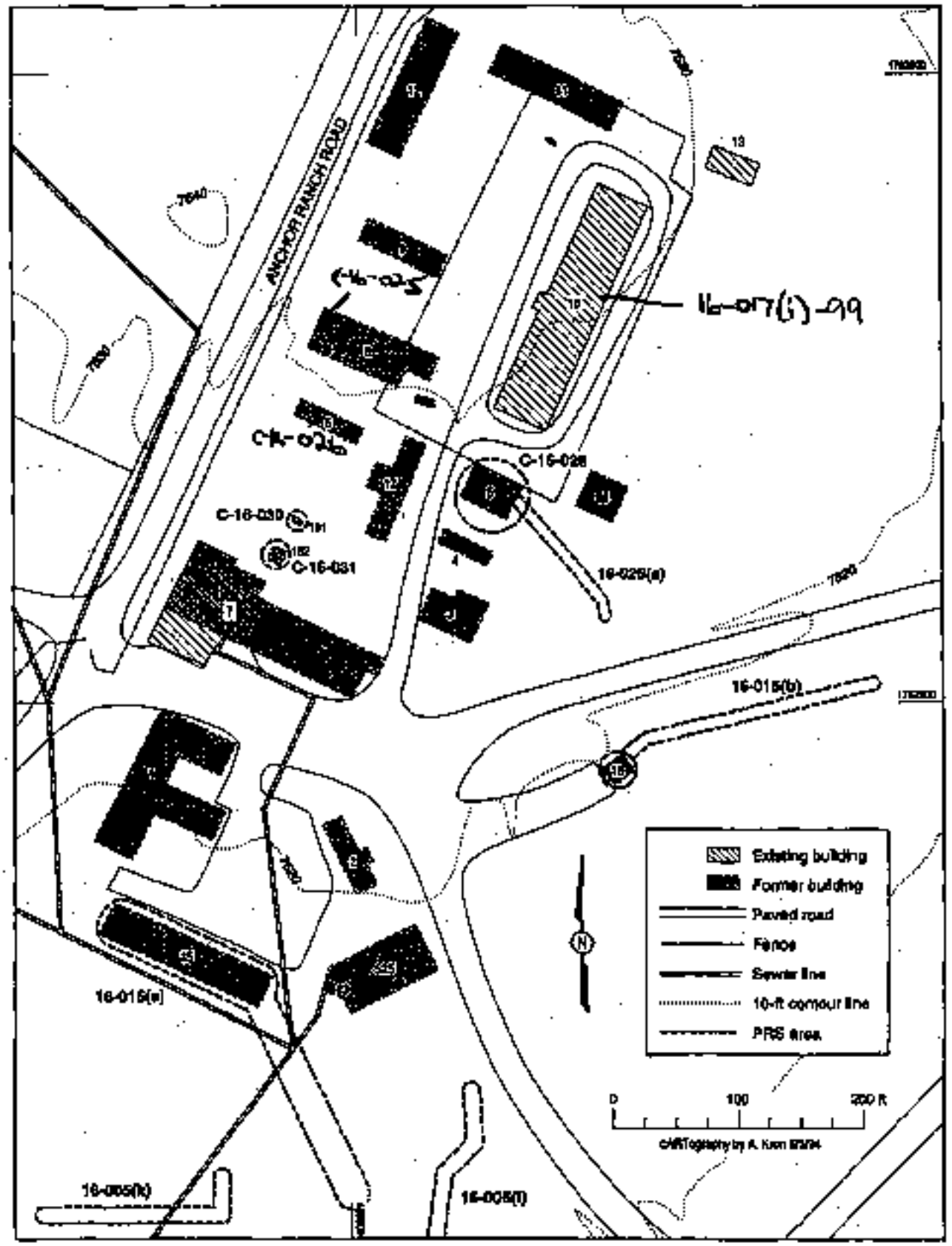

Fig. 5-61. Location of PRSs at the administration area.

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 16-021(c)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-003(k)	HSWA	13 Active HE Sumps and Drain Lines	HE, barium, metals, uranium, VOCs, SVOCs, cyanide	Under Investigation
16-021(c)	HSWA	Outfall from 13 Active HE Sumps	HE, barium, metals, uranium, VOCs, SVOCs, cyanide	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface and subsurface), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS contains 13 active HE sumps and drain lines and the associated outfall. PRS 16-003(k) consists of 13 active HE sumps and drain lines that serve TA-16-260, an HE machining facility that processes large quantities of explosives. Two of the sumps receive barium precipitation treatment waste, and periodically, HE charges with uranium attached have been machined at the facility. PRS 16-021(c) is the outfall associated with the 13 active sumps servicing TA-16-260.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

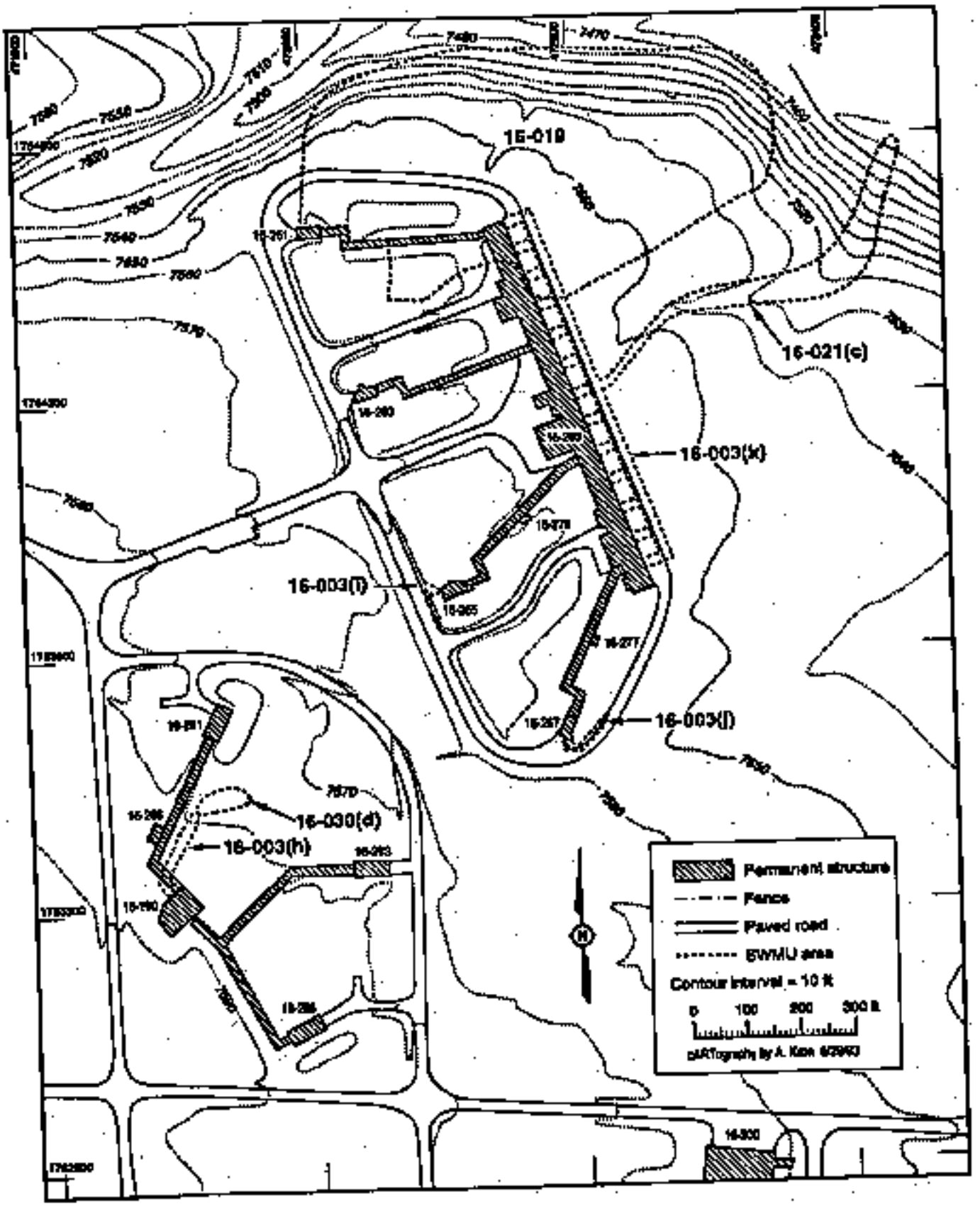

Fig. 5-6. TA-16-260 and TA-16-280 groups.

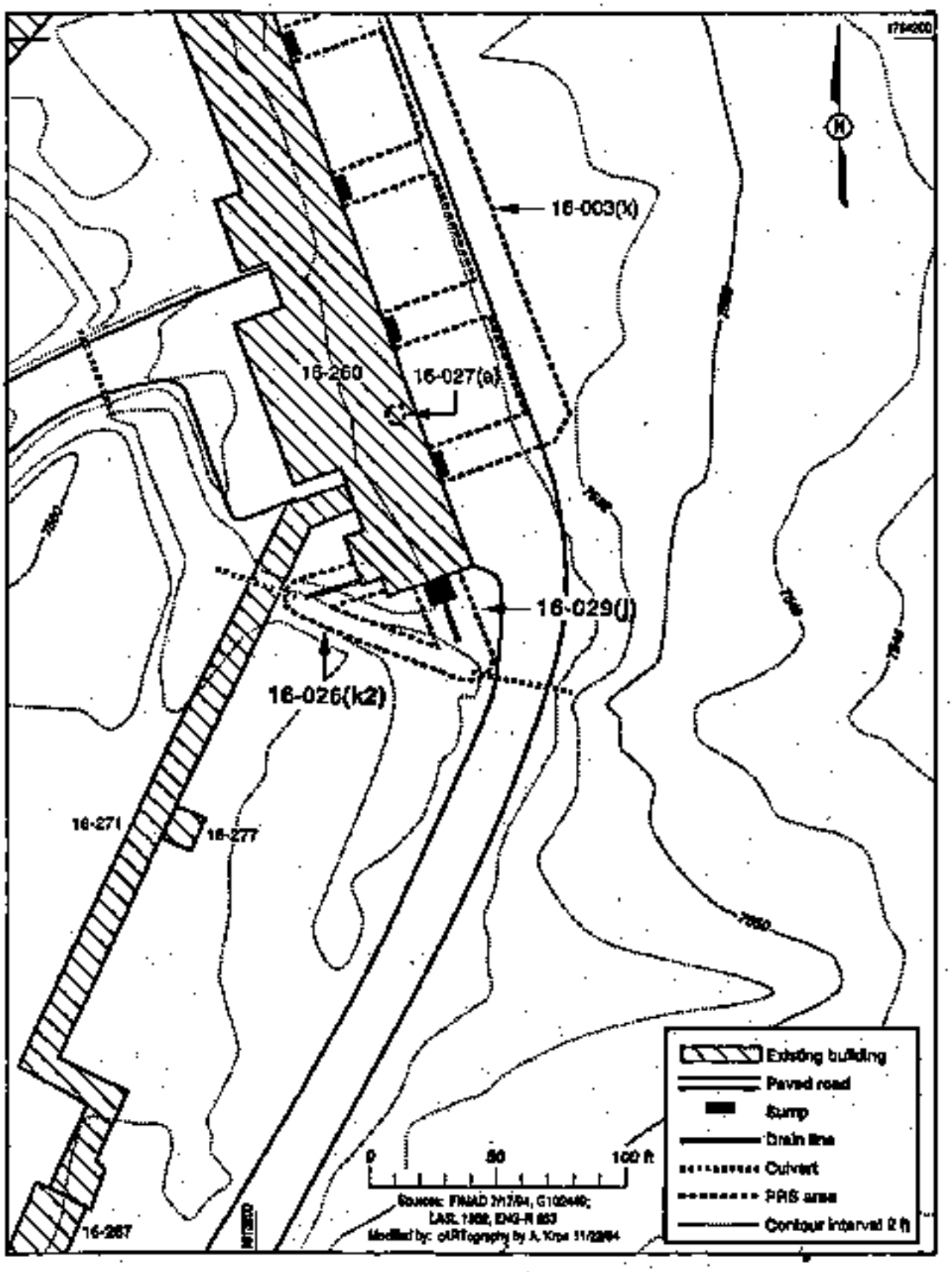

Fig. 5-28-10. Locations of SWMUs 16-026(k2) and 16-029(j) at TA-16-260.

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 16-025(y)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-025(y)	HSWA	Former Barium Nitrate Grinding Facility	HE, barium, metals	NFA Criterion 6
16-029(a2)	HSWA	Two Former HE Sumps, Drain Lines and Outfalls	HE, barium, metals	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that created, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history (GMX-2 Area), waste streams (primarily residual HE, metals, and barium), transport mechanisms (primarily surface and near surface contamination with potential subsurface contamination), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS encompasses an area which is the location of building footprints of former HE process buildings, former materials storage buildings, sumps, drain lines, and outfall systems associated with the GMX-2 HE process buildings. All of the former structures are related to and located along or in close proximity to the GMX-2 HE process buildings. The majority of the structures in this consolidated PRS were constructed in the 1940s primarily for experimental HE research and development activities. No production scale HE volumes were processed in this area. The GMX-2 area ceased to be used as an active site in the early 1950s. Most of the structures in the GMX-2 area were intentionally destroyed by burning in 1960. Residual debris from burning and the remaining subsurface structures were cleaned up in 1966.

PRS 16-025(y) is the former location of TA-16-55, the decommissioned barium nitrate grinding facility. The building housed a micropulverizer used to grind barium nitrate from 1944 – 1945. The building was subsequently used for numerous purposes including lead storage, instrument calibration, and materials storage. PRS 16-029(a2) is the former location of two sumps, drain lines and outfalls which served TA-16-55.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

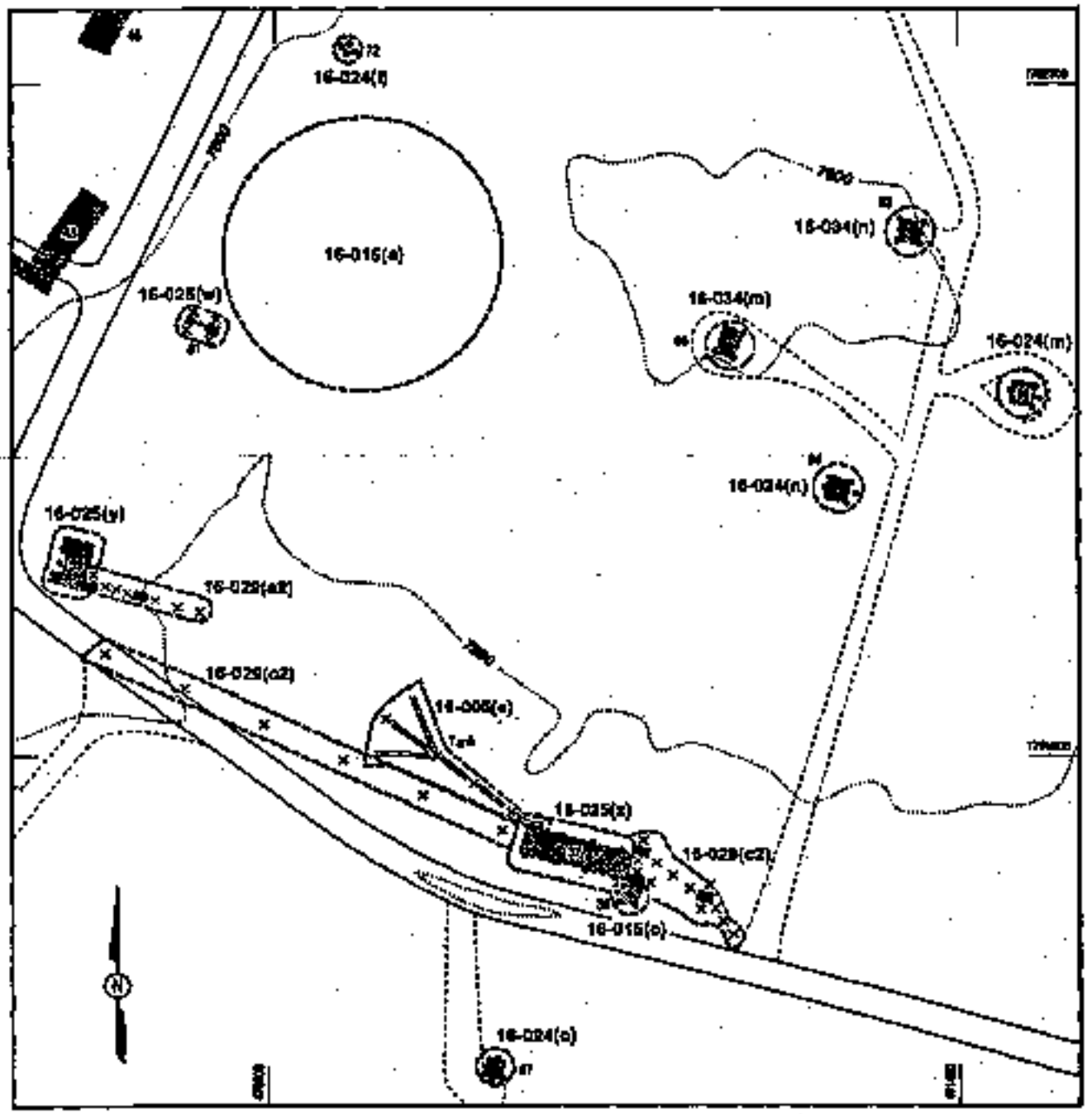

Fig. 5-78. Sampling locations at GMX-2 east.

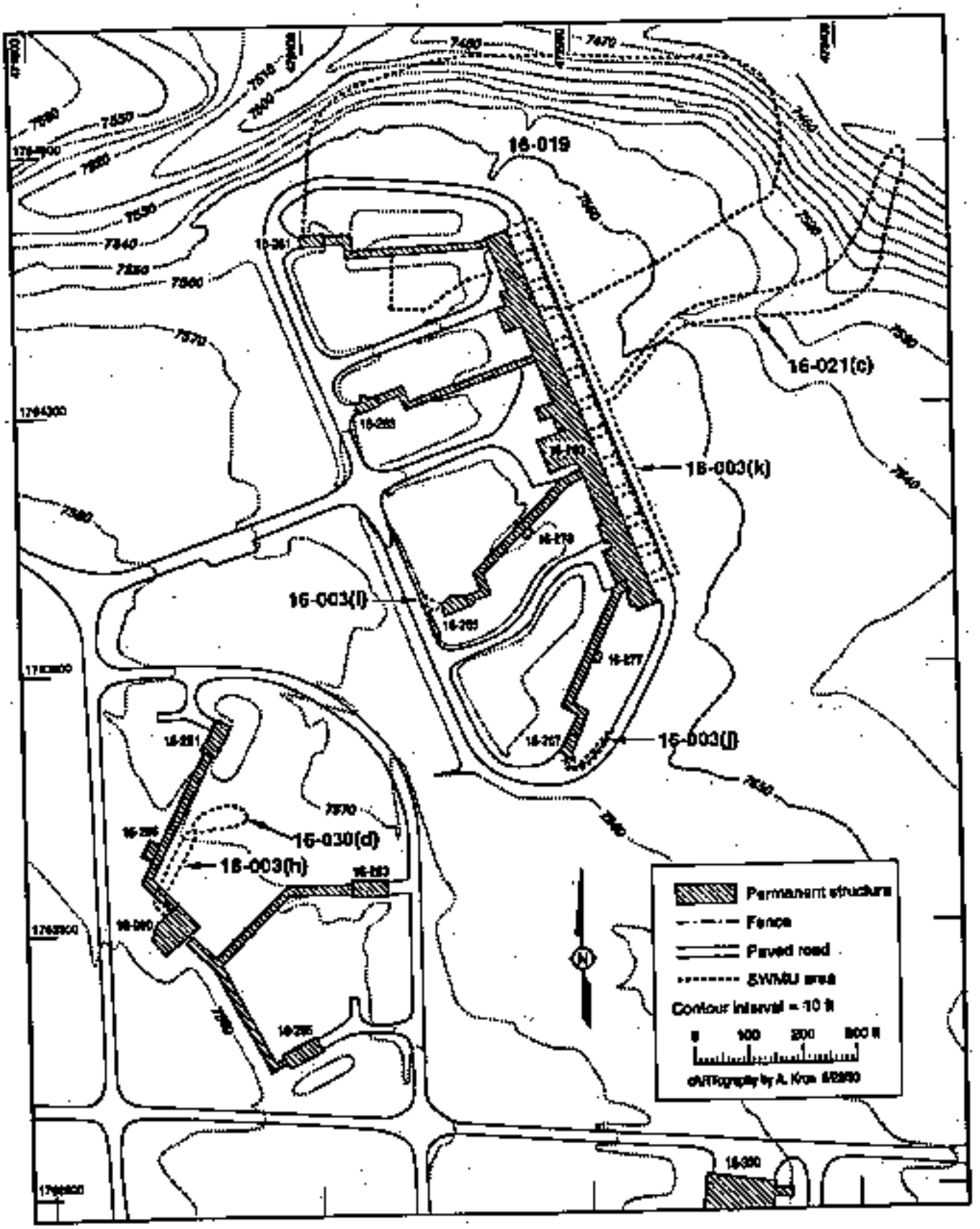

Fig. 5-6. TA-16-260 and TA-16-280 groups.

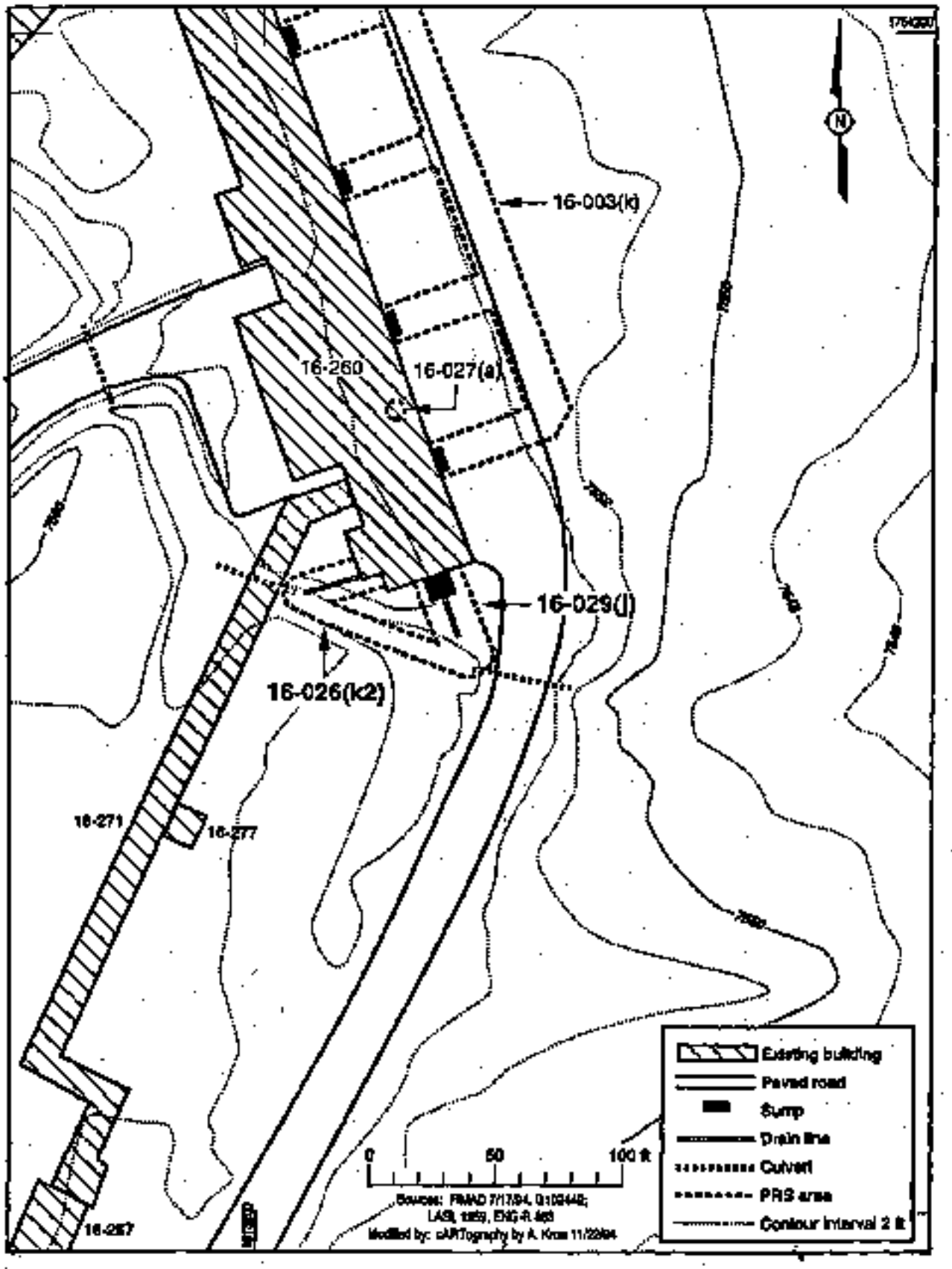

Fig. 5-28-10. Locations of SWMUs 16-026(k2) and 16-029(j) at TA-16-260.

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls **Proposed PRS Number:** 16-026(b)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-026(b)	HSWA	Outfall from Inactive HE Sumps and Drain Lines	HE, barium, VOCs, SVOCs, cyanide	Under Investigation
16-026(c)	HSWA	Outfall from Inactive HE Sumps and Drain Lines	HE, barium, VOCs, SVOCs	NFA Criterion 5
16-026(d)	HSWA	Outfall from Inactive HE Sumps and Drain Lines	HE, barium, VOCs, SVOCs	NFA Criterion 5
16-028(a)	HSWA	Outfall from Inactive HE Sumps and Drain Lines	HE, barium, VOCs, SVOCs	Under Investigation
16-029(a)	HSWA	Two Inactive HE Sumps and Drain Lines	HE, barium, VOCs, SVOCs, cyanide	Under Investigation
16-029(b)	HSWA	Two Inactive HE Sumps and Drain Lines	HE, barium, VOCs, SVOCs	Under Investigation
16-029(c)	HSWA	Two Inactive Sumps and HE Drainlines	HE, barium, VOCs, SVOCs	Under Investigation
16-029(d)	HSWA	Two Inactive HE Sumps and Drain Lines	HE, barium, VOCs, SVOCs	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface, subsurface and sediments), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRSI contains inactive HE sumps, drain lines and outfalls associated with inactive rest houses on the west side of the 300-Line. The rest houses are located adjacent to the process buildings and each rest house has a pair of sumps. The effluent from each sump drained into the gutter along the roadway adjacent to the rest houses. Resthouse TA-16-307 served TA-16-306, the plastics production facility. The rest house was used for storage of molds and other materials used in the plastics development facilities. The building previously housed a solvent disassembly tank used for removing HE from test devices which was the principal cause of HE contamination in the outfall drainage channel.

Resthouse TA-16-305 served TA-16-304 and-306, the plastics development and production facility. The rest house was used for storage of chemicals used in plastics processing. Filament winding of development weapons components is also conducted at TA-16-305. Resthouse TA-16-303 served TA-16-302, an HE casting facility. The rest house was used for storage of raw materials used in the casting process, and HE castings produced in the casting building. Resthouse TA-16-301 served TA-16-300, the mock HE processing facility. The rest house was used for storage of raw materials used in the preparation of mock HE.

NMED Concurrence: _____ **Date:** _____

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DOE Concurrence: _____ **Date:** _____

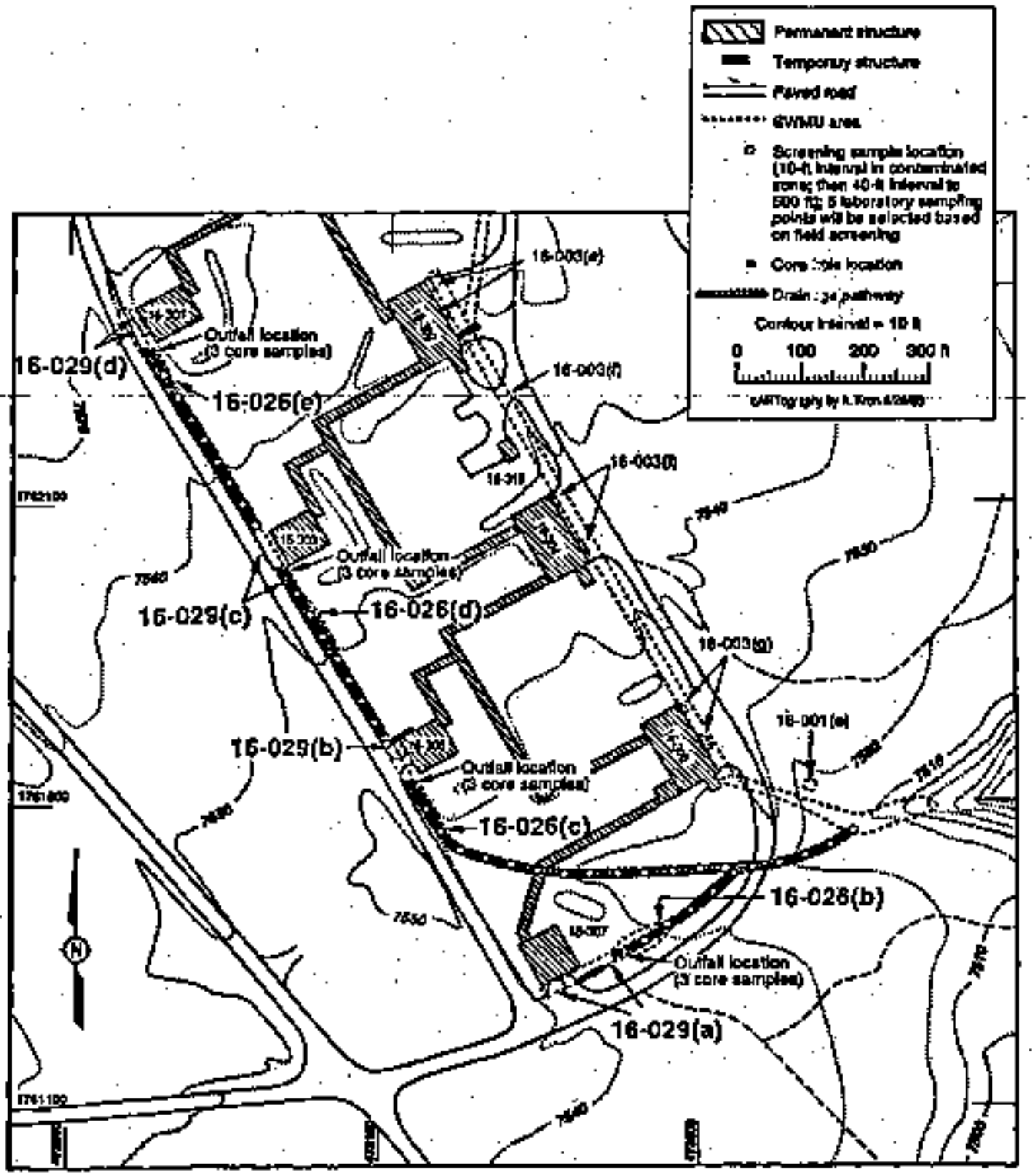

Fig. 5-21. Schematic field screening sampling locations for SWMUs 16-026(b–e) and 16-029(a–d).

Site Type: Former Structures

Proposed PRS Number: 16-026(q)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
16-005(d)	HSWA	Former Septic Tank and Drain Line	HE, metals, uranium, VOCs, SVOCs	Under Investigation
16-017(h)-99	HSWA	Former HE Casting Building	HE, barium, SVOCs	Under Investigation
16-017(k)-99	HSWA	Former Storage Magazine	HE, barium, SVOCs	Under Investigation
16-025(k)	HSWA	Former HE Powder Inspection Room (with addition)	HE and barium	NFA Criterion 5
16-025(l)	HSWA	Former HE Casting Room	HE, barium, metals	Under Investigation
16-026(q)	HSWA	Former Sumps, Drain Lines, and Outfalls from HE Casting Room	HE, metals, uranium, VOCs, SVOCs	Under Investigation
16-026(r)	HSWA	Former Outfall	HE, metals, uranium, VOCs, SVOCs	Under Investigation
16-026(r)	HSWA	Former Drain Line	HE and barium	Under Investigation
16-031(d)	HSWA	Decommissioned Cooling Tower	HE, barium, metals	NFA Criterion 5
16-032(c)	HSWA	Former Sumps, Drain Lines and Outfalls	HE, VOCs, SVOCs, metals	Under Investigation
16-034(a)	HSWA	Former Secondary Sump, Drain Line and Outfall	HE, barium, metals	Under Investigation
C-16-006	Non-HSWA	Former Solvent Storage Building	VOCs, SVOCs	Under Investigation
C-16-065	Non-HSWA	Former Drum Storage Platform	HE, barium, metals	NFA Criterion 5

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number:

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history (20s-Line), waste streams (primarily residual HE, metals, barium, and SVOCs), transport mechanisms (primarily surface and near surface contamination with potential subsurface contamination), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS encompasses an area which is the location of footprints of former HE process buildings, former materials storage buildings, one former septic tank and drain line, one former cooling tower, former sumps, drain lines, and outfall systems associated with the 20s-Line of HE process buildings. All of the former structures are related to and located along or in close proximity to the 20s-Line of HE process buildings. The 20s-Line contained several HE production facilities in a single line of buildings that were connected by enclosed walkways. The buildings in the 20s-Line were not burned until 1968. The residual debris from burning and the subsurface structures such as sumps and drain lines were cleaned up in 1969.

PRS 16-017 consists of a group of 23 intact, abandoned structures associated with S-Site. These structures were proposed for NFA and deferral until D&D in the work plan. Due to consolidation, each of the 23 former structures in the series has been given an alpha identifier. PRS 16-017(h) is the former HE casting building TA-16-27. The structure was removed in 1998. PRS 16-005(d), (TA-16-177) served a lavatory in TA-16-27, which housed an HE production casting operation. This building was highly contaminated with HE. PRS 16-025(k), (TA-16-24) housed an analytical laboratory and PRS 16-025(f) (TA-16-25) was the location of HE powder inspections. PRS 16-026(q) consists of the sumps, drains and outfalls for TA-16-27, the HE production casting building and the main production casting facility for S-Site from 1945 through 1953. After casting operations were moved into the 300-Line in the early 1950s, TA-16-27 was used as a warehouse. The building was abandoned in 1970 but has not yet been decommissioned; however, the sumps and drain lines were removed in 1968 and disposed at MDA L. PRS 16-029(r) is the location of the former drain line which served TA-16-25, the HE powder inspection building in the 20s-Line. A drainage ditch is evident at the location of the former drain line and was determined to be contaminated with HE in 1970. PRS 16-029(f2) is the former location of the decommissioned sump, drain line and outfall from the analytical laboratory (TA-16-24). This sump and drain line were removed and disposed at TA-54 and noncombustible debris was disposed of at MDA P. PRS 16-032(c) is the location the former sumps, drain lines and outfalls that served TA-16-26, the first HE casting building at S-Site. The building was renovated in 1945 adding the HE sump. This sump discharged to a secondary sump which discharged to a drain line and the outfall. The rock-lined ditch which served as the outfall is still present. TA-16-26 was destroyed in 1958 and the drains and sumps were removed and disposed at TA-54 and noncombustible debris was disposed of at MDA P. PRS 16-034(a) is the building footprint for TA-16-24, the former analytical laboratory discussed above.

PRS 16-031(d) is the location of the decommissioned cooling tower (TA-16-28). The tower was used to store water used in cooling jackets for the casting operations in TA-16-27. The tower was concurrently with TA-16-27 in 1945 and demolished in1968. There is no record of a sump or chromate use. PRS C-16-008 is the former location of a solvent storage building (TA-16-148) located west of TA-16-24. The structure was quite small and was removed prior to 1950. PRS C-16-065 is the location of a former drum storage platform (TA-16-185). The structure consisted of a concrete bandstand adjacent to the large casting building (TA-16-27). The storage area was completed in 1948 and abandoned in place in 1960 and removed in 1968 when the 20s-Line was decommissioned. PRS 16-017(k) is a former storage magazine for TA-16-27 which was removed in 1995.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

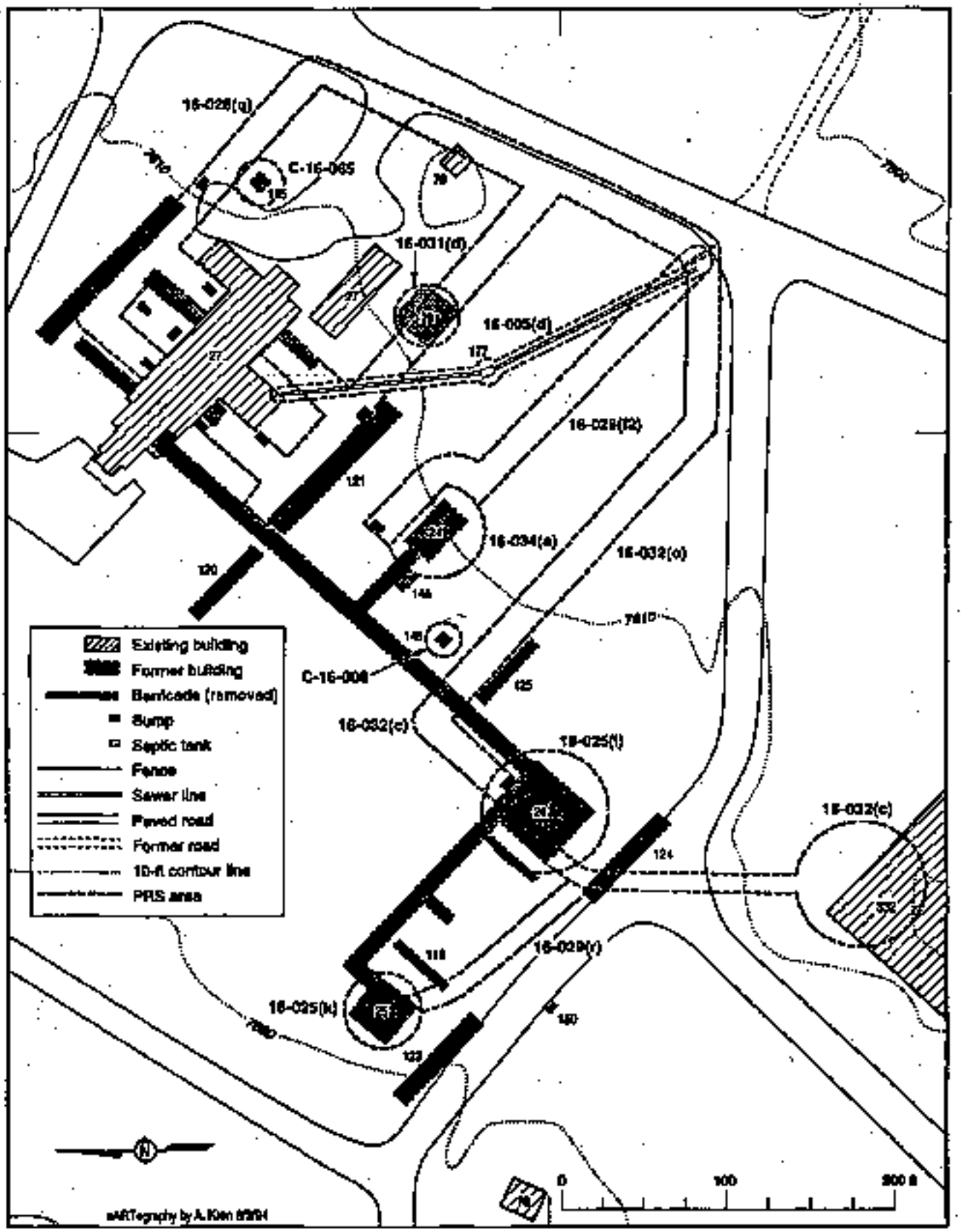

Fig. 5-59. Locations of PRSs at GMX-3 central.

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 16-029(b2)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-029(b2)	HSWA	Two Former HE Sumps, Drain Lines and Outfalls	HE and barium	NFA Criterion 5
C-16-005	Non-HSWA	Former HE processing Facility	HE, barium, metals	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history (GMX-2 Area), waste streams (primarily residual HE, metals, and barium), transport mechanisms (primarily surface and near surface contamination with potential subsurface contamination), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS encompasses an area which is the location of building footprints of former HE process buildings, former materials storage buildings, sumps, drain lines, and outfall systems associated with the GMX-2 HE process buildings. All of the former structures are related to and located along or in close proximity to the GMX-2 HE process buildings. The majority of the structures in this consolidated PRS were constructed in the 1940s primarily for experimental HE research and development activities. No production scale HE volumes were processed in this area. The GMX-2 area ceased to be used as an active site in the early 1950s. Most of the structures in the GMX-2 area were intentionally destroyed by burning in 1960. Residual debris from burning and the remaining subsurface structures were cleaned up in 1966.

PRS C-16-005 is the former location of TA-16-53, the decommissioned HE processing facility. The building housed an hydraulic press for HE processing. HE machining and casting may also have been carried out in this building. Additionally, the building may have been used as an optical equipment storage facility. PRS 16-029(b2) is the former location of two sumps, drain lines and outfalls which served TA-16-53.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

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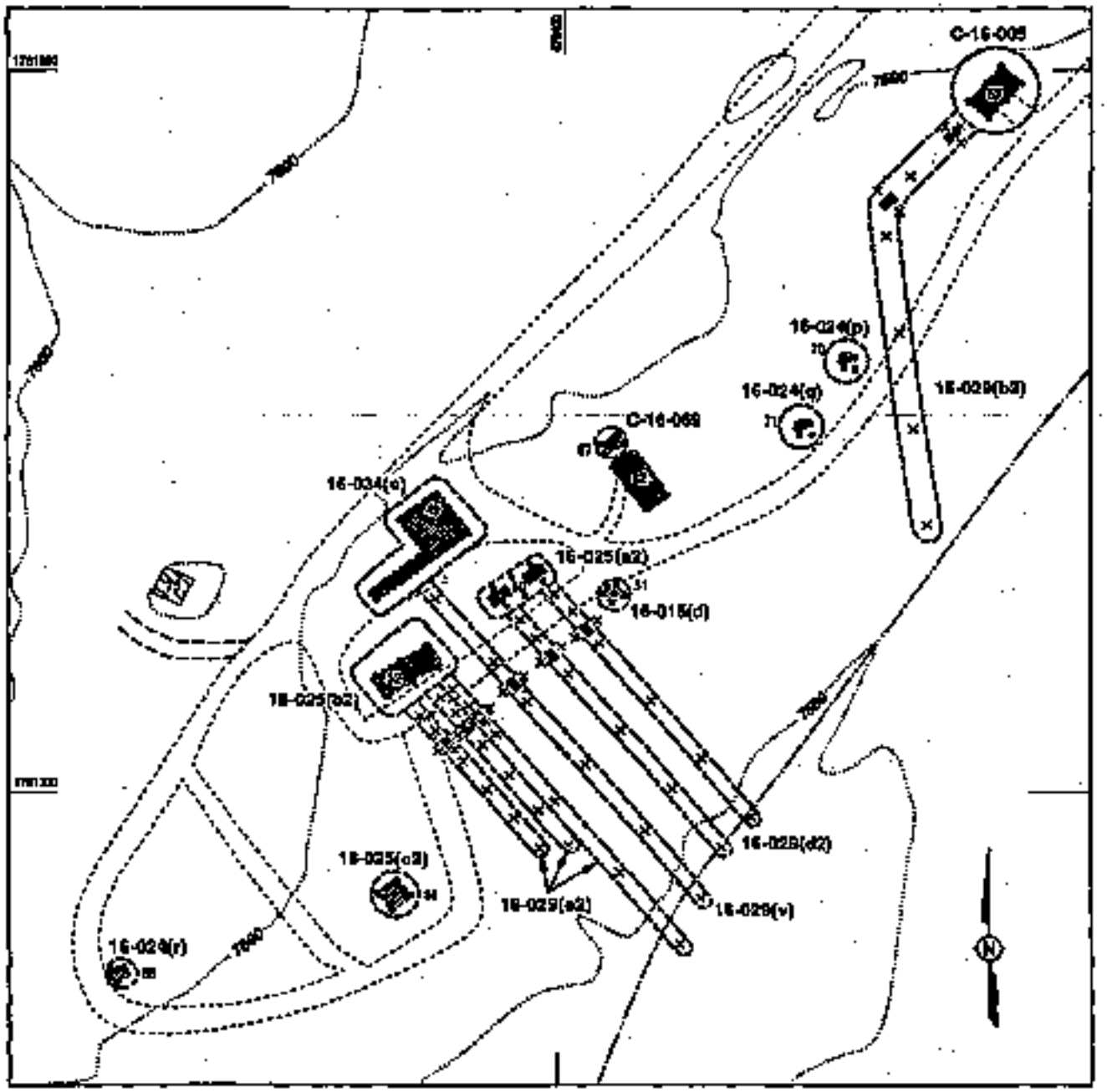

Fig. 5-77. Sampling locations at GMX-2 south.

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 16-029(c2)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-005(e)	HSWA	Three Former HE Septic System	HE, metals, carbon-14, VOCs, SVOCs	Under Investigation
16-015(c)	Non-HSWA	Former HE Steam Cleaning Building	HE, barium, metals, SVOCs	Under Investigation
16-025(z)	HSWA	Former Explosives Testing Facility	HE, metals, carbon-14, VOCs, SVOCs	Under Investigation
16-029(c2)	HSWA	Former HE Sumps, Drain Lines and Outfalls	HE, metals, carbon-14, VOCs, SVOCs	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history (GMX-2 Area), waste streams (primarily residual HE, metals, barium, and SVOCs), transport mechanisms (primarily surface and near surface contamination with potential subsurface contamination), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS encompasses an area which is the location of footprints of former HE process buildings, former materials storage buildings, sumps, drain lines, and outfall systems associated with the GMX-2 HE process lines. All of the former structures are related to and located along or in close proximity to the GMX-2 HE process lines. The majority of the structures in this consolidated PRS were constructed in the 1940s primarily for experimental HE research and development activities. No production scale HE volumes were processed in this area. The GMX-2 area ceased to be used as an active site in the early 1950s. Most of the structures in the GMX-2 area were intentionally destroyed by burning in 1960. Residual debris from burning and the remaining subsurface structures were cleaned up in 1966.

PRS 16-015(c) is the former location of TA-16-36, a decommissioned HE steam cleaning building. PRS 16-025(z) is the former location of TA-16-37, a former explosives testing facility which included casting operations. The building was equipped with an elaborate plumbing system designed to facilitate HE development and vacuum overcasting operations. PRS 16-029(c2) is the former location of three sumps, drain lines and outfalls which served TA-16-37. PRS 16-005(e) is the location of the former septic system (TA-16-179) that served the lavatories and darkrooms in TA-16-37, the explosives testing facility.

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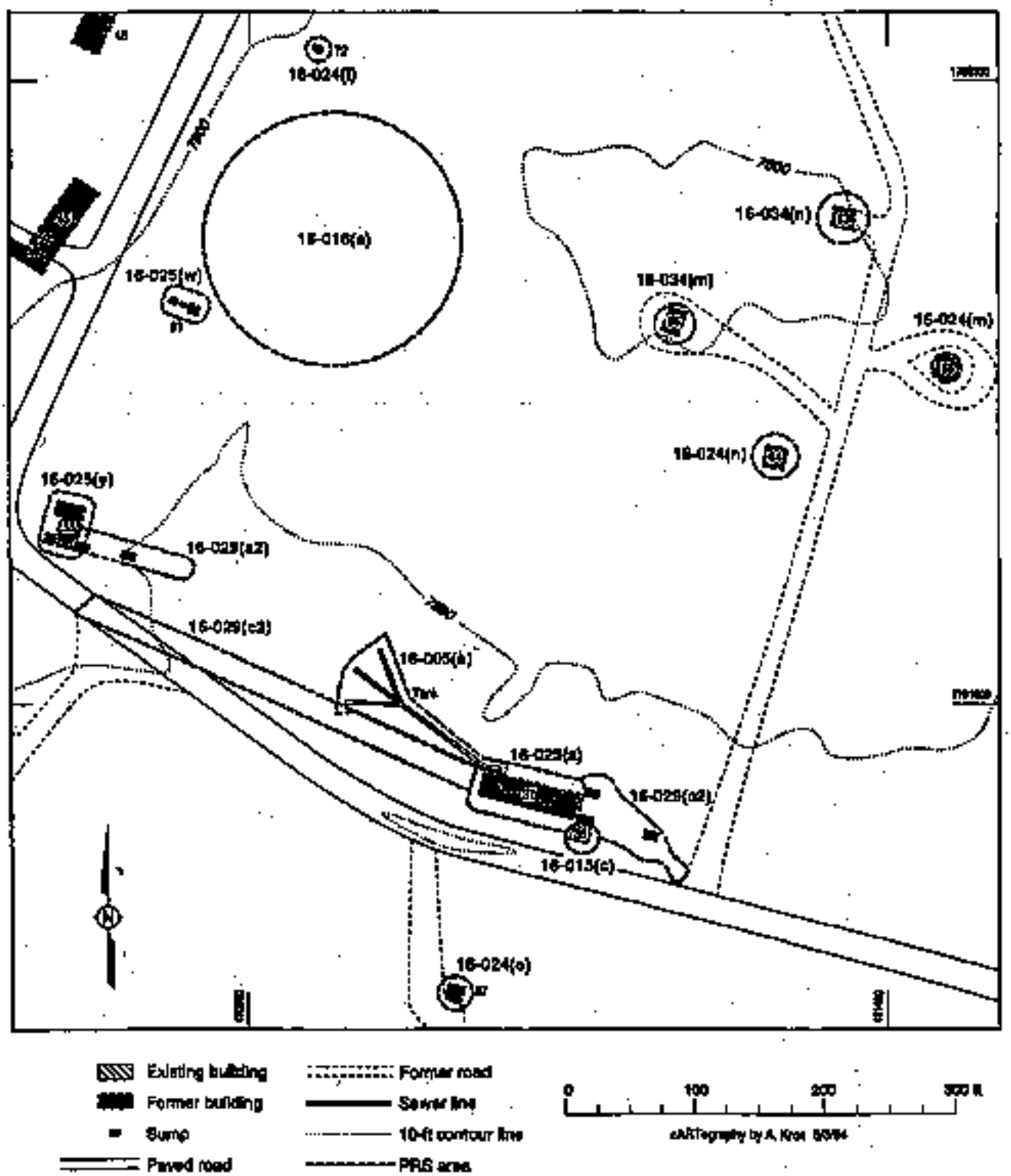

Fig. 5-74. Locations of PRSs at GMX-2 east.

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 16-029(e)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
16-026(h2)	HSWA	Drainline/Outfall from HE Sump	HE, Barium, SVOCs	Under Investigation
16-029(e)	HSWA	One Inactive HE Sump	HE, Barium, SVOCs	Under Investigation

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface and subsurface), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS contains one inactive HE sump and the associated drainline and outfall from TA-16-360, a packing and shipping facility for finished HE products. The sump and outfall most likely received wash water from past cleaning practices.

NMED Concurrence: _____ *Date:* _____

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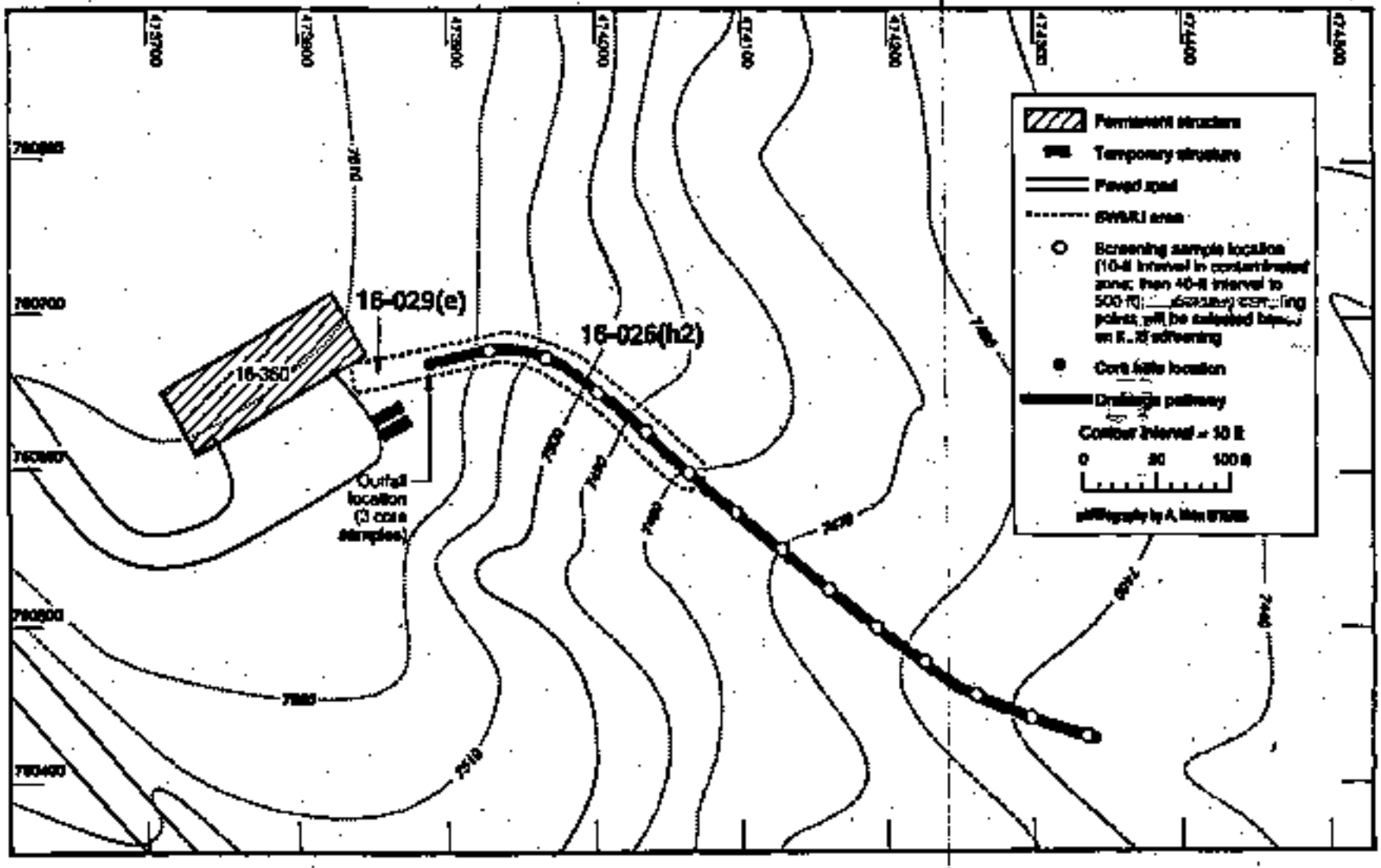
DOE Concurrence: _____ *Date:* _____


16-029(e)
16-026(h2)
16-360
Outfall location (3 core samples)
Permanent structure
Temporary structure
Paved road
SWMU area
Screening sample location (10-ft interval in contaminated zone; then 40-ft interval to 500 ft; ... sampling points will be selected based on field screening
Core hole location
Drainage pathway
Contour interval = 10 ft
0
50
100 ft
7910
7920
7930
7940
7950
7960
7970
7980
7990
8000
8010
8020
8030
8040
8050
8060
8070
8080
8090
8100
8110
8120
8130
8140
8150
8160
8170
8180
8190
8200
8210
8220
8230
8240
8250
8260
8270
8280
8290
8300

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 16-029(g)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
16-029(a)	HSWA	Outfall from Active HE Sump and Drain Line	uranium, VOCs, SVOCs, HE	NFA Criterion 1
16-029(g)	HSWA	One Active HE Sump and Drain Line	uranium, VOCs, SVOCs, HE	Under Investigation

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity? *4. Are the transport mechanisms and pathways similar?*	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface, subsurface and sediments), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS contains one active HE sump, drain line and outfall associated with TA-16-450, a materials testing facility. TA-16-450 was constructed in the early 1950s as a chemical engineering laboratory for explosives; however, it was never used as such and HE was never used in the building. The sump receives wash-down water from floor trenches in Room 1D1 which is discharged to the NPDES-permitted outfall (EPA 04A081).

NMED Concurrence: _____ *Date:* _____

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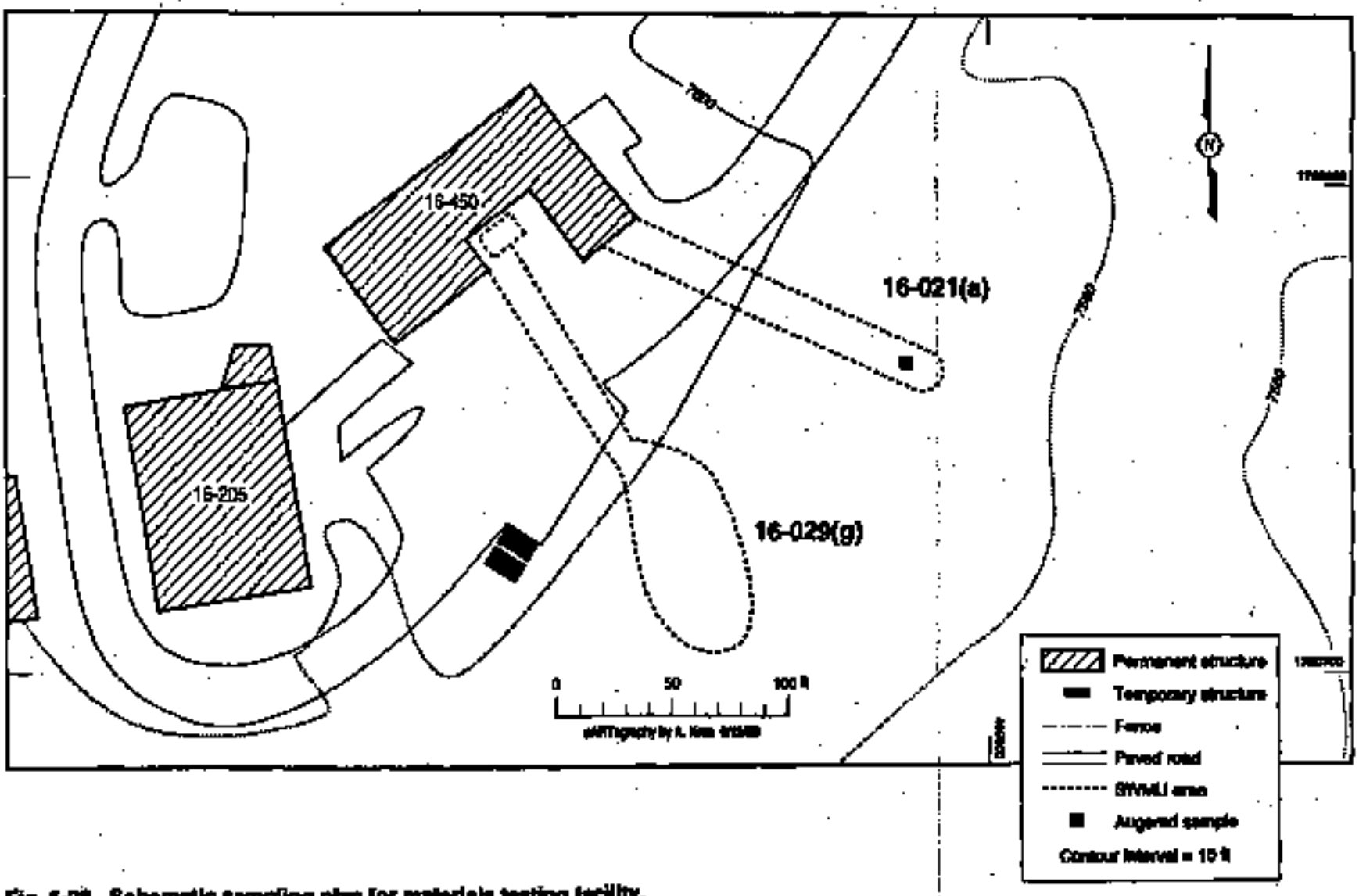

Fig. 5-28. Schematic sampling plan for materials testing facility.

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 16-029(h)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-003(p)	Non-HSWA	One Inactive HE Sump	HE, Barium, SVOCs	Under Investigation
16-029(h)	HSWA	Drainline/Outfall from HE Sump	HE, Barium, SVOCs	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history of the North, South, East, West Machining Line waste streams (primarily residual HE, metals, and barium), transport mechanisms (primarily surface and near surface contamination with some potential subsurface contamination), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS contains one inactive HE sump and the associated drainline and outfall from TA-16-345 that was a rest house that served as an HE storage facility for TA-16-340. The ia HE was stored in containers. The sump and outfall most likely received wash water from past cleaning practices.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

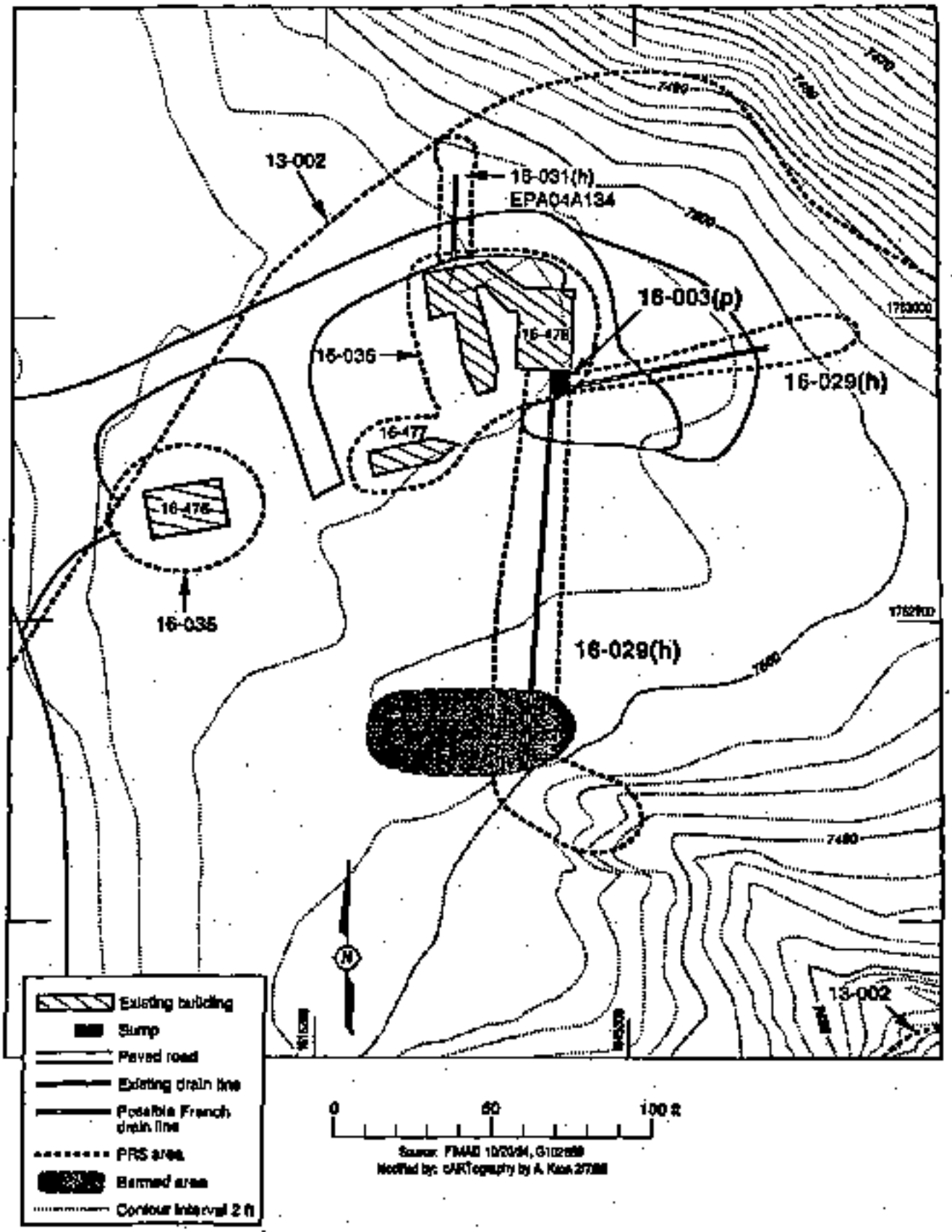

Fig. 5-29-1. SWMUs 16-003(p) and 16-029(h) at TA-16-476.

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 16-9025(d)

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-025(d)	HSWA	Former HE Equipment and Control Building	HE, barium, metals	NFA Criterion 3
16-025(g)	HSWA	Former HE Machining Building	HE, barium, metals	NFA Criterion 5
16-025(h)	HSWA	Former HE Machining Building	HE, barium, metals	NFA Criterion 5
16-025(i)	HSWA	Former HE Machining Building	HE, barium, metals	Under Investigation
16-025(j)	HSWA	Former HE Machining Building	HE, barium, metals	NFA Criterion 5
16-029(h2)	HSWA	Former HE Sump, Drain Line and Outfall	HE, barium, metals	Under Investigation
16-029(m)	HSWA	Former HE Sump, Drain Line and Outfall	HE, barium, metals	Under Investigation
16-029(n)	HSWA	Former HE Sump, Drain Line and Outfall	HE, barium, metals	Under Investigation
16-029(o)	HSWA	Former HE Sump, Drain Line and Outfall	HE, barium, metals	Under Investigation
16-029(p)	HSWA	Former HE Sump, Drain Line and Outfall	HE, barium, metals	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history of the North, South, East, West Machining Line waste streams (primarily residual HE, metals, and barium), transport mechanisms (primarily surface and near surface contamination with some potential subsurface contamination), geographical proximity, an the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS encompasses an area which was formerly the location of HE machining buildings (TA-16-95, -96, -97, and -98) which are referred to as "West, North, East and South," including their sumps and drain lines. The buildings were all small and of wooden frame construction on a concrete slab. Each building was equipped with garbage cans to collect pieces of HE f disposal at the burning ground. Intentional burning in 1960 destroyed the buildings, explosive residues were removed to TA-54, and noncombustibles were disposed of at MDA P. The sumps an drain lines were subsequently removed in 1967.

PRS 16-025(g) is the former location of TA-16-95, a HE machining building, and PRS 16-029(m) is the former location of the sump, drain line and outfall that served TA-16-95. PRS 16-025(h) is former location of TA-16-96, a HE machining building, and PRS 16-029(n) is the former location of the sump, drain line and outfall that served TA-16-96. PRS 16-025(i) is the former location of T 16-97, a HE machining building, and PRS 16-029(o) is the former location of the sump, drain line and outfall that served TA-16-97. PRS 16-025(j) is the former location of TA-16-98, a HE machi building, and PRS 16-029(p) is the former location of the sump, drain line and outfall that served TA-16-98. PRS 16-029(h2) is the former location of the large drainage system which interconnec many of these drain lines and identified through a manhole designated TA-16-801.

PRS-025(d) is the former location of TA-16-94, a decommissioned equipment control building previously situated in the center of the North, South, East, West machining buildings. The building almost identical in structure and removed at the same as the remaining structures in this consolidated PRS.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

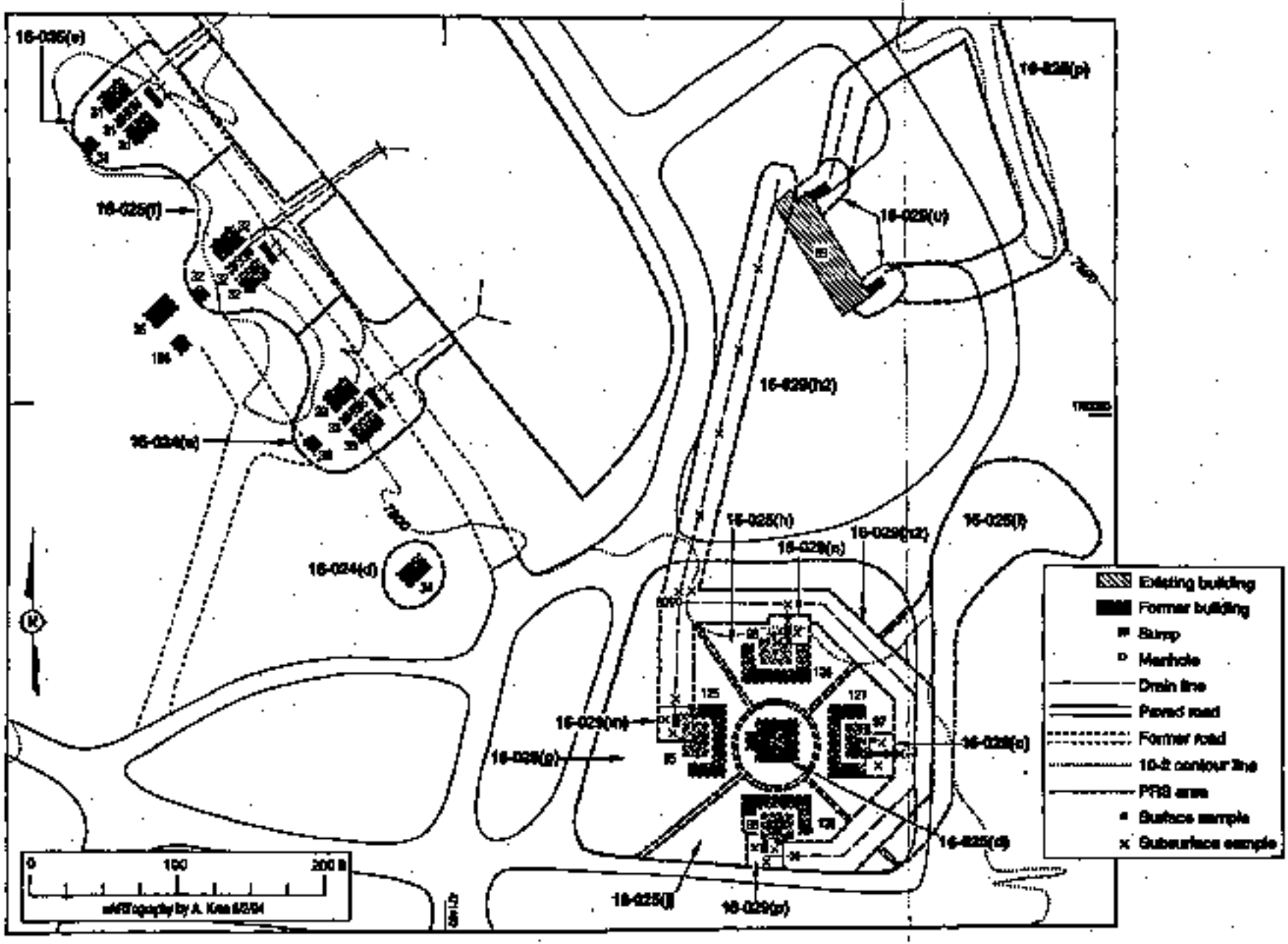

Fig. 5-63. Sampling locations at GMX-3 north.

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 16-029(h2)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-025(d)	HSWA	Former HE Equipment and Control Building	HE, barium, metals	NFA Criterion 3
16-025(g)	HSWA	Former HE Machining Building	HE, barium, metals	NFA Criterion 5
16-025(h)	HSWA	Former HE Machining Building	HE, barium, metals	NFA Criterion 5
16-025(i)	HSWA	Former HE Machining Building	HE, barium, metals	Under Investigation
16-025(j)	HSWA	Former HE Machining Building	HE, barium, metals	NFA Criterion 5
16-029(h2)	HSWA	Former HE Sump, Drain Line and Outfall	HE, barium, metals	Under Investigation
16-029(m)	HSWA	Former HE Sump, Drain Line and Outfall	HE, barium, metals	Under Investigation
16-029(n)	HSWA	Former HE Sump, Drain Line and Outfall	HE, barium, metals	Under Investigation
16-029(o)	HSWA	Former HE Sump, Drain Line and Outfall	HE, barium, metals	Under Investigation
16-029(p)	HSWA	Former HE Sump, Drain Line and Outfall	HE, barium, metals	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history of the North, South, East, West Machining Line waste streams (primarily residual HE, metals, and barium), transport mechanisms (primarily surface and near surface contamination with some potential subsurface contamination), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS encompasses an area which was formerly the location of HE machining buildings (TA-16-95, -96, -97, and -98) which are referred to as "West, North, East and South," including their sumps and drain lines. The buildings were all small and of wooden frame construction on a concrete slab. Each building was equipped with garbage cans to collect pieces of HE for disposal at the burning ground. Intentional burning in 1960 destroyed the buildings, explosive residues were removed to TA-54, and noncombustibles were disposed of at MDA P. The sumps and drain lines were subsequently removed in 1987.

PRS 16-025(g) is the former location of TA-16-95, a HE machining building, and PRS 16-029(m) is the former location of the sump, drain line and outfall that served TA-16-95. PRS 16-025(h) is the former location of TA-16-96, a HE machining building, and PRS 16-029(n) is the former location of the sump, drain line and outfall that served TA-16-96. PRS 16-025(i) is the former location of TA-16-97, a HE machining building, and PRS 16-029(o) is the former location of the sump, drain line and outfall that served TA-16-97. PRS 16-025(j) is the former location of TA-16-98, a HE machining building, and PRS 16-029(p) is the former location of the sump, drain line and outfall that served TA-16-98. PRS 16-029(h2) is the former location of the large drainage system which interconnected many of these drain lines and identified through a manhole designated TA-16-801.

PRS-025(d) is the former location of TA-16-94, a decommissioned equipment control building previously situated in the center of the North, South, East, West machining buildings. The building was almost identical in structure and removed at the same as the remaining structures in this consolidated PRS.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 16-029(j)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-026(k2)	HSWA	Outfall from Inactive HE Floor Drain and Drain Line	HE, Barium, metals, VOCs, SVOCs	Under Investigation
16-029(j)	HSWA	Outfall from Inactive HE Sump and Drain Line	HE, barium, metals, VOCs, SVOCs	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface and subsurface), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

PRSs 16-026(k2) and 16-029(j) are outfalls from inactive sumps and drain lines, which serviced TA-16-260. PRS 16-029(j) was a sump that received wash-down water from cleaning activities from the control cubicle of machining Bay 26. Use of the sump was discontinued in 1970; although it is not plugged, the cubicle is no longer used for HE patching operations. PRS 16-026(k2) received wash-down water contaminated with HE from a floor drain and associated drain line in the southern portion of TA-16-260.

NMED Concurrence: _____ **Date:** _____

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DOE Concurrence: _____ **Date:** _____

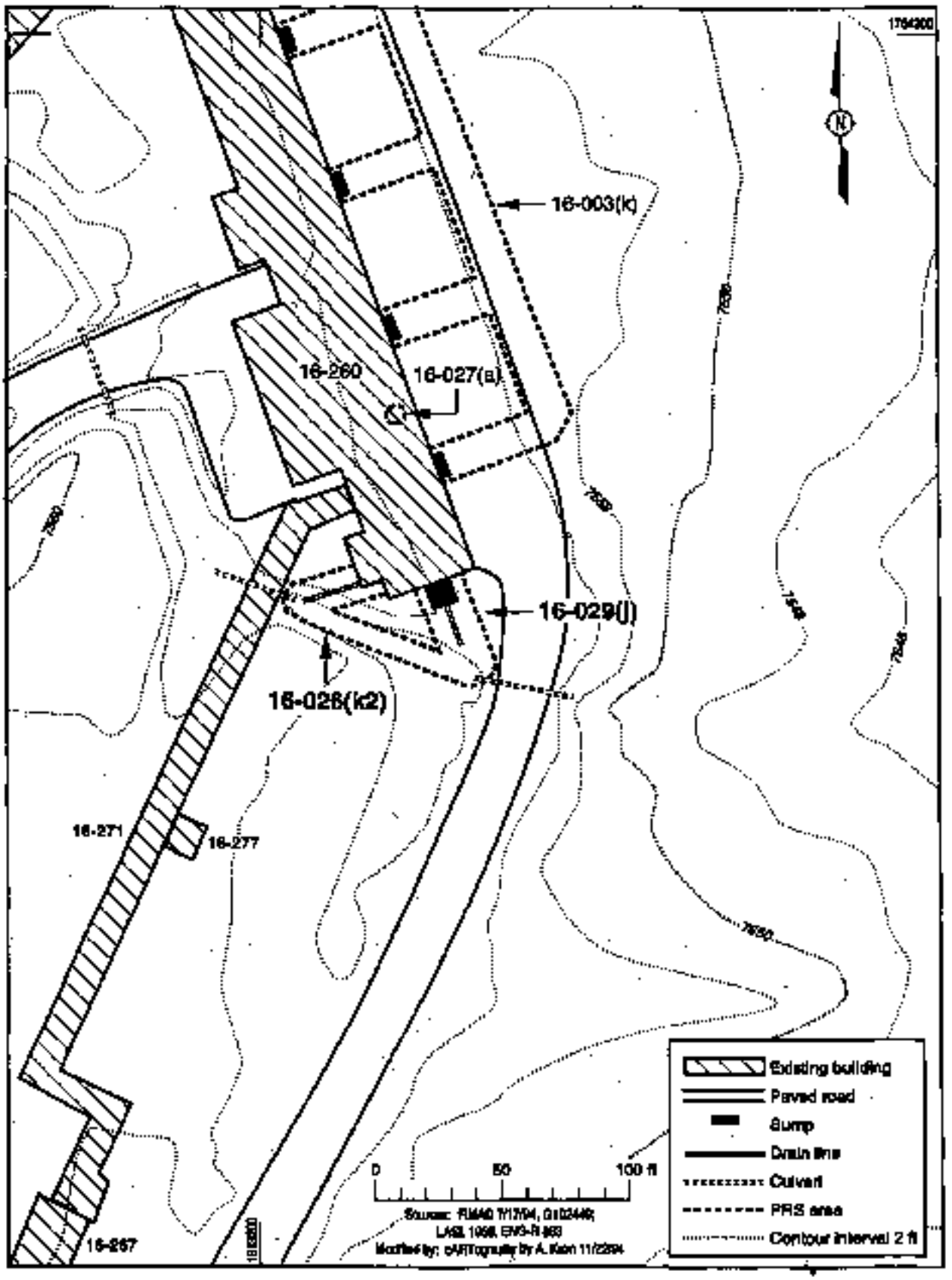

Fig. 5-28-10. Locations of SWMUs 16-026(k2) and 16-029(j) at TA-16-260.

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 16-029(q)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-017(f)-99	HSWA	Former HE Processing Building	HE, barium, SVOCs	Under Investigation
16-029(q)	HSWA	Former HE Sumps, Drain Lines, and Outfall	HE, barium, SVOCs	Under Investigation
C-16-064	Non-HSWA	Former Drum Storage Platform	HE, barium, SVOCs	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms (primarily surface and near surface), and the type of investigation needed to assess residual HE contamination, it is proposed that the PRSs listed above be consolidated.

Description of Aggregate:

Based on the operational history, waste streams, geographical proximity, transport mechanisms (primarily surface and near surface), and the type of investigation needed to assess residual HE contamination, it is proposed that the PRSs listed above be consolidated.

PRS 16-017 consisted of 23 abandoned structures, some intact and some removed, in, or closely associated with the World War II era S-Site. To allow for tracking and consolidatin, each PRS 16-017 structure was given an alpha numeric identifier (a-x). For the purposes of this consolidated unit, TA-16-99 is designated as PRS 16-017(f). PRS C-16-064 is a former drum storage platform formerly located 50 ft southwest of TA-16-99. The platform was used for storage of garbage cans containing HE scrap from the riser cutting in TA-16-99.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

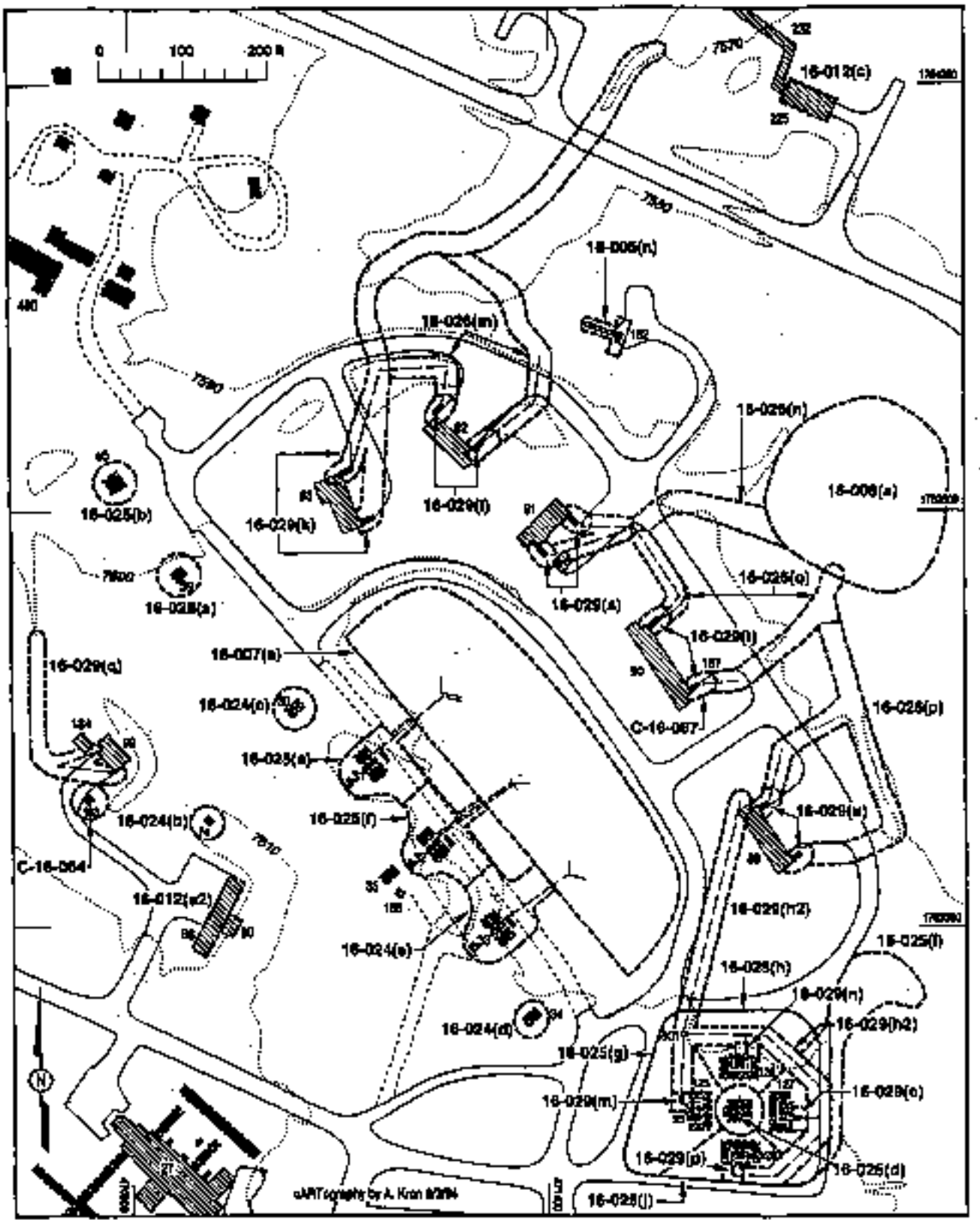

Fig. 5-68. Locations of PRSs at GMX-3, north.

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 16-029(v)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
16-015(d)	Non-HSWA	Former HE Steam Cleaning Building	HE, barium, metals, SVOCs	Under Investigation
16-025(a2)	HSWA	Former HE Casting Building	HE, barium, metals	Under Investigation
16-025(b2)	HSWA	HE, barium, VOCs, SVOCs	HE, barium, VOCs, SVOCs	NFA Criterion 6
16-029(d2)	HSWA	Two Former HE Sumps, Drain Lines and Outfalls	HE, barium, metals	Under Investigation
16-029(e2)	HSWA	Three Former HE Sumps, Drain Lines and Outfalls	HE, barium, metals	Under Investigation
16-029(v)	HSWA	Former HE Sump, Drain Line and Outfall	HE, barium, SVOCs	Under Investigation
16-034(o)	HSWA	Former HE Analytical Laboratory	HE, barium, metals, SVOCs	Under Investigation

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history (GMX-2 Area), waste streams (primarily residual HE, metals, barium, and SVOCs), transport mechanisms (primarily surface and near surface contamination with potential subsurface contamination), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS encompasses an area which is the location of building footprints of former HE process buildings, former materials storage buildings, sumps, drain lines, and outfall systems associated with the GMX-2 HE process buildings. All of the former structures are related to and located along or in close proximity to the GMX-2 HE process buildings. The majority of the structures in this consolidated PRS were constructed in the 1940s primarily for experimental HE research and development activities. No production scale HE volumes were processed in this area. The GMX-2 area ceased to be used as an active site in the early 1950s. Most of the structures in the GMX-2 area were intentionally destroyed by burning in 1960. Residual debris from burning and the remaining subsurface structures were cleaned up in 1968.

PRS 16-034(o) is the former location of TA-16-49, an experimental laboratory to determine the properties of HE. A wide range of solvents was used in the experiments, and the facility was cleaned each day with wash-down water including solvents and HE being discharged to the sump. PRS 029(v) is the former location of the sump, drain line and outfall that served TA-16-49. Lead-lined troughs were located along laboratory benches that drained into the sump. PRS 16-025(b2) is the former location of TA-16-52, an experimental casting facility. PRS 16-029(e2) is the former location of three sumps, drain lines and outfalls that served TA-16-52.

PRS 16-025(a2) is the former location of TA-16-50, an experimental HE casting building. PRS 16-029(d2) is the former location of two HE sumps, drain lines and outfalls that served TA-16-50. The facility was routinely cleaned using high-pressure steam cleaning which was discharged to the sumps.

PRS 16-015(d) is the former location of a decommissioned HE steam cleaning building, (TA-16-51).

NMED Concurrence: _____ *Date:* _____

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DOE Concurrence: _____ *Date:* _____

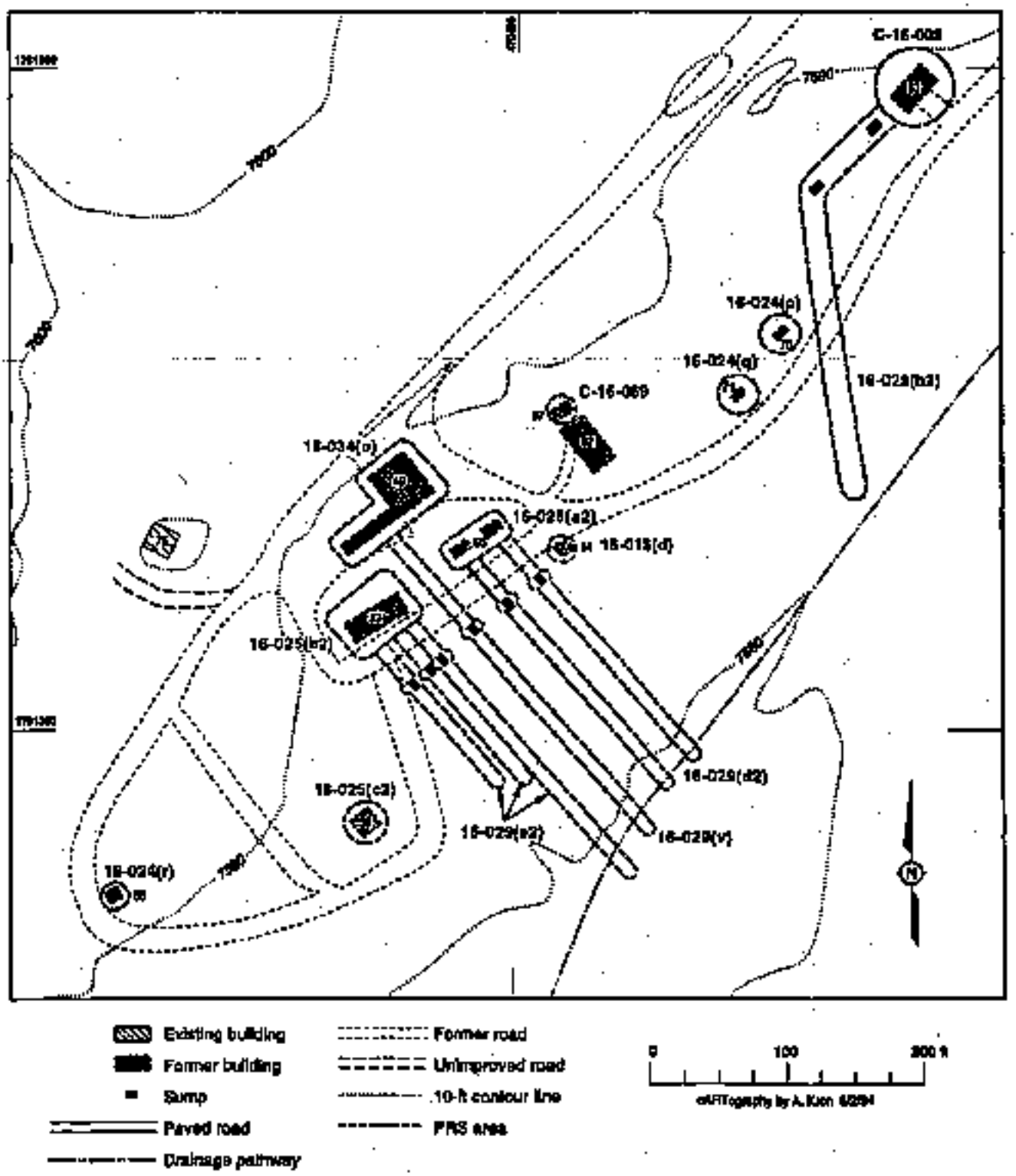

Fig. 5-73. Locations of PRSs at GMX-2 south.

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 16-029(x)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-008(g)	HSWA	Inactive HE Septic Tank	HE, barium, metals, uranium, boron, VOCs, SVOCs, cyanide	Under Investigation
16-017(v)-99	HSWA	Former HE Processing Building	HE, barium, metals, uranium, SVOCs	Under Investigation
16-025(x)	HSWA	Inactive HE Laboratory	HE, barium, metals, SVOCs, cyanide	NFA Criterion 5
16-029(w)	HSWA	Former HE Sump, Drain Line and Outfall	HE, barium, metals, VOCs, SVOCs, cyanide	Under Investigation
16-029(x)	HSWA	Inactive HE Sump, Drain Line and Outfall	HE, barium, metals, uranium, boron, VOCs, SVOCs, cyanide	Under Investigation
16-031(c)	HSWA	Former Cooling Tower	Metals	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?		
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history (GMX-2 Area), waste streams (primarily residual HE, metals, barium, and SVOCs), transport mechanisms (primarily surface and near surface contamination with potential subsurface contamination), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS encompasses an area, which was formerly the location of the TA-16-100 HE processing activities. The site is currently devoid of structures and is wooded and fenced. TA-16-100 was constructed in 1944 to conduct tests involving, handling, loading, shake-testing, and cold-testing of mock-ups of the atomic bomb, Fat Man. All active work at the site ceased in 1980. The site was abandoned and the buildings are still standing.

PRS 16-008(g) is the former septic tank TA-16-527, and the associated drain line. The septic tank served TA-16-515, but reportedly did not serve any of the HE processing areas in the building. The septic tank was abandoned in place.

PRS 16-017 consists of a group of 23 intact, abandoned structures associated with S-Site. These structures were proposed for NFA and deferral until D&D in the work plan. Due to consolidation, each of the 23 former structures in the series has been given an alpha identifier. PRS 16-017(v) is a former HE processing building (TA-16-515) that was later used as a warehouse. The structure was removed in 1995. PRS 16-025(x) is the former location of TA-16-100, an electroplating laboratory. PRS 16-029(w) is the former HE sump, drain line, and outfall in TA-16-100, the former electroplating laboratory. Little is known about activities in TA-16-100, however, the sump, line and building were removed in 1980. PRS 16-029(x) is the inactive HE sump from floor troughs in TA-16-515, a warehouse, shop and small office. The building was remodeled into a laboratory, inspection room, assembly and varnishing of HE parts, HE casting, and repair area for HE parts. The lab housed an X-ray machine and dark room. Effluent flowed from two work areas into a trough to the drain line and onto the sump. Drainlines from the darkroom and utility room also discharged to the sump. PRS 16-031(c) in an inactive cooling tower for TA-16-515; however there is no documented evidence to indicate that the structure was a cooling tower. Engineering drawings indicate that all effluent from this structure entered the drain system described for PRS 16-029(x) above.

NMED Concurrence: _____ **Date:** _____

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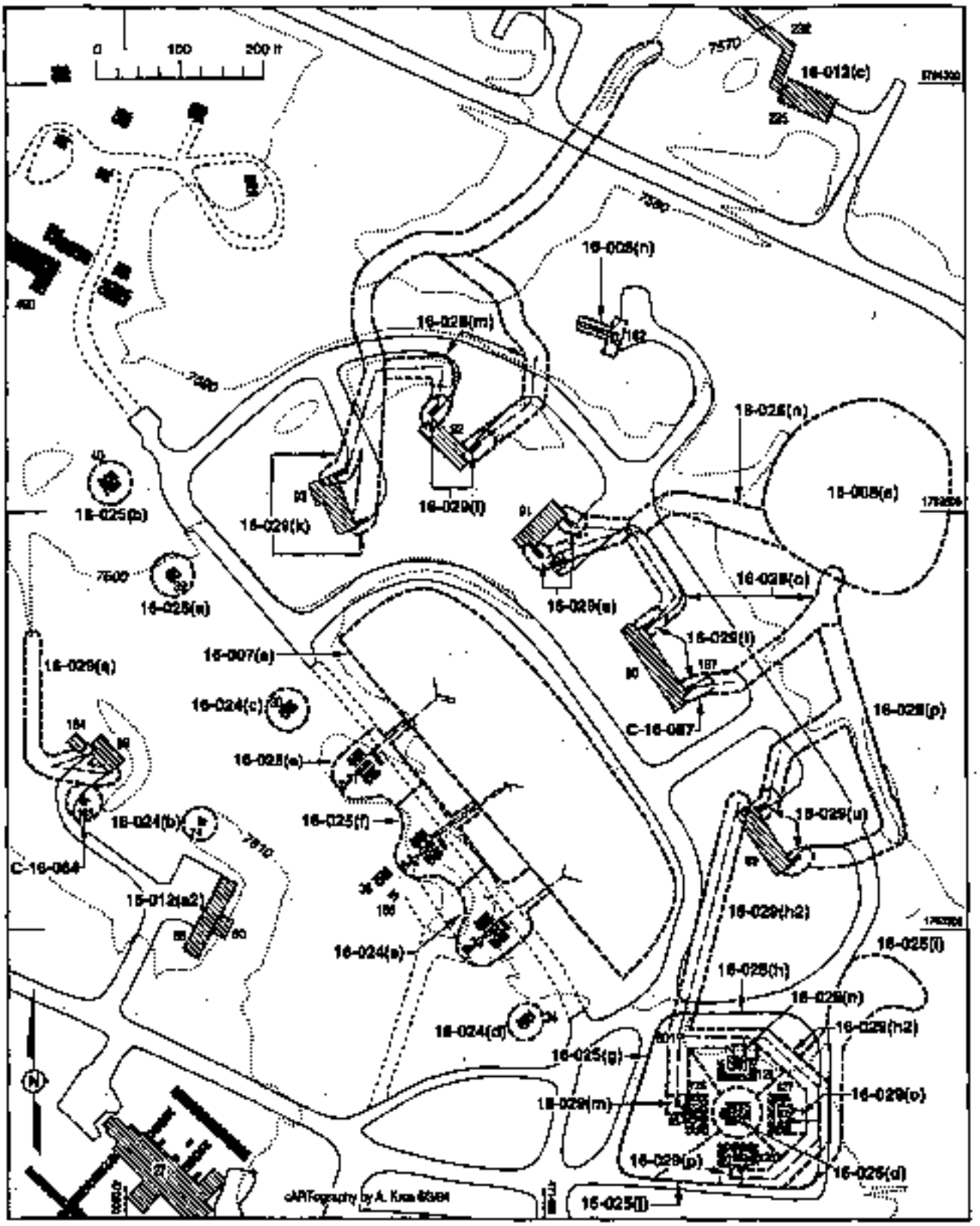

Fig. 5-88. Locations of PRSs at GMX-3, north.

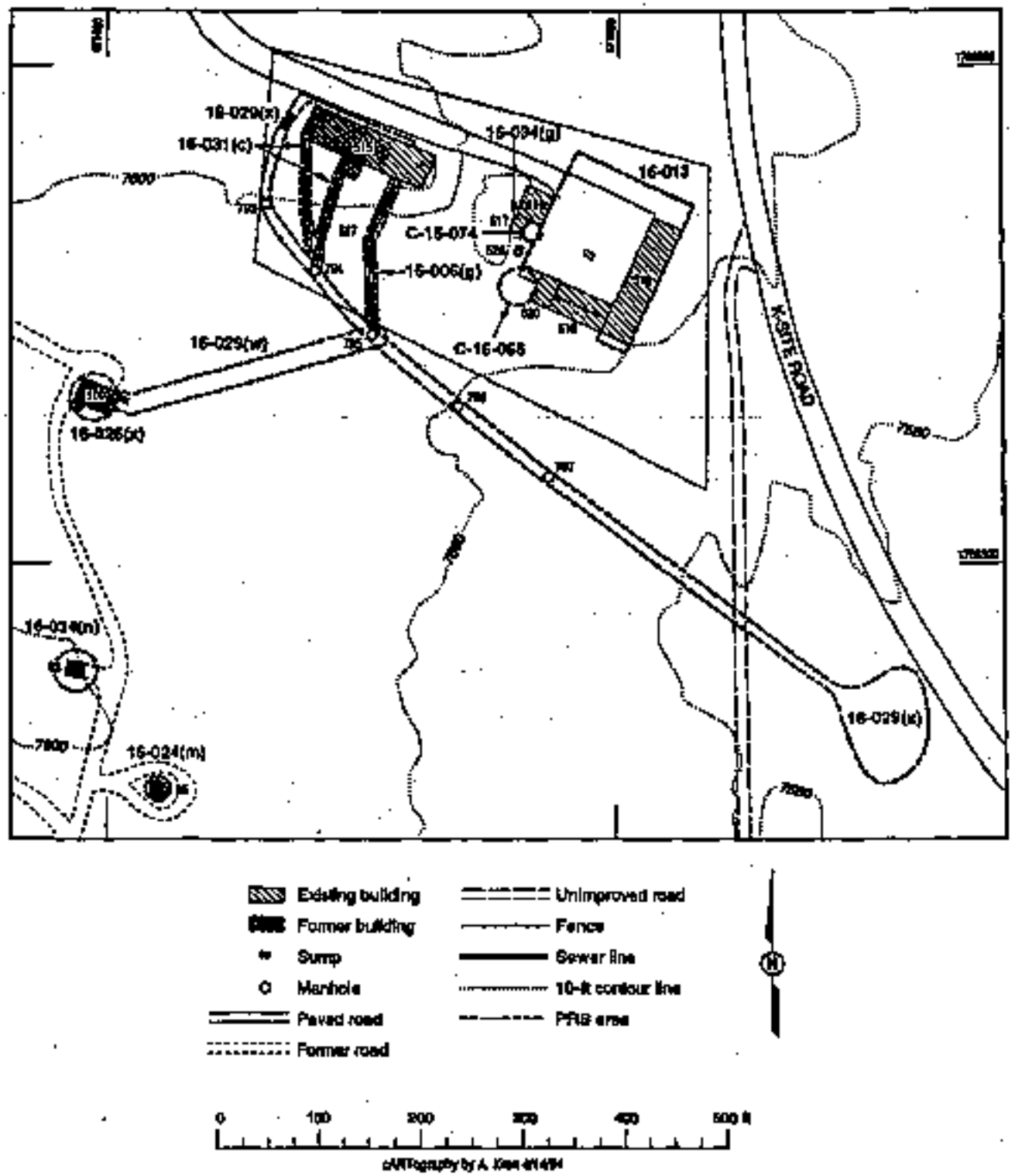

Fig. 5-94. Locations of PRSs at V-Site.

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 16-029(y)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
16-025(t)	HSWA	Former HE Milling and Experimental Casting Facility	HE, barium, metals, uranium	Under Investigation
16-029(y)	HSWA	Three Former HE Sumps, Drain Lines and Outfalls	HE, barium, metals, uranium	Under Investigation

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history (GMX-2 Area), waste streams (primarily residual HE, metals, barium, and uranium), transport mechanisms (primarily surface and near surface contamination with potential subsurface contamination), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated

Description of Aggregate:

The consolidated PRS encompasses an area which is the location of building footprints of former HE process buildings, former materials storage buildings, sumps, drain lines, and outfall systems associated with the GMX-2 HE process buildings. All of the former structures are related to and located along or in close proximity to the GMX-2 HE process buildings. The majority of the structures in this consolidated PRS were constructed in the 1940s primarily for experimental HE research and development activities. No production scale HE volumes were processed in this area. The GMX-2 area ceased to be used as an active site in the early 1950s. Most of the structures in the GMX-2 area were intentionally destroyed by burning in 1960. Residual debris from burning and the remaining subsurface structures were cleaned up in 1966.

PRS 16-025(t) is the former location of TA-16-38, the decommissioned HE milling, machining and experimental casting facility. It was reported that uncommon types of HE including plumbatol and boracitol were processed in this building. PRS 16-029(y) is the former location of three sumps, drain lines and outfalls which served TA-16-55.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

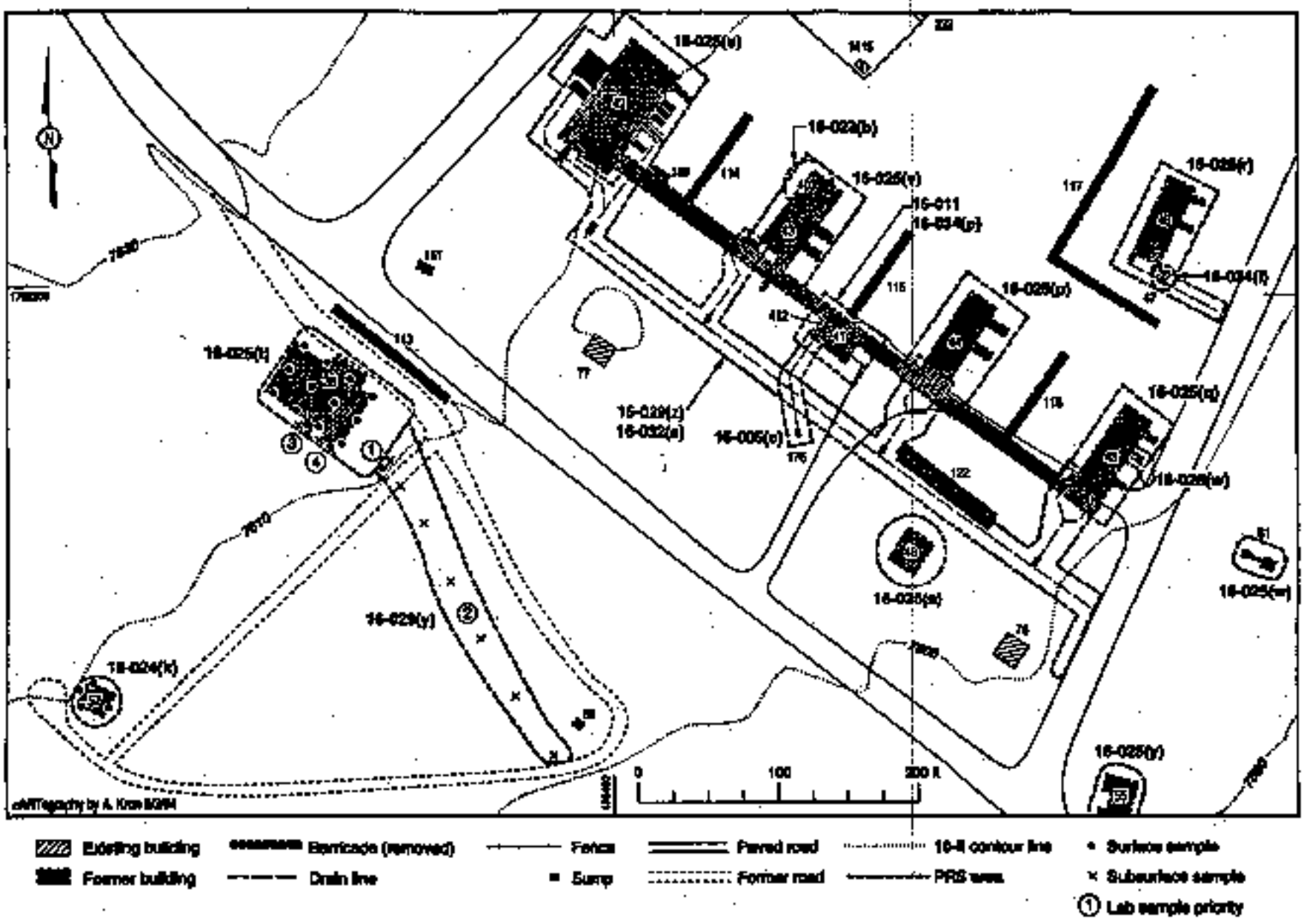

Fig. 5-79. Sampling locations at GMX-2 west.

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 16-029(z)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-011	Non-HSWA	Former Incinerator Cage	HE, metals, barium, SVOCs	Under Investigation
16-023(b)	Non-HSWA	Former Incinerator Cage	HE, metals, barium, SVOCs	NFA Criterion 5
16-025(p)	HSWA	Former Raw HE Inspection Room	HE and barium	Under Investigation
16-025(q)	HSWA	Former HE X-ray Examination Room (with two additions)	HE, barium, metals, cyanide	Under Investigation
16-025(r)	HSWA	Former HE Rest House (room with vestibule)	HE, barium, metals	Under Investigation
16-025(s)	HSWA	Former Radiography Building	HE, metals, barium, cobalt-60, radium 226, uranium	Under Investigation
16-025(u)	HSWA	Former HE Casting Room (with addition)	HE, barium, metals	Under Investigation
16-025(v)	HSWA	Former HE Casting and Machining Room (with two additions)	HE, barium, metals	Under Investigation
16-026(w)	HSWA	Former Outfall from Photography Lab	HE, VOCs, SVOCs, metals, barium, cyanide	Under Investigation
16-029(z)	HSWA	Former Sumps and Drain Line	HE, VOCs, SVOCs, metals, barium, cyanide	Under Investigation
16-032(a)	HSWA	Former Secondary Sumps, Drain Line and Outfall	HE, VOCs, SVOCs, metals, barium, cyanide	Under Investigation
16-034(l)	HSWA	Former Equipment Building	HE, metals, barium	NFA Criterion 5
16-034(p)	HSWA	Former Trash Incinerator	HE, metals, barium, SVOCs	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history (40s-Line), waste streams (primarily residual HE, metals, barium, and SVOCs), transport mechanisms (primarily surface and near-surface contamination with some potential subsurface contamination), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The consolidated PRS encompasses an area which is the location of five footprints of former HE process buildings, three former sump, drain line, and outfall systems associated with the 40s-Line of HE process buildings, three former trash incinerators also associate with the 40s-Line, one former equipment building, and one former radium source building. All of the former structures are related to and located along or in close proximity to the 40s-Line of HE process buildings. The 40s-Line contained several HE production facilities in a single line of buildings that were connected by enclosed walkways. PRS 16-025(p), (TA-16-44) was used for physical inspection and sifting of raw HE materials; PRS 16-025(q), (TA-16-45) housed an x-ray facility for examination of HE lenses; and PRS 16-025(r), (TA-16-46) was a rest house used for temporary storage of HE products awaiting radiography in TA-16-45, and was separate from the process buildings. PRS 16-025(u) (TA-16-42) housed HE casting operations; and PRS 16-025(v), (TA-16-43) housed experimental HE casting and/or machining operations. All of these buildings were of wood construction, with wooden floors on pillars. Each of the buildings had floor troughs that discharged to sumps, that with the exception of TA-16-46, discharged to a common outfall.

PRS 16-026(w) consisted of a drain line and outfall from the dark room at TA-16-45. PRS 16-029(z) includes the sumps that were previously located in the former HE processing buildings (TA-16-42, -43, -44, and -45. PRS 16-032(a) includes the secondary sumps for these buildings and the common drain line linking them all. PRSs 16-011, -023(b), and -034(p) (TA-16-412, -403, and -41, respectively) were the locations of incinerators used to burn paper and cloth that may have been contaminated with low levels of HE. All three incinerators were located with the 40s-Line. PRS 16-034(l) is the former location of an equipment storage building (TA-16-47). The structure may have stored HE or HE-contaminated materials and was intentionally burned down in early 1960. PRS 16-025(s) (TA-16-48) was a radium source storage building along the 40s-Line.

NMED Concurrence: _____ **Date:** _____

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DOE Concurrence: _____ **Date:** _____

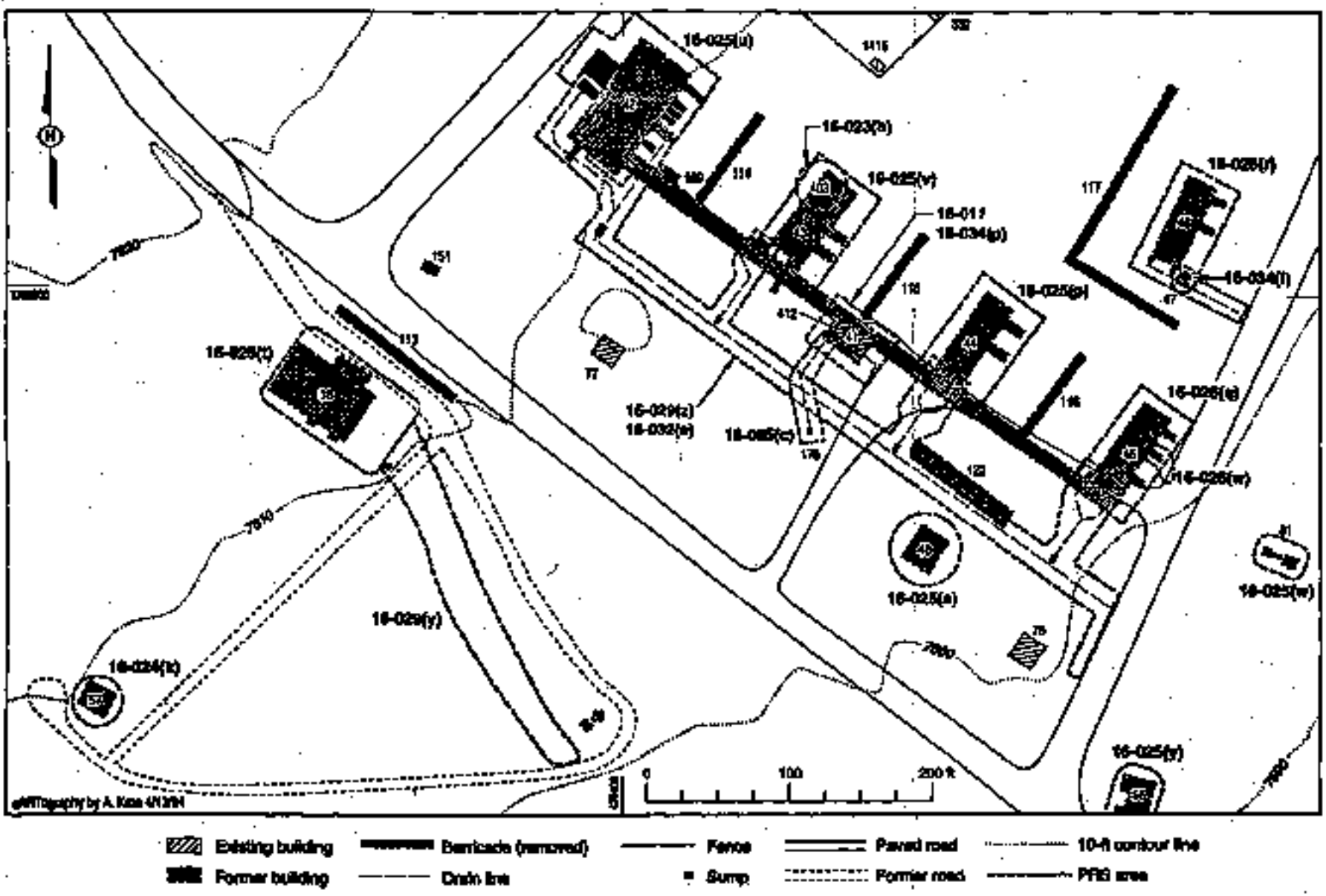

Fig. 5-60. Locations of PRSs at GMX-3 south.

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 16-034(b)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
16-005(j)	HSWA	Former HE Septic System	HE, metals, radionuclides, radium, organics, cyanide	Under Investigation
16-005(m)	HSWA	Former HE Sump (chemical pit), Drain Line and Outfall	HE, metals, radionuclides, radium, organics, cyanide	Under Investigation
16-034(b)	HSWA	Former HE X-ray Radiography Building	HE, barium, metals, uranium, radium, cobalt-60, SVOCs, cyanide	NFA Criterion 5
16-034(c)	HSWA	Former HE Warehouse	HE and barium	NFA Criterion 5
16-034(d)	HSWA	Former HE Machine Shop	HE, barium, metals, SVOCs	NFA Criterion 5
16-034(e)	HSWA	Former HE Storage Building	HE and barium	NFA Criterion 5
16-034(f)	HSWA	Former HE Laboratory	HE, barium, metals, uranium, plutonium, VOCs, SVOCs, cyanide	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-dispersable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history of the T-Site waste streams (primarily residual HE, metals, barium, radionuclides, VOCs, and SVOCs), transport mechanisms (primarily surface and near surface contamination with some potential subsurface contamination), geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated

Description of Aggregate:

The consolidated PRS encompasses an area which was formerly the location of the T-Site (TA-24) HE-related magazines, hutments, warehouses, shops, laboratories, and septic system. The site is currently devoid of structures and has been overgrown with trees. TA-24 was used primarily for radiographic operations of HE charges. Construction of structures at T-Site began in 1944 and continued until it ceased being used as an active site in 1950. Most of the structures remaining at TA-24 were destroyed by intentional burning in 1960, with residual debris and subsurface structures being removed in 1968. HE was reported to have been removed to better than 3% wt, and radionuclides cleaned up to background. PRS 16-034(b) is the former location of TA-16-490, a decommissioned primary laboratory and office building. The building housed X-ray radiography of HE, photoprocessing, electron microscopy and storage. Solvents were also used in the building. PRS 16-005(j) is the location of the former septic tank and drain line (TA-16-507) which served TA-16-490. PRS 16-005(m) is the former location of TA-16-507, a decommissioned sump, drain line and outfall that received effluent from the large room in the central section of TA-16-490. The sump drained to the east of TA-16-490 and was shown to be contaminated with HE prior to its removal in 1960. PRS 16-034(d) is the former location of TA-16-492, a decommissioned machine shop and was shown to be contaminated with residual HE prior to burning in 1960. PRS 16-034(f) is the former location of TA-16-499, a decommissioned laboratory. Small-scale photoprocessing was conducted in the building in addition to plutonium autoradiography experiments. PRS 16-034(c) is the former location of TA-16-491, a decommissioned warehouse hut. During WWII the hut was used to store equipment, but by 1950 was the site of X-ray exposure experiments on rabbits and rats. PRS 16-034(e) is the former location of TA-16-496, a decommissioned storage building.

NMED Concurrence: _____ **Date:** _____

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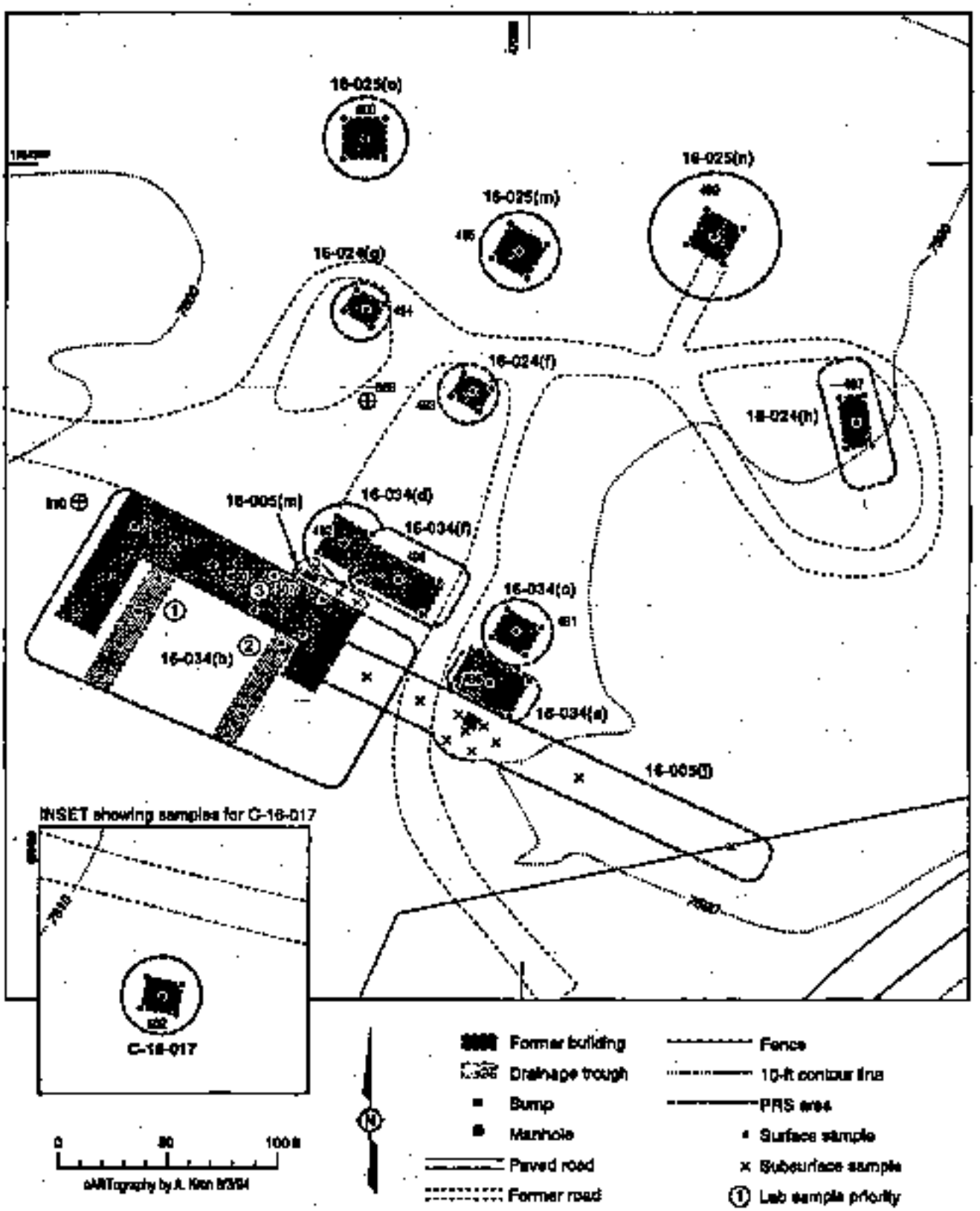


Fig. 5-92. Sampling locations at T-Site.

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 19-001-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
19-001	HSWA	Former septic system	VOCS, SVOCs, metals, rad	NFA Criterion 5
19-002	HSWA	Former surface disposal	VOCs, SVOCs, metals, rad	NFA Criterion 5
19-003	HSWA	Former drain line	VOCs, SVOCs, metals, rad	NFA Criterion 5
C-19-001	Non-HSWA	Former Building Footprints	VOCs, SVOCs, metals, rad	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history of the former East Gate Laboratory, the geographic proximity of the PRSs, the transport mechanisms (surface and shallow subsurface), and the single investigation needed to assess these PRSs and confirm completion of cleanup, they are proposed for consolidation

Description of Aggregate:

The consolidated PRSs are all associated with former structures at the TA-19, former East Gate Laboratory, which was used for experimental work on small sources that included spontaneous fission experiments. PRS 19-001 was a septic system consisting of a tank and associated inlet and outlet lines that served the retreat building; all of thesaunderground structures were removed in 1997. PRS 19-002 was a surface disposal site consisting of numerous carbon type dry cell batteries and concrete debris from decommissioned TA-19 structures. The concrete and batteries were removed from the site in 1996. PRS 19-003 was a drain line for the latrine that served the TA-19 laboratory building, which operated from 1944 to 1966. The latrine managed sanitary waste and the drain line discharged to Pueblo Canyon. The drain line was removed in 1997. PRS C-19-001 is associated with possible contaminated soil beneath all former structures at TA-19. The structures included the laboratory building, retreat building, latrine, and guard house. Surface samples associated with the former building structures were collected in 1997.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

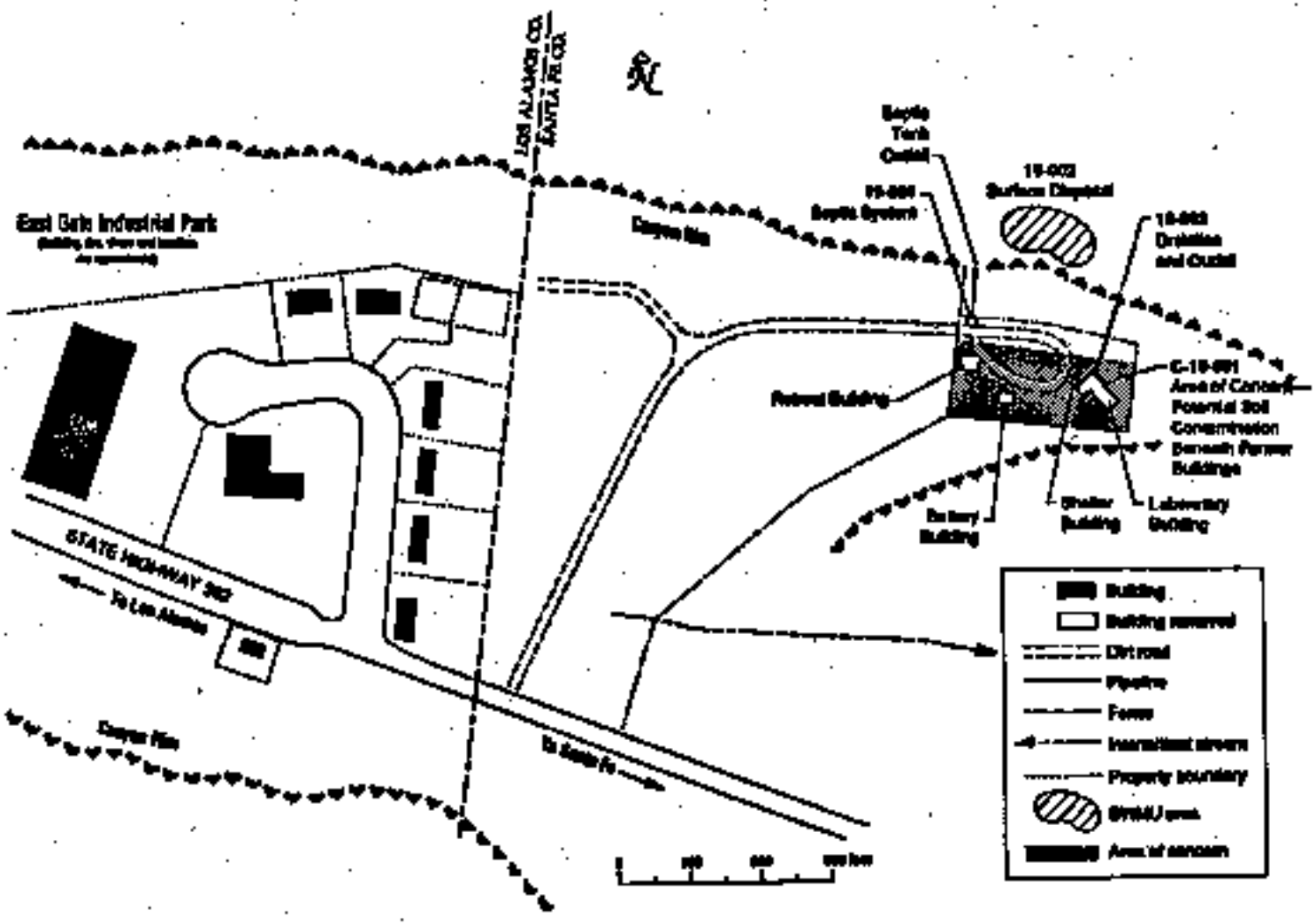


Figure 5-65. SWMU Group 19-1 (East Gate Laboratory).

PRS Consolidation Worksheet

Site Type: Miscellaneous

Proposed PRS Number: 21-003-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
21-003	HSWA	PCB Storage Building	PCB, Rad, Organics	Under Investigation
21-013(f)	Non-HSWA	Surface Disposal Area	PCB, Rad, Organics	Under Investigation

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on collocation of these PRSs, transport mechanisms (surface and shallow subsurface) of identical contaminants, and the investigation needed to address the sites and the surrounding area, it is proposed to consolidate these PRSs.

Description of Aggregate:

PRS 21-003 comprises two areas: a container storage area inside Building TA-21-61 and a fenced storage area east of the building. The container storage area is a RCRA unit and is undergoing decontamination to nondetectable or statistically insignificant levels of hazardous constituents. The building footprint and the fenced storage area are considered the boundary of the PRS. PRs 21-013(f) is a possible disposal area of mounds of soil identified in a 1949 aerial photo. A 1950 aerial photo shows that Building TA-21-61 was built on the area where the mounds of soil were located. Therefore PRSs 21-003 and 21-013(f) are collocated.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

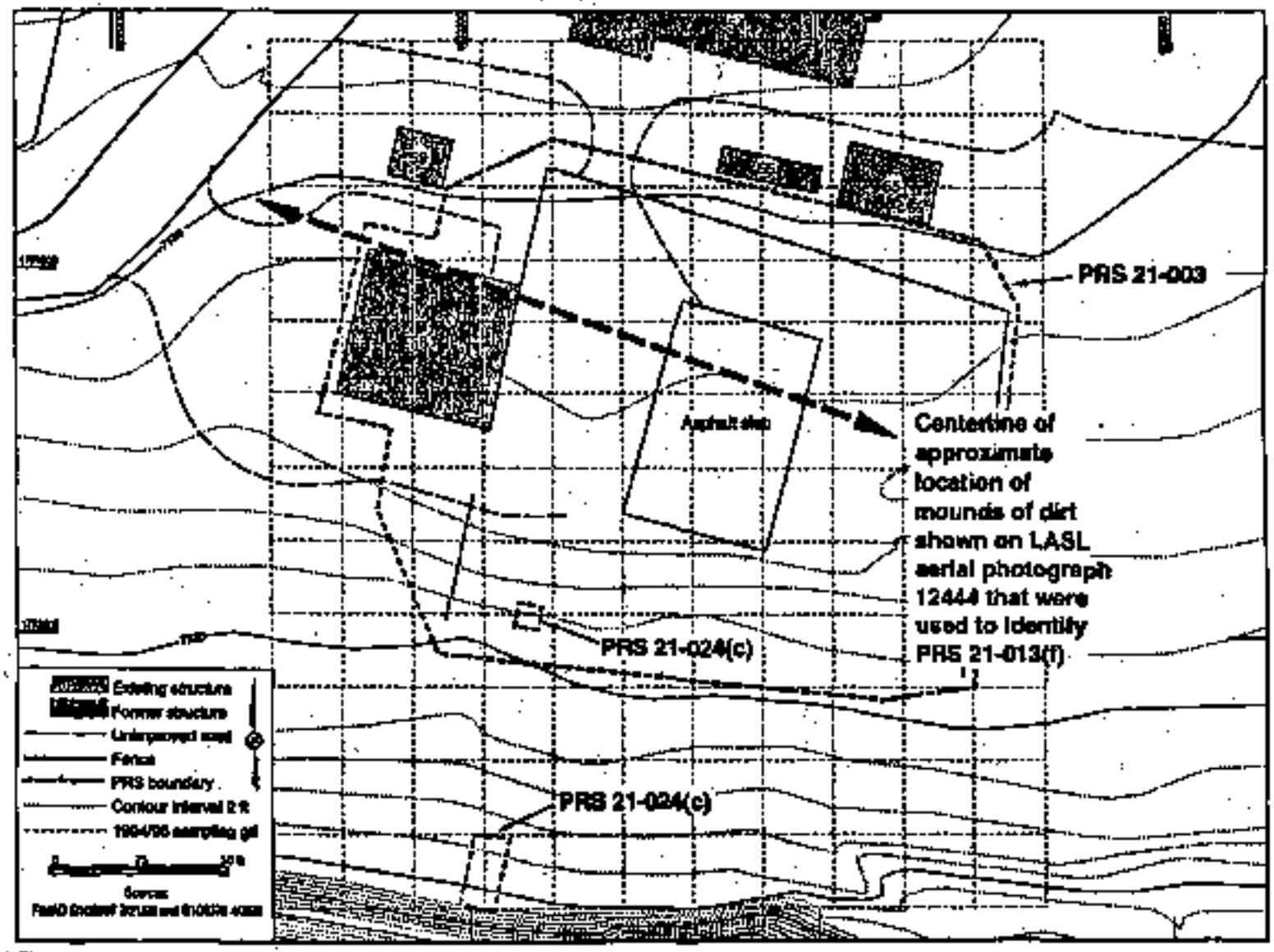


Figure A-3. Revised location of PRS 21-013(f).

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 21-004(b)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
21-004(b)	HSWA	Above-Ground Tank	Rad, Metals, Organics	NFA Criterion 5
21-004(c)	HSWA	Above-Ground Tank	Rad, Metals, Organics	NFA Criterion 5
21-004(d)	Non-HSWA	Drainline and Outfall	Rad, Metals, Organics	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

These PRSs have all received the same wastestream and are proposed for consolidation.

Description of Aggregate:

PRS's 21-004(b,c) are two ea/the 3,000-gallon above-ground stainless steel tanks located within an asphalt berm. PRS 21-004(d) is an associated drainline and outfall. The tanks were installed in 1979 to receive overflow from sump TA-21-223. This sump received all industrial wastewater from DP East. Preliminary investigation indicates that no release from the tanks or releases to the berm or environment have occurred.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

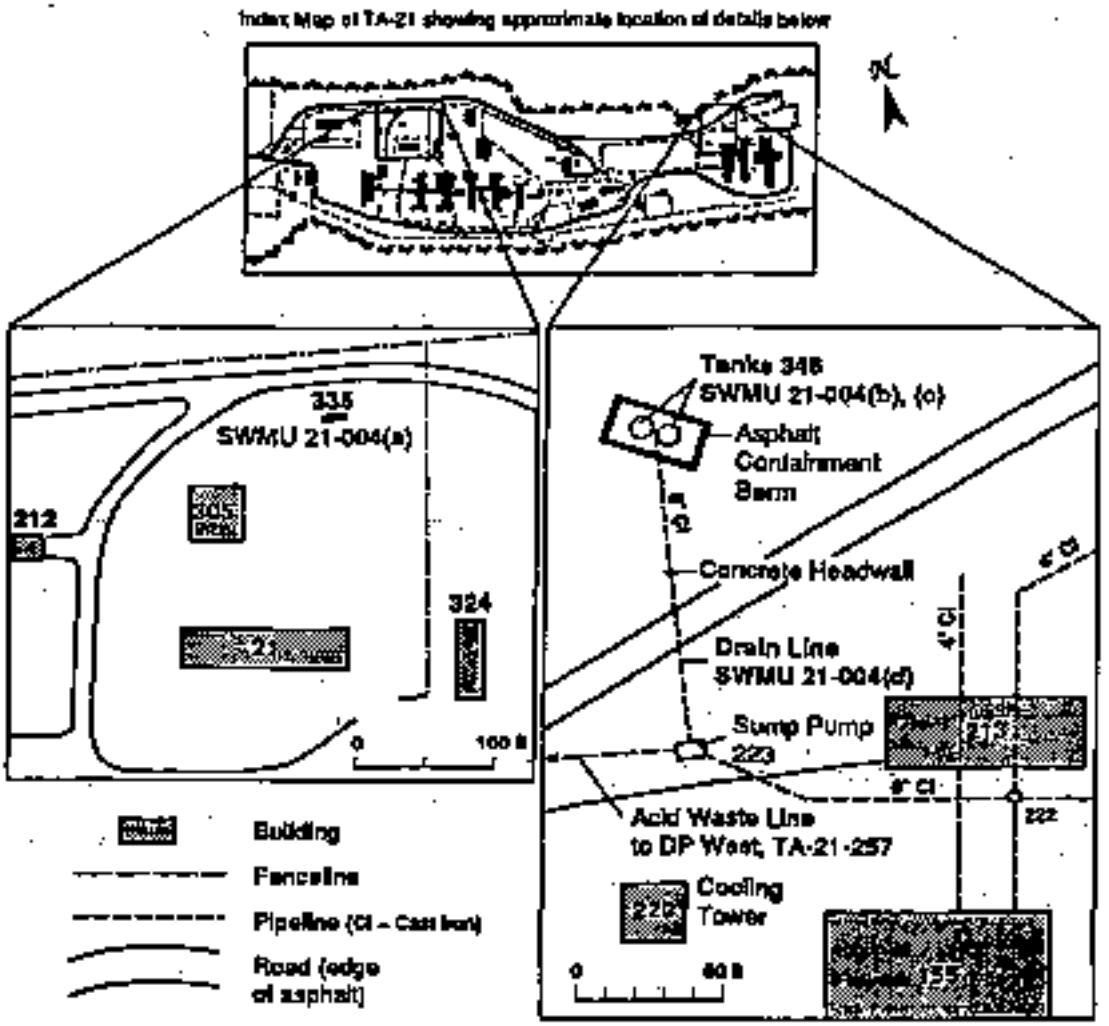


Fig. 14.3-1 Locations of the TA-21 aboveground tanks SWMU 21-004(a), (b), and (c) and the drain line [SWMU 21-004(d)] from sump TA-21-223 to aboveground tanks TA-21-346 [SWMU 21-004(b), (c)]. (LASL 1979; LANL 1983a)

pre-existing 6-in. drain line, SWMU 21-004(d), originating from sump pump TA-21-223. The sump pump is connected to the main TA-21 acid waste line and is responsible for pumping liquid waste produced at DP East to Building TA-21-257 at DP West for treatment (Fig. 14.3-1). The two tanks were installed to receive liquid waste from the sump, if it were to overflow.

Tanks TA-21-346 are reported to have been pumped out on two occasions over the past 12 years of operation. This liquid waste was sent back into sump TA-21-223. No leaks from the tanks or releases to the berm or the environment have occurred (Buchholtz 1991). No leaks on the tanks

PRS Consolidation Worksheet

Site Type: Miscellaneous

Proposed PRS Number: 21-006(c)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
21-006(c)	HSWA	Subsurface Unit	Ethylene glycol, phosphoric acid, Pu	Under Investigation
21-006(d)	HSWA	Subsurface Unit	Ethylene glycol, phosphoric acid, Pu	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

These PRSs are thought to be the same PRS or located in the same area, received the same waste streams, and are therefore proposed for consolidation.

Description of Aggregate:

PRS 21-006(c) is the site of an inactive underground seepage pit located outside of room 322 in building TA-21-3, and was used to decontaminate radioactive materials containers from a drain in room 322. Because of additions to building TA-21-3, the location of the pit is under rooms 3133 and 3131 of the addition. PRS 21-006(d) may be the same PRS as 21-006(c) or collocated.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

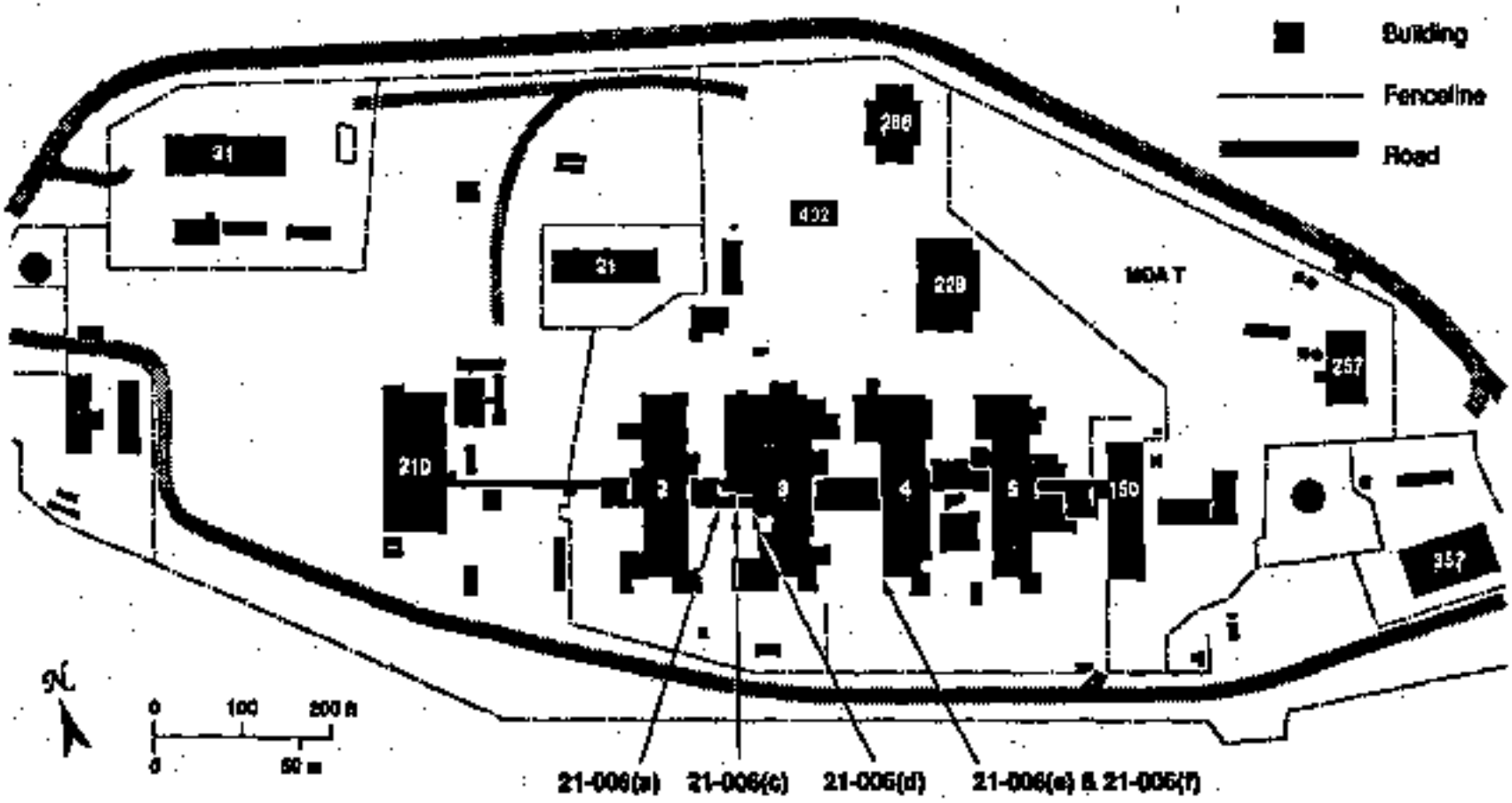


Fig. 18.2-1 General location of underground seepage pits, SWMUs 21-006(a), (c)–(f). (LANL 1990)

PRS Consolidation Worksheet

Site Type: Miscellaneous

Proposed PRS Number: 21-006(e)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
21-006(e)	HSWA	Underground Seepage Pit	Rad, Metals	Under Investigation
21-006(f)	Non-HSWA	Underground Seepage Pit	Rad, Metals	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

These PRSs are thought to be the same PRS or located in the same area, received the same waste streams, and are therefore proposed for consolidation.

Description of Aggregate:

PRSs 21-006(e&f) are located south of building TA-21-4. The waste discharged to this pit is unknown and its exact location has not been determined. PRS 21-006(f) was a seepage pit adjacent to the same building and received fluorine waste contaminated with plutonium. Both pits (if present) have been paved over. It is likely that these PRSs are duplicates. Visual inspections of Building 4, both prior to and after demolition, did not indicate any lines or foundation penetrations in the vicinity of the described PRS locations

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

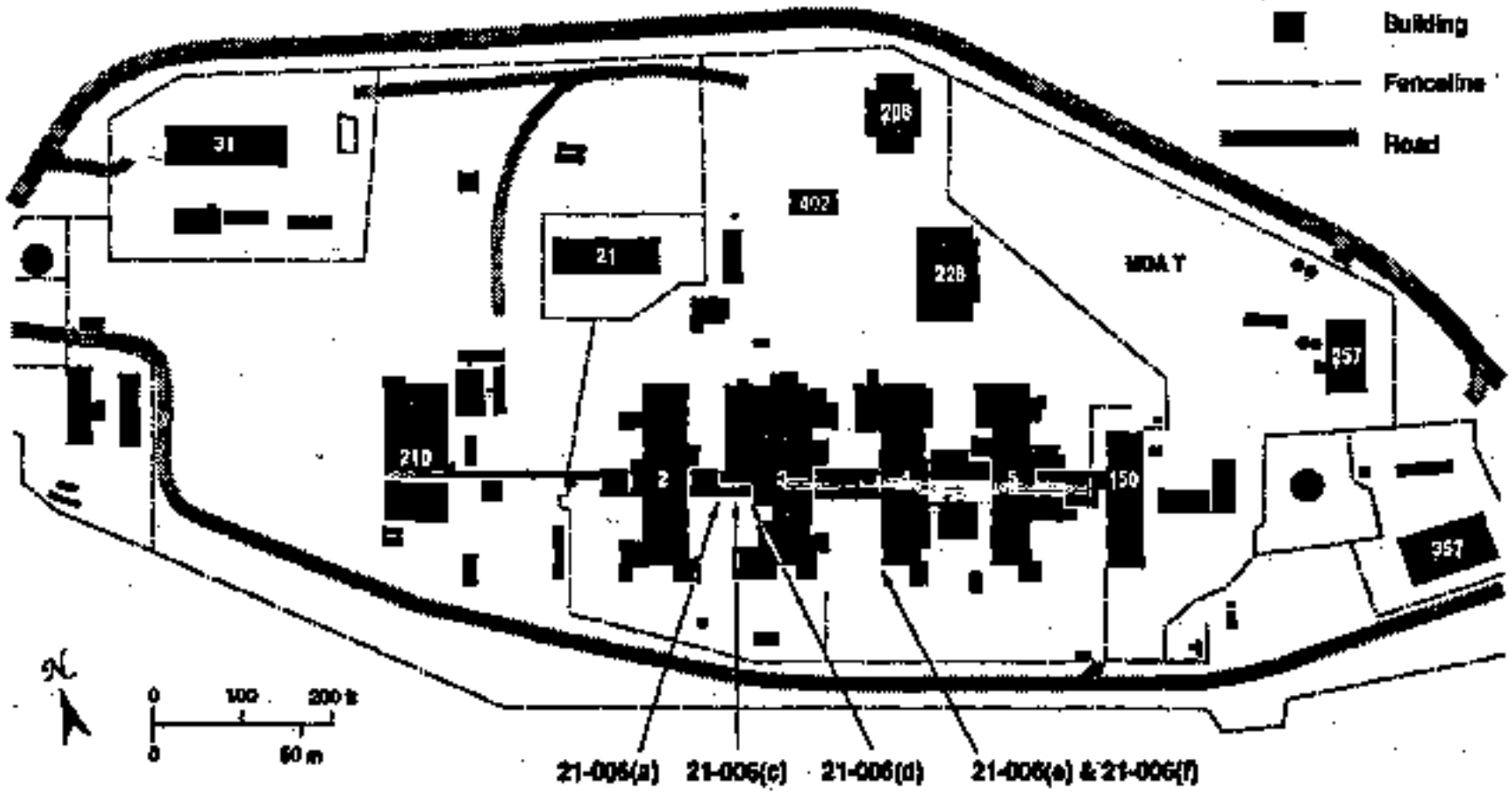


Fig. 18.2-1 General location of underground seepage pits, SWMUs 21-006(a), (c)–(f). (LANL 1990)

PRS Consolidation Worksheet

Site Type: Miscellaneous

Proposed PRS Number: 21-013(d)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
21-013(d)	HSWA	Surface Disposal	Rad, Organics, Metals	NFA Criterion 5
21-013(e)	HSWA	Surface Disposal	Rad, Organics, Metals	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface, subsurface and sediments), geographical proximity, overlapping dispersion areas, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

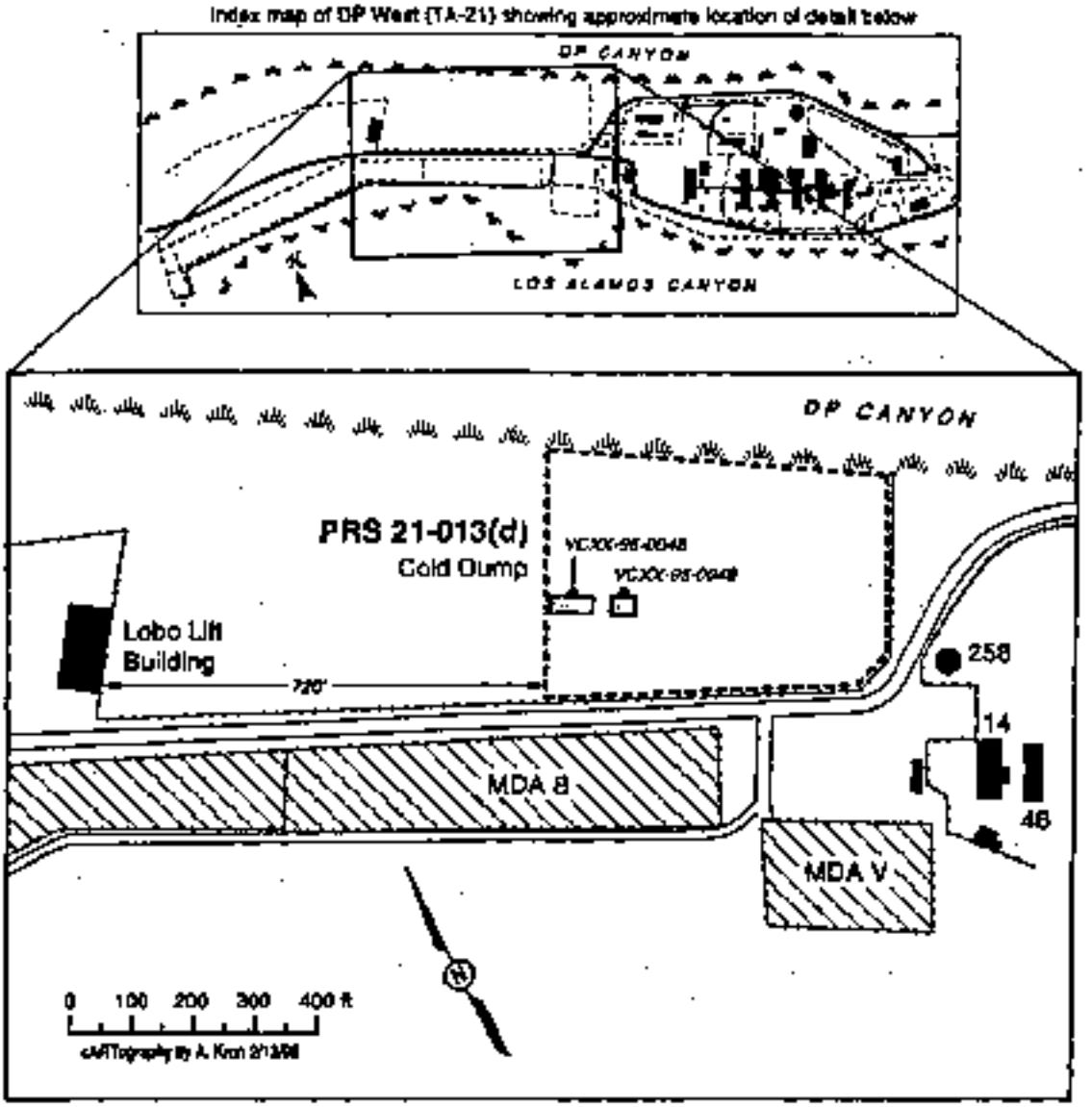
Description of Aggregate:

PRS 21-013(d) is believed to have been a disposal site for nonradioactive waste chemicals or materials known as the "cold dump". PRS 21-013(e) has been used to dispose of construction debris including soil piles and drain pipes and was located northwest of PRS 21-013(d). These PRSs were investigated in 1994 and 1995 and corrective action activities were conducted at each of these sites. Because the locations of the sites were indefinite, the area of investigation used during the 1996 VCA was greatly enlarged. These sites are now contiguous areas.

NMED Concurrence: _____ **Date:** _____

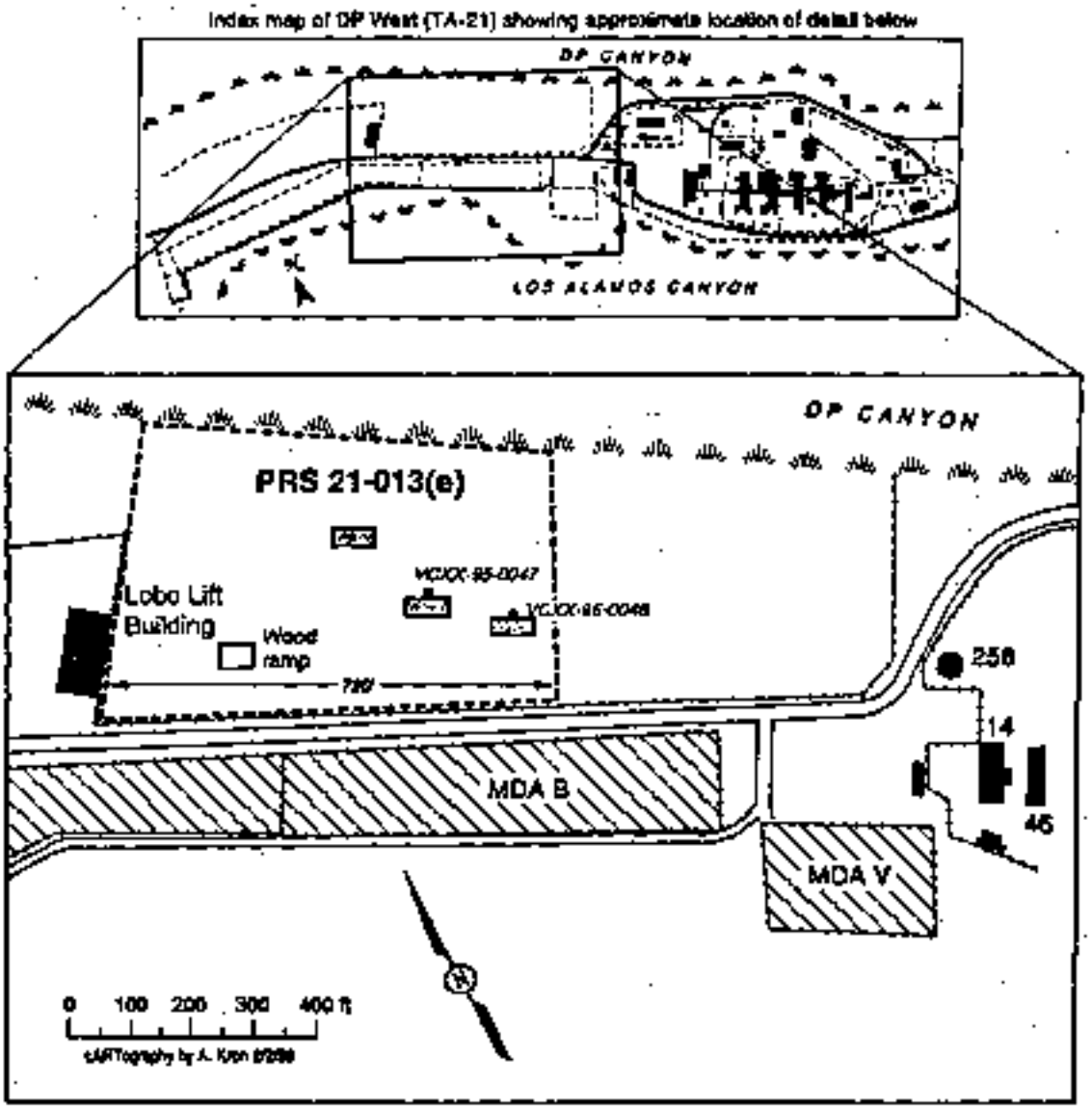
ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____



- Sampling location
- Asphalt pile
- Area of PRS (debris and trash scattered throughout area)
- Building
- Fence
- Road
- Material Disposal Area (MDA)
- Edge of mesa

Figure 4. Excavation and confirmatory sampling locations for PRS 21-013(d), cold dump.



- Sampling location
- Large asphalt pile
- Area of PRS (debris and trash scattered throughout area)
- Building
- Fence
- Road
- Material Disposal Area (MDA)
- Edge of mesa

Figure 6. Excavation and confirmatory sampling locations for PRS 21-013(e), cold dump.

PRS Consolidation Worksheet

Site Type: Waste Water Treatment Plant

Proposed PRS Number: 21-016(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
21-001	Non-HSWA	Rad Waste Storage Area	Radionuclides, Metals,SVOCs, VOCs	Under Investigation
21-010(a)	HSWA	Former Industrial Liquid Waste Treatment Facility, 21-35	Radionuclides, Metals,SVOCs, VOCs	Under Investigation
21-010(b)	HSWA	Former Acid Waste Manhole	Radionuclides, Metals,SVOCs, VOCs	Under Investigation
21-010(c)	HSWA	Former Acid Waste Storage Tank	Radionuclides, Metals,SVOCs, VOCs	Under Investigation
21-010(d)	HSWA	Former Acid Waste Storage Tank	Radionuclides, Metals,SVOCs, VOCs	Under Investigation
21-010(e)	HSWA	Industrial Septic Tank	Radionuclides, Metals,SVOCs, VOCs	Under Investigation
21-010(f)	HSWA	Grit Chamber	Radionuclides, Metals,SVOCs, VOCs	Under Investigation
21-010(g)	HSWA	Former Acid Tank	Radionuclides, Metals,SVOCs, VOCs	Under Investigation
21-010(h)	HSWA	Former Acid Waste Manhole	Radionuclides, Metals,SVOCs, VOCs	Under Investigation
21-011(a)	HSWA	Building 21-257	Rad, Metals, Organics	Under Investigation
21-011(c)	HSWA	Acid Tank and Sump	Radionuclides, Metals,SVOCs, VOCs	Under Investigation
21-011(d)	HSWA	Aboveground acid holding tank	Rad, Metals, Organics	Under Investigation
21-011(e)	HSWA	Aboveground acid holding tank	Rad, Metals, Organics	Under Investigation
21-011(f)	HSWA	Aboveground effluent holding tank	Rad, Metals, Organics	Under Investigation
21-011(g)	HSWA	Aboveground effluent holding tank	Rad, Metals, Organics	Under Investigation
21-011(h)	Non-HSWA	Acid storage tank	Rad, Metals, Organics	Under Investigation
21-011(i)	HSWA	Aboveground NaOH storage tank	Rad, Metals, Organics	Under Investigation
21-011(j)	HSWA	Aboveground Am raffinate storage tank	Rad, Metals, Organics	Under Investigation
21-016(a)	HSWA	4 Absorption Beds	Radionuclides, Metals,SVOCs, VOCs	Under Investigation
21-016(b)	HSWA	Caisson Building, 21-188	Radionuclides, Metals,SVOCs, VOCs	Under Investigation
21-016(c)	HSWA	52 Asphalt-lined Shafts	Radionuclides, Metals,SVOCs, VOCs	Under Investigation
21-028(a)	Non-HSWA	Former Waste Storage Area	Organics, Metals, Radionuclides	Under Investigation
C-21-009	Non-HSWA	Cement Paste Spill	Radionuclides, Metals,SVOCs, VOCs	Under Investigation
C-21-012	Non-HSWA	Cement Paste Spill	Radionuclides, Metals,SVOCs, VOCs	Under Investigation

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

Site Type: MDA

Proposed PRS Number:

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history and the geographical proximity of the waste water treatment plant, the holding tanks, and the outfalls, the common waste streams managed, the transport mechanisms (surface to subsurface) of identical contaminants and the investigation needed to assess all of the components of the WWTP, it is proposed that these PRSs be consolidated.

Based on the operational history, waste streams, transport mechanisms (surface to subsurface), geographical proximity, and the investigation needed to assess the above PRSs/AOCs, it is proposed that the PRSs/AOCs be consolidated to identify them as being part of the MDA T inventory.

Description of Aggregate:

These PRSs are associated with the waste water treatment plant at TA-21. PRS 21-011(a) was the waste treatment plant TA-21-257 put into operation in 1967 after the previous plant TA-21-35 ceased operations. The plant treated liquid waste from plutonium processing operations associated with DP site. The plant was used to treat and prepare waste for disposal at MDA T and discharge through an outfall (21-011k) to DP Canyon. The plant contained a clarifier/flocculator, storage tanks, and pumps. A cement silo also existed at the treatment plant. PRS 21-011(d) was an acid holding tank (TA-21-110) located near building TA-21-257. The tank was a 13,500 gal. aboveground tank that received acid waste from DP East. PRS 21-011(e) was an acid holding tank (TA-21-111) located near building TA-21-257. The tank was a 13,500 gal. aboveground tank that received acid waste from DP West and from the "General's Tanks" (two 50,000 gallon tanks used to store highly enriched plutonium solutions) buried at MDA A. The years the tank received waste are not known. PRS 21-011(f) was an effluent holding tank (TA-21-112) located near building TA-21-257. The tank was a 12,700 gal. aboveground tank that received effluent waste originally from TA-21-35, then after 1967, from TA-21-257. The treated effluent was retained in the tank for three to five days, then discharged to DP Canyon at outfall 21-011(k). After 1982 the effluent was pumped to TA-50 for disposal. PRS 21-011(g) was an effluent holding tank (TA-21-113) located near building TA-21-257. The tank was a 12,700 gal. aboveground tank that received effluent waste originally from TA-21-35, then after 1967, from TA-21-257. The treated effluent was retained in the tank for three to five days, then discharged to DP Canyon. After 1982 the effluent was pumped to TA-50 for disposal. PRS 21-011(h) was an acid storage tank (TA-21-256) located near building TA-21-257. The tank was a 2,000 gal. aboveground acid storage tank that was known as Pug Mill Tank. The tank was removed in 1985. PRS 21-011(i) was a sodium hydroxide storage tank (TA-21-288) located near building TA-21-257. The tank was a 1,000 gal. aboveground storage tank that was installed in 1967. PRS 21-011(j) was an americium raffinate storage tank (TA-21-289) located near building TA-21-257. This tank was installed in 1967 and has a 1,500 gal. holding capacity. The surrounding area was not originally asphalted, and spills occurring during tanker trucks transfer operations were reported. The exact date the tank was taken out of operation is not known. PRS 21-001 was a storage area associated with the waste water treatment plant.TA-21 (DP Mesa) has several MDAs associated with it. MDA T consists of four absorption beds, a distribution sump, retrievable waste storage area (currently empty and backfilled), a series of disposal shafts (up to 8 ft. in diameter and 70 ft. deep), the former waste treatment plant (TA-21-35), and cement paste spills on the surface and within the retrievable waste storage area. Historic operations at MDA T involved the disposal of radioactive liquid process wastes from the purification of radioactive materials.

The remainder of the PRS in this consolidated unit [PRSs 21-010(a-h) and 21-026(a)] are comprised of PRSs associated with decommissioned waste treatment facilities and various storage areas. These PRSs are either adjacent to or within the PRS boundary of MDA T.

TA-21 (DP Mesa) has several MDAs associated with it. MDA T consists of four absorption beds, a distribution sump, retrievable waste storage area (currently empty and backfilled), a series of disposal shafts (up to 8 ft. in diameter and 70 ft. deep), the former waste treatment plant (TA-21-35), and cement paste spills on the surface and within the retrievable waste storage area. Historic operations at MDA T involved the disposal of radioactive liquid process wastes from the purification of radioactive materials.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

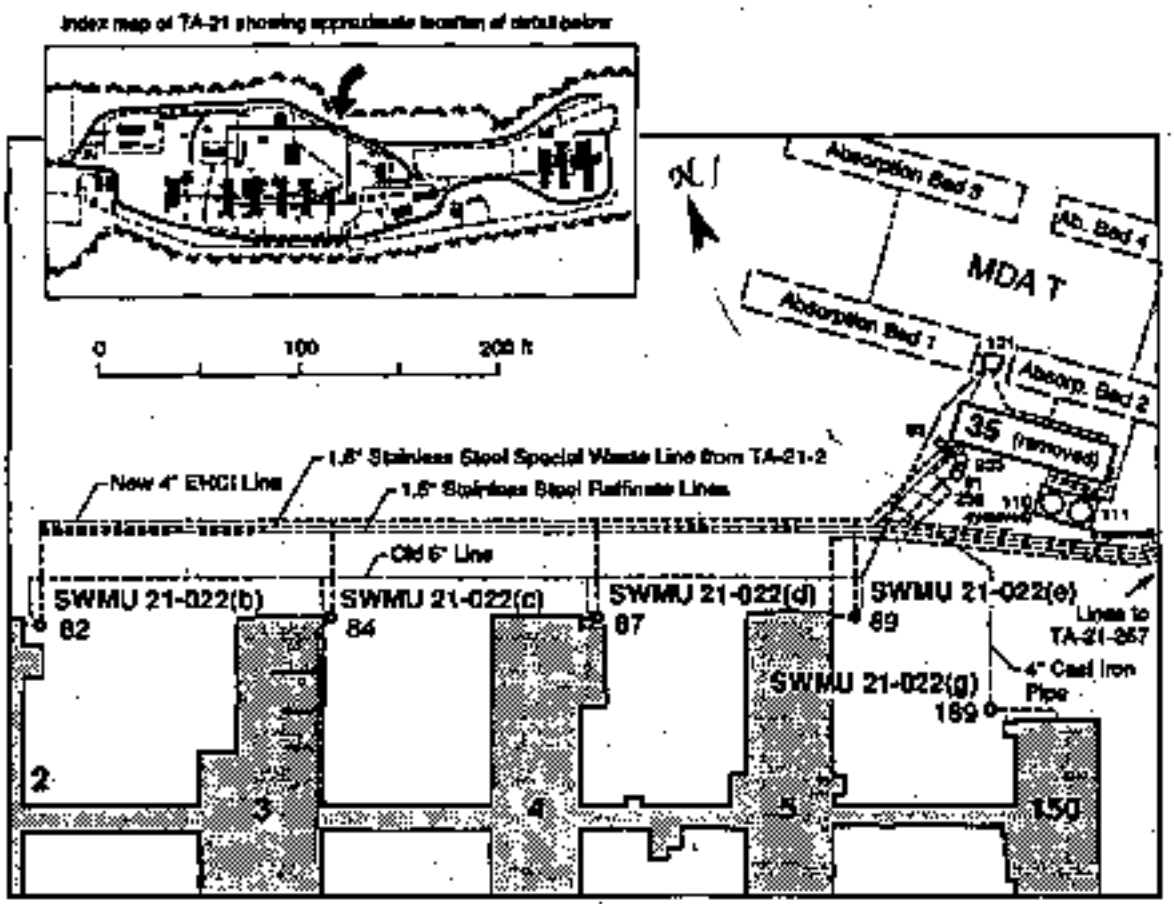
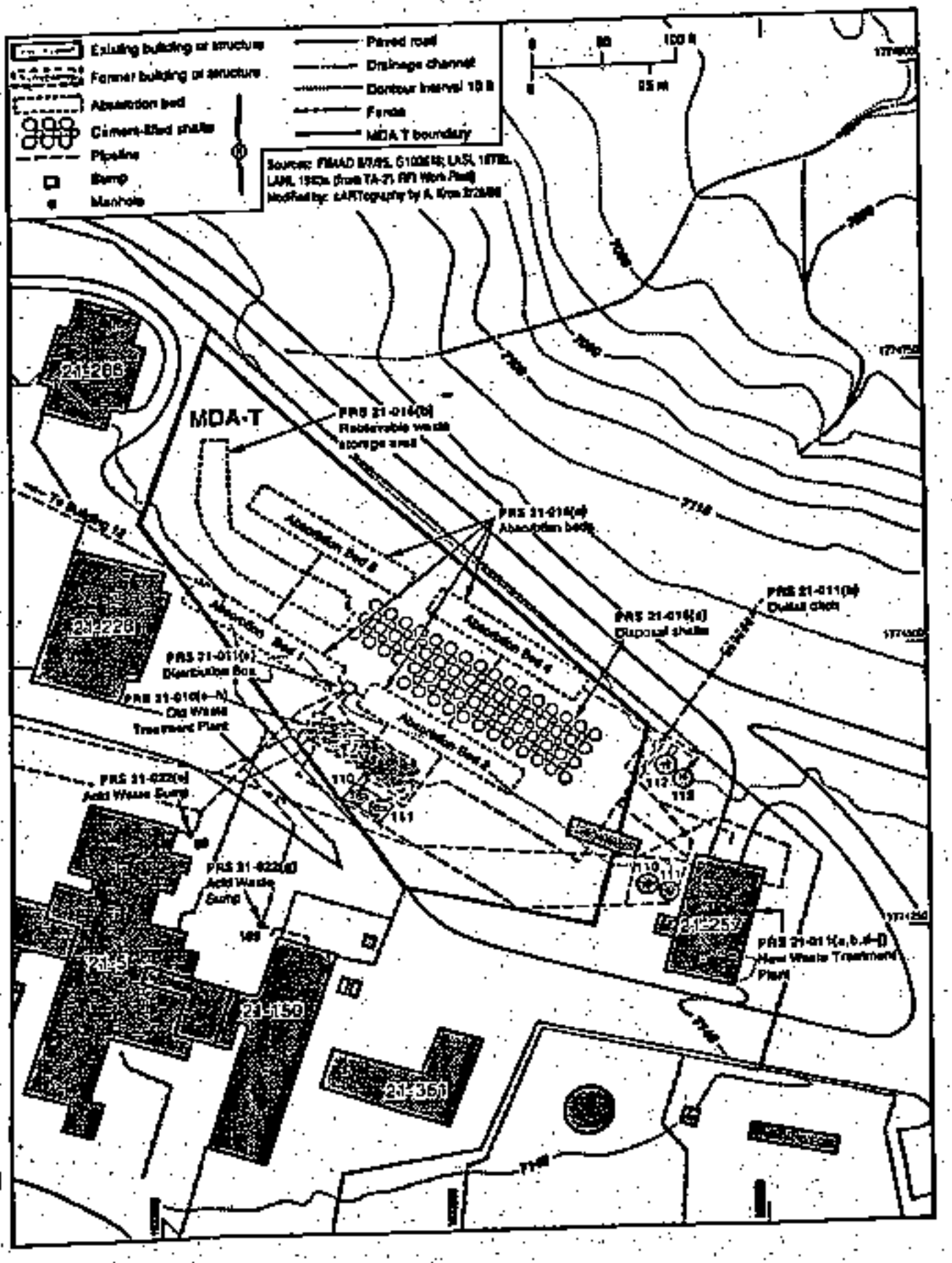


Fig. 18.8-1 Location of acid waste lines and sumps as they appeared in 1954 and 1962 on the north end of Buildings 2, 3, 4, 5, and 150. (LASL 1961, 1976b)


Existing building or structure
Former building or structure
Absorption bed
Cement-filled shafts
Pipeline
Sump
Manhole
Paved road
Drainage channel
Contour interval 10 ft
Fence
MDA-T boundary
0 50 100 ft
0 25 m
MDA-T
PRS 21-014(b)
Retrievable waste storage area
PRS 21-014(e)
Absorption beds
PRS 21-011(h)
Dual dish
PRS 21-016(c)
Disposal shafts
PRS 21-011(e)
Distribution Box
PRS 21-010(a–h)
Old Waste Treatment Plant
PRS 21-022(e)
Acid Waste Sump
PRS 21-022(d)
Acid Waste Sump
PRS 21-011(a,b,d–f)
New Waste Treatment Plant
Absorption Bed 1
Absorption Bed 2
Absorption Bed 3
Absorption Bed 4
Absorption Bed 5
To Building 14
21-208
21-228
21-5
21-150
21-351
21-253
7700
7710
7720
7730
7740
110
111
112
113
109

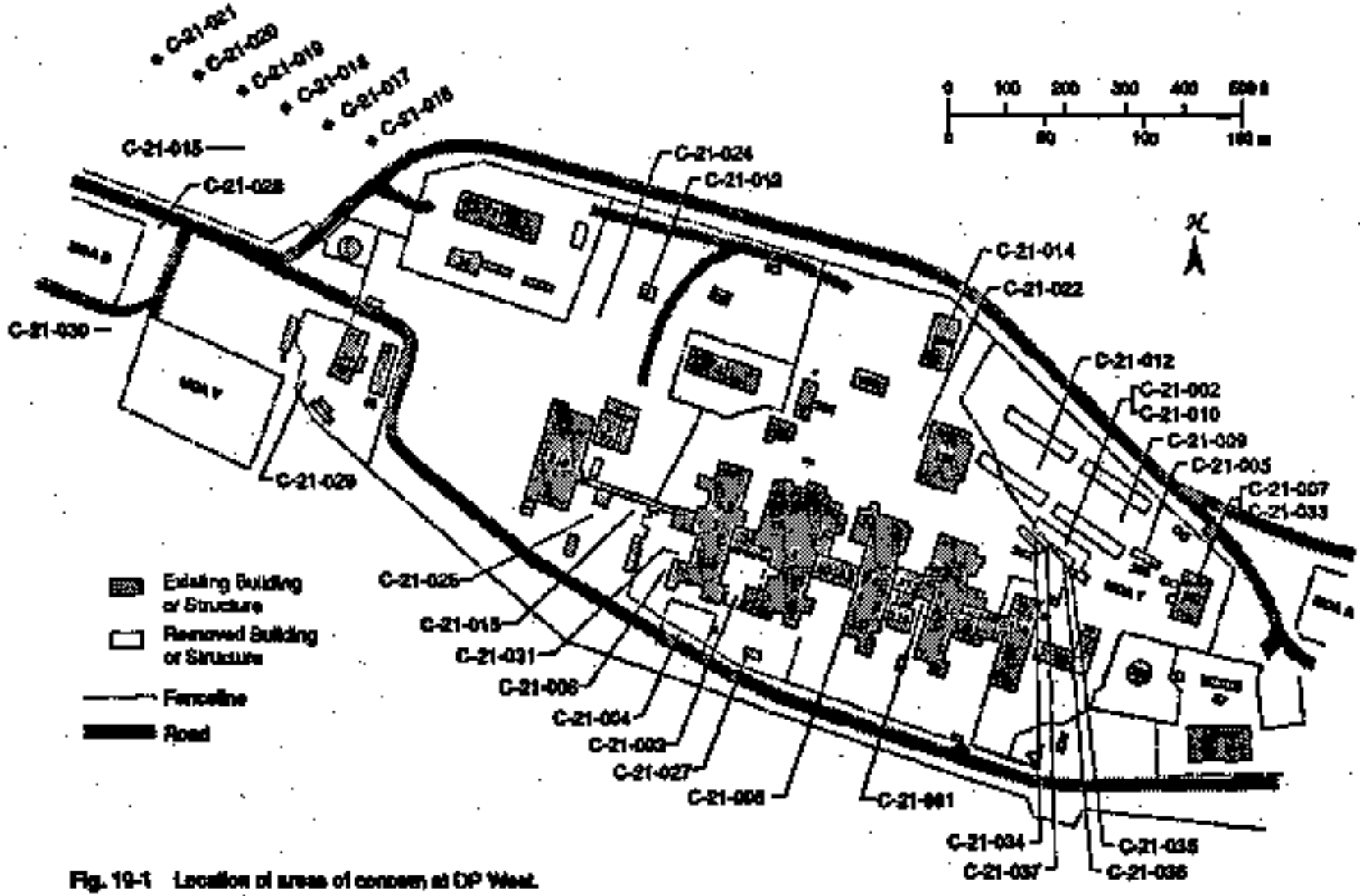


Fig. 19-1 Location of areas of concern at DP West.

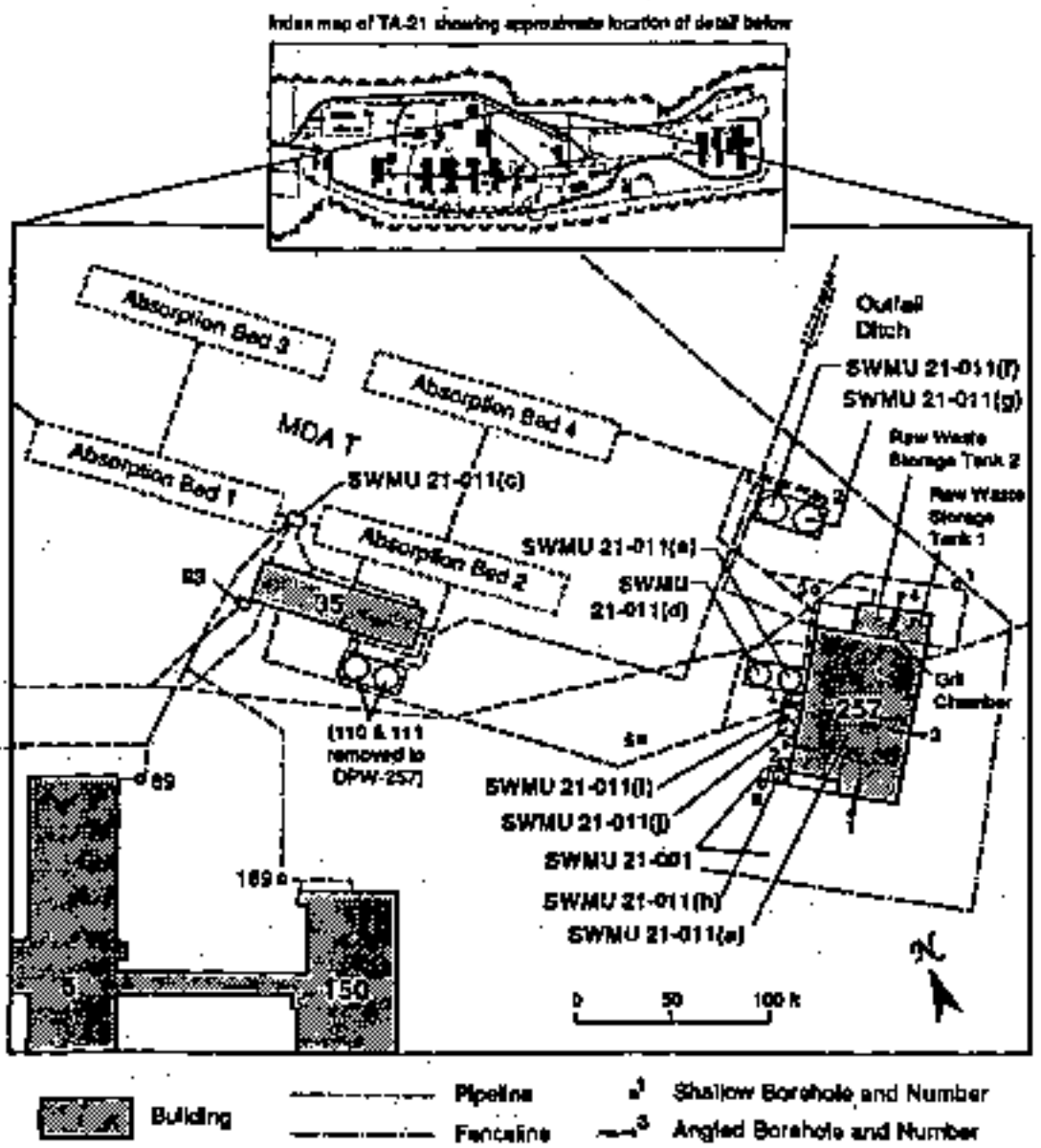


Fig. 16.5-1 SWMU and borehole locations for the New Industrial Waste Treatment Plant TA-21-257. (LASL 1976b; LANL 1983a)

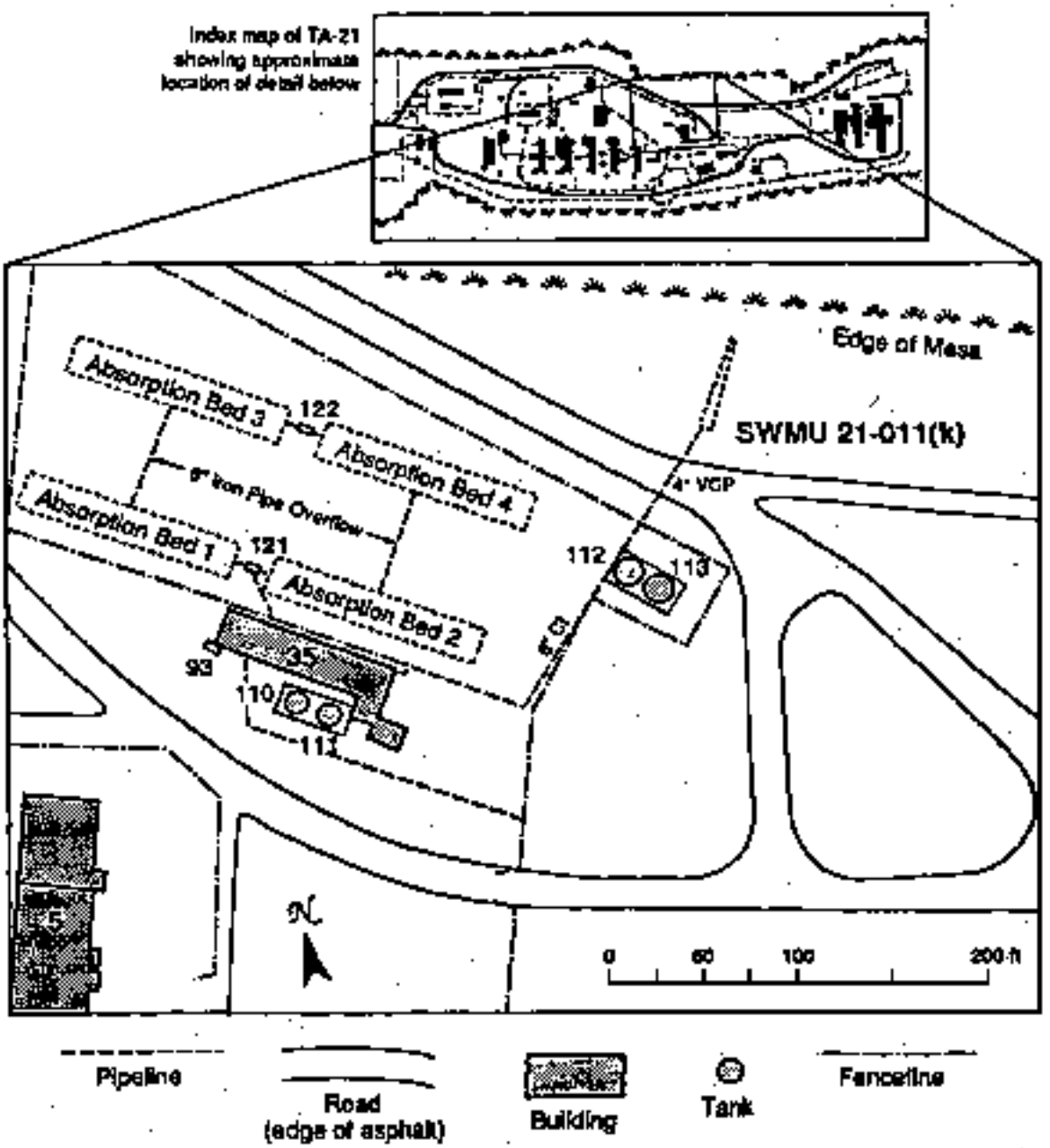


Fig. 15.4-1 Location of SWMU 21-011(k) in 1958. (LASL 1958c, 1961)

PRS Consolidation Worksheet

Site Type: MDA U

Proposed PRS Number: 21-017(a)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
21-017(a)	HSWA	Adsorption bed	SVOCs, Rad	Under Investigation
21-017(b)	HSWA	Absorption bed	SVOCs, Rad	Under Investigation
21-017(c)	HSWA	Sump	SVOCs, Rad	Under Investigation
21-022(f)	HSWA	Piping	SVOCs, Rad	Under Investigation

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms (surface and subsurface), and the investigation required to assess the contamination at MDA U, it is proposed that these PRSs be consolidated.

Description of Aggregate:

MDA U covers approximately 0.25 acres and contains two adsorption beds (PRSs 21-017(a,b)) and the associated sump (PRS 21-017(c)). PRS 21-022(f) is the piping formerly serving MDA U. MDA U was used for the subsurface disposal of contaminated liquid wastes from DP East. In 1985, the piping and sump were removed and a trench was excavated to remove soil contaminated with actinium; not all contamination was removed

NMED Concurrence: _____ *Date:* _____

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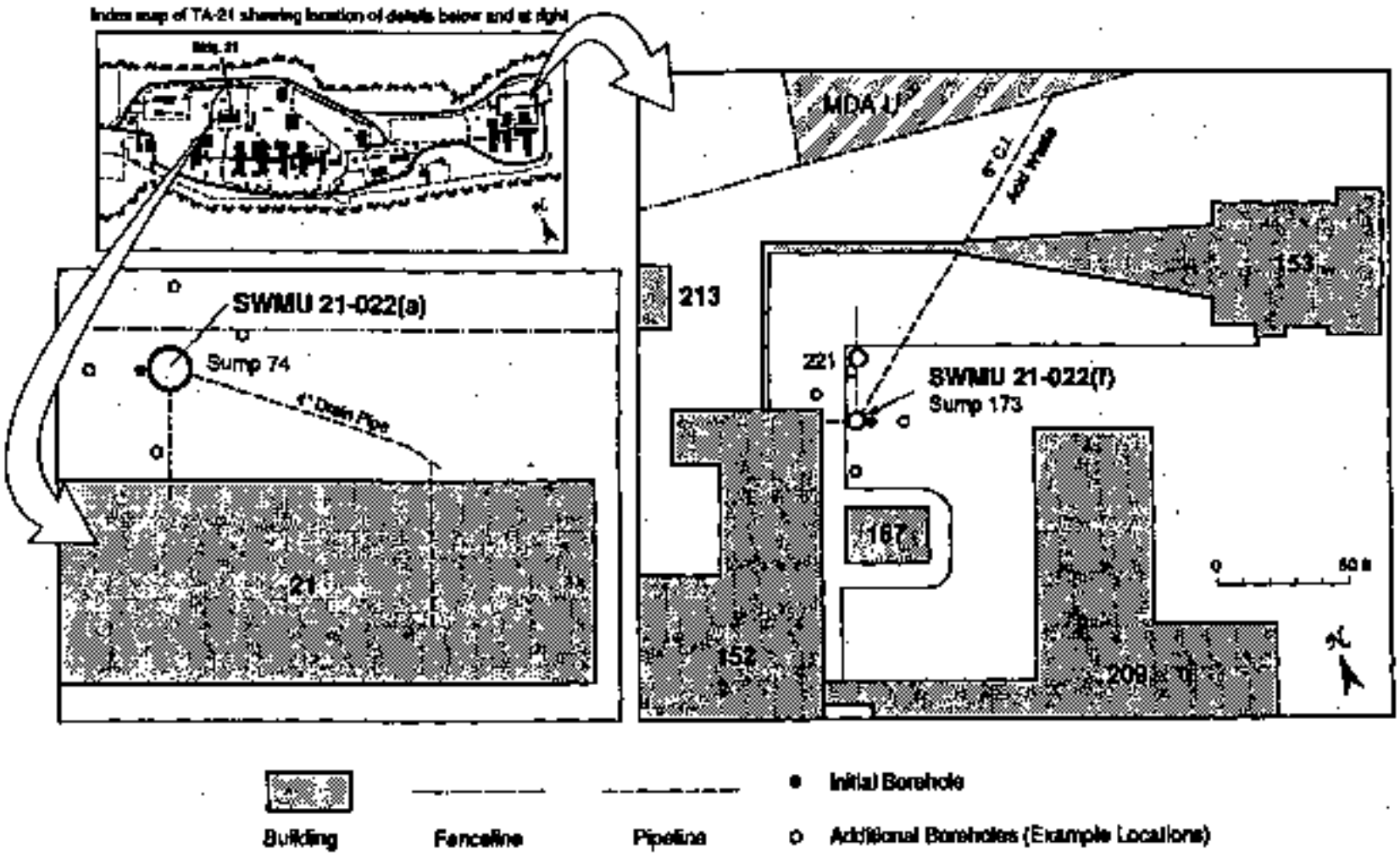


Fig. 17.5-1 Location of SWMUs 21-022(a) (f). (LASL 1960, 1964)

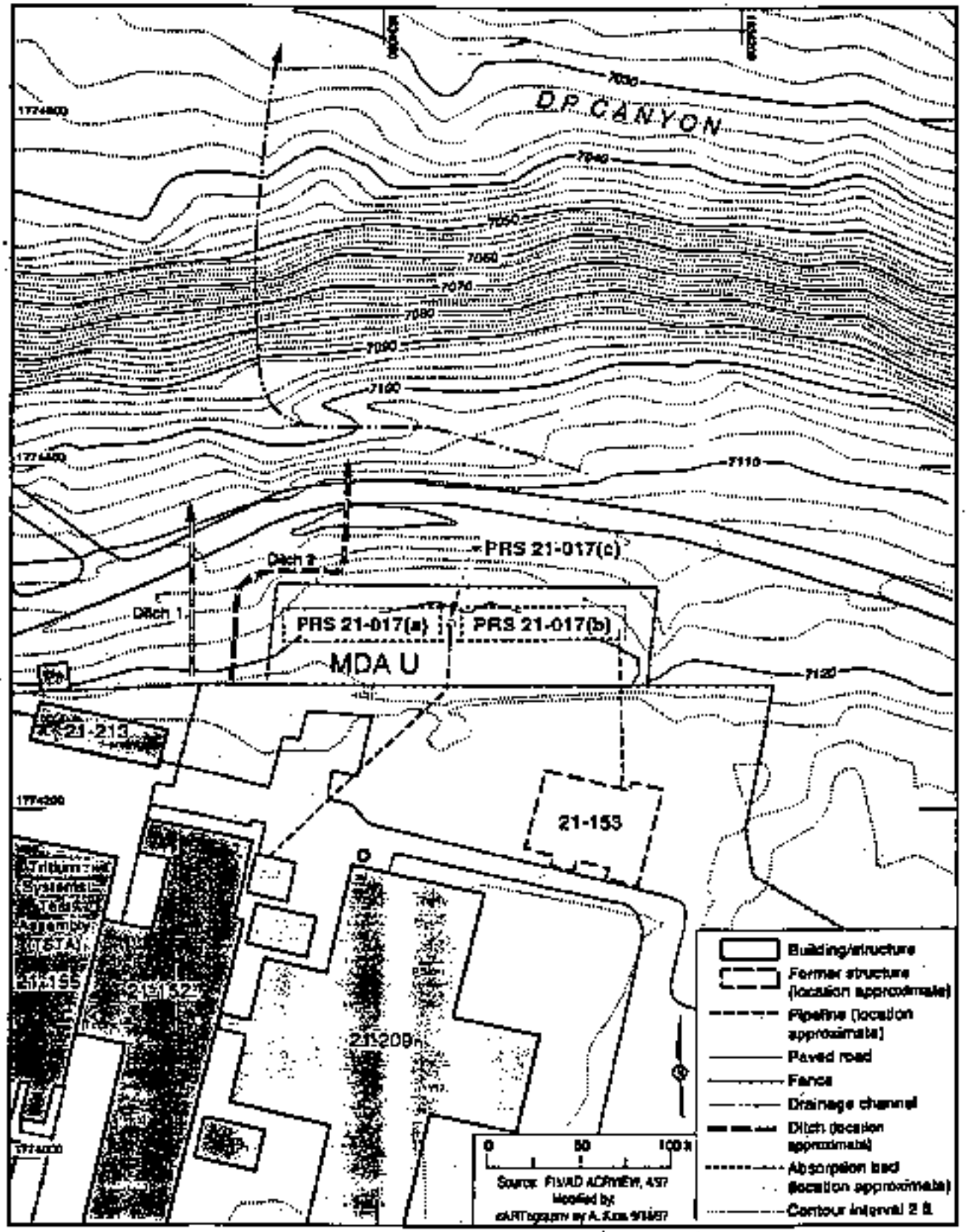


Figure 2. MDA U site map.

PRS Consolidation Worksheet

Site Type: MDA

Proposed PRS Number: 21-018(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
21-013(b)	HWSA	Surface disposal	Rad, metals, organics	Under Investigation
21-013(g)	Non-HSWA	Surface disposal	Rad, metals, organics	Under Investigation
21-018(a)	HWSA	Liquid disposal pits	Rad, metals, organics	Under Investigation
21-018(b)	HSWA	Former laundry facility structure	Rad, metals, organics	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on operational history of the laundry facility, geographic proximity of each of the associated PRSs, transport mechanisms (surface and subsurface) of identical contaminants, and the type of investigation needed to assess these PRSs and surrounding area, they are proposed for consolidation.

Description of Aggregate:

PRSs 21-013(b,g) and 21-018(a,b) are associated with Material Disposal Area (MDA) V. PRS 21-018(a) consists of three liquid absorption beds (20 ft x 200 ft x 8 ft deep) designed to dispose of the outflow from the radioactive laundry facility (PRS 21-018(b)) and the 6" iron pipe that piped the outflow from PRS 21-018(b). The beds were in continuous use from 1945 to 1961. Historic evidence shows the bed were under-designed for the volume of wastewater discharged, resulting in overflows into the adjacent drainage and into Los Alamos Canyon. PRSs 21-013(b,g) are surface disposal areas (building debris pushed over the mesa edge) immediately down gradient from the absorption beds; overflows from the beds flowed over these PRSs. The laundry facility structure has been removed.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

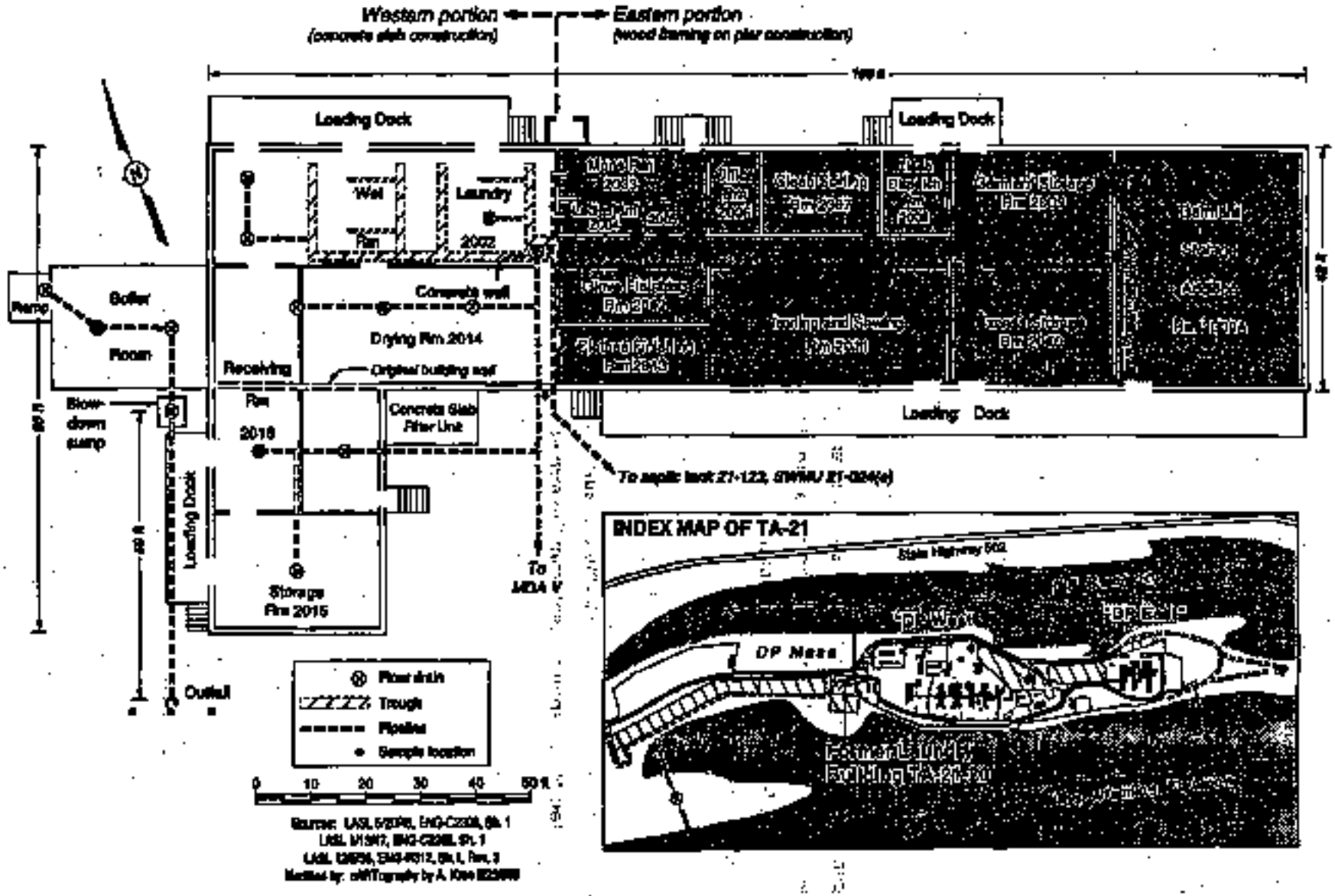


Fig. 1. Sample locations for former laundry building, TA-21-20.

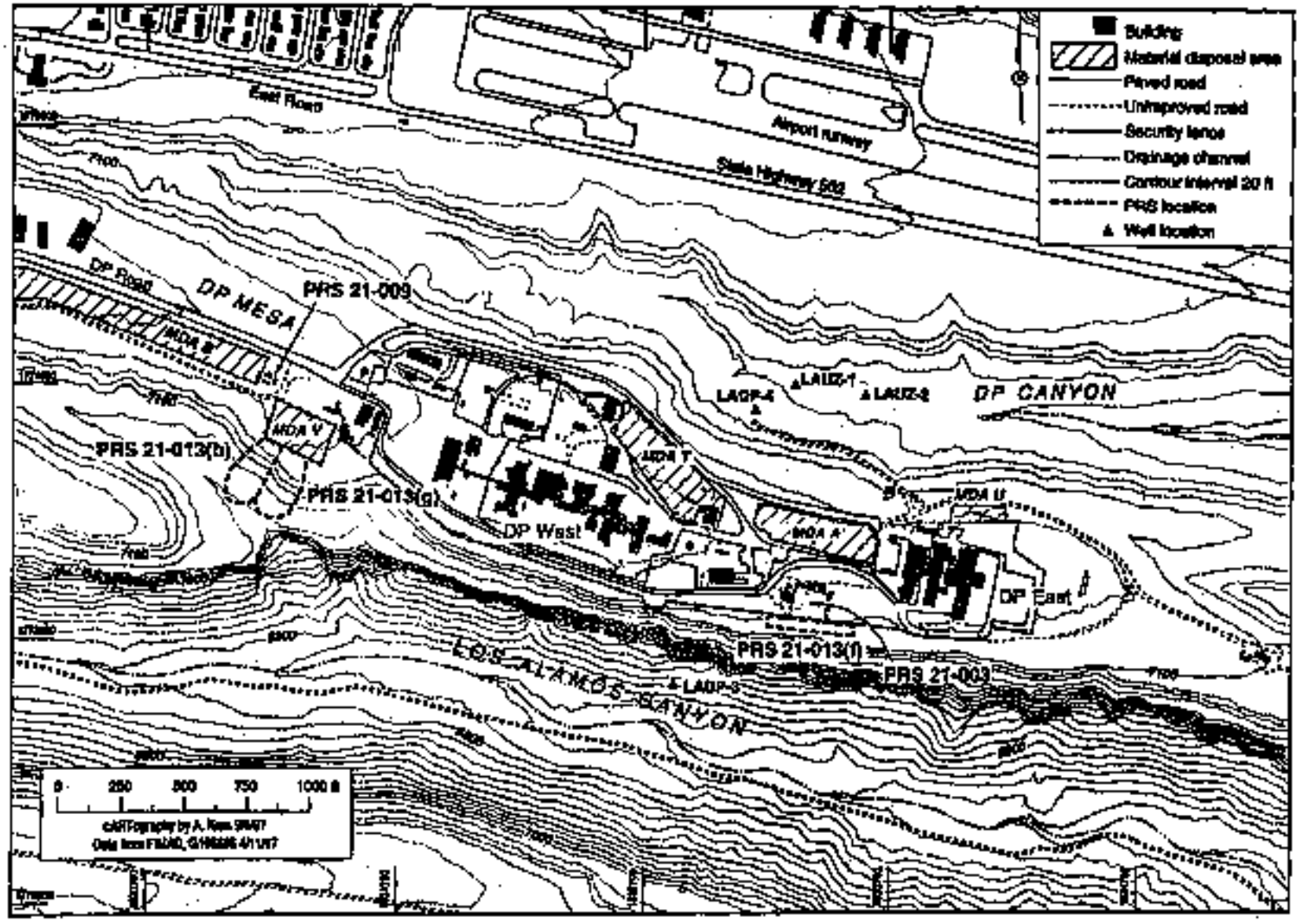


Fig. 1.1-3 Location of PRSs 21-013(b, f, and g).

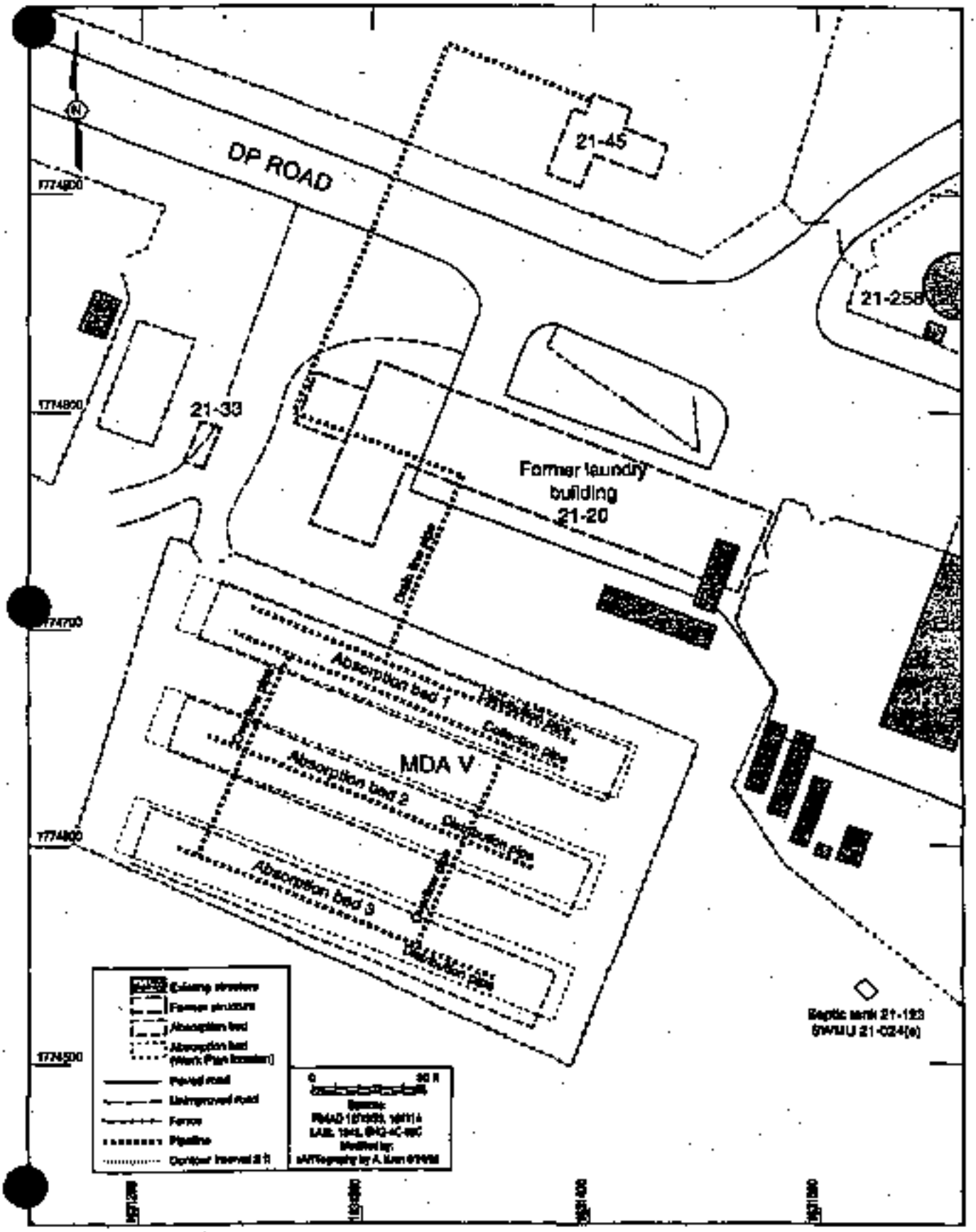


Fig. 5.1.1-1. Layout of absorption beds at MDA V, based on TA-21 work plan. 21-018(a)

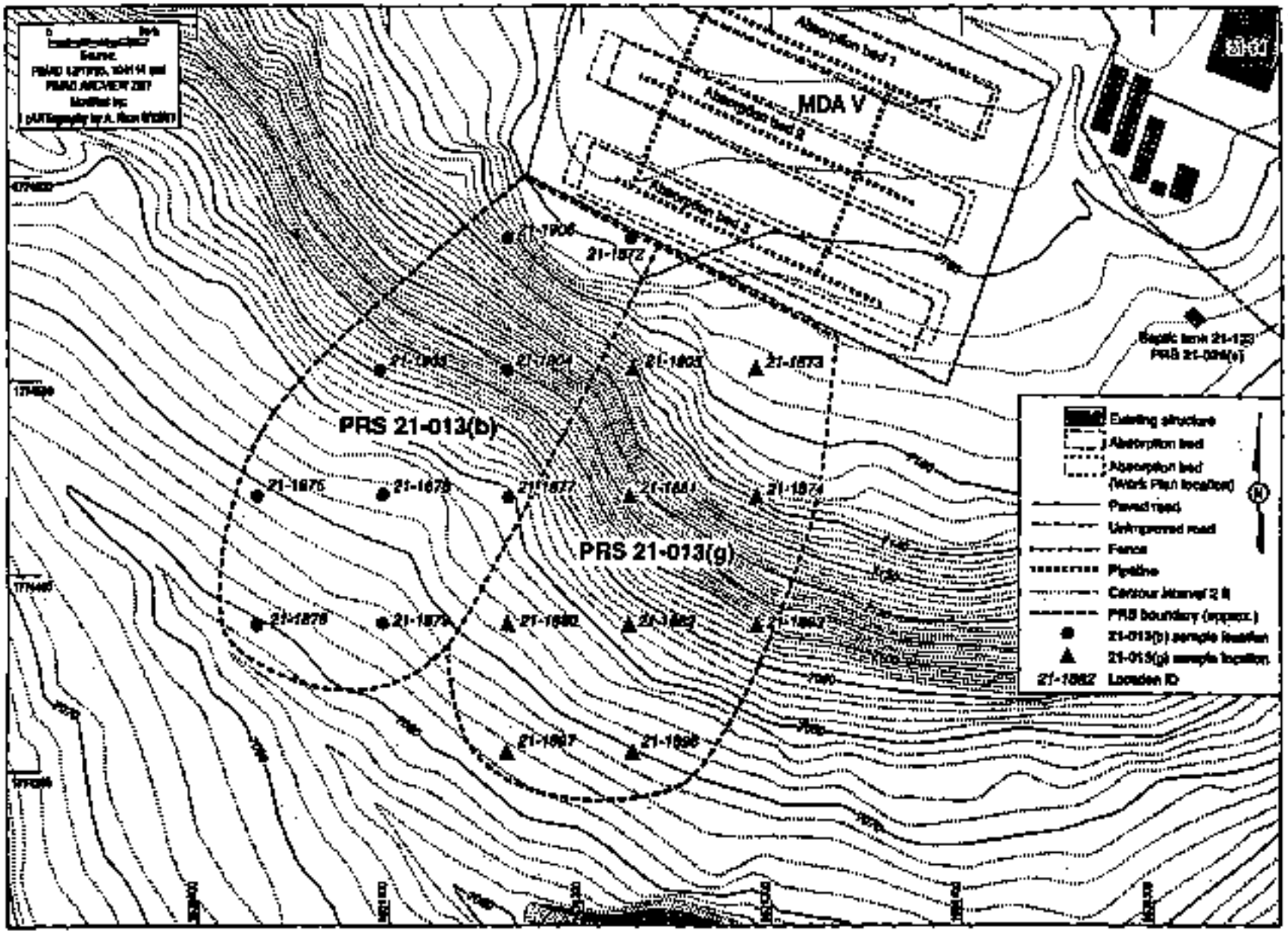


Fig. 6.1.4-1. Locations of samples collected at PRSs 21-013(b,g).

PRS Consolidation Worksheet

Site Type: Miscellaneous

Proposed PRS Number: 21-021-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
21-019(a)	Non-HSWA	Deposition from air emissions	Radionuclides (U, Pu, Am, etc.)	NFA Criterion 5
21-019(b)	Non-HSWA	Deposition from air emissions	Radionuclides (U, Pu, Am, etc.)	NFA Criterion 5
21-019(c)	Non-HSWA	Deposition from air emissions	Radionuclides (U, Pu, Am, etc.)	NFA Criterion 5
21-019(d)	Non-HSWA	Deposition from air emissions	Radionuclides (U, Pu, Am, etc.)	NFA Criterion 5
21-019(e)	Non-HSWA	Deposition from air emissions	Radionuclides (U, Pu, Am, etc.)	NFA Criterion 5
21-019(f)	Non-HSWA	Deposition from air emissions	Radionuclides (U, Pu, Am, etc.)	NFA Criterion 5
21-019(g)	Non-HSWA	Deposition from air emissions	Radionuclides (U, Pu, Am, etc.)	NFA Criterion 5
21-019(h)	Non-HSWA	Deposition from air emissions	Radionuclides (U, Pu, Am, etc.)	NFA Criterion 5
21-019(i)	Non-HSWA	Deposition from air emissions	Radionuclides (U, Pu, Am, etc.)	NFA Criterion 5
21-019(j)	Non-HSWA	Deposition from air emissions	Radionuclides (U, Pu, Am, etc.)	NFA Criterion 5
21-019(k)	Non-HSWA	Deposition from air emissions	Radionuclides (U, Pu, Am, etc.)	NFA Criterion 5
21-019(l)	Non-HSWA	Deposition from air emissions	Radionuclides (U, Pu, Am, etc.)	NFA Criterion 5
21-019(m)	Non-HSWA	Deposition from air emissions	Radionuclides (U, Pu, Am, etc.)	NFA Criterion 5
21-020(a)	Non-HSWA	Deposition from air emissions	Radionuclides (U, Pu, Am, etc.)	NFA Criterion 5
21-020(b)	Non-HSWA	Deposition from air emissions	Radionuclides (U, Pu, Am, etc.)	NFA Criterion 5
21-021	HSWA	Deposition from air emissions	Radionuclides (U, Pu, Am, etc.)	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on operational history, waste streams, geographical proximity (DP Mesa), undistinguishable source term, and the investigation needed to assess the above PRSs, it is proposed that the PRSs be consolidated to identify them as being part of the TA-21 air emissions inventory.

Description of Aggregate:

TA-21 (DP Mesa) has had historical air emissions from incinerators, filter houses, buildings, and exhaust stacks since the beginning of technical operations in the mid 1940s. Radionuclides were the predominate emission and the amount fluctuated greatly with time. In 1992, DP Mesa was gridded and the surface and shallow subsurface was sampled for radionuclides. Results for Pu-239 ranged from 0-60 pCi/g with no discernable trend or pattern that would allow the specific origin of the airborne contamination to be identified.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

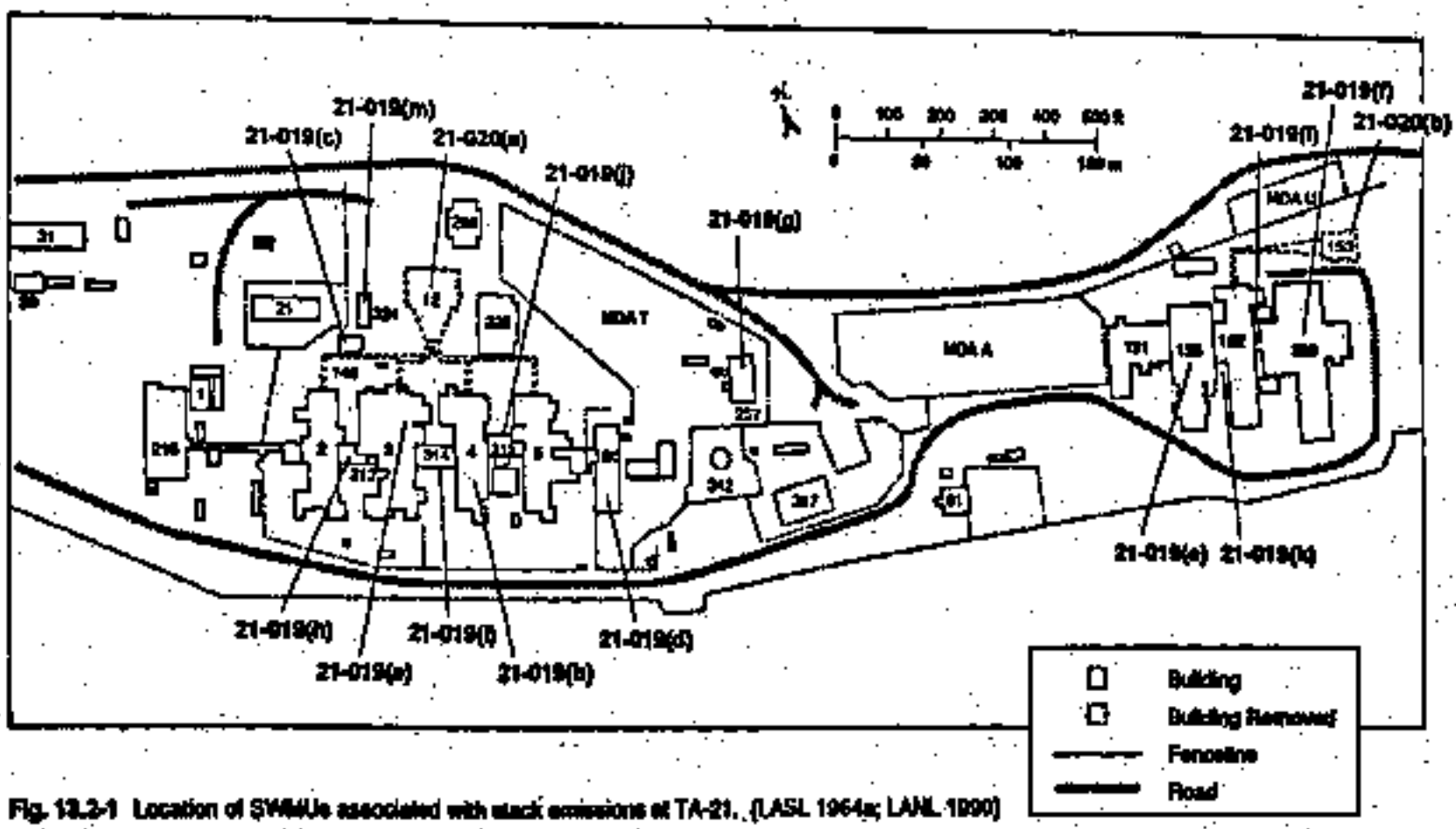


Fig. 13.2-1 Location of SWMUs associated with stack emissions at TA-21. (LASL 1964a; LANL 1990)

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 21-022(b)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
21-022(b)	HSWA	Former Acid Waste Sump	Rad, Metals, Organics	Under Investigation
21-022(c)	HSWA	Former Acid Waste Sump	Rad, Metals, Organics	Under Investigation
21-022(d)	HSWA	Former Acid Waste Sump	Rad, Metals, Organics	Under Investigation
21-022(e)	HSWA	Former Acid Waste Sump	Rad, Metals, Organics	Under Investigation
21-022(g)	HSWA	Former Acid Waste Sump	Rad, Metals, Organics	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on operational history, geographic proximity, transport mechanisms (subsurface), and the type of investigation needed to assess these PRSs, they are proposed for consolidation.

Description of Aggregate:

These five PRSs are associated with sumps and drain lines on the north side of buildings 21-2, 21-3, 21-4, 21-5, and 21-150. These sumps received radioactive liquid waste from DP West facilities prior to the start up of MDA T and subsequent waste disposal facilities (TA-21-257). The sumps were removed in 1979 and 1980. The investigation of the former sump locations will be coordinated with the D&D effort for the associated buildings.

Although one of these lines was associated with MDA T, the newer lines were rerouted to serve Building 257. The geographic extent of these lines (>500 linear feet) is such that the PRSs will be investigated separately from MDA T.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

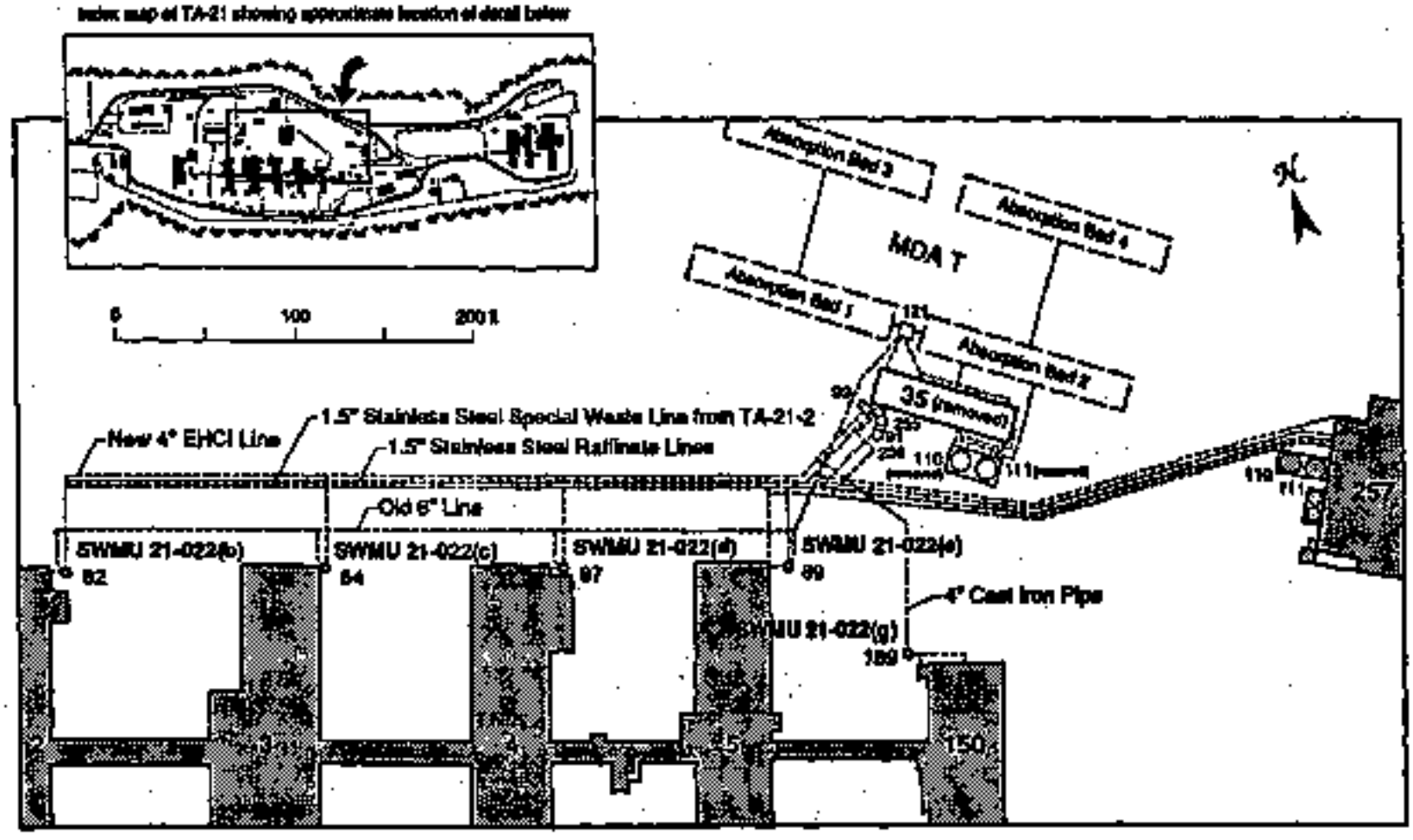


Fig. 18.5-1 Location of acid waste lines and sumps as they appeared in 1954 and 1962 on the north end of Buildings 2, 3, 4, 5, and 150. (LASL 1961, 1976b)

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 21-022(h)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
21-022(h)	HSWA	Acid Line and Sumps	Uranium, Plutonium, Metals, Organics	Under Investigation
21-022(i)	HSWA	Acid Line and Sumps	Uranium, Plutonium, Metals, Organics	Under Investigation
21-022(j)	HSWA	Acid Line and Sumps	Uranium, Plutonium, Metals, Organics	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on operational history, geographic proximity, transport mechanisms (subsurface), and the type of investigation needed to assess these PRSs, they are proposed for consolidation.

Description of Aggregate:

21-022(h) is a sump and line that will be removed by D&D in the demolition of building 21-150. 21-022(i) is a sump that was removed in the D&D of building 21-3 south. 21-022(j) is a sump located in building 21-2 south.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

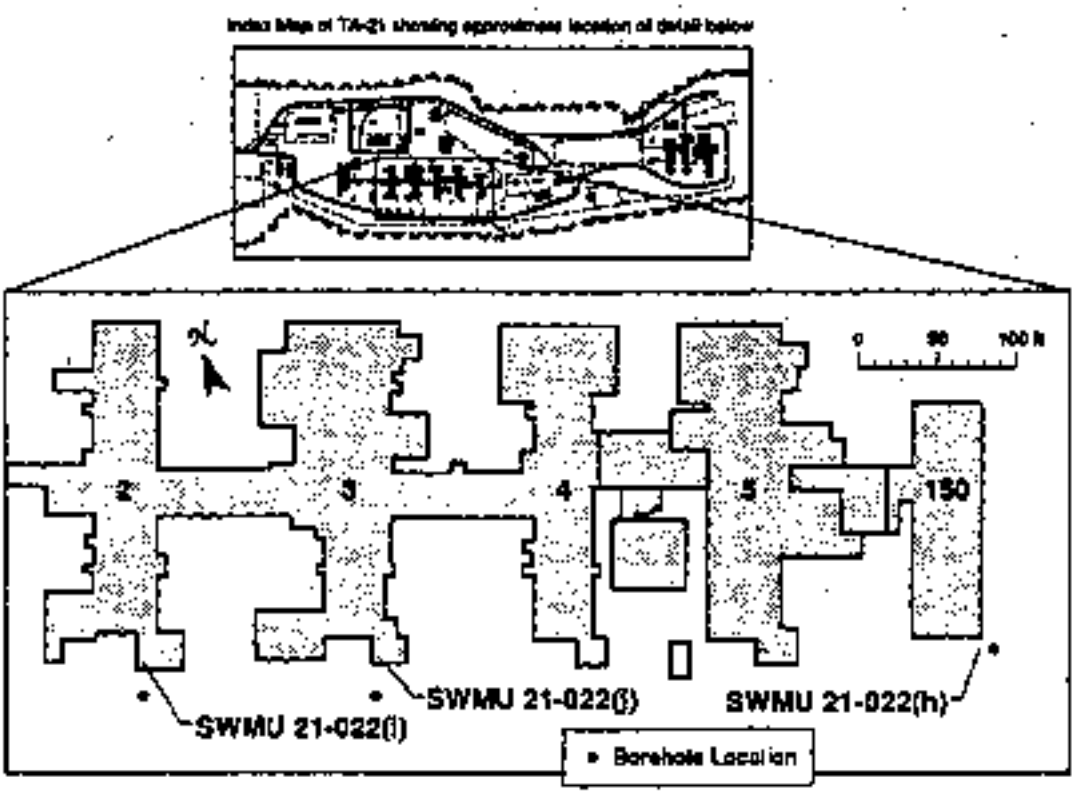


Fig. 18.8-1 Location of boreholes and SWMUs 21-022(h)–(i).

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 21-023(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
21-023(a)	HSWA	Former Septic Tank	Rad, Metals, Organics	Under Investigation
21-023(b)	HSWA	Former Septic Tank	Rad, Metals, Organics	Under Investigation
21-023(d)	HSWA	Former Septic Tank	Rad, Metals, Organics	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Because all three PRS's are in the same geographical location, and have the same COPCs, they are proposed for consolidation

Description of Aggregate:

These PRSs are the location of former septic tanks beneath the footprint of buildings(TA-21-3 North and -35) that have been decommissioned by D&D. The tanks were removed in 1988. Building 3 North housed plutonium processing activities, however, the septic tanks reportedly received only wastewater from decontamination showers and lavatories.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

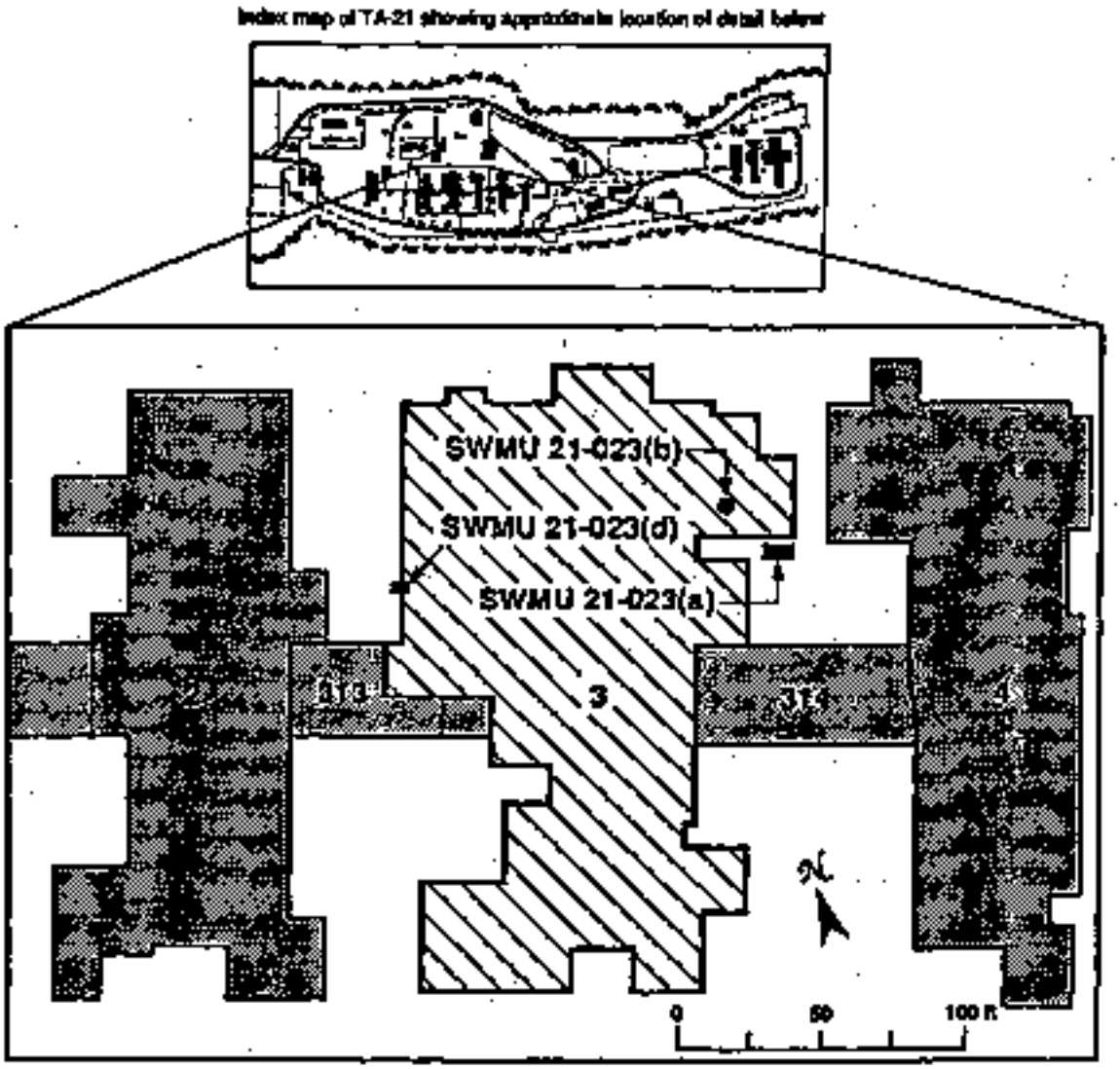


Fig. 18.3-1 Location of SWMUs 21-023(a), (b), and (d) in relation to current configuration of Building 3. (LASL 1964, 1968a)

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 21-024(l)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
21-004(a)	Non-HSWA	Surface Unit	Rad, Organics	NFA Criterion 5
21-024(l)	HSWA	Outfall		NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Because the two PRS's are in the same location any investigation or remediation will incorporate both and are therefore proposed for consolidation.

Description of Aggregate:

PRS 21-004(a) is an aboveground tank (#335) and drainline north of building TA-21-21. The tank replaced outfall PRS 21-024(l) that was connected to floor drains in TA-21-021. TA-21-021 was known as the vault where all finished metal products (plutonium and uranium) were stored. Wash-down water from floor cleaning may have been discharged to the outfall and subsequently to the tank. The interior of the tank has been swept and no radioactive contamination was detected. The vault is currently inactive and scheduled for D&D.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

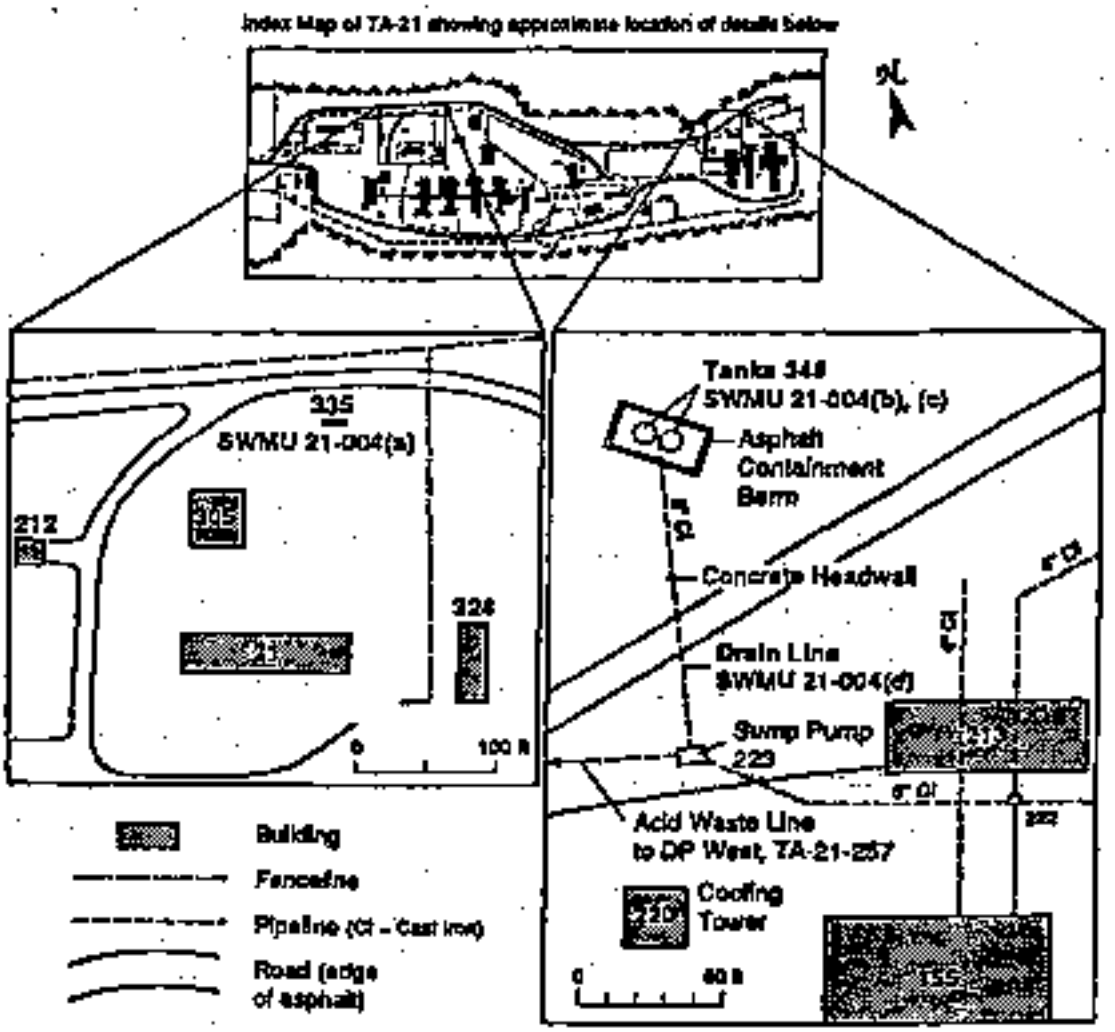


Fig. 14.3-1 Locations of the TA-21 aboveground tanks SWMU 21-004(a), (b), and (c) and the drain line [SWMU 21-004(d)] from sump TA-21-223 to aboveground tanks TA-21-348 [SWMU 21-004(b), (c)]. (LASL 1979; LANL 1983a)

pre-existing 6-in. drain line, SWMU 21-004(d), originating from sump pump TA-21-223. The sump pump is connected to the main TA-21 acid waste line and is responsible for pumping liquid waste produced at DP East to Building TA-21-257 at DP West for treatment (Fig. 14.3-1). The two tanks were installed to receive liquid waste from the sump, if it were to overflow.

Tanks TA-21-348 are reported to have been pumped out on two occasions over the past 12 years of operation. This liquid waste was sent back into sump TA-21-223. No leaks from the tanks or releases to the berm or the environment have occurred (Buchholtz 1991). No leaks on the tanks

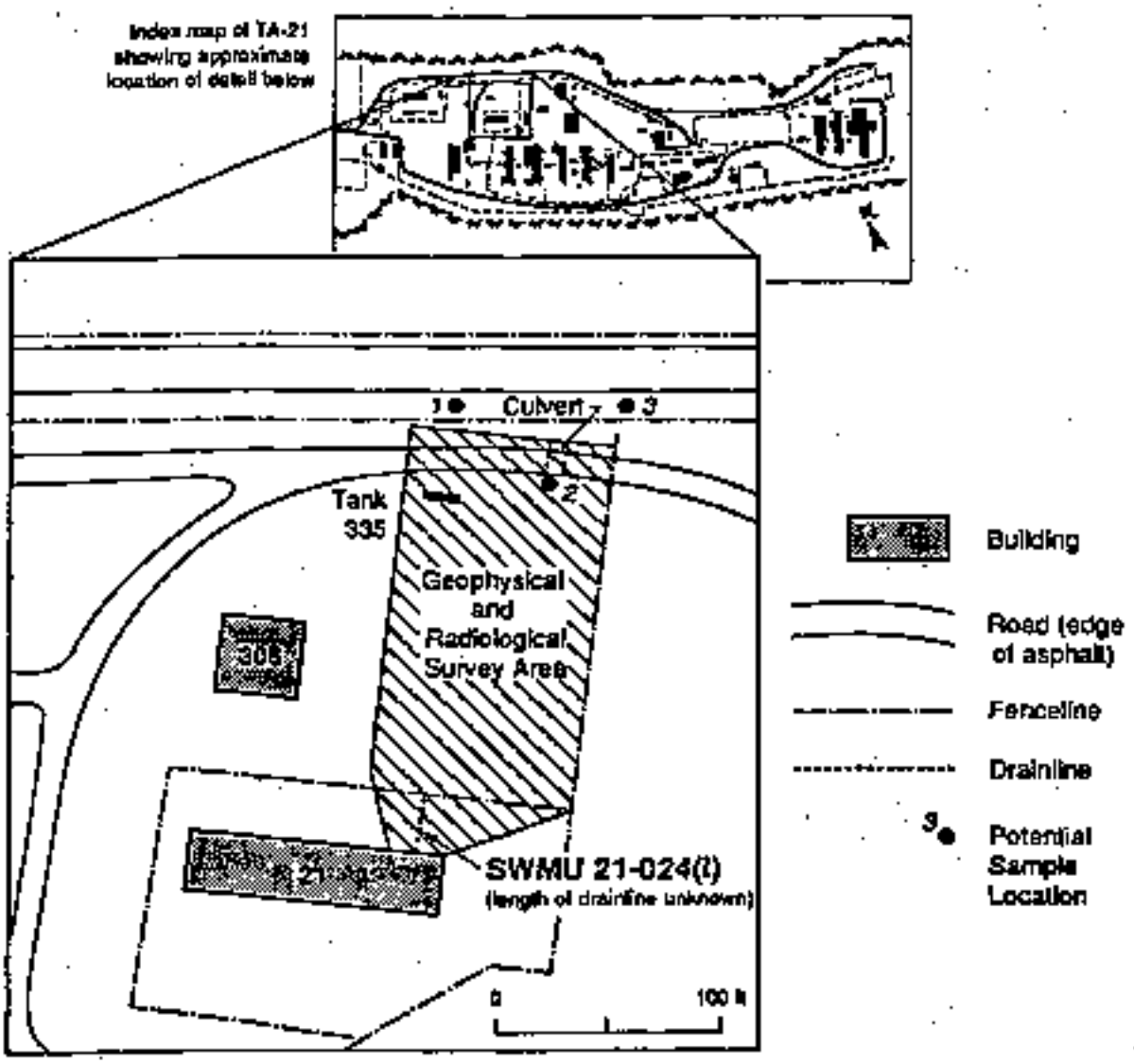


Fig. 15.2-4 Location of SWMU 21-024(l), geophysical and radiological survey area, and potential sampling locations. (LASL 1960; LANL 1993)

PRS Consolidation Worksheet

Site Type: Waste Water Treatment Plant

Proposed PRS Number: 21-026(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
21-013(a)	HSWA	Sand filter surface disposal area	Rad, Metals	NFA Criterion 5
21-026(a)	HSWA	Sewage treatment plant	Rad, Metals	NFA Criterion 5
21-026(b)	HSWA	Drying beds	Rad, Metals	NFA Criterion 5
21-026(c)	Non-HSWA	Dosing siphon chamber	Rad, Metals	NFA Criterion 5
21-026(d)	Non-HSWA	Outfall	Rad, Metals	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history and geographic proximity of the waste water treatment plant and its components, the common waste streams managed, transport mechanisms (surface and shallow subsurface) of identical contaminants, and the investigation needed to assess the contamination, it is proposed that the above PRSs be consolidated

Description of Aggregate:

PRSs 21-026(a-d) and 21-013(a) are associated with the components of a sewage treatment plant at TA-21. PRS 21-026(a) is the treatment plant that treated sanitary waste and non-contact cooling water from TA-21 facilities. Treated effluent was discharged to drying beds (PRS 21-026 (b)). PRS 21-026(c) is a chlorine contact chamber located next to the sewage plant (PRS 21-026(a)). PRS 21-026(d) is the outfall associated with the sewage treatment plant. PRS 21-013 (a) is a small disposal area consisting of sand from the drying beds of the sanitary waste treatment plant. This area is inactive.

Piping associated with this waste water treatment plant run the entire length of the mesa. This geographical extent is such that this sanitary line will be investigated separately.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

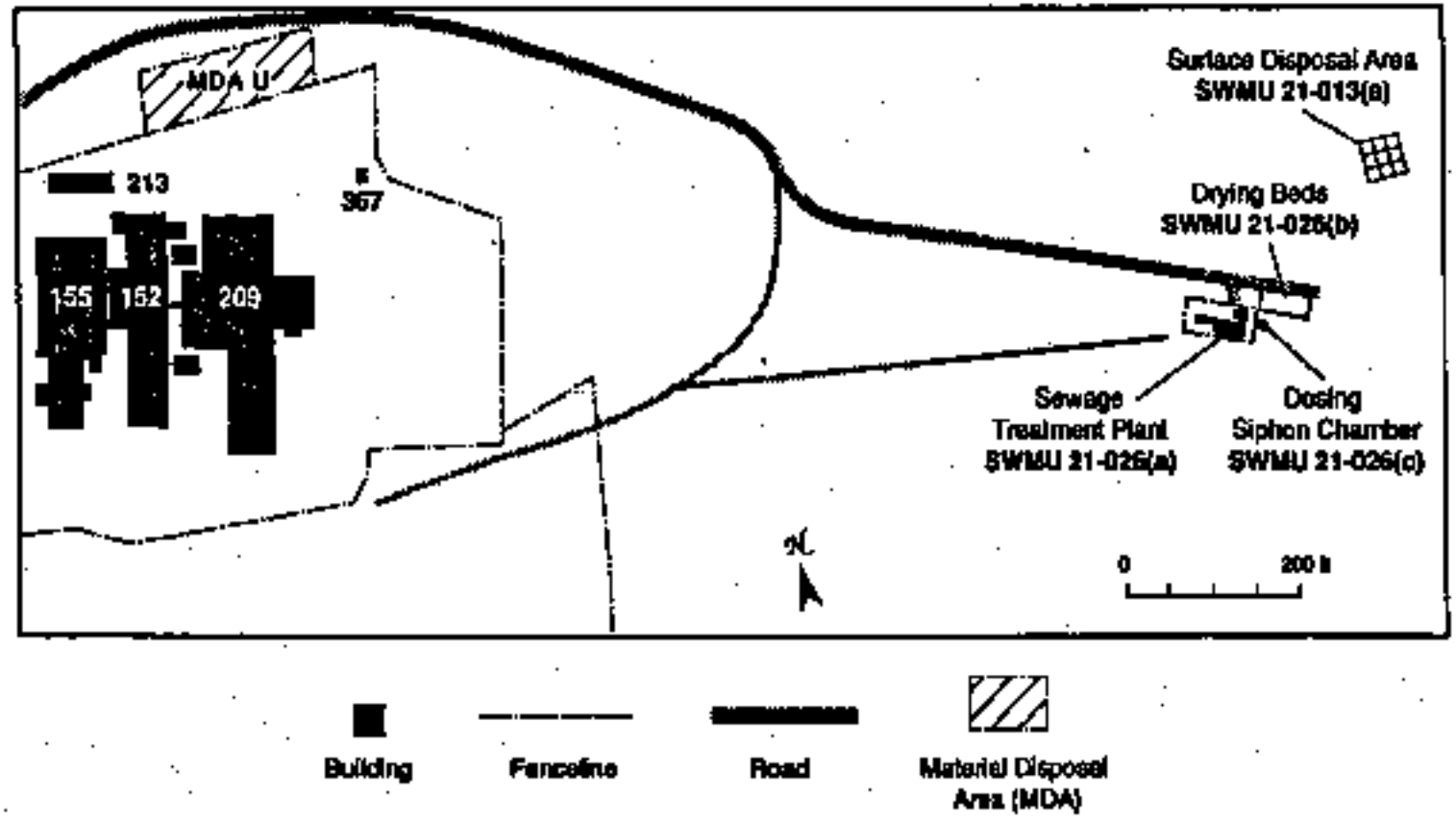


Fig. 14.8-1 Location of the TA-21 sewage treatment plant. (LASL 1986a)

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 21-027(d)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
21-027(d)	HSWA	Former Drain Line	VOCs, SVOCs, metals, radionuclides	Under Investigation
C-21-028	Non-HSWA	Former Aboveground Storage Tank	VOCs, SVOCs, metals, radionuclides	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms (primarily subsurface), and the type of investigation needed to assess the residual hydrocarbon contamination while removing the remaining portion of the drainline it is proposed that these PRSs be consolidated.

Description of Aggregate:

The consolidated PRS consists of a former aboveground diesel fuel storage tank and concrete containment area, and the drainline from the containment area. AOC-21-028 was a 12,788-gallon aboveground fuel tank, identified as structure TA-21-47. The tank was installed in 1945 and set on a reinforced 9-inch thick concrete slab. The slab had a 4-inch vitrified clay pipe (VCP) drainline, which discharged to the south toward the rim of Los Alamos Canyon. Following the construction of Building TA-21-33 in 1948, a reinforced concrete wall was constructed around the tank to contain any fuel should the tank leak or rupture. A 4-inch steel drainline (PRS 21-027(d)) replaced the former VCP drainline. The new drainline extended from the catch basin and was routed around the new building toward the rim of Los Alamos Canyon. The tank was reportedly removed in 1960 and the 4-inch steel drainline was removed in 1965. There are no records documenting the removal of the 4-inch VCP drainline. Historic records conflict over the use of the tank. Retired Zia Company employees who worked at TA-21 have stated that the tank was installed to serve the boiler in the former DP Laundry, (TA-21-20). The boiler was reportedly fueled by diesel fuel; however, former employees stated that the DP Laundry was tied into the overhead steam line and condensate return line from the DP Steam Plant so there would have been no reason to operate the boiler in the laundry building, and the tank may not have ever been used. There are no records of the tank being serviced (i.e., filled with diesel). The Comprehensive Environmental Assessment and Response Program (CEARP) report indicates the presence of a diesel tank with a storm drainline that extended to Los Alamos Canyon. The SWMU Report states that it is unknown whether the tank leaked or if there were hazardous releases from the drainline.

AOC-21-028 was proposed for no further action (NFA) in the TA-21 RFI Work Plan because it was one of "... those sites where records show that no documented releases have occurred, or that releases have occurred but cleanup has been conducted and documented, no further investigation will be pursued." The AOC was proposed for NFA in the March 1995 Request for Permit Modification, and subsequently approved for NFA by DOE. During the recent excavation of the non-traditional in-situ vitrification (NTISV) demonstration pit, a portion of the 4-inch VCP drainline (PRS 21-027(d)) was discovered. The RFI for PRS 21-027(d) was completed in 1992, and the site was determined as being suitable for NFA and a Class III Permit Modification by EPA in 1995, and by NMED in 1996. However, PRS 21-027(d) remains on Table A of Module VIII of LANL's Hazardous Waste Facility Permit.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

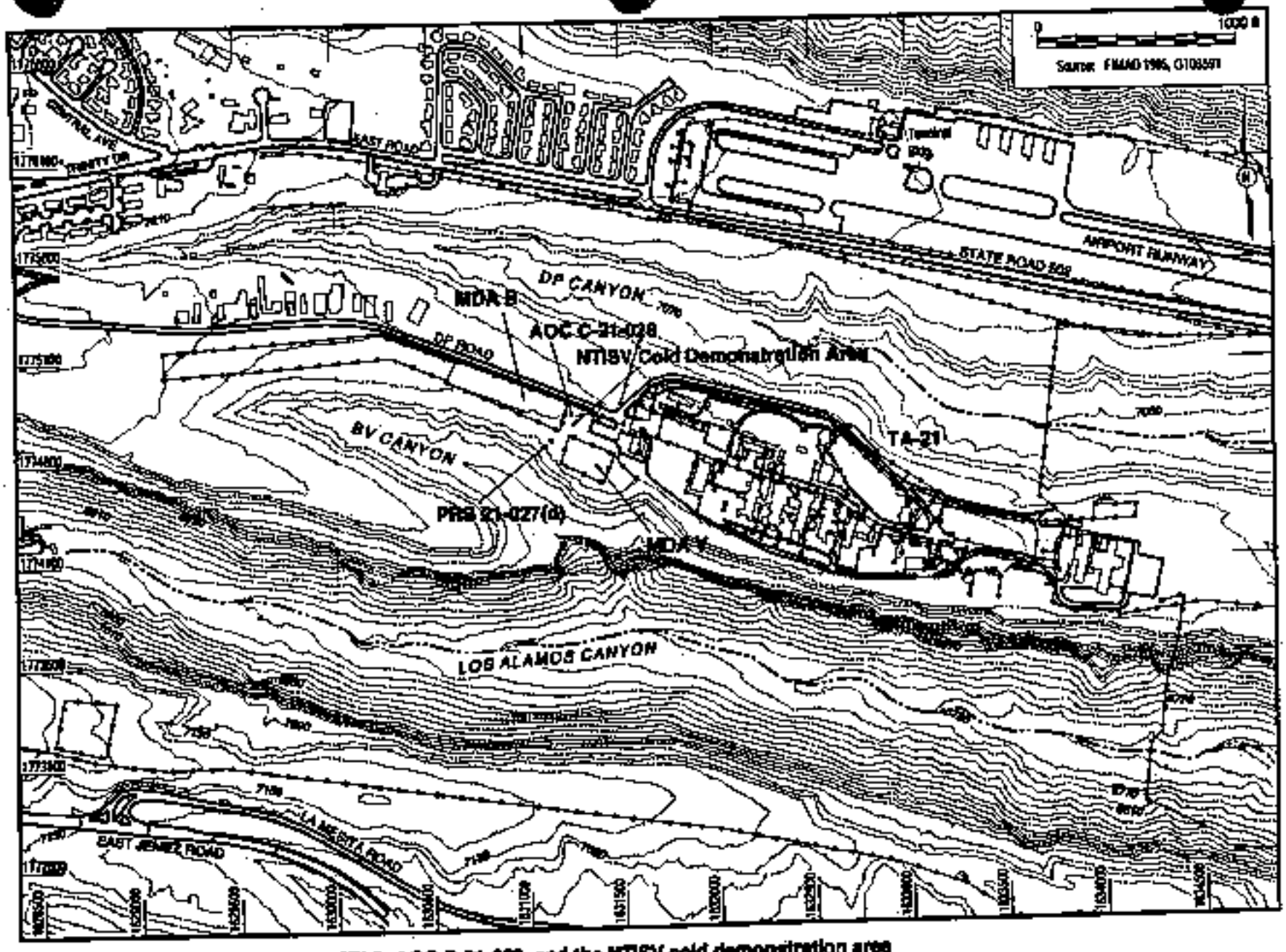
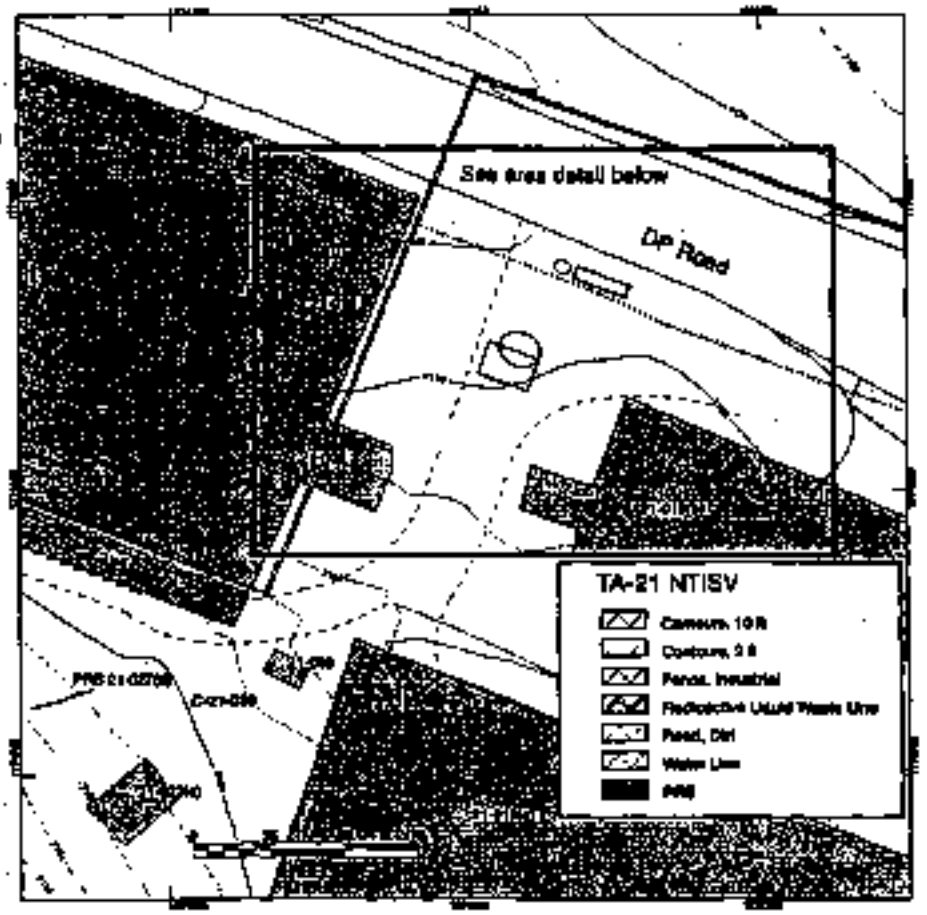


Figure 1-2. Locations of PRS 21-027(d), AOC C-21-028, and the NTISV cold demonstration area



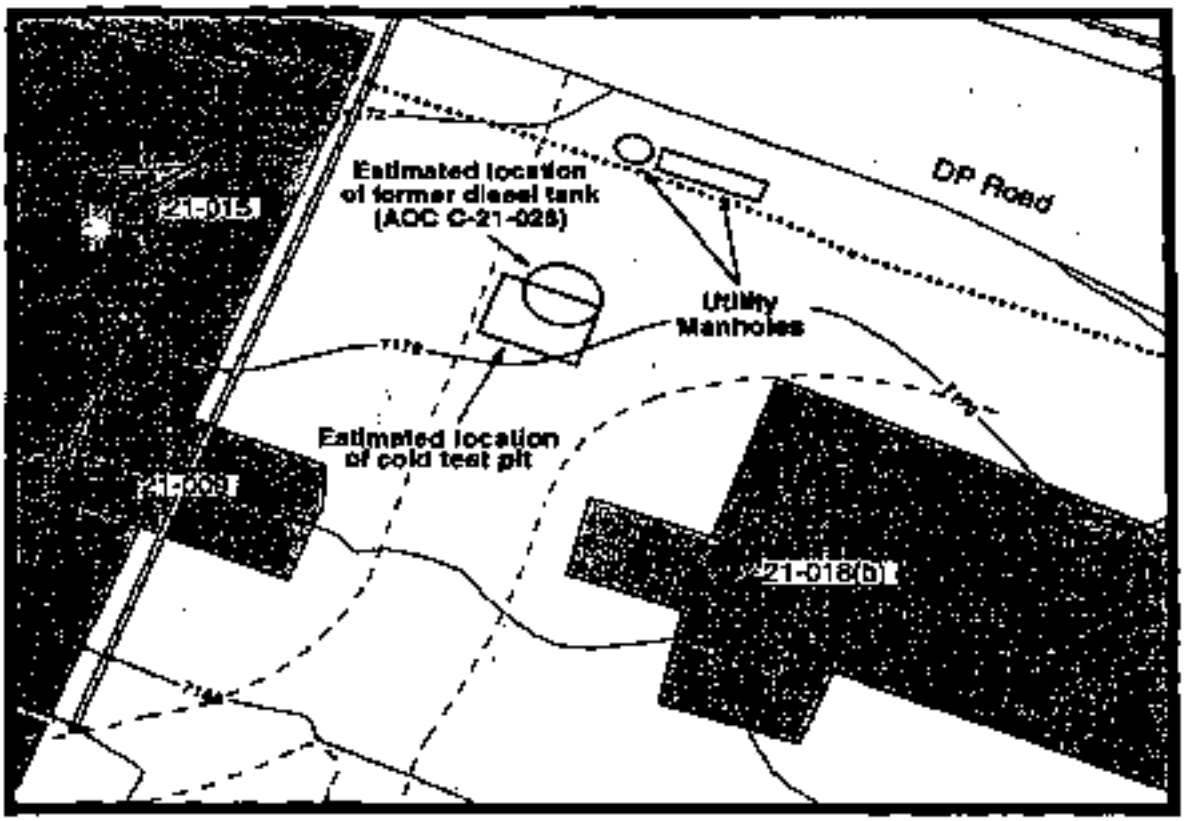


Figure 1-3. Site map with estimated locations for AOC C-21-028 and the NTISV cold demonstration area.

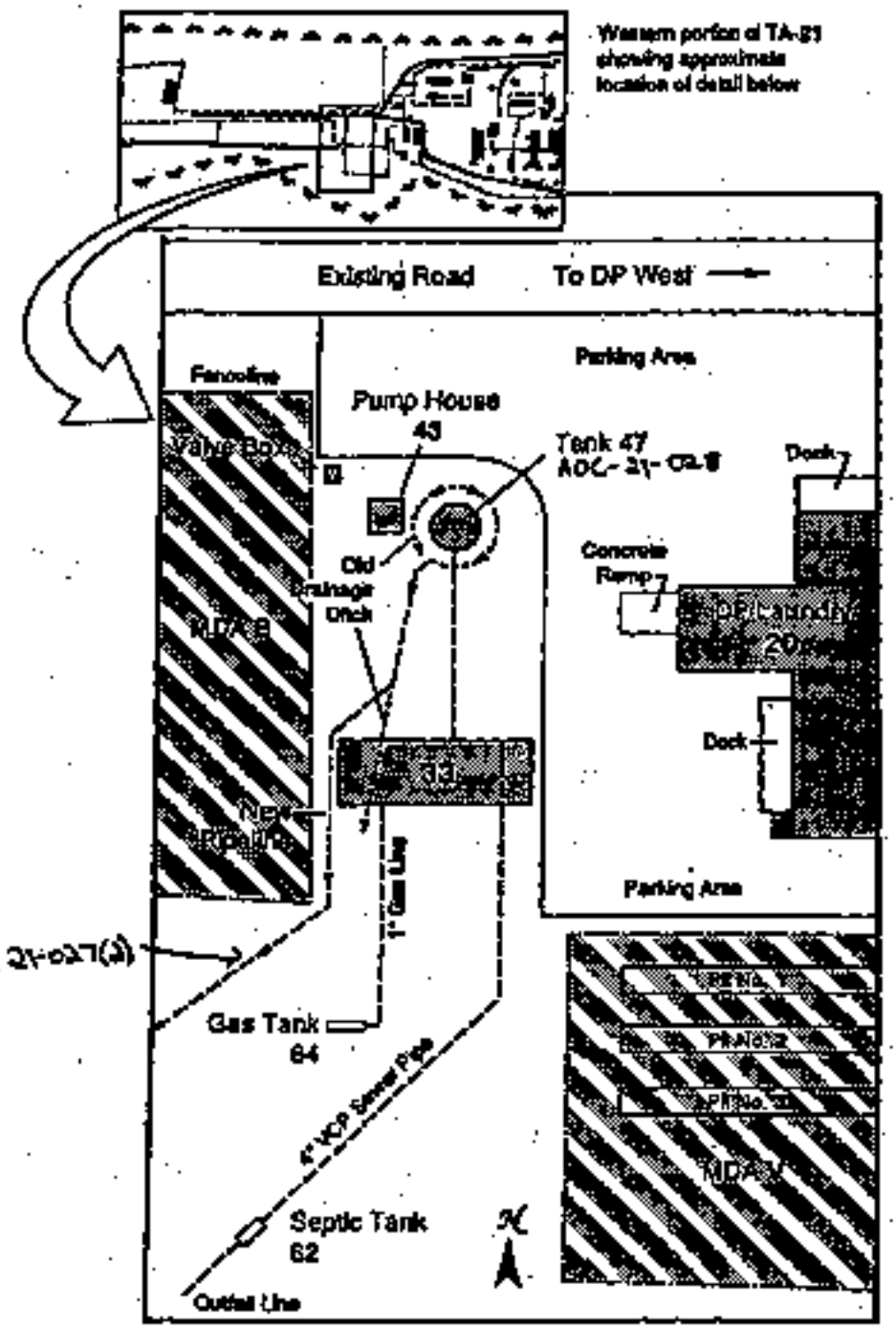


Fig. 17.3-1 Location of Building 33 at TA-21 in 1948. (LASL 1948)

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: **22-015(d)-99**

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
22-010(b)	HSWA	Septic Tank, Leach Field, Sand Filters	HE, organics, metals, Rad	NFA Criterion 5
22-012	HSWA	Wash Pad		NFA Criterion 5
22-015(d)	HSWA	Inactive Explosives Drain and Seepage Pit	HE, organics, metals, Rad	NFA Criterion 5
22-015(e)	HSWA	Inactive Explosives Sump	HE, organics, metals, Rad	NFA Criterion 5
22-016	HSWA	Former Septic Tank	HE, organics, metals, Rad	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Since these PRS's received the same contaminants and are part of a wastewater drainage system including associated drain lines, the source term is undistinguishable, they are recommended for consolidation.

Description of Aggregate:

PRS 22-016 was a septic tank (TA-22-42) serving building TA-21-1, used from 1945 until 1948 when it was replaced by another septic tank (TA-22-51) with a large leach field and associated drain lines. Buildings 22-90, 91, 93, 94, 52, and 5 were added to the system. The leach field was abandoned in the late 1970s or early 1980s and a sand filter east of the leach field was constructed. PRS 22-010(b) consists of the replacement septic tank, drain lines, leach field and sand filter. These tanks received sanitary wastewater from buildings associated with HE assembly, fabrication, and laundry operations.

PRS 22-012 is a concrete pad that was used for washing explosive contaminated equipment with water. PRS 22-015(e) is an inactive explosives sump and collected water through interconnected drain lines from the wash pad (PRS-012) and a sink drain from room 108 of Building TA-22-1. The sump was filled with concrete after the building was abandoned in 1984. PRS 22-015(d) is an inactive explosive drain and seepage pit that served building TA-22-1. The seepage pit collected wastewater from HE operations in the building including water from PRSs 22-012 and 22-015(e). A 8-inch vitrified clay pipe drain line from the wash pad sump extends in a southeasterly direction to the seepage pit and is approximately 180 feet in length.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

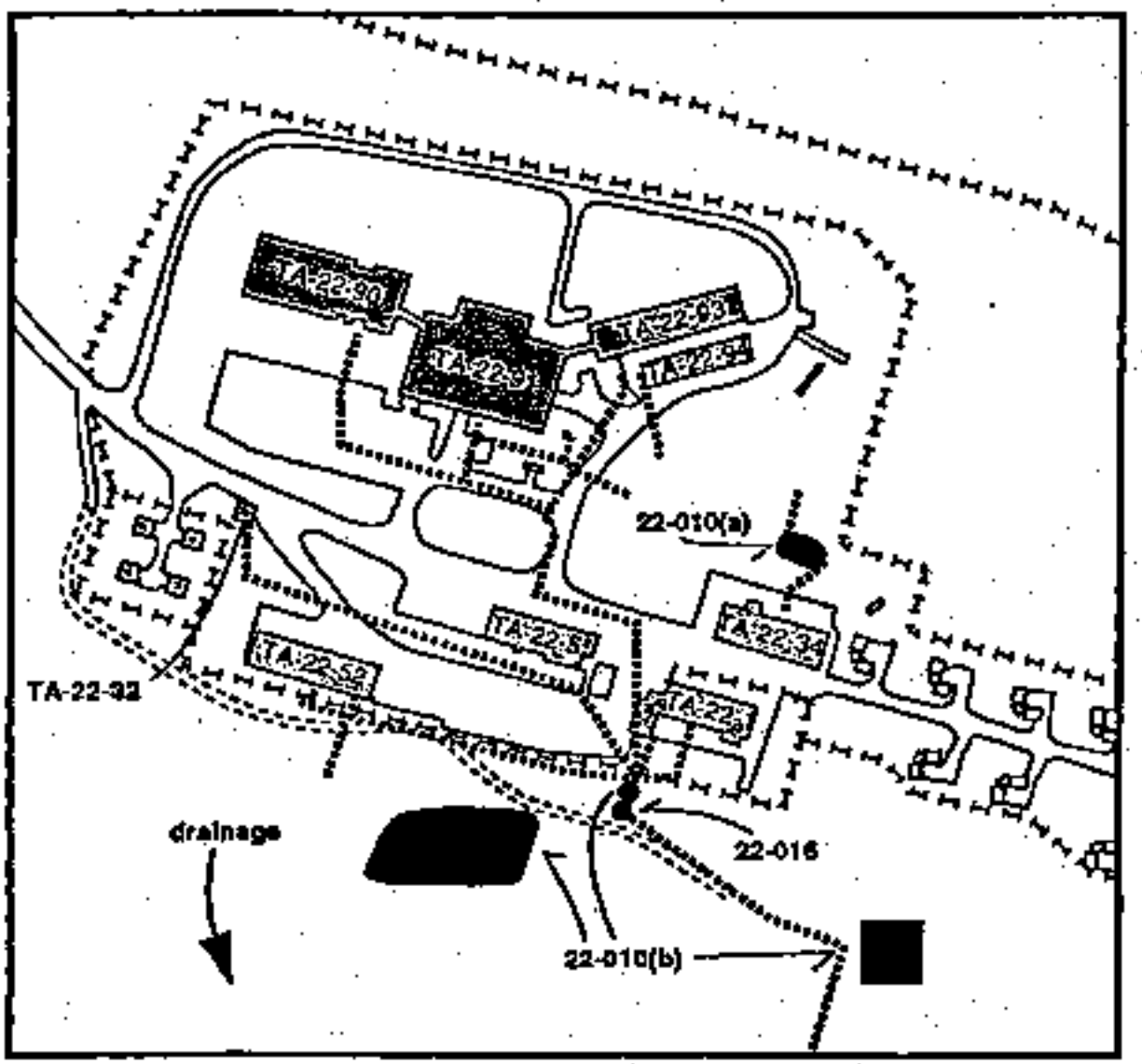
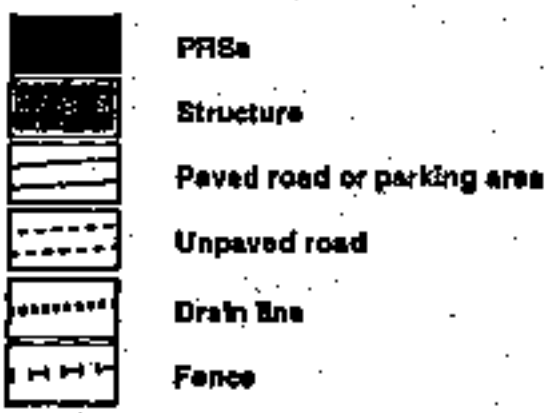


Figure 5-24. Locations of 22-010(a, b) and 22-016.



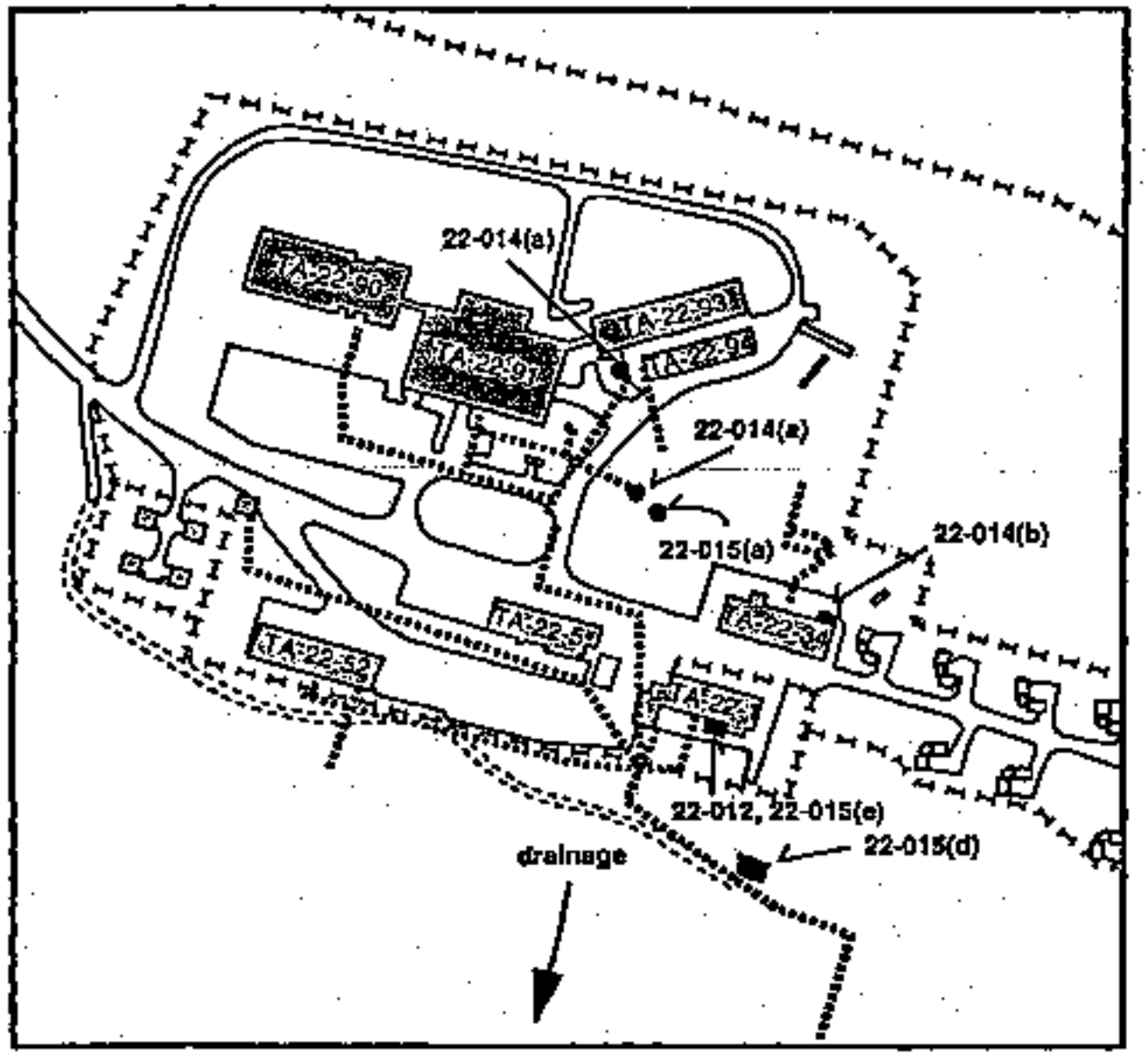
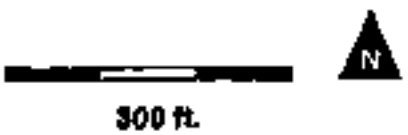
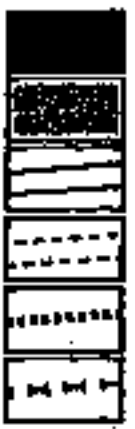


Figure 5-8. Locations of 22-012, 22-014(a, b) and 22-015(a, d, e).





PRS Consolidation Worksheet

Site Type: MDA

Proposed PRS Number: 33-001(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
33-001(a)	HSWA	Disposal Pit	Rad, Shot Debris, HE	Under Investigation
33-001(b)	HSWA	Disposal Pit	Rad, Shot Debris, HE	Under Investigation
33-001(c)	HSWA	Disposal Pit	Rad, Shot Debris, HE	Under Investigation
33-001(d)	HSWA	Disposal Pit	Rad, Shot Debris, HE	Under Investigation
33-001(e)	HSWA	Shot Chamber	Rad, HE	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?		
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on operational history, waste streams, geographic proximity, transport mechanisms (subsurface), and the investigation required to assess contamination at MDA E, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

MDA E contains six disposal pits (PRSs 33-001(a-d)) used for the disposal of various items including spent projectiles, uranium, beryllium, shot debris, HE, etc. The pits were constructed around underground shaft #3 (PRS 33-001(e)). Shaft #3 is 6 ft x 6 ft x 48 ft deep. Explosive testing in shaft #3 involved HE, beryllium, and tungsten. The shaft collapsed during an experiment in 1950. The disposal pits were closed in 1963.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

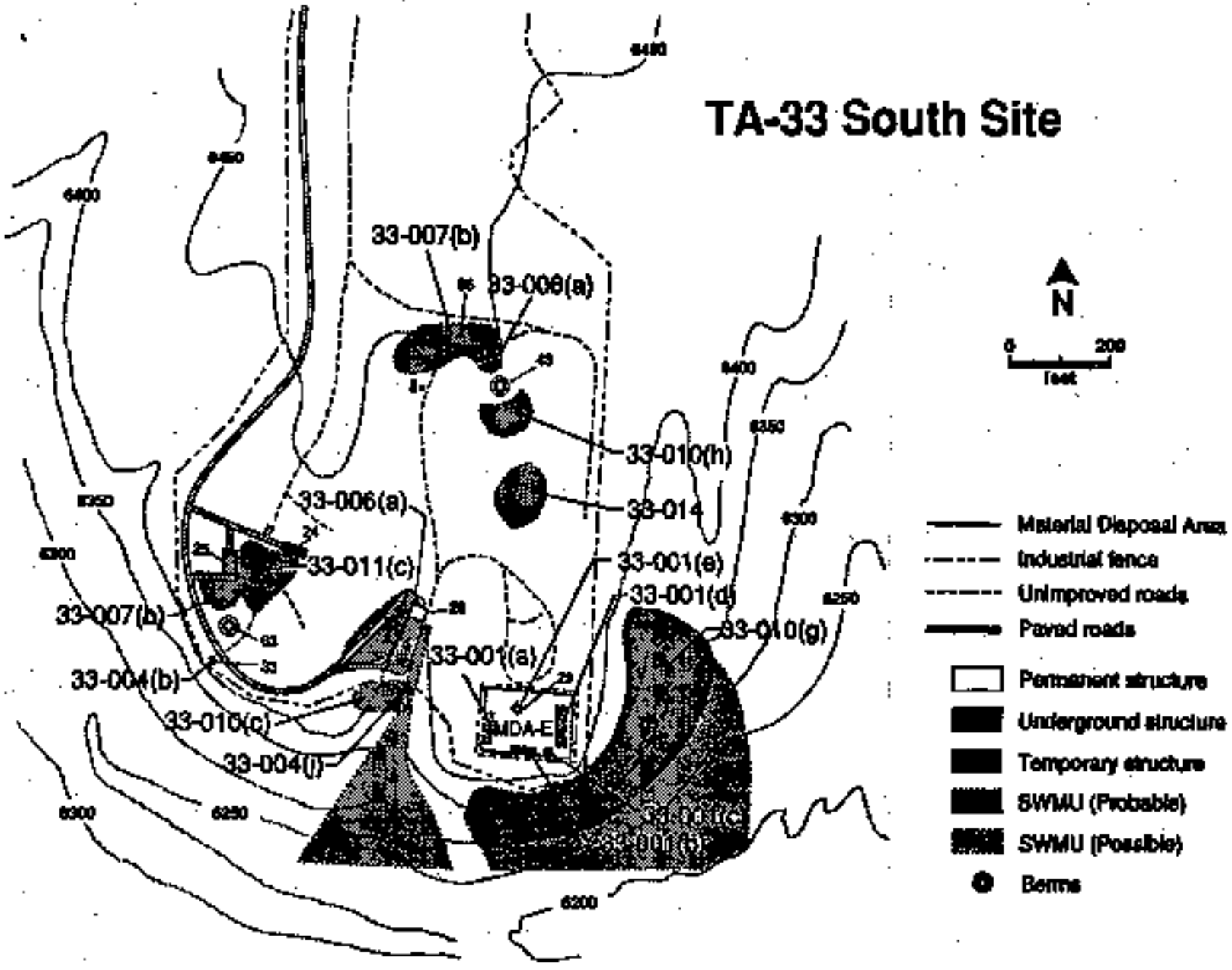


Fig. 3-12. South Site.

PRS Consolidation Worksheet

Site Type: MDA

Proposed PRS Number: 33-002(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
33-002(a)	HSWA	Inactive Septic Tank	Rad, VOCs, SVOCs	Under Investigation
33-002(b)	HSWA	Inactive Sump	Rad, VOCs, SVOCs	NFA Criterion 5
33-002(c)	HSWA	Inactive Sump	Rad, VOCs, SVOCs	NFA Criterion 5
33-002(d)	HSWA	Inactive Outfall	Rad, VOCs, SVOCs	NFA Criterion 5
33-002(e)	HSWA	Inactive Roof Drain Outfall	Rad, VOCs, SVOCs	NFA Criterion 2

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Because the PRSs are located in the same geographic proximity and the contaminants are identical and commingled, the PRSs listed above are proposed for consolidation.

Description of Aggregate:

MDA K contains a septic system, two sumps, a siphon tank, leach field, outfall, and a roof drain that served building TA-33-86, the tritium facility. The tritium facility experienced accidental releases of tritium during its operating life, but is presently inactive. The associated septic system, sumps, leach field, cooling water outfall and roof drain are contaminated with tritium. Solvents were used in the building to clean contaminated parts. The septic system was used primarily for sanitary wastes, but also received tritium and possible uranium-contaminated waste. In 1961, the septic system received two emergency releases of plutonium-contaminated liquid. The sump received organic contaminants and tritium. The cooling water and roof drains also contain tritium.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

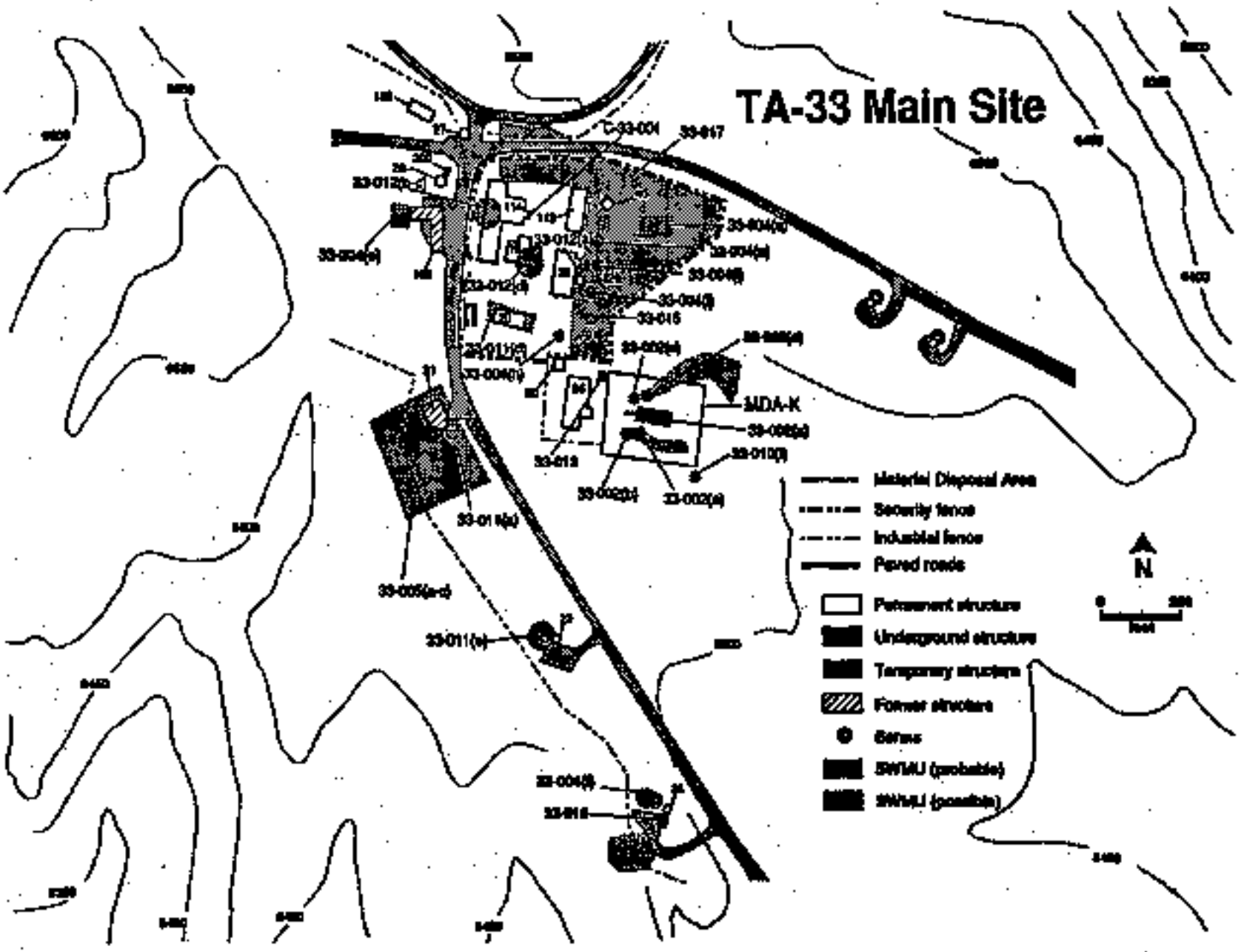


Fig. 3-5. TA-33 Main Site.

PRS Consolidation Worksheet

Site Type: MDA

Proposed PRS Number: 33-003(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
33-003(a)	HSWA	Underground Test Chamber	Be, Po-210, HE	NFA Criterion 3
33-003(b)	HSWA	Underground Test Chamber	Be, Po-210, HE	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Because of the geographic proximity of these two sites, and because their contamination is non-discernable due to bulldozing, they are proposed for consolidation.

Description of Aggregate:

MDA D consists of two areas (PRSs 33-003(a,b)), each approximately 20 ft x 30 ft and each containing an underground concrete chamber. Chamber #1 (PRS 33-003(a)) is octogonal with dimensions of 16 ft x 16 ft x 11 ft high. Chamber #2 (PRS 33-003(b)) is also octagonal with dimensions of 16 ft x 16 ft x 16 ft high. Both chambers are about 30 ft below grade and were used for classified explosive experiments. These chambers were destroyed in experiments. Contaminated material was bulldozed into a crater and covered with uncontaminated materials.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

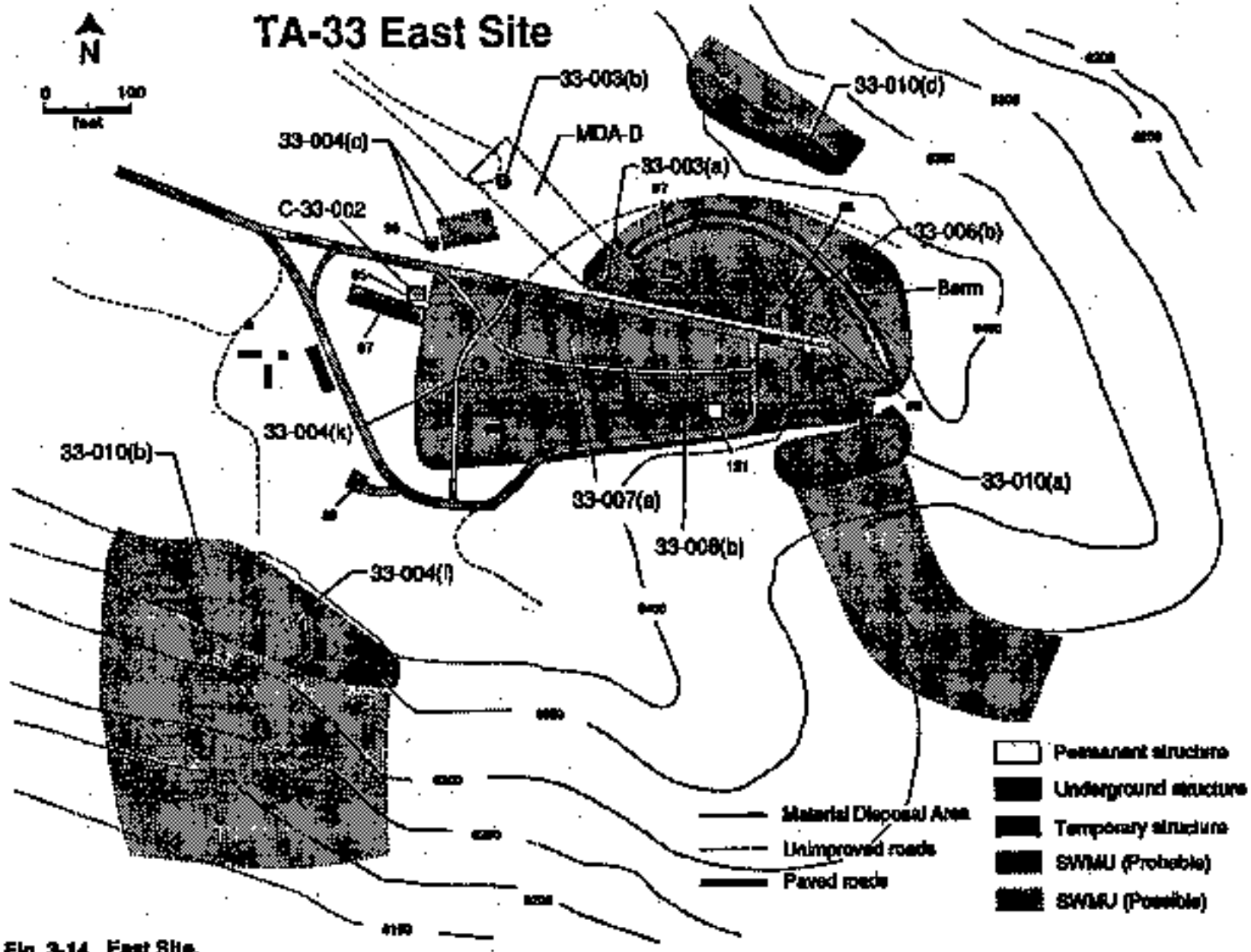


Fig. 3-14. East Site.

PRS Consolidation Worksheet

Site Type: Waste Water Treatment Plant

Proposed PRS Number: 35-003(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
35-003(a)	HSWA	Holding tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	NFA Criterion 5
35-003(b)	HSWA	Holding tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	NFA Criterion 5
35-003(c)	HSWA	Holding tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	NFA Criterion 5
35-003(d)	HSWA	Holding tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Under Investigation
35-003(e)	HSWA	Surge tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Under Investigation
35-003(f)	HSWA	Surge tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Under Investigation
35-003(g)	HSWA	Surge tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Under Investigation
35-003(h)	HSWA	Retention tank	Rad, Metals, VOCs, SVOCs, PCBs	NFA Criterion 5 (RCRA only)
35-003(l)	HSWA	Holding tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Under Investigation
35-003(m)	HSWA	Surge tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Under Investigation
35-003(misc)	Non-HSWA	Miscellaneous piping	Rad, Metals, VOCs, SVOCs, PCBs	Under Investigation
35-003(n)	HSWA	Holding tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	NFA Criterion 5
35-003(o)	HSWA	Surge tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Under Investigation
35-003(q)	HSWA	Holding tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Under Investigation
35-003(r)	Non-HSWA	Outfall and Receiving Canyon	Rad, Metals, VOCs, SVOCs, PCBs	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface, subsurface and sediments), geographical proximity, overlapping dispersion areas, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description of Aggregate:

The TA-35 waste water treatment plant (WWTP) was a large operation located on the east end of Ten Site mesa that operated from 1951 until 1963. It consisted of an array of underground waste lines, storage tanks, and chemical treatment precipitation tanks. The plant treated liquid waste that originated from the radiochemistry laboratories and operation of the radioactive lanthanum-140 hot cells in Building TA-35-2. PRS 35-003(misc.) consists of the network of underground lines that connected the various structures that composed the Ten Site WWTP. Two of the lines had direct outfalls to the small side canyon east of the WWTP, PRS 35-003(r). PRS 35-003(r) is a small shallow canyon located immediately east of the former WWTP. The canyon received effluent discharge and spills from the WWTP holding tanks. All buildings, foundations, and structures were removed during D&D activities in 1961 and 1965. It is expected that contamination at the WWTP will not be distinguishable from each PRS at the site.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

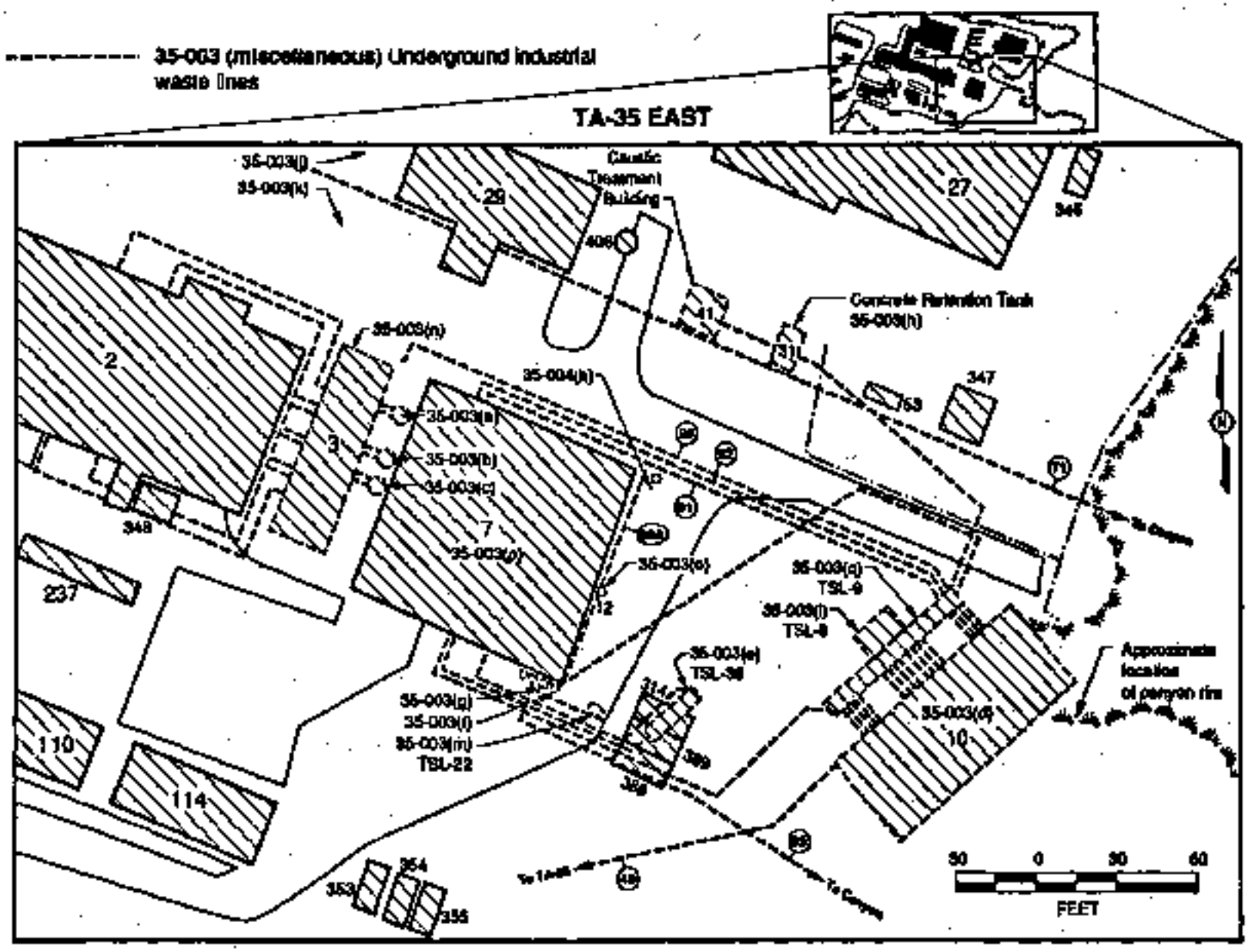


Figure 3-6. Locations of structures and SWMUs at TA-35 (LASL 1976, 04-0250).

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 35-003(j)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
35-003(j)	HSWA	Former Oil Storage Tank	VOCs, PCBs, Rad	Under Investigation
35-003(k)	HSWA	Location of oil storage tanks	VOCs, PCBs, Rad	Under Investigation
35-014(d)	Non-HSWA	Location of dielectric oil spill	VOCs, PCBs, Rad	Under Investigation
35-015(b)	HSWA	Location of former waste oil treatment facility	VOCs, PCBs, Rad	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Since the PRSs are all in close proximity, have the same COPCs, undistinguishable source terms, and were part of one system, they are proposed for consolidation.

Description of Aggregate:

PRS 35-015(b) is the location of a former waste oil treatment facility. The facility processed used oil from the Helios CO2 laser in TA-35-86. The facility was removed in 1988/1989 and some of the area has been paved while other portions remain unpaved with oil-contaminated soil. PRSs 35-003(j and k) are the locations of former above-ground oil siege tanks near the former waste oil treatment facility. The tanks were used for storage of dielectric oil in association with the waste oil treatment facility (PRS 35-015(b)). The tanks were piped to the waste oil treatment facility. PRS 35-014(d) was the location of a dielectric oil spill at the former location of two oil siege tanks at the southwest corner of TA-35-29. Leaks of dielectric oil from the valve system on the siege tanks were the likely source of the release. The tanks were installed in 1974 and removed in the late 1980s.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

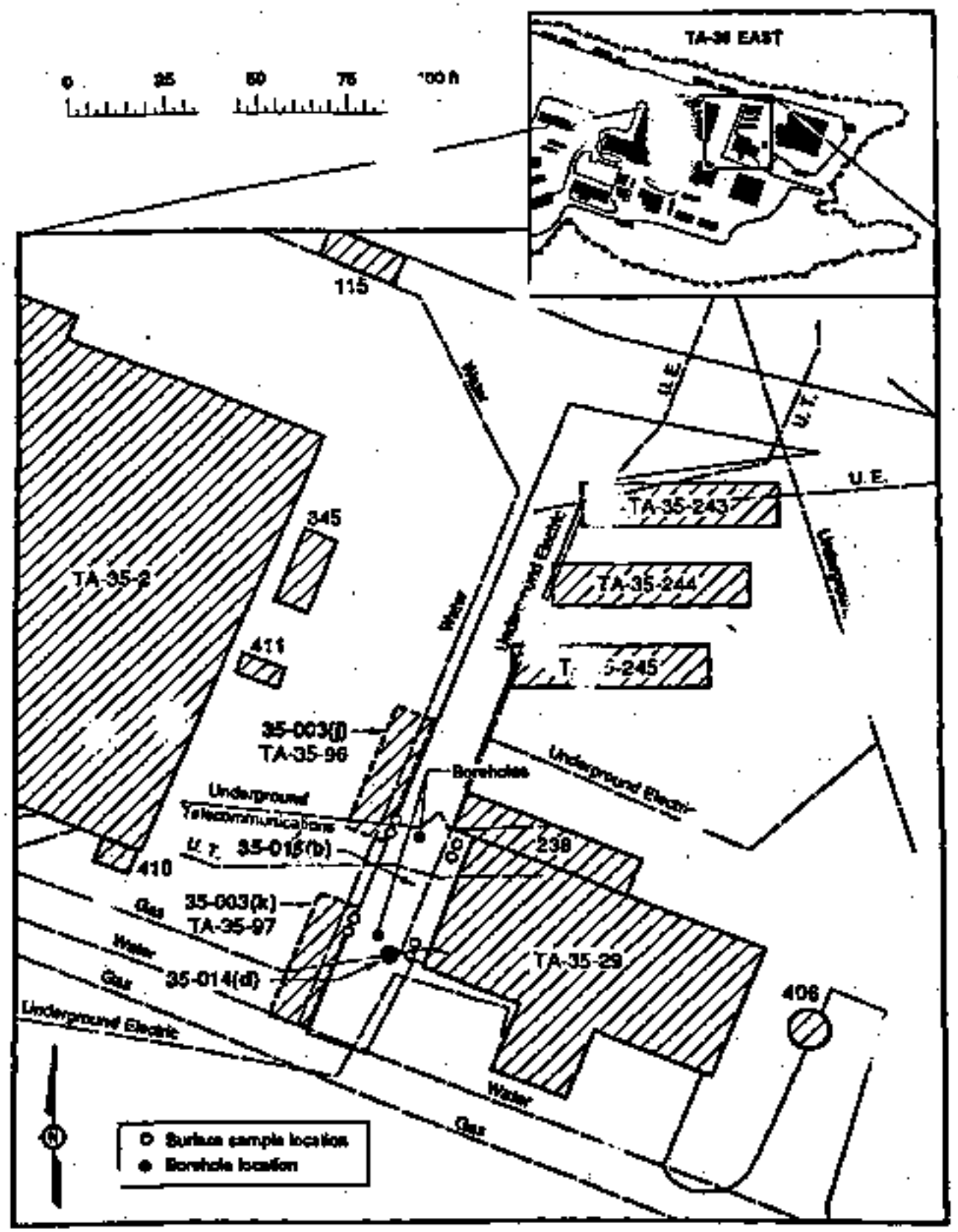


Figure 7-26. Schematic sample location map for SWMU Aggregate I [SWMU No. 35-003(j & k), 35-014(d), and 35-015(b)].

PRS Consolidation Worksheet

Site Type: Surface Impoundments

Proposed PRS Number: 35-010(a)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
35-010(a)	HSWA	Lagoon	Rad, Inorganics, PCBs, sanitary	Under Investigation
35-010(b)	HSWA	Lagoon	Rad, Inorganics, PCBs, sanitary	Under Investigation
35-010(c)	HSWA	Lagoon	Rad, Inorganics, PCBs, sanitary	Under Investigation
35-010(d)	HSWA	Sandfilters	Rad, Inorganics, PCBs, sanitary	Under Investigation
35-010(e)	Non-HSWA	Discharge headwall (outfall)	Rad, Inorganics, PCBs, sanitary	Under Investigation

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams discharged to the ponds, geographical proximity, transport mechanisms and the investigation required to assess potential contamination. It is proposed that the above PRSs be consolidated.

Description of Aggregate:

PRSs 35-010(a-e) are all part of the TA-35 sewer lagoon system and consist of three sewage lagoons, four sand filters, and an outfall. These PRSs received sanitary and industrial wastewater from TA-35, -46, -50, and -55 from 1976 through 1989

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

TABLE 3-18

SANITARY-WASTE TREATMENT SYSTEM

SWMU No.	Structure Number	Structure Type	Dimensions
35-010(a)	TA-35-144	Lagoon	240 ft x 59 ft
35-010(b)	TA-35-145	Lagoon	100 ft x 115 ft
35-010(c)	TA-35-146	Lagoon	105 ft x 115 ft
35-010(d)	TA-35-215	Sand Filters	100 ft x 45 ft
35-010(e)	TA-35-215	Discharge Headwall	N/A

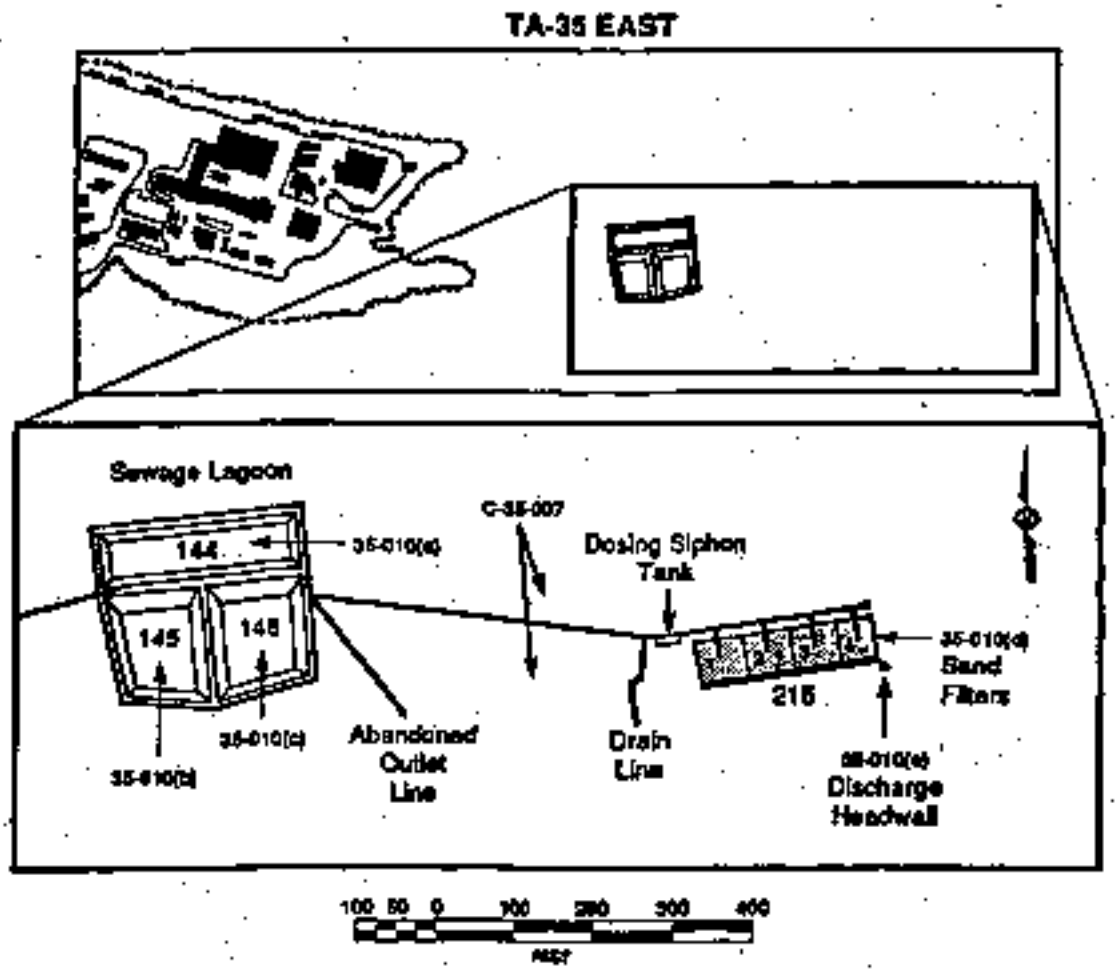


Figure 3-6. Locations of structures and SWMUs at TA-35 (LANL 1988, 04-0249).

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 36-006-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
36-004(a)	Non-HSWA	Active firing site (Eenie)	Rad, Metals	Under Investigation
36-006	HSWA	Surface Disposal Area	Rad, metals	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-dispersable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Because of its proximity to the active Eenie firing pad, debris dispersed from that pad by explosive detonations was routinely deposited over the surface disposal area. Because of their geographical proximity and common contaminants, these PRS's are proposed for consolidation.

Description of Aggregate:

PRS 36-006 is a surface disposal area located within 100 ft of the Eenie firing pad. The area was used to dispose of cables and other residuals from explosive tests at the firing pad. PRS 36-004(a) is the Eenie firing pad.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

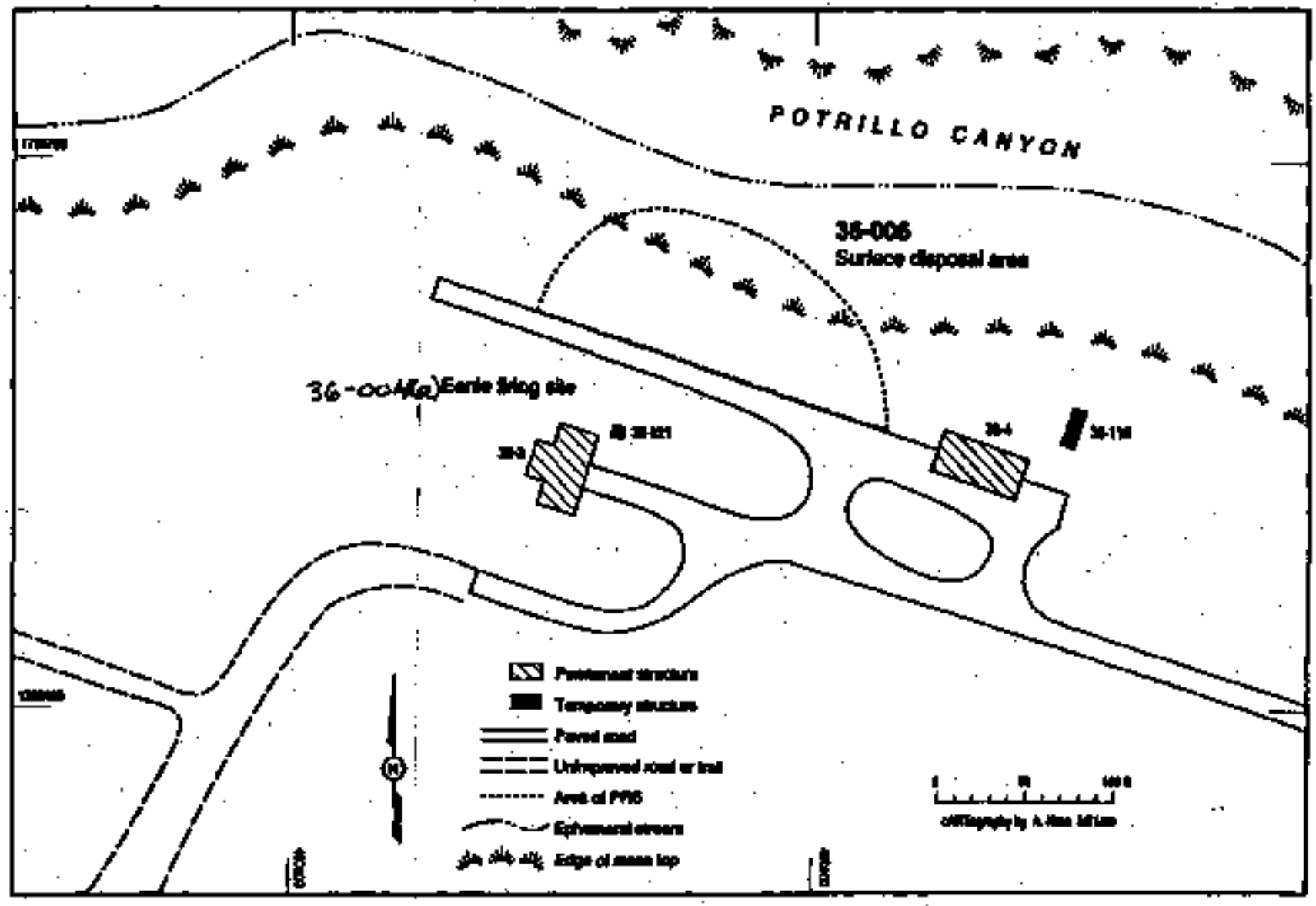


Figure 5-11. Location of the surface disposal area (PRS 36-006).

PRS Consolidation Worksheet

Site Type: Waste Water Treatment Plant

Proposed PRS Number: 41-002(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
41-002(a)	HSWA	Imhoff tank and chlorinator	Rad, metals, PCBs, VOCs, SVOCs	Under Investigation
41-002(b)	HSWA	Contact tank	Rad, metals, PCBs, VOCs, SVOCs	Under Investigation
41-002(c)	HSWA	Sludge drying bed	Rad, metals, PCBs, VOCs, SVOCs	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Because all these PRSs are part of the same wastewater treatment system and based on the operational history, waste streams, transport mechanisms, geographic proximity, and the investigation needed to assess the contamination at the WWTP, it is proposed that these PRSs be consolidated.

Description of Aggregate:

These PRSs consist of the components of the TA-41 waste water treatment plant (WWTP). The treatment plant was built in 1951 and received sanitary waste from TA-41 and TA-2 until 1989. Documentation shows several episodes of tritium contamination in wastewater received at the treatment plant. Components of this WWTP are similar to those of the WWTPs throughout the Laboratory (e.g., TA-3 and TA-35). Each of the WWTP components is interconnected by a network of drainlines and the contact tank at the TA-41 WWTP discharges effluent through a drain line to Los Alamos Canyon.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

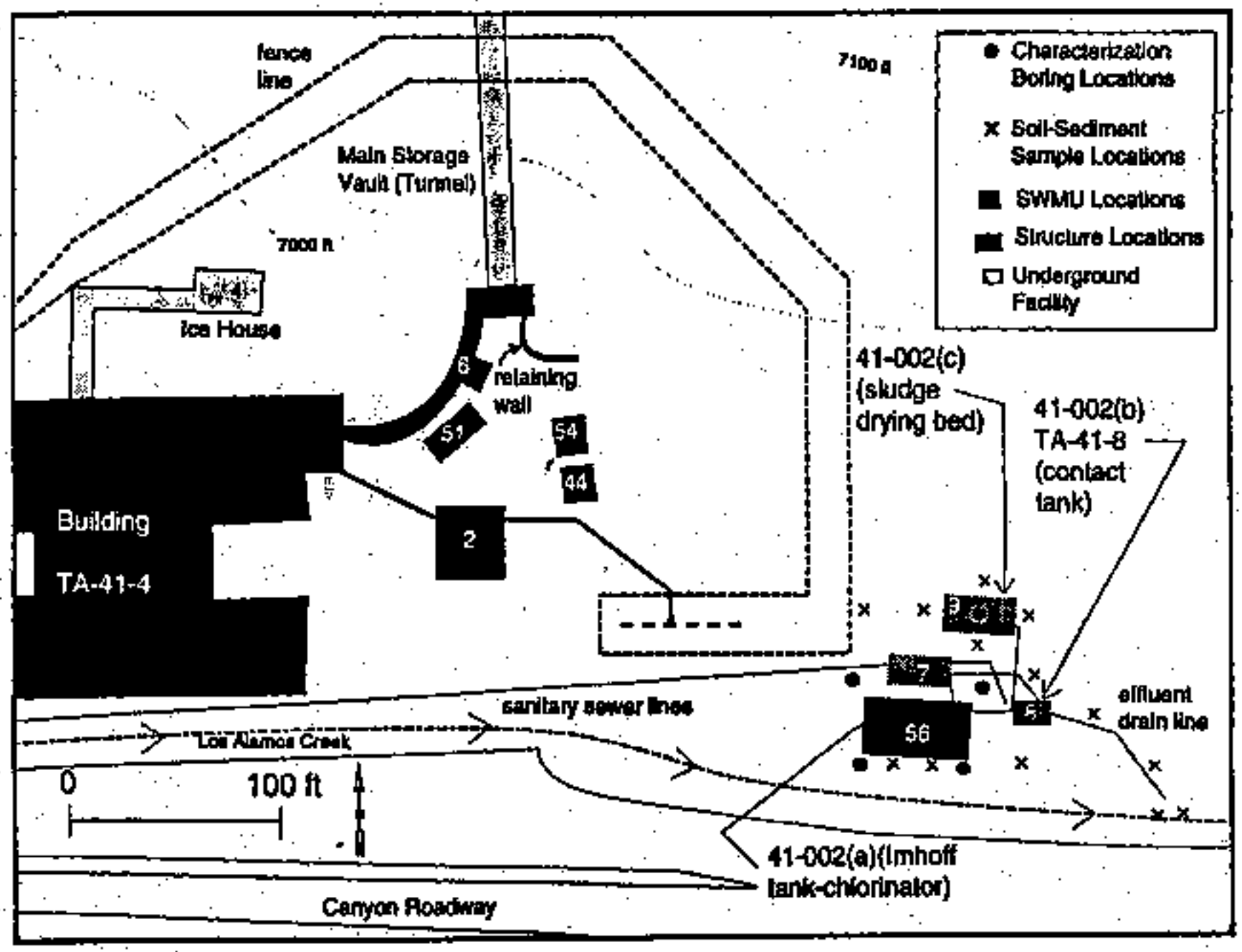


Figure 7.15-1 Proposed SWMU no. 41-002, sewage treatment plant, RFI boring-soil sampling locations.

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 42-001(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
42-001(a)	HSWA	Incinerator Complex	Rad, Metals, VOCs, SVOCs	NFA Criterion 5
42-001(b)	HSWA	Ash Holding Tank	Rad, Metals, VOCs, SVOCs	NFA Criterion 5
42-001(c)	HSWA	Ash Holding Tank	Rad, Metals, VOCs, SVOCs	NFA Criterion 5
42-002(a)	Non-HSWA	Indoor Storage and Decontamination Area	Rad, Metals, VOCs, SVOCs	NFA Criterion 5
42-002(b)	HSWA	Outdoor Decontamination Area	Rad, Metals, VOCs, SVOCs	NFA Criterion 5
42-003	HSWA	Septic Tank	Rad, Metals, VOCs, SVOCs	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

All of these PRSs and some associated soil have been removed by D&D activities. Proposed confirmation sampling activities involve subsurface investigation over the entire area including former structure locations. These PRSs are located within close proximity of each other and have received the same waste streams. Migration pathways, COPCs, and methods of investigation are identical and source terms are undistinguishable.

Description of Aggregate:

PRSs 42-001(a-c), 42-002(a,b), and 42-003 are the sites of former structures at TA-42 associated with an incinerator complex and control building. The incinerator (42-001(a)) and indoor storage and decontamination area (42-002(a)) were housed in control building TA-42-1. PRSs 42-001(b and c) were two ash holding tanks located approximately 60 feet north of the control building used to store radioactively-contaminated ash generated from the incineration process. Ashes trapped in the incinerator's off-gas system and from the incinerator were pumped via underground drainlines to the tanks. The drainlines connected the tanks directly to the incinerator. PRS 42-002(b) was an outdoor decontamination area located at the end of the asphalt driveway northwest of the control building TA-42-1, liquids generated from the decontamination process presumably flowed down the embankment on the northwest side of the driveway. PRS 42-003 is the septic system, including tank, filter trench, tile drainfield, and outfall that served the control building. In 1978, all structures, debris and contaminated soils were removed and disposed of at Area G. The drainlines were filled with hot asphalt and initially it was not known if they were removed. However, a personal communication with a current employee in March 1998 confirmed that all underground structures including the lines were removed in the 1978 D&D operation.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

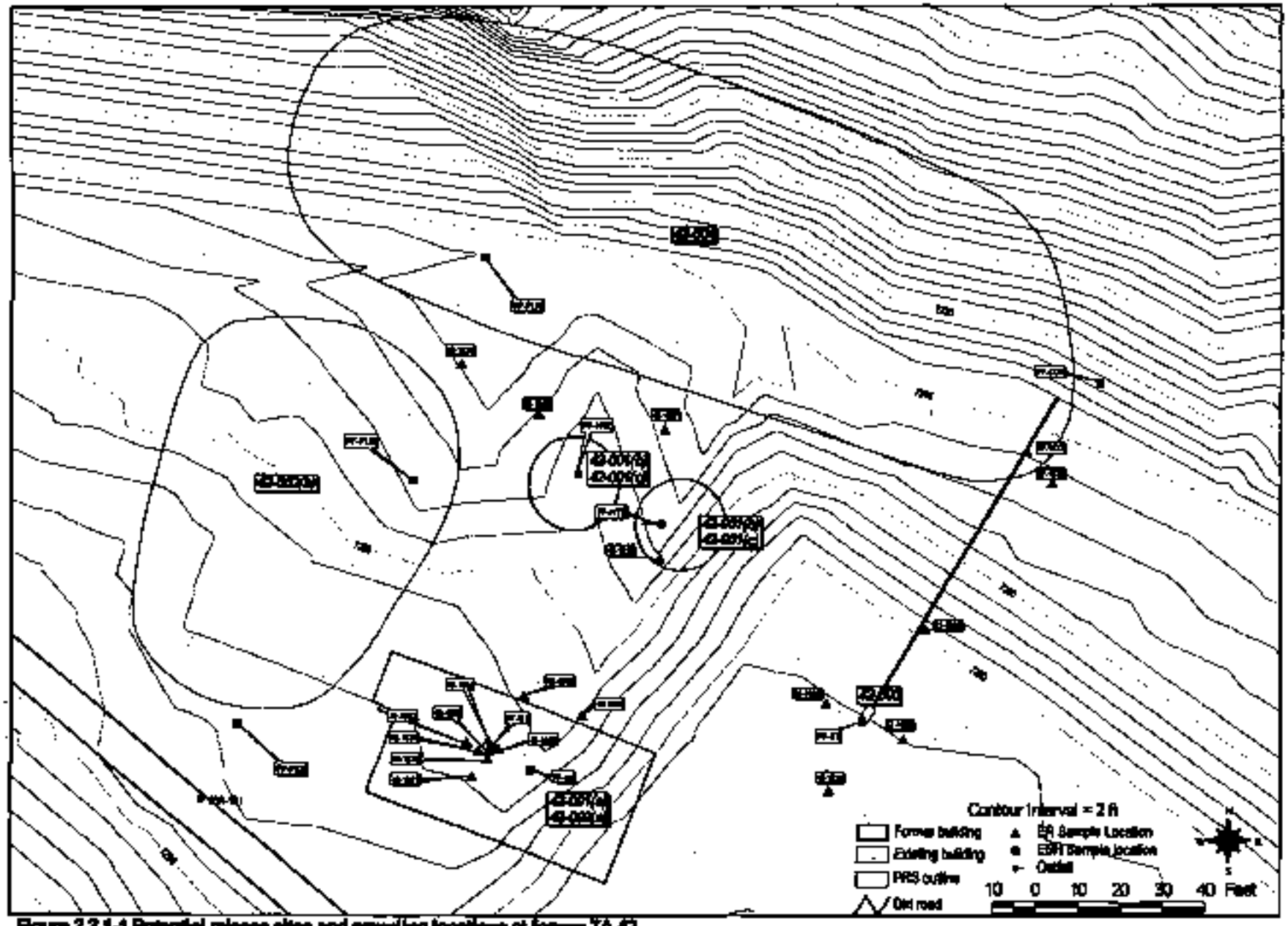


Figure 2.2.1-1 Potential release sites and sampling locations at former TA-42

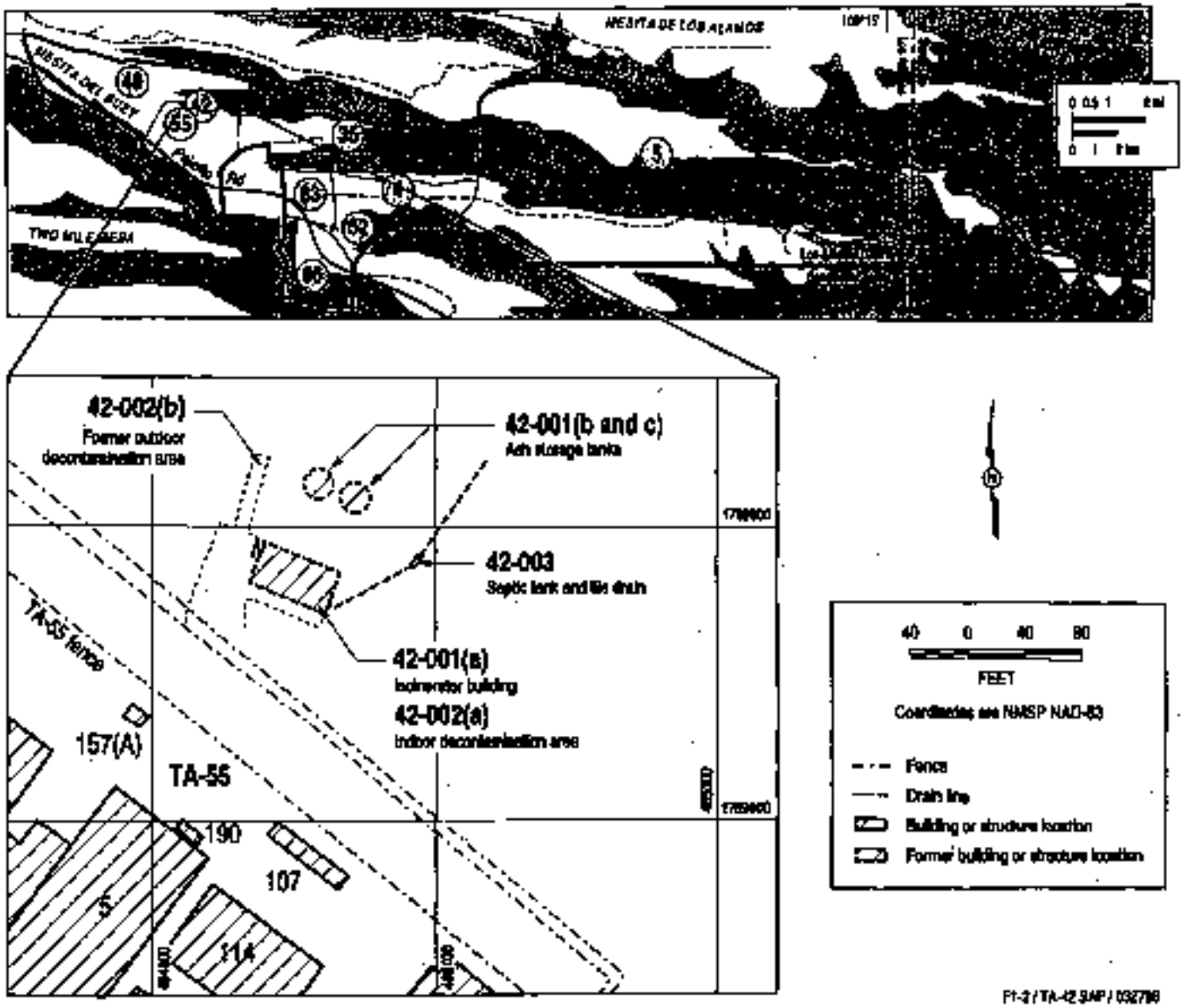


Figure 1-2. General location map for former TA-42 showing PRSs.

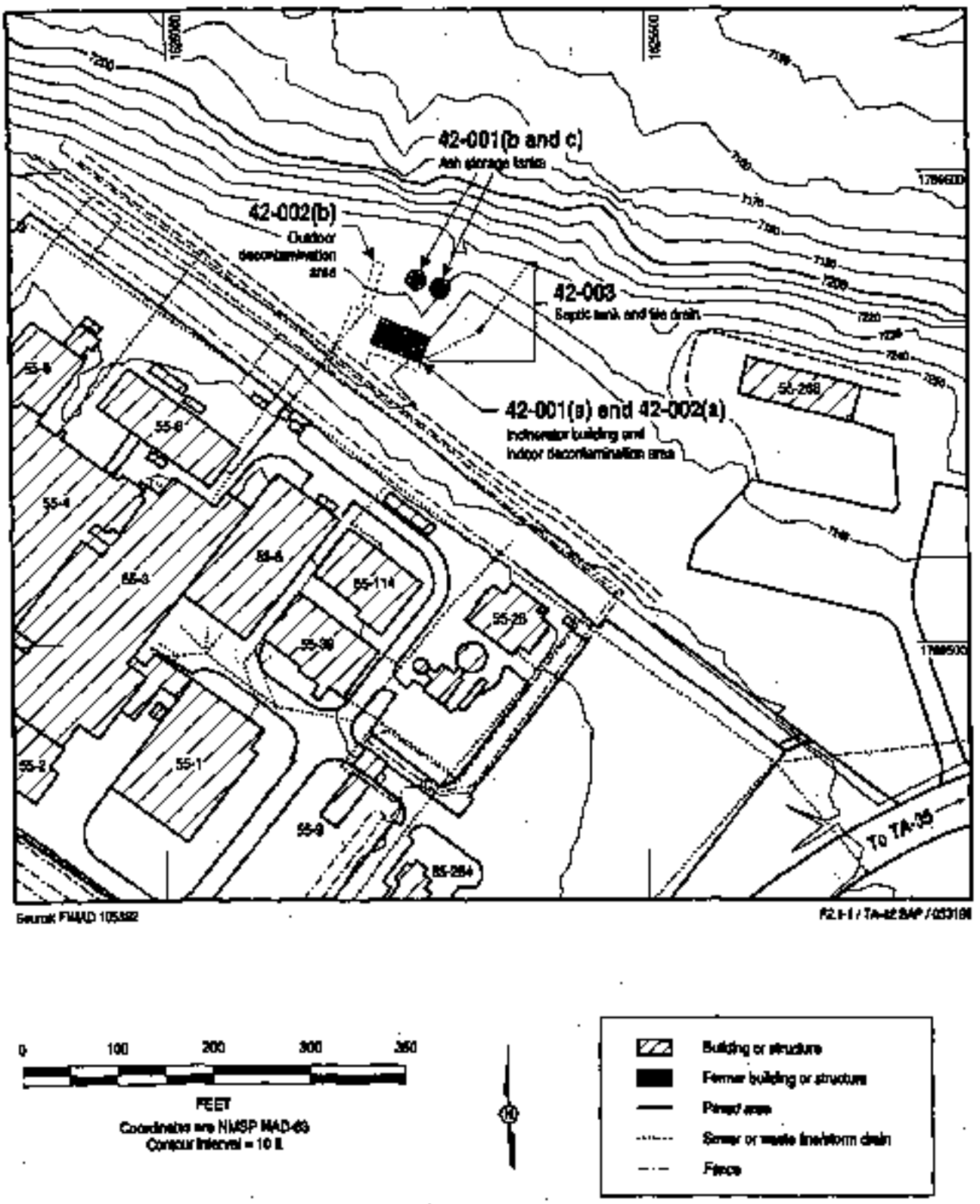


Figure 2.1-1. Schematic site map of former TA-42 showing PRS locations and the relationship of the former site to TA-55.

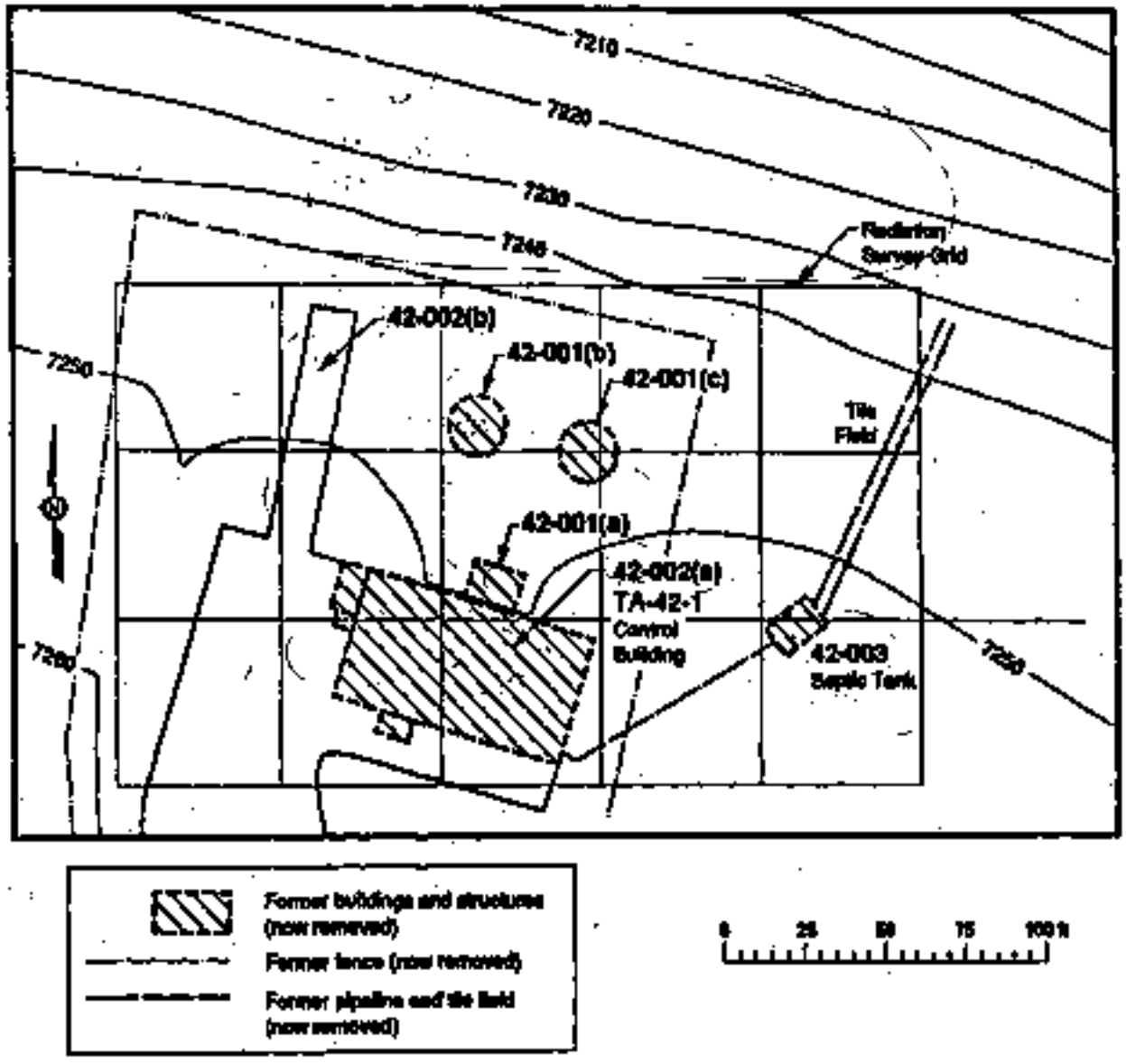


Figure 7-30. Location map and grid boundary for SWMU Aggregate J.

PRS Consolidation Worksheet

Site Type: Miscellaneous

Proposed PRS Number: 46-004(d)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
46-004(d)	HSWA	Active Dry Well	Metals, PCBs, U, Pu, Th, VOCs, SVOCs	Under Investigation
46-004(e)	HSWA	Active Dry Well	Metals, PCBs, U, Pu, Th, VOCs, SVOCs	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

These two PRSs are located three feet apart and have received the same waste streams. Migration pathways, COPCs, and methods of investigation are identical and source terms are undistinguishable.

Description of Aggregate:

PRS 46-004(d and e) consist of two active dry wells connected in series that serve building TA-46-58. The wells consist of 3-foot diameter concrete cylinders, approximately 4 feet in length. PRS 46-004(d) is approximately 3 ft west of and receives overflow from PRS 46-004(e). These dry wells receive waste from building TA-46-58 which houses office space, a laboratory, equipment room, and formerly included a machine shop. Building records list 46-004(d) as a dry well for an acid drain; however, current Laboratory operating procedures prohibit the disposal of hazardous chemicals into these systems.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

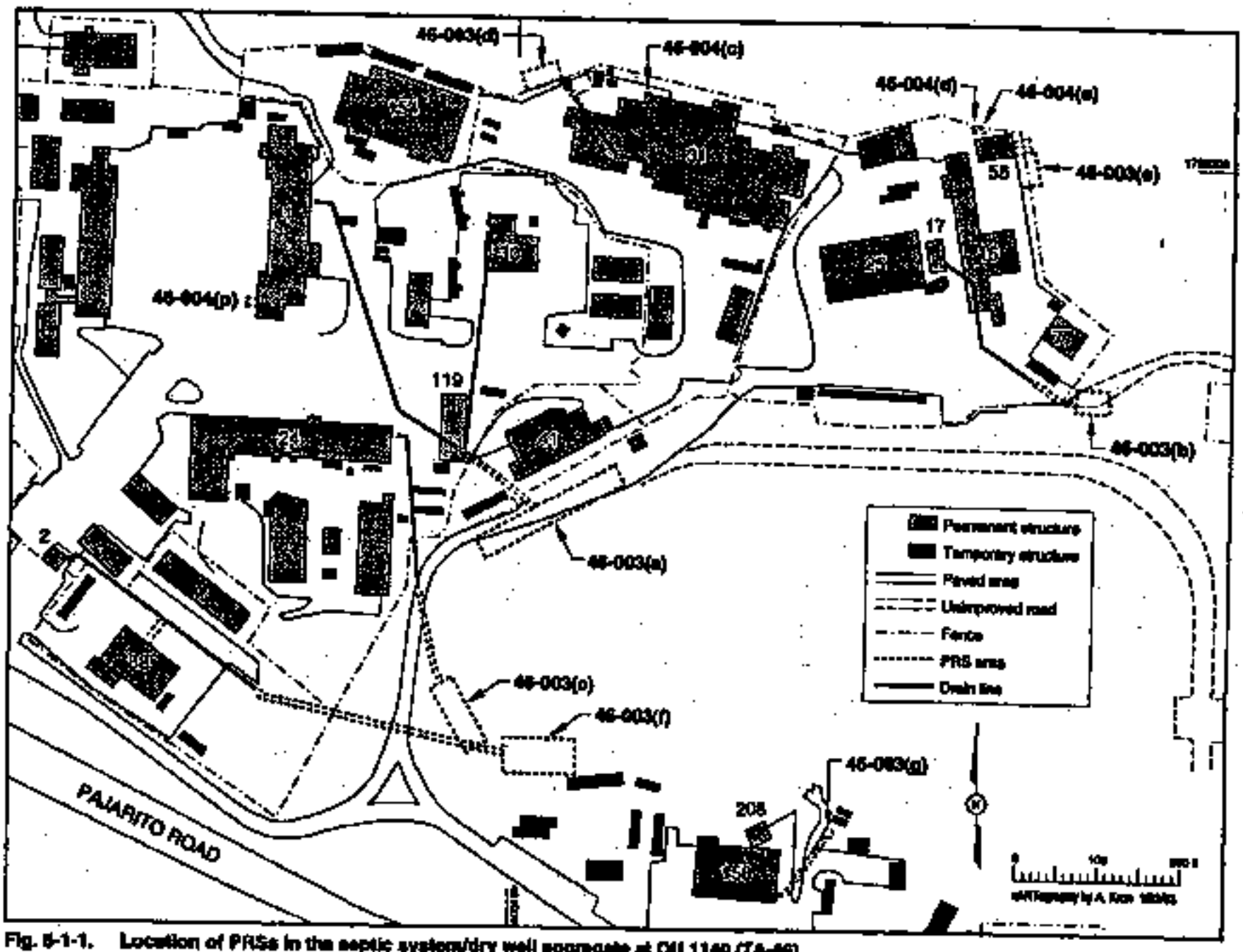


Fig. 5-1-1. Location of PRSs in the septic system/dry well aggregate at OU 1140 (TA-46).

PRS Consolidation Worksheet

Site Type: Miscellaneous

Proposed PRS Number: 46-004(d2)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
46-004(d2)	HSWA	Former Building Emissions	Beryllium, Radionuclides	NFA Criterion 5
46-004(g)	HSWA	Former Building Emissions	U-235, U-238, Thorium	Under Investigation
46-004(h)	HSWA	Former Building Emissions	U-235, U-238	NFA Criterion 5
C-46-002	Non-HSWA	Former Building Emissions	U-235, U-238	NFA Criterion 5
C-46-003	Non-HSWA	Former Building Emissions	U-235, U-238	NFA Criterion 5

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, undistinguishable source terms, and the investigation needed to assess these PRSs, it is proposed that these PRSs be consolidated to identify them as being part of the TA-46 air emissions inventory

Description of Aggregate:

TA-46 has had historical air emissions from exhaust stacks since the beginning of the technical operations in the late 1950s through the late 1970s. Contamination from the stacks would have been dispersed around TA-46. PRS 46-004(g) represents airborne emissions of natural and depleted uranium, and thorium from the Rover Fuel Element Research Program at TA-46-1. PRS 46-004(h) represents airborne emissions of uranium from the testing of fuel rods at TA-46-16. PRS 46-004(d2) represents emissions of beryllium from experiments conducted at TA-46-24. ADC C-46-002 represents accidental releases of uranium from Rover Program activities at TA-46-31. ADC C-46-003 was a one-time release of depleted uranium hexafluoride from TA-46-30 in 1978. The release was followed up by a series of decontamination and monitoring efforts within the building and downwind of the building. While there is documentation of specific types and quantities of airborne emissions (radionuclides) from several TA-46 buildings, there is evidence of any resulting environmental contamination. Contamination from the buildings with PRS stack emissions will not be distinguishable from each other.

The areas considered most likely to have received stack emissions based on prevailing wind patterns are the west, north, and east sections of TA-46. Both mesa top and the bench below TA-46 in Canada del Buey were considered potential areas of deposition. The June 26, 1996 RFI Report for TA-46 documents results of the investigation for the areas surrounding these PRSs.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

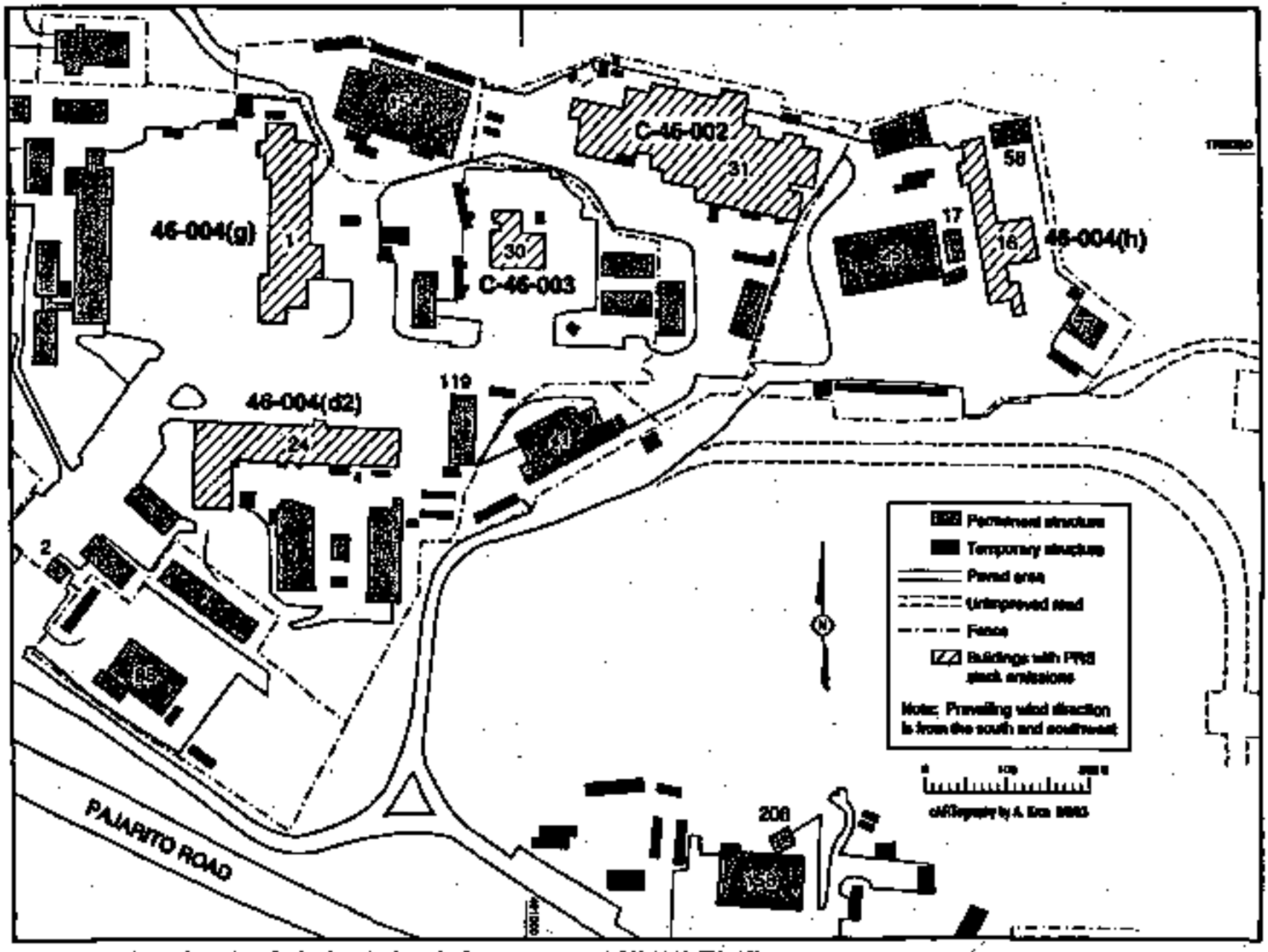


Fig. 5-6-1. Location of PRSs in the stack emission aggregate at OU 1148 (TA-46).

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls **Proposed PRS Number:** 48-004(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
48-004(a)	HSWA	Two Inactive Sumps	Rad, VOCs, SVOCs, PCBs, Metals	NFA Criterion 3
48-004(b)	HSWA	Three Inactive Tanks	Rad, VOCs, SVOCs, PCBs, Metals	NFA Criterion 3
48-004(c)	HSWA	Two Former Tanks	Rad, VOCs, SVOCs, PCBs, Metals	NFA Criterion 3

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

All were part of the acid waste neutralization process located within TA-48-1 and will be investigated together after the building is no longer operational.

Description of Aggregate:

PRSs 48-004(a-c) are sumps at building TA-48-1 that were part of the acid neutralization process. The sumps, tanks, and associated process lines were operational from the 1950s until the 1970s and were abandoned in place in 1982. An automatic neutralization station added caustics to the acid wastes in each of these sumps, which was equipped with a dual sump pump for pumping treated liquid waste to TA-50 for further processing. There was no drain line or outfall associated with these units. The precipitated sludge from the sumps was drummed and disposed. Acid wastes are now piped to TA-50 without pre-treatment with caustics (in the sumps).

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

TABLE 3-37

OUTFALLS AT TA-48

SWMU No.	NPDES Permit No.	Waste Source	Outfall Location[a]
48-007(a)	045/045 EPA 03A	TA-48-1	East of TA-48-1
48-007(b)	016 EPA 04A	TA-48-1	Northeast of TA-48-1
48-007(c)	131 EPA 04A	TA-48-1	North of TA-48-1
48-007(d)	153 EPA 04A	TA-48-1	East of TA-48-1
48-007(e)	126 EPA 04A	TA-48-8	Northwest of TA-48-8
48-007(f)	137 EPA 04A	TA-48-46	Northeast of TA-48-46

[a]Outfall locations are shown in Figure 3-6.

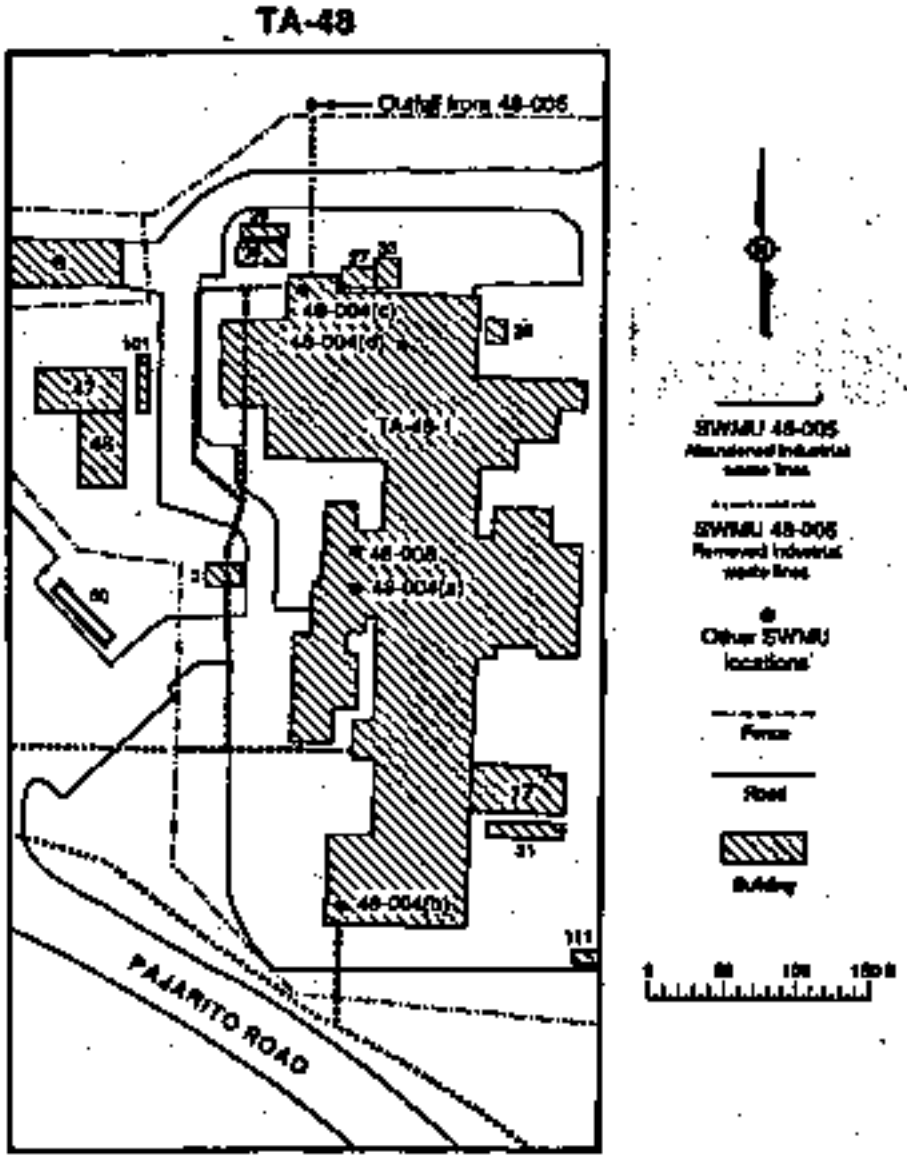


Figure 3-6. Locations of structures and SWMUs at TA-48.

PRS Consolidation Worksheet

Site Type: Surface Impoundments

Proposed PRS Number: 53-002(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
53-002(a)	HSWA	Two northern lagoons	Rad, inorganics, organics	Under Investigation
53-002(b)	HSWA	Southern Lagoon	Rad, inorganics, organics	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface, subsurface and sediments), geographical proximity, overlapping dispersion areas, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated. The lagoons and all associated and interconnected piping will be investigated concurrently.

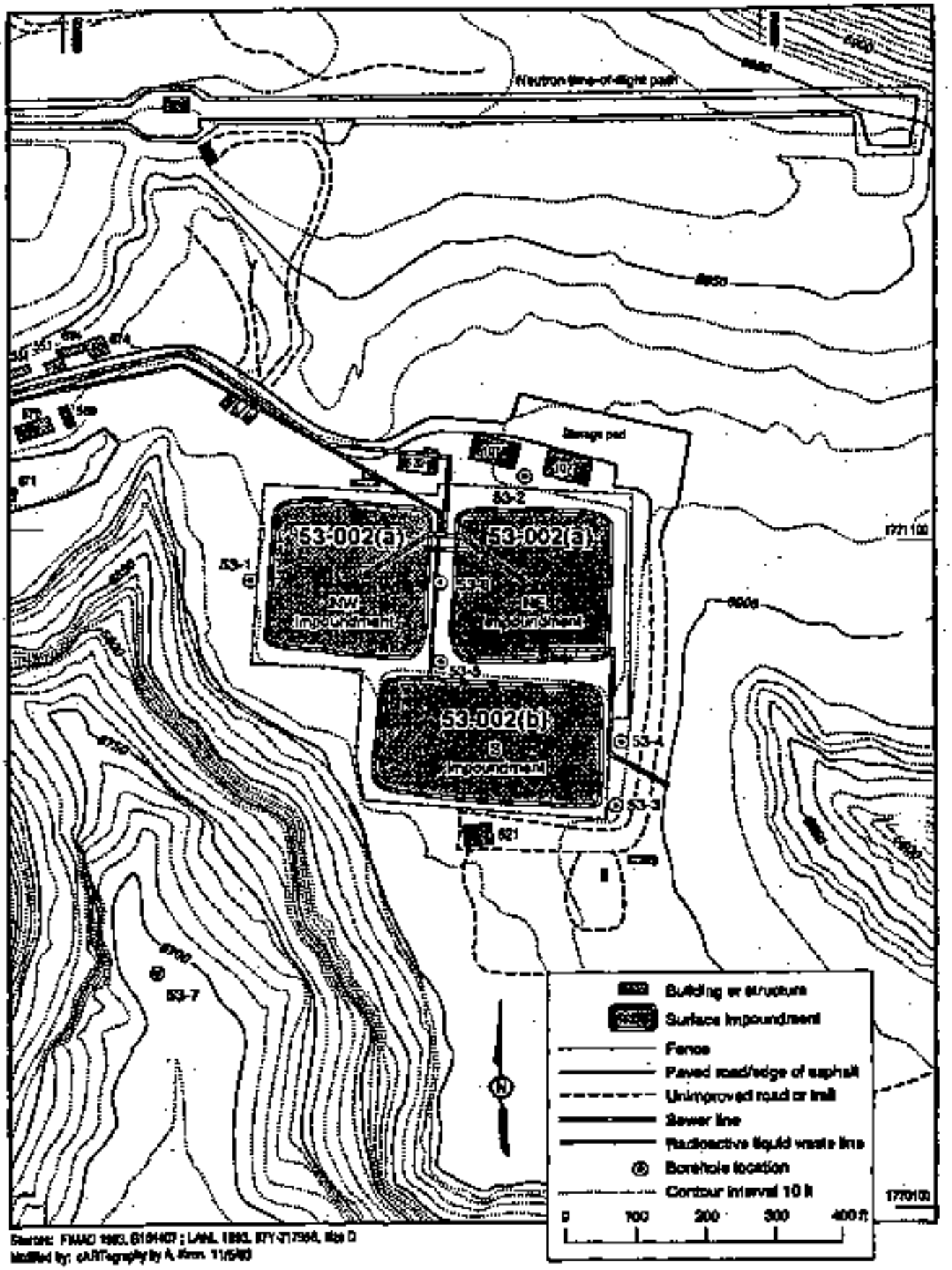
Description of Aggregate:

PRSs 53-002(a and b) comprise three surface impoundments collectively identified as structure TA-53-165, including adjacent piping and drainage areas at the east edge of Mesita de Los Alamos. PRS 53-002(a) includes two northern surface impoundments and associated drainages and piping and PRS 53-002(b) includes the southern surface impoundment. All three surface impoundments received sanitary, industrial, and radioactive wastewater from TA-53 facilities, as well as septic tank sludge from other Laboratory facilities. These PRSs are inactive and no longer receive waste water; the northern impoundments are dry and partially covered with a geotextile and the southern impoundment contains minimal water and sludge. Lines and piping for the impoundments include a sewer line that discharged to both northern impoundments (PRS 53-002(a)), and a radioactive liquid waste line that discharged to the southern impoundment (53-002(b)). The northern two impoundments are connected via an overflow line and a drainline discharges from the northeastern impoundment to an outfall at the head of a tributary to Los Alamos Canyon.

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____



Source: FWAD 1993, 619407 ; LANL 1993, BTY-217966, Sht D
Modified by: cARTography by A. Ahm 11/5/93

Figure 6-2. Layout of PRS 53-002 Impoundments.

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 53-006(b)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
53-006(a)	Non-HSWA	Resin Storage Tank (inactive)	Rad, VOCs, SVOCs, PCBs, Metals	Under Investigation
53-006(b)	HSWA	Underground Storage Tank (rad decay)	Rad, VOCs, SVOCs, PCBs, Metals	Under Investigation
53-006(c)	HSWA	Underground Storage Tank (rad decay)	Rad, VOCs, SVOCs, PCBs, Metals	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms, geographical proximity, and the investigation required to assess contamination associated with the tanks and corresponding piping, it is proposed that the above PRSs be consolidated.

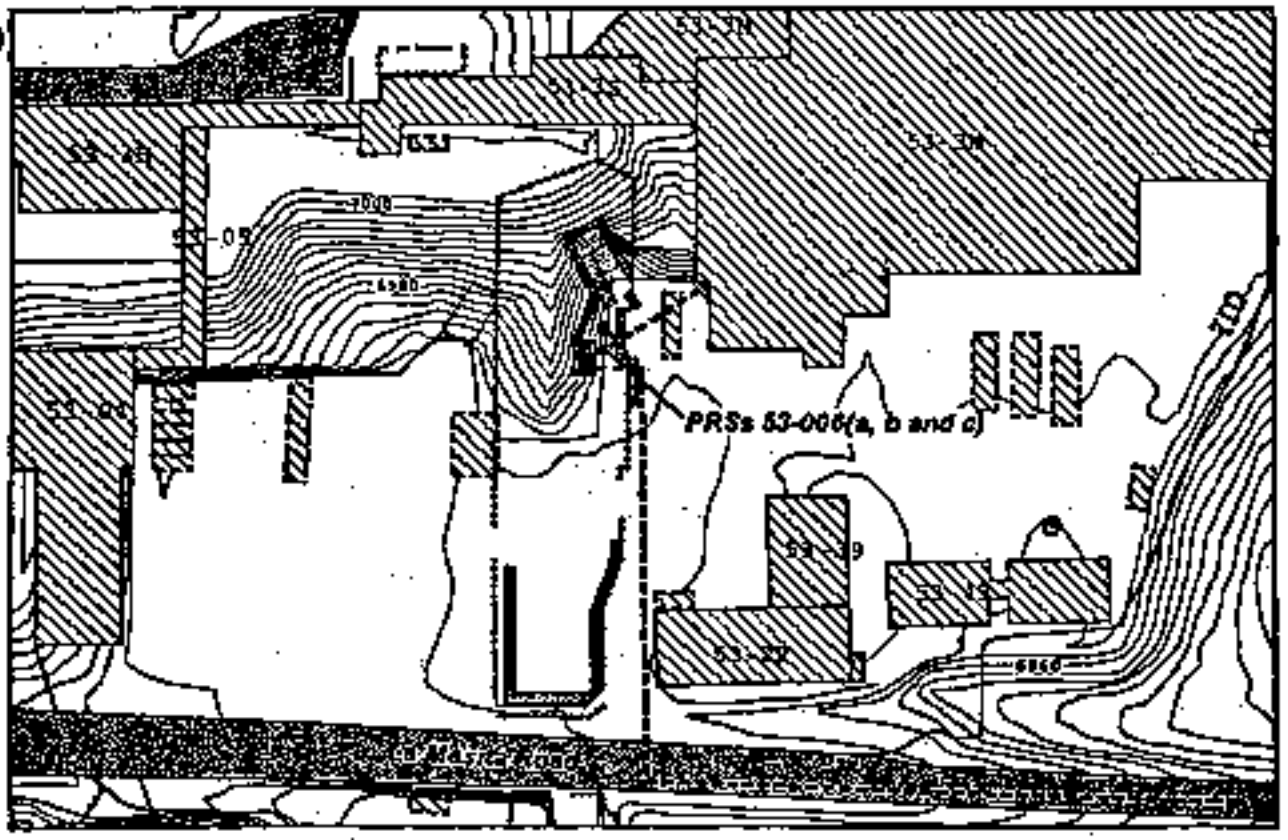
Description of Aggregate:

PRSs 53-006(a-c) are underground tanks located directly south of area TA-53-3S and were used to collect and decay radioactive liquid waste (RLW) from the LANSCE accelerator. PRSs 53-006(b,c) are steel tanks, approximately 12 ft long and 8 ft diameter, and are buried 16 ft below ground surface. Additionally, the two tanks are interconnected by an overflow pipe. The inlet pipe from Building TA-53-3 has a 3-way valve that directs water into one or both tanks. PRS 53-006(a) is an underground tank located approximately 15 ft northeast of PRSs 53-006(b and c) containing radioactively-contaminated resin in the form of tiny glass beads and wastewater. The tank is 80 ft long and is buried 16 ft below ground surface. The inlet/outlet pipe has two valves; one directs overflow water from PRS 53-006(a) to PRSs 53-006(b,c) while the other directs resin to PRS 53-006(a) or radioactive waste water to PRSs 53-006(b,c).

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____



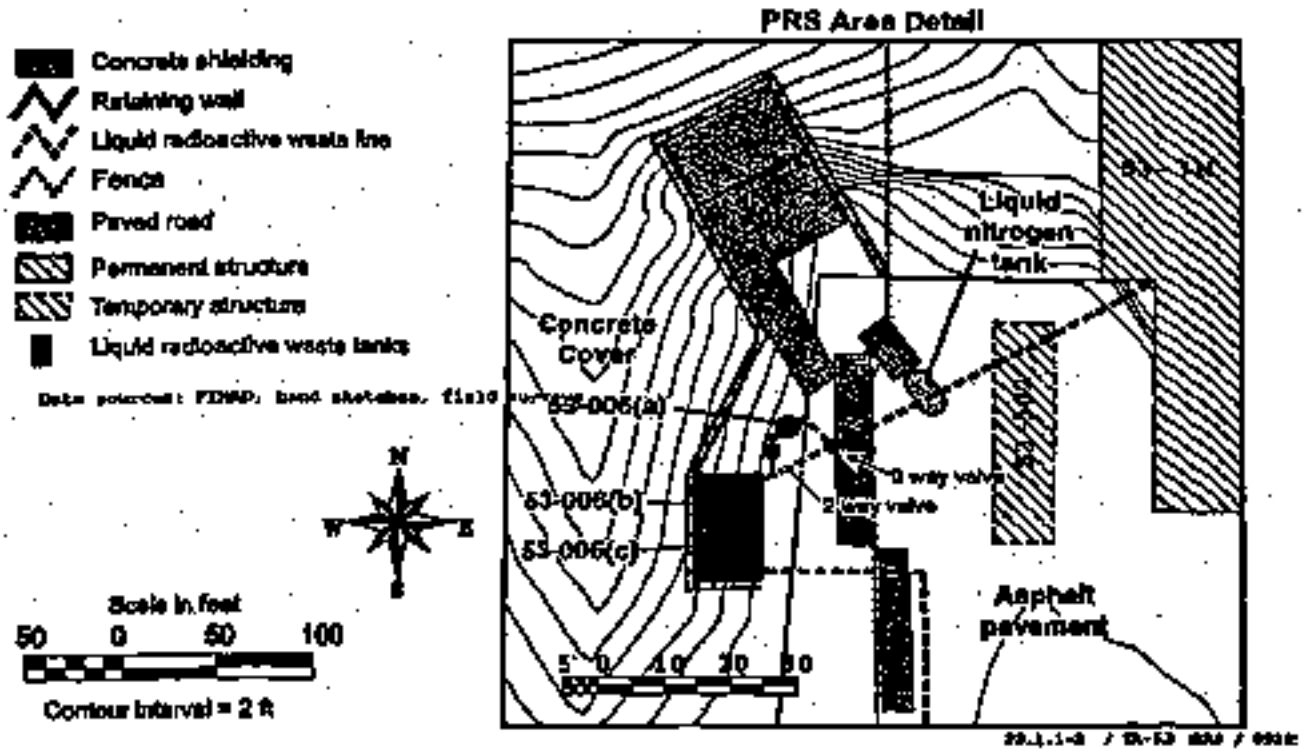


Figure 2.1-2. Location of PRSs 53-006(a,b,c)

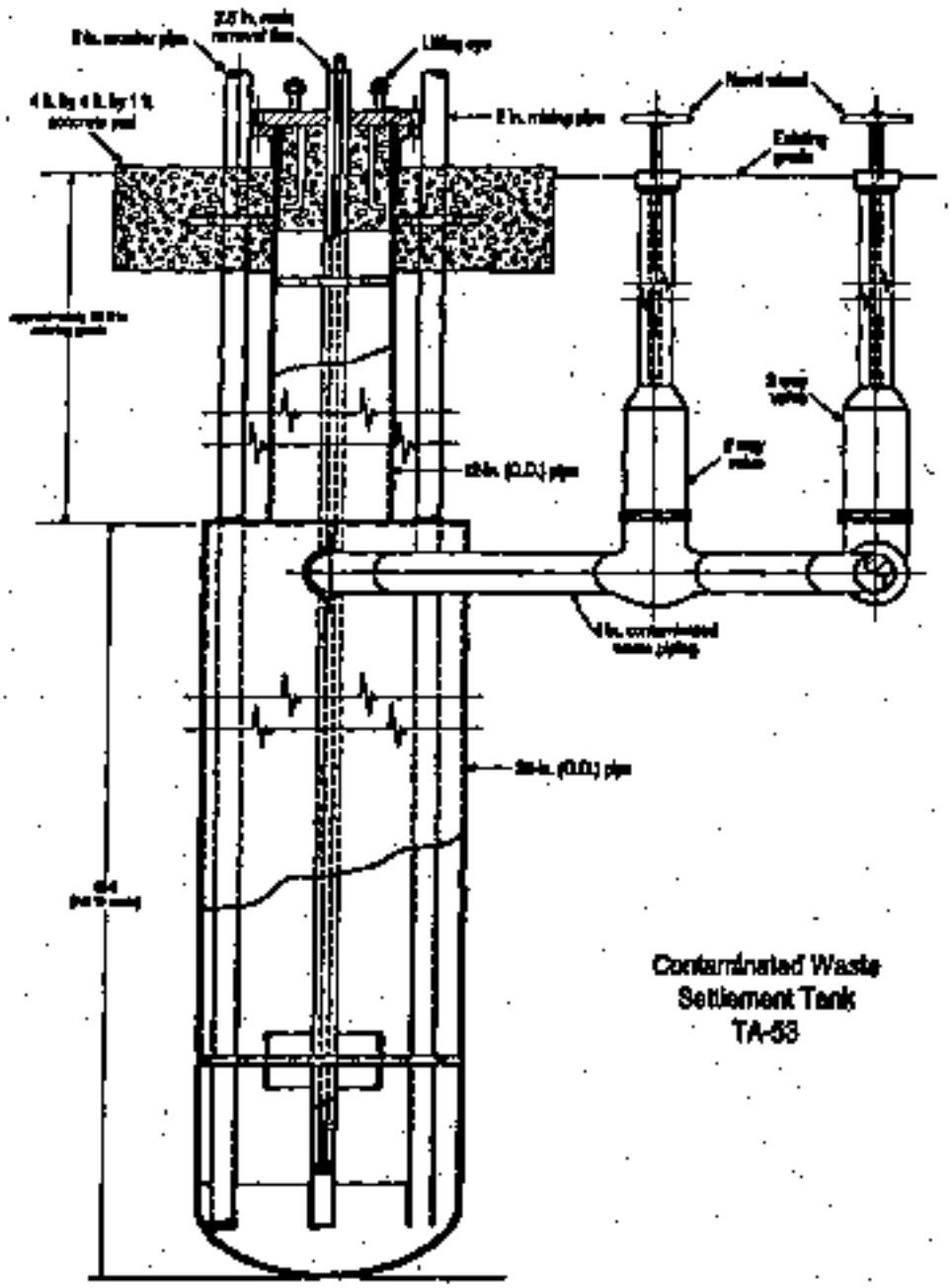


Figure 2.1-4. Detail cross-section view of PRS 53-006(a)

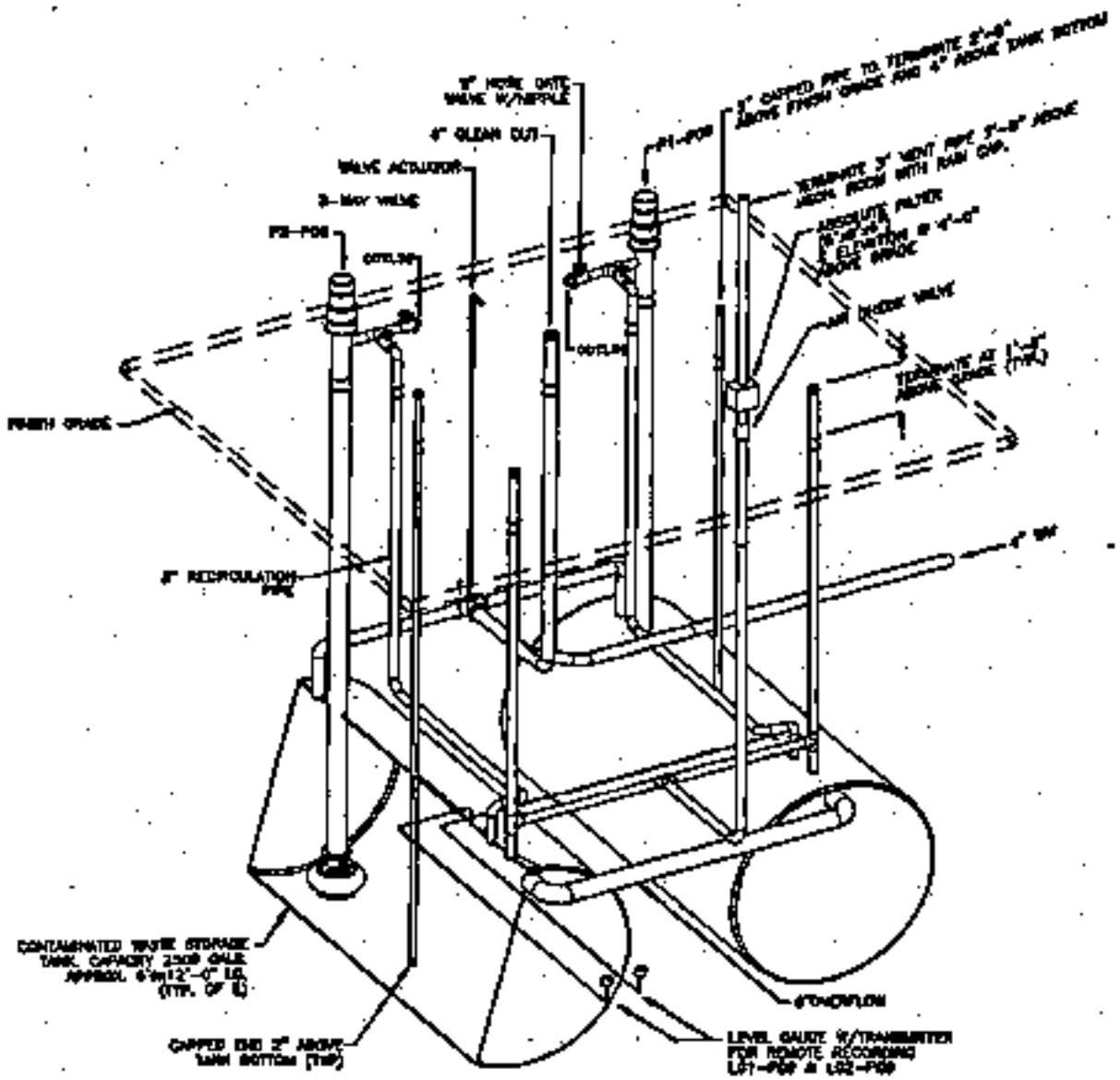


Figure 2.1-3. Schematic of PRSs 53-006(b,c)

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 53-006(d)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
53-006(d)	HSWA	Underground Storage Tank (rad decay)	Rad, VOCs, SVOCs, PCBs, Metals	Under Investigation
53-006(e)	HSWA	Underground Storage Tank (rad decay)	Rad, VOCs, SVOCs, PCBs, Metals	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that created, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

These PRSs are part of the same waste storage tank and receive the same waste stream and are proposed for consolidation. The tanks and associated piping will be investigated concurrently.

Description of Aggregate:

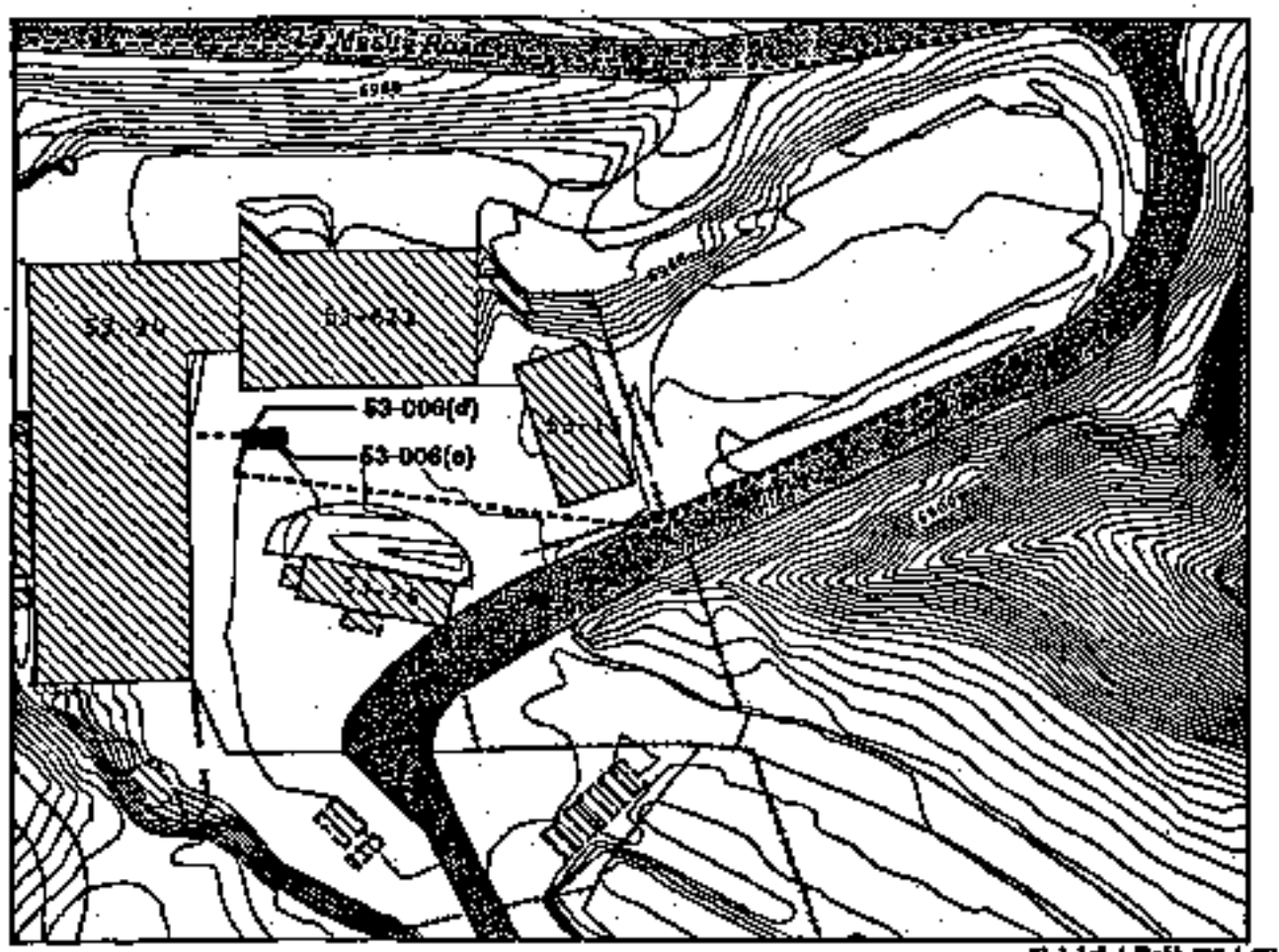
PRSs 53-006(d,e) are compartments of an underground storage and decay tank located directly south of Building TA-53-622 that collects radioactive liquid waste water from the Weapons Neutron Research (WNR) facility at TA-53. These tanks also receive discharges from TA-53-7 (drainage from floor drains in the beam line, target and experimental areas), TA-53-8 (drainage from a de-ionized water pump located in a radiologically controlled area (RCA), TA-53-30 (drainage from floor and sink drains in RCAs), TA-53-268 (discharges from an equipment room floor drain), and TA-53-38 (drainage from the de-ionized water system).

The underground tank is composed of one-ft thick reinforced concrete walls with a one-ft thick divider wall that separates the compartments. The structure is approximately 20 ft long x 12 ft wide x 10 high, and is buried 10 ft below ground surface. A pipe transports radioactive liquid waste to the tanks and a 3-way valve directs water into both compartments. The two compartments are also connected via an overflow hole near the top of the concrete divider.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____



Data sources: TIRAM, 1988 ortho, field surveys

Scale in feet

50 0 50 100 150

Contour interval = 2 ft

Liquid radioactive waste line

Fence

Paved road

Permanent structure

Temporary structure

Liquid radioactive waste tanks

Figure 2.1-6. Location of PRS 53-006(d,e)

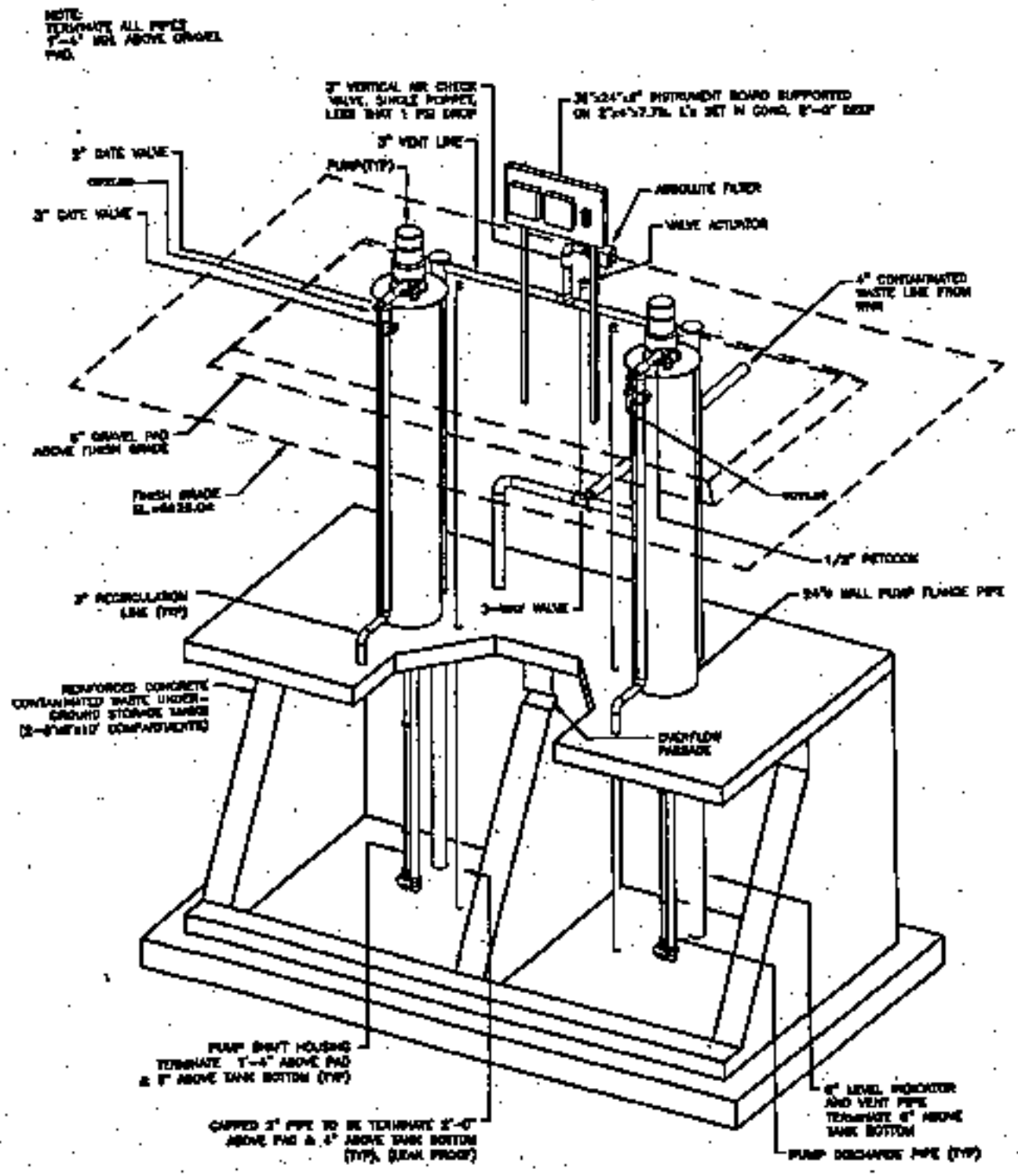


Figure 2.1-6. Schematic of PRSs 53-006(d,e)

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 54-007(c)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
54-007(c)	HSWA	Inactive Septic System	Sanitary, Rad, Metals	Under Investigation
54-007(e)	Non-HSWA	Inactive Septic System	Sanitary, Rad, Metals	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Since the two septic tanks share the same leach field, received the same waste streams and require a single investigation, they are proposed for consolidation.

Description of Aggregate:

PRS 54-007(c) is an active septic system that served TA-54-34, an office building and TA-54-38, the NDT facility. Structures comprising this PRS include a 2,000-gallon septic tank and corresponding leach field. The leach field also received wastewater from the former Animal Holding Facility through the septic tank designated as PRS 54-007(e). The facilities were tied into the Laboratory SWSC in 1992.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

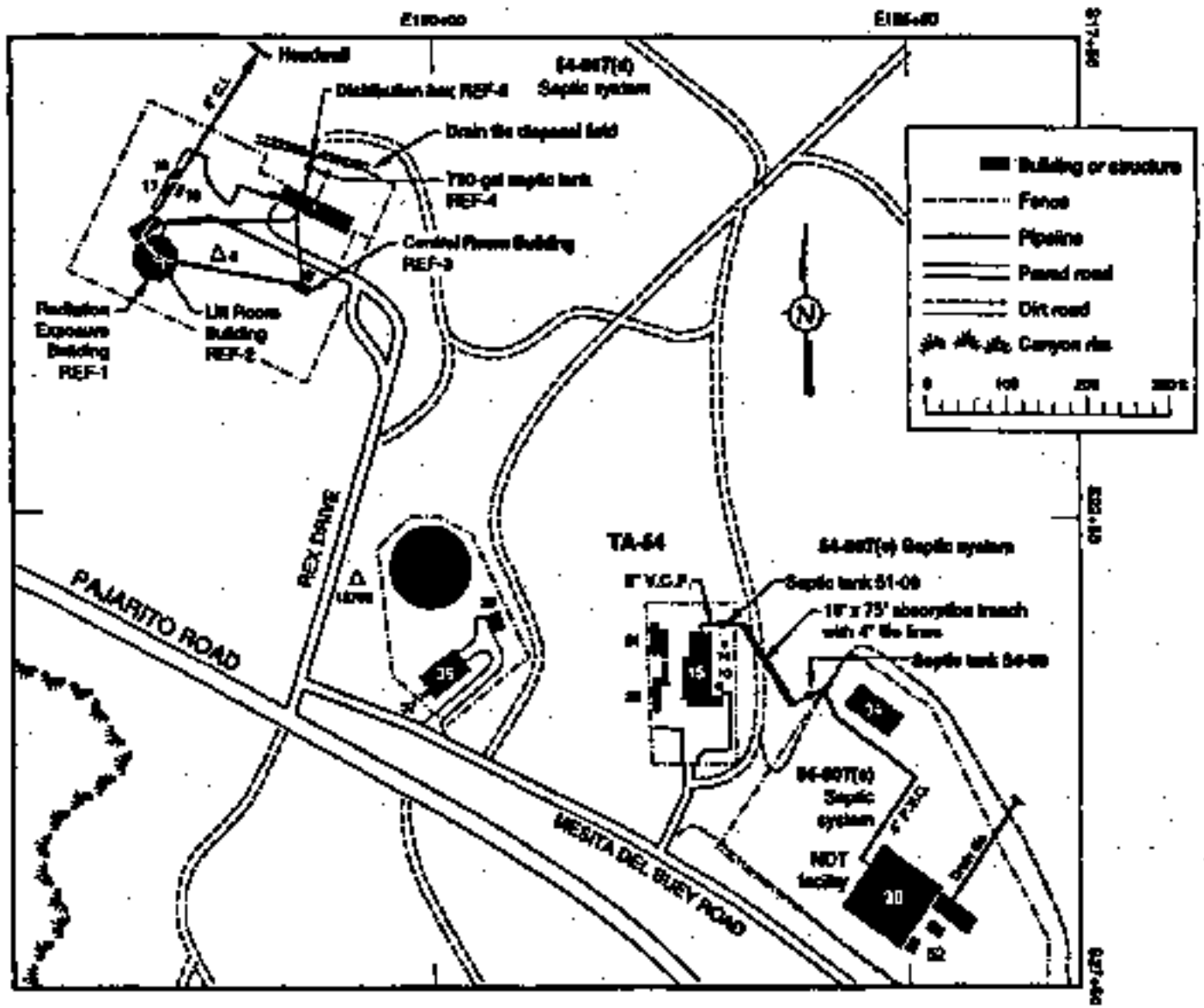


Figure 5.5-3 Location map of the western portion of TA-54, SWMUs 54-007(c, d, e). (LASL 1961 [ENG C-30357]; LABL 1977 [LA-RN-A-11]; LANL 1984 [ENG-R5128]; LANL 1985 [ENG 54-47]; LANL 1990 [D145])

PRS Consolidation Worksheet

Site Type: MDA

Proposed PRS Number: 54-013(b)-99

PRS Number	*Regulatory Driver*	*PRS Description*	*COPCs*	*Regulatory Status*
54-013(b)	HSWA	Decon Pit converted to Pit 19	Rad, Organics, Metals	Under Investigation
54-014(b)	HSWA	TRU Storage Pit	Rad, Organics, Metals	Under Investigation
54-014(c)	HSWA	TRU Storage Shafts	Rad, Organics, Metals	Under Investigation
54-014(d)	HSWA	TRU Storage Trenches	Rad, Organics, Metals	Under Investigation
54-015(k)	HSWA	TRU Waste Storage Mound	Rad, Organics, Metals, PCBs	Under Investigation
54-017	HSWA	Disposal Pits (19)	Rad, Organics, Metals, PCBs	Under Investigation
54-018	HSWA	Disposal Pits (5)	Rad, Organics, Metals, PCBs	Under Investigation
54-019	HSWA	Disposal Shafts (91)	Rad, Organics, Metals, PCBs	Under Investigation
54-020	HSWA	Disposal Shafts (37)	Rad, Organics, Metals, PCBs	Under Investigation

Consolidation Checklist Criteria:

	Yes	*No*
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the common contaminants, geographic proximity, transport mechanisms, and type of investigation needed to assess these PRSs, they are proposed for consolidation. These subsurface sites will be investigated concurrently with closure activities for other RCRA subsurface units at Area G.

Description of Aggregate:

These PRSs are all subsurface units within Area G and are not "RCRA regulated units." MDA G shafts contain the following types of waste: TRU, radioactive, chemical hot cell, beryllium, solvents, animal tissue, fuel elements, control rods, and PCB oil. MDA G pits contain the following types of waste: radionuclides, chemicals, PCBs, asbestos, contaminated soil and building debris, dry boxes, sludge drums and filter plenums. This consolidated unit also includes a TRU Waste storage mound from which TRU Waste is scheduled to be retrieved starting in 1999 (PRS 54-015(k)).

NMED Concurrence: _____ *Date:* _____

ER Project Concurrence: _____ *Date:* _____

DOE Concurrence: _____ *Date:* _____

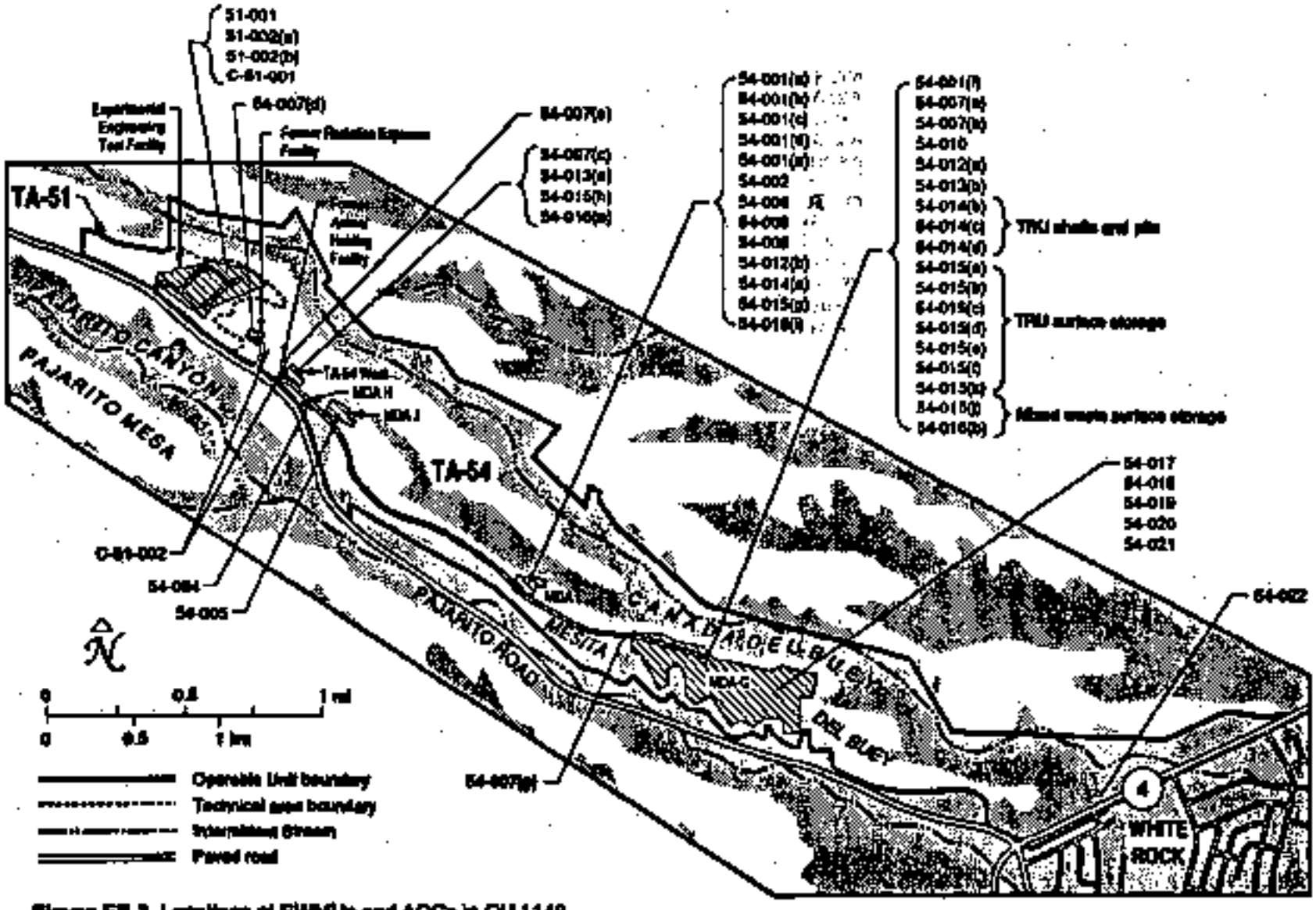


Figure ES-3 Locations of SWMUs and AOCs in OU 1148.

PRS Consolidation Worksheet

Site Type: MDA

Proposed PRS Number: 73-001(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
73-001(a)	HSWA	Landfill	VOCs, SVOCs, PCBs, metals, rad	Under Investigation
73-004(d)	HSWA	Former Septic system	VOCs, SVOCs, PCBs, metals, rad	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on operational history (subsurface disposal activities at PRSs 73-001(a-d)), geographic proximity (PRSs 73-001(b-d) are located adjacent to and PRS 73-004(d) was located within the boundary of the main landfill PRS 73-001(a)), transport mechanisms (subsurface), and the type of investigation needed to assess these PRSs, they are proposed for consolidation.

Description of Aggregate:

PRSs 73-001(a) and 73-004(d) are associated with disposal activities in the vicinity of the TA-73 airport landfill. PRS 73-001(a) is the main landfill situated north of the airport runway. It initially consisted of a natural, hanging valley into which municipal waste was disposed. As more capacity was required, trenches were excavated into the tuff adjacent to the original Hanging Valley. Laboratory use of the disposal area probably began in 1943, and Los Alamos County operated the landfill from 1965 until 1973. Landfill volume is estimated to be 469,500 cubic yards.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

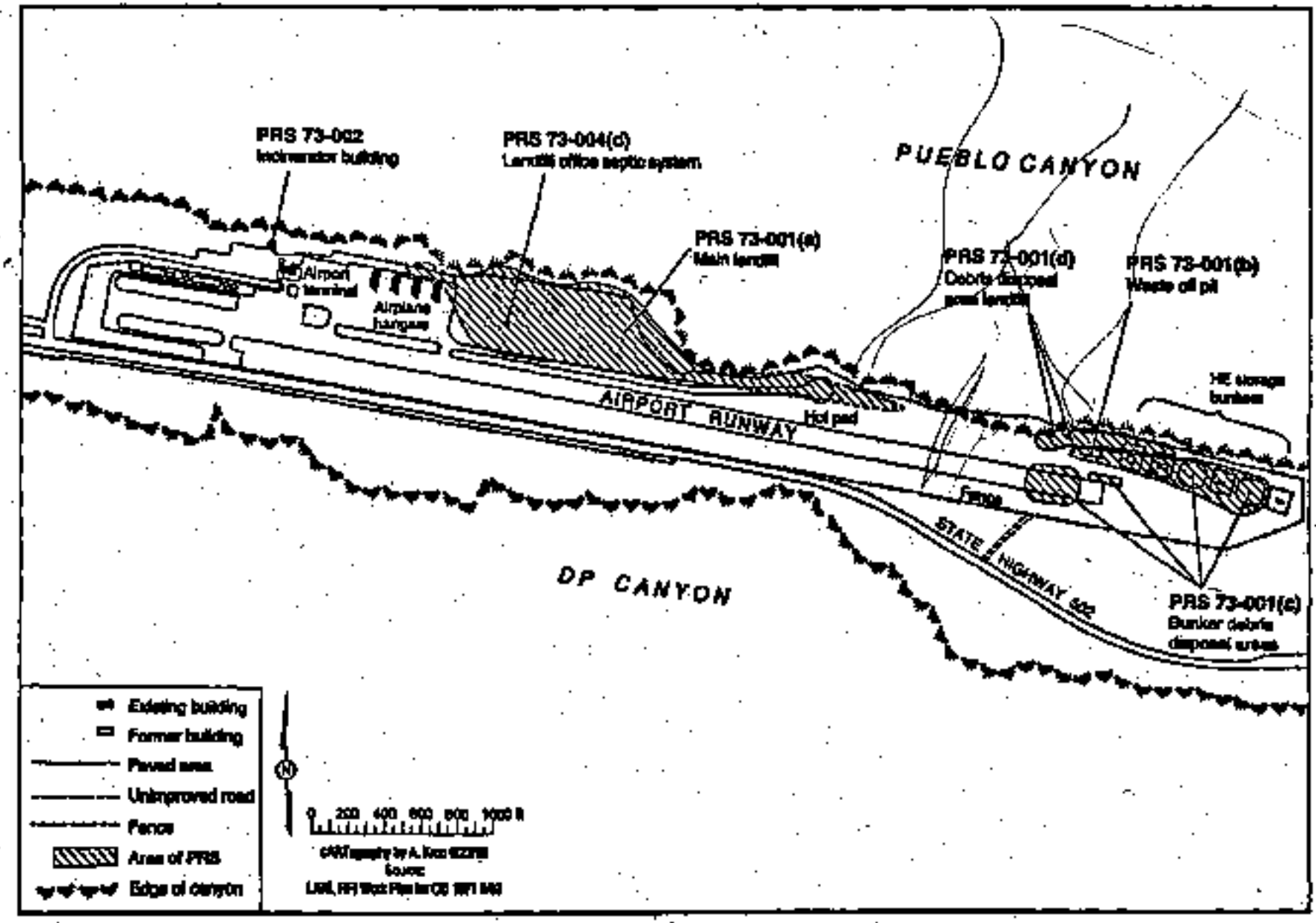


Figure 1.0-3. Locations of PRSs 73-001(a), 73-001(b), 73-001(c), 73-001(d), and 73-004(d); 73-002 is also shown

PRS Consolidation Worksheet

Site Type: MDA

Proposed PRS Number: 73-001(b)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
73-001(b)	HSWA	Subsurface disposal	VOCs, SVOCs, PCBs, metals, rad	Under Investigation
73-001(c)	HSWA	Subsurface disposal	VOCs, SVOCs, PCBs, metals, rad	Under Investigation
73-001(d)	HSWA	Subsurface disposal	VOCs, SVOCs, PCBs, metals, rad	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on operational history (subsurface disposal activities at PRSs 73-001(a-d)), geographic proximity (PRSs 73-001(b-d) are located adjacent to and PRS 73-004(d) was located within the boundary of the main landfill PRS 73-001(a)), transport mechanisms (subsurface), and the type of investigation needed to assess these PRSs, they are proposed for consolidation.

Description of Aggregate:

PRS 73-001(b) was a waste oil pit approximately 100 ft x 25 ft with an unknown depth and was located northeast of the original end of the runway. The period of operation is estimated to have been from 1947 to 1974. Used oil from the motor pool and other operations are known to have been disposed at this PRS. The Zia Company reportedly closed the waste oil pit by filling it with clean sand to solidify its contents. However, recent RFI results indicate that the closed waste oil pit was incorporated into PRS 73-001(d) when the disposal trenches were excavated in 1984. PRS 73-001(c) was a subsurface disposal area containing debris from the demolition of four high explosive (HE) storage bunkers that were constructed of concrete in 1947, along the north canyon rim east of the original runway. The bunkers were demolished in 1974. The rubble from the bunkers was placed in two large pits adjacent to the bunker sites in a small trench at the northeast corner of the runway and beneath the 1974 runway extension. However, recent RFI results indicate that the disposal pits adjacent to the bunker sites were incorporated into 73-001(d) when the disposal trenches were excavated.

PRS 73-001(d) is a debris disposal area consisting of two roughly parallel, unlined trenches with a depth of approximately 35 feet. In 1984, the site was used to bury debris excavated from the western portion of 73-001(a) for airport hangar space expansion and the excavation of PRSs 73-001(b) and 73-001(c). The trenches are estimated to contain 126,000 cubic yards. In 1986, PRS 73-001(d) was covered with soil and re-vegetated. PRS 73-004(d) was a septic system that served the landfill office located east of the present airport terminal building and within the footprint of PRS 73-001(a). A 4 in. diameter vitrified-clay pipe (VCP) connected the building's toilet to the septic tank located about 20 ft northeast of the building. The building and septic tank were removed as part of the decommissioning of the landfill operation in the early 1970s.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

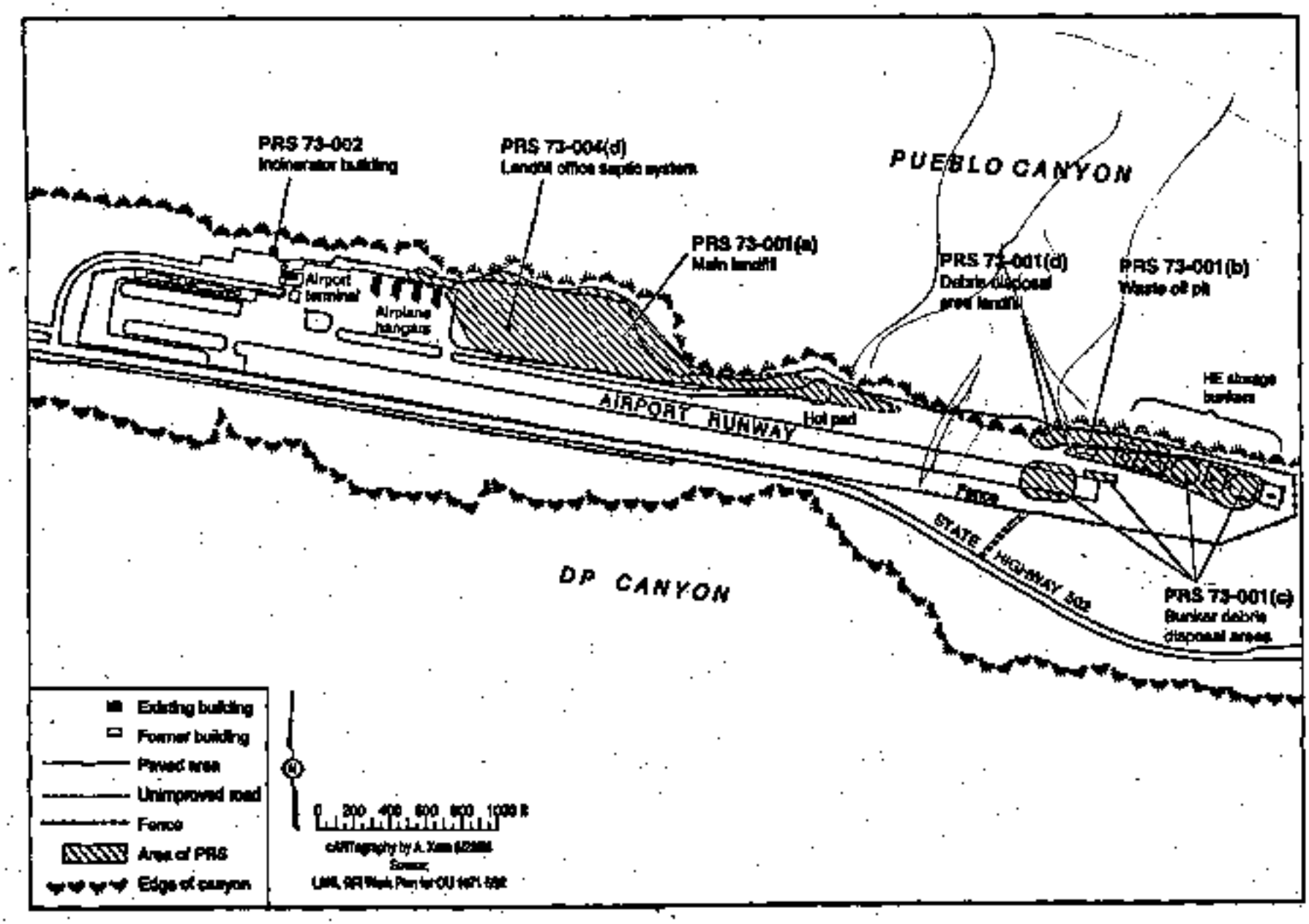


Figure 1.0-3. Locations of PRSs 73-001(a), 73-001(b), 73-001(c), 73-001(d), and 73-004(d); 73-002 is also shown

PRS Consolidation Worksheet

Site Type: Incinerator Surface Disposal

Proposed PRS Number: 73-002-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
73-002	HSWA	Surface disposal area	metals, SVOCs, VOCs, PCBs, pesticides	Under Investigation
73-003	Non-HSWA	Former steam cleaning plant	VOCs, SVOCs, metals	Under Investigation
73-004(a)	HSWA	Former septic system	VOCs, SVOCs, metals	NFA Criterion 5
73-004(b)	HSWA	Former septic system	VOCS, SVOCs, metals	NFA Criterion 5
73-006	HSWA	Former drain lines	VOCS, SVOCs, metals	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on removal history and geographic proximity (all are former structures removed from a localized area), transport mechanisms (subsurface), and the single investigation needed to confirm the completion of cleanup activities at these PRSs, they are proposed for consolidation.

Description of Aggregate:

PRSs 73-002, 73-003, 73-004(a,b) and 73-006 are associated with former structures and activities located on the east end of the airport landfill. PRS 73-002 is a surface disposal area associated with operation of an incinerator. PRS 73-003 was a steam cleaning plant for garbage trucks, cans, and dumpsters that were used for the collection of municipal waste. The wash water was discharged into a septic tank (PRS 73-004(b)) located to the west of the plant. The plant was used from 1949 until October 1970 and was demolished in 1971. The septic tank was concrete and discharged through a 6 in. vitrified-clay pipe (VCP) to an outfall to Pueblo Canyon; the tank and associated piping were removed in 1996. PRS 73-004(a) was a septic tank that received sanitary waste from toilets and shower facilities located in the adjacent incinerator building. The tank was concrete and discharged through a 6 in. VCP to an outfall to Pueblo Canyon. The tank and associated piping were removed in 1996. PRS 73-006 consists of the outfalls associated with two drain lines that discharged to Pueblo Canyon from the incinerator building. One drain line that originated at a floor drain in the stoking room was constructed of 6 in. VCP and extended from the north side of building to the canyon rim while the second VCP drain line is reported to have exited the northeast side of the building and extended to the canyon rim. These drains are presumed to have handled wash water and been in operation concurrent with the incinerator (PRS 73-002). These drain lines have been removed

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

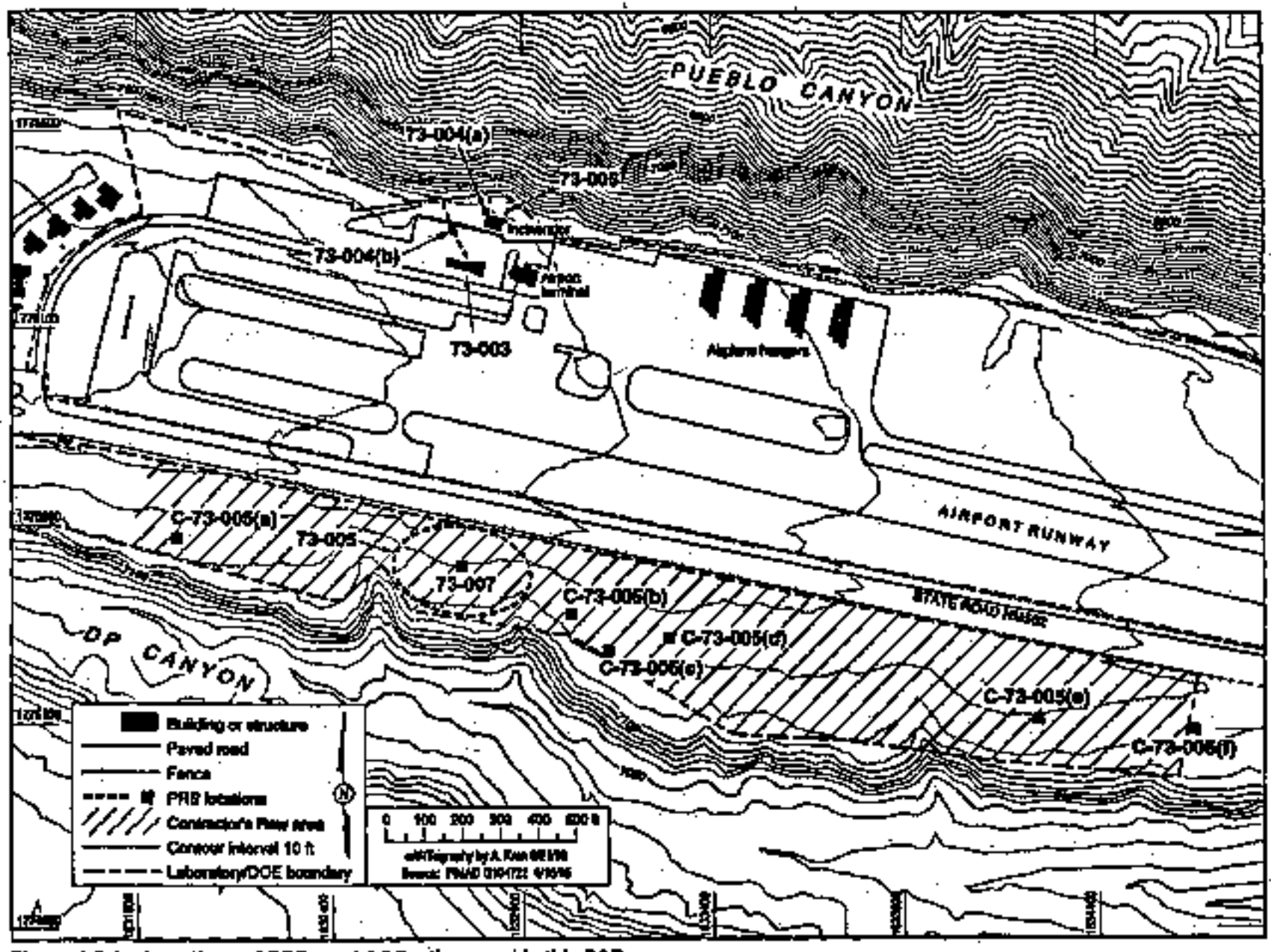


Figure 1.0-1. Locations of PRSs and AOCs discussed in this SAP.

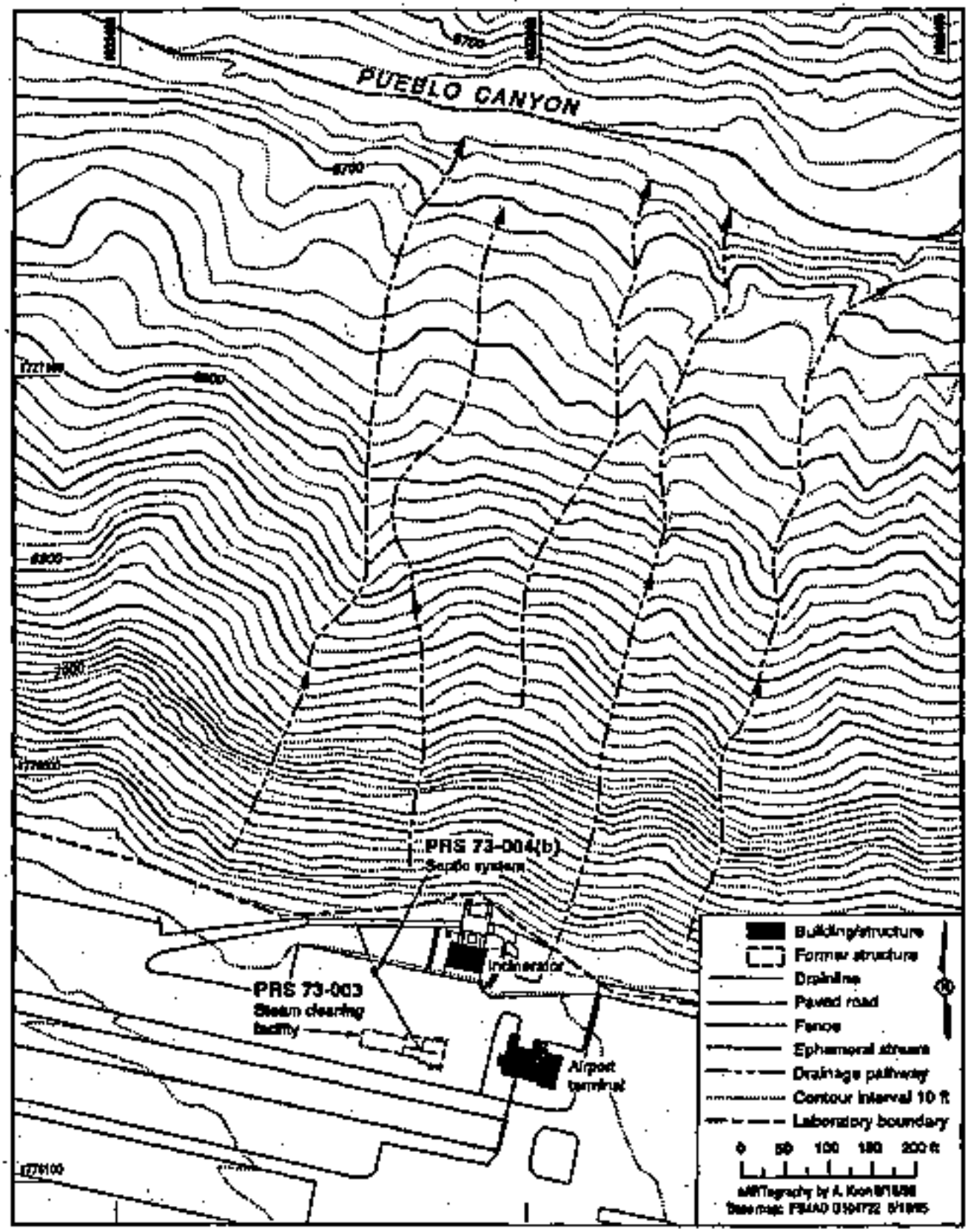


Figure 2.1.1-1. Locations of PRSs 73-003 (steam cleaning facility) and 73-004(b) (septic system).

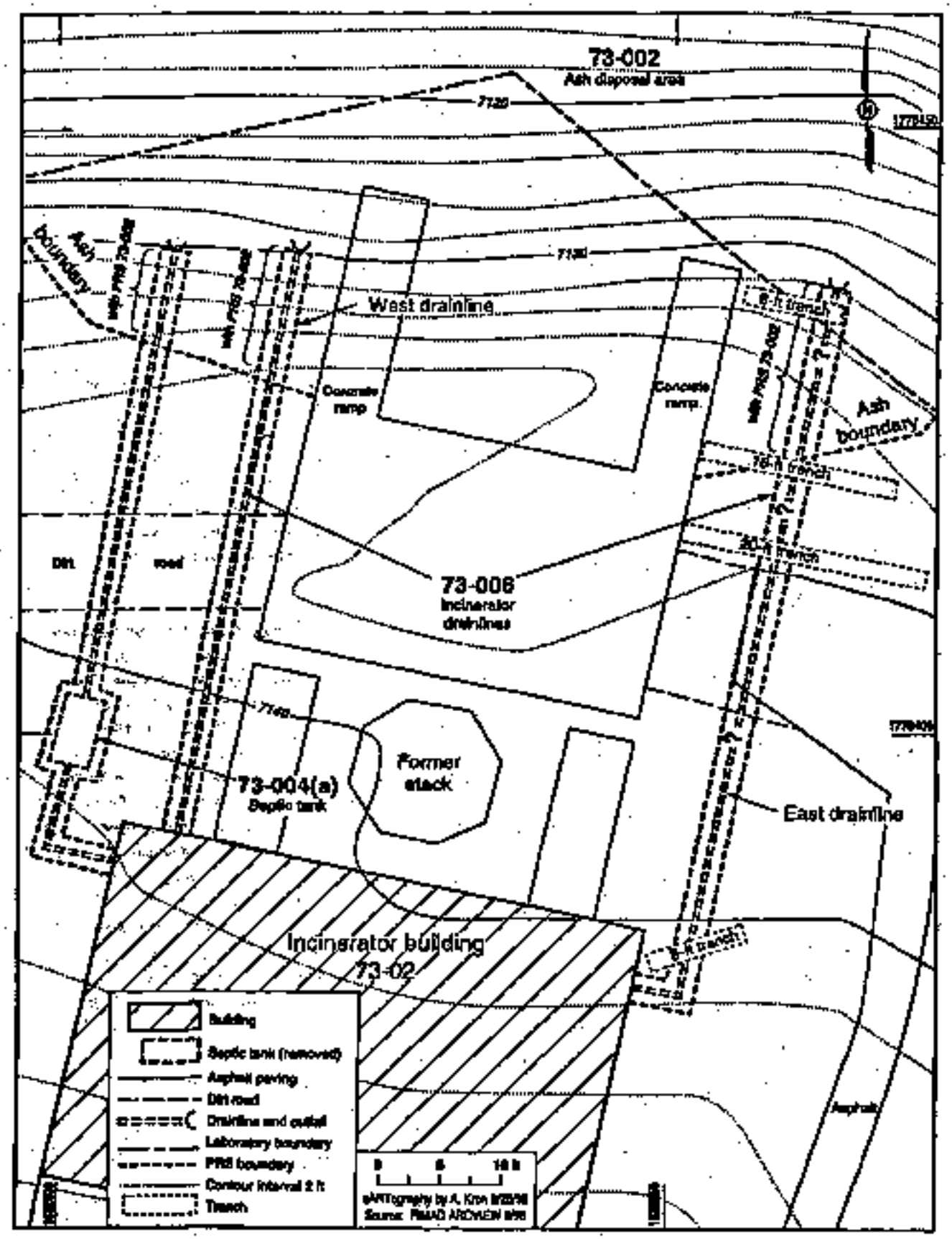


Figure 3.1.1-1. Site map for PRSs 73-004(a) and 73-006.

PRS Consolidation Worksheet

Site Type: Miscellaneous

Proposed PRS Number: 73-005-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Regulatory Status
73-005	HSWA	Surface disposal area	metals, SVOCs, VOCs, PCBs, pesticides	Under Investigation
73-007	Non-HSWA	Former Septic Sayatem	metals, SVOCs, VOCs, PCBs, pesticides	Under Investigation
C-73-005(a)	Non-HSWA	Surface disposal	metals, SVOCs, VOCs, PCBs, pesticides	Under Investigation
C-73-005(b)	Non-HSWA	Surface disposal	metals, SVOCs, VOCs, PCBs, pesticides	Under Investigation
C-73-005(c)	Non-HSWA	Surface disposal	metals, SVOCs, VOCs, PCBs, pesticides	Under Investigation
C-73-005(d)	Non-HSWA	Surface disposal	metals, SVOCs, VOCs, PCBs, pesticides	Under Investigation
C-73-005(e)	Non-HSWA	Surface disposal	metals, SVOCs, VOCs, PCBs, pesticides	Under Investigation
C-73-005(f)	Non-HSWA	Surface disposal	metals, SVOCs, VOCs, PCBs, pesticides	Under Investigation

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of a process or system that treated, stored, or released hazardous constituents to the environment?	☐	☐
2. Is the contamination origin non-discernable?	☐	☐
3. Are the PRSs in the same geographic proximity?	☐	☐
4. Are the transport mechanisms and pathways similar?	☐	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☐	☐

Consolidation Rationale:

Based on operational history and geographic proximity associated with former "contractors' row," transport mechanisms (surface and shallow subsurface), and the single investigation needed to assess these PRSs, they are proposed for consolidation.

Description of Aggregate:

These PRSs are located south of State Road 502 and are associated with former temporary office and storage buildings erected and used by construction contractors in the middle to late 1940s. The area was referred to as "contractors' row," no Laboratory operations were conducted at this site. PRS 73-005 is a surface disposal area consisting of mounds of concrete and other debris presumably from the former temporary structures. PRS 73-007 was a steel septic tank that received sanitary waste from an unknown facility within the former contractors' row. The tank was removed and drain lines were abandoned in place in 1996. PRSs C-73-005(a-f) are six unlined pits of various dimensions ranging from 3 to 6 ft x 5 to 12 ft x 2.5 to 6 ft that were discovered on DOE property on East Mesa south of State Road 502. It is likely these pits received sanitary waste from facilities within former contractors' row. The septic pits were all excavated directly into tuff, with excavated material piled next to each pit. C-73-005(a) was constructed with a 4-in. VCP inlet drain line that was connected to the edge of the mesa by a shallow trench that may have contained an outlet drain line at one time or may have acted directly as a open drainage ditch. C-73-005(b) was constructed with a VCP outlet drain line, but no visible inlet drain line. The other four pits contained no visible inlet or outlet lines or trenches. RFI samples associated with PRSs C-73-005(a-f) were collected in 1998; additional samples are proposed to complete the RFI by determining the extent of COPCs.

NMED Concurrence: _____ **Date:** _____

ER Project Concurrence: _____ **Date:** _____

DOE Concurrence: _____ **Date:** _____

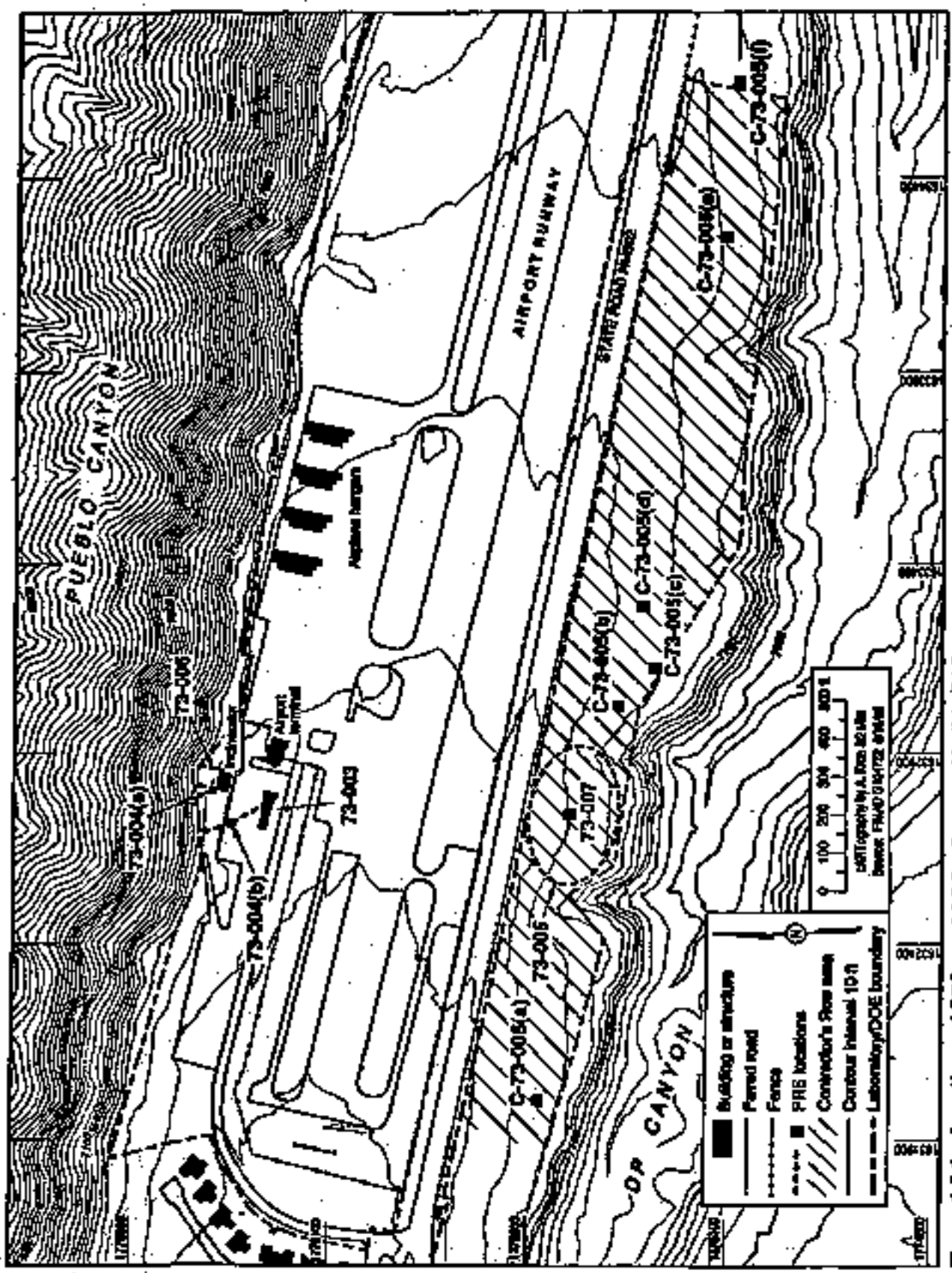


Figure 1.0-1. Locations of PRBs and AOCs discussed in this SAP.

PRS Consolidation Worksheet

Site Type: Effluent Discharge - Golf Course

Proposed PRS Number: 00-028(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
00-028(a)	HSWA	Soil contamination from effluent discharge - (active)	Metals	Rendija/Barrancas/Guaje
00-028(b)	HSWA	Soil contamination from effluent discharge - (active)	Metals	Pueblo

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, general geographical proximity, similar transport mechanisms, indistinguishable source terms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit are both Los Alamos County recreation areas irrigated with effluent from former and current waste water treatment plants (WWTPs). PRS 00-028(a) is the Los Alamos County Golf Course and PRS 00-028(b) consists of the North Mesa athletic fields. Both sites were irrigated first by the former Central WWTP (PRS 00-019) from 1948 until 1964 and by the Pueblo WWTP (PRS 00-018(b)) from 1951 until 1991. Both treatment plants were intended to handle only sanitary waste water. Results from the RFI Report for PRSs 00-018(a,b), (LA-UR-97-3392) indicate that the only COPCs are metals.

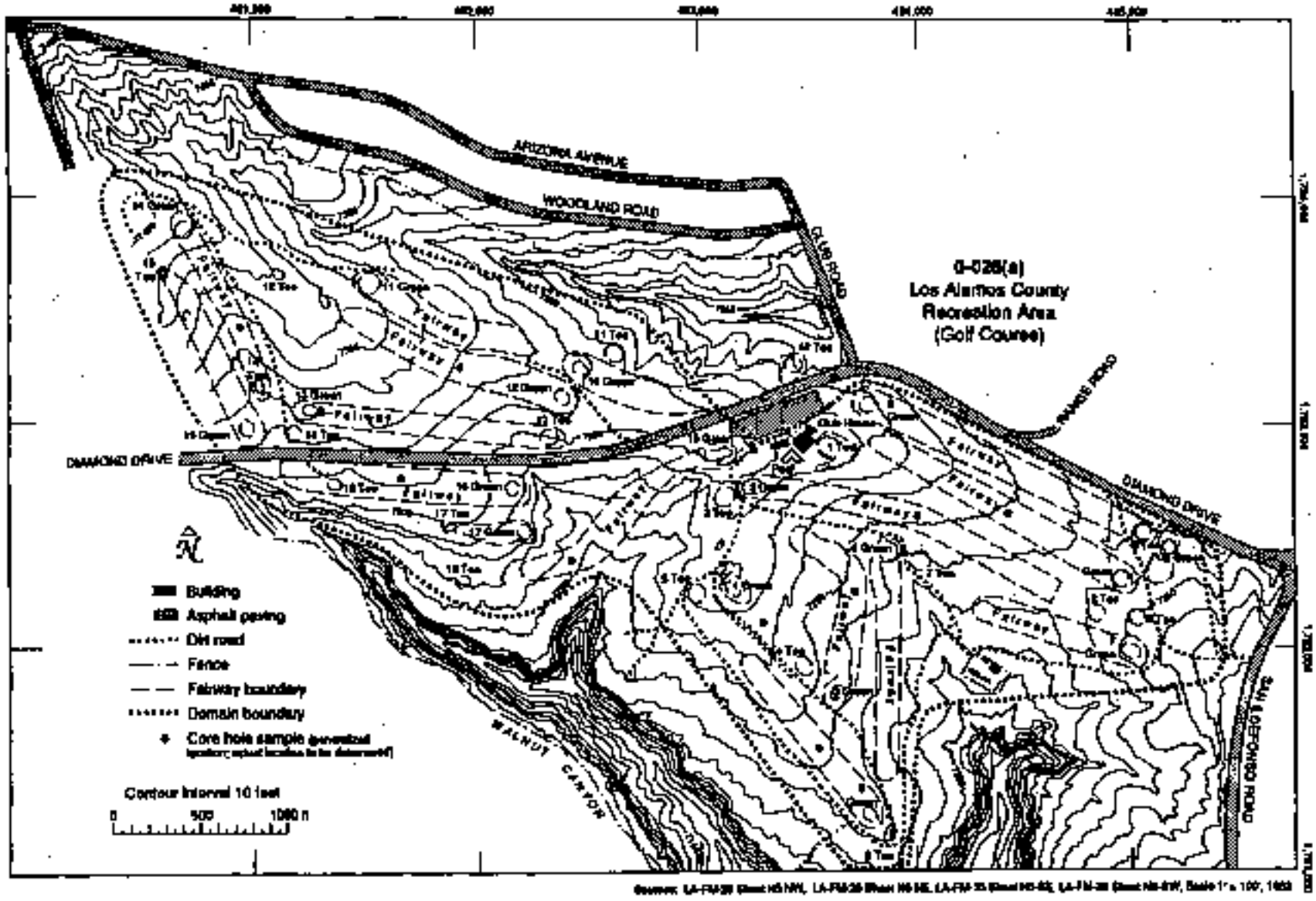


Figure 5-31. Sampling locations at Los Alamos County Golf Course (SWMU 0- 028(a)).

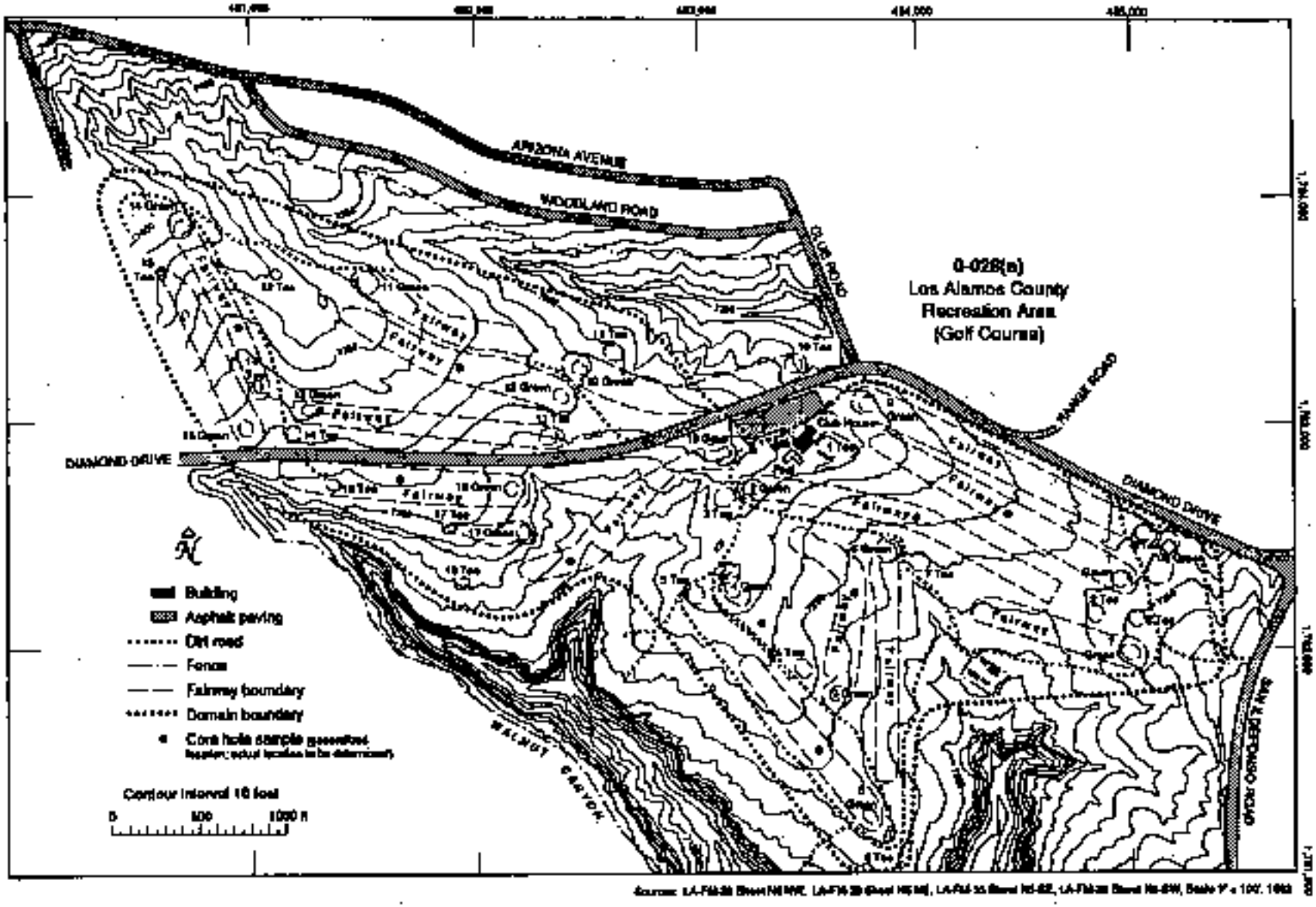


Figure 5-31. Sampling locations at Los Alamos County Golf Course [SWMU 0- 028(a)].

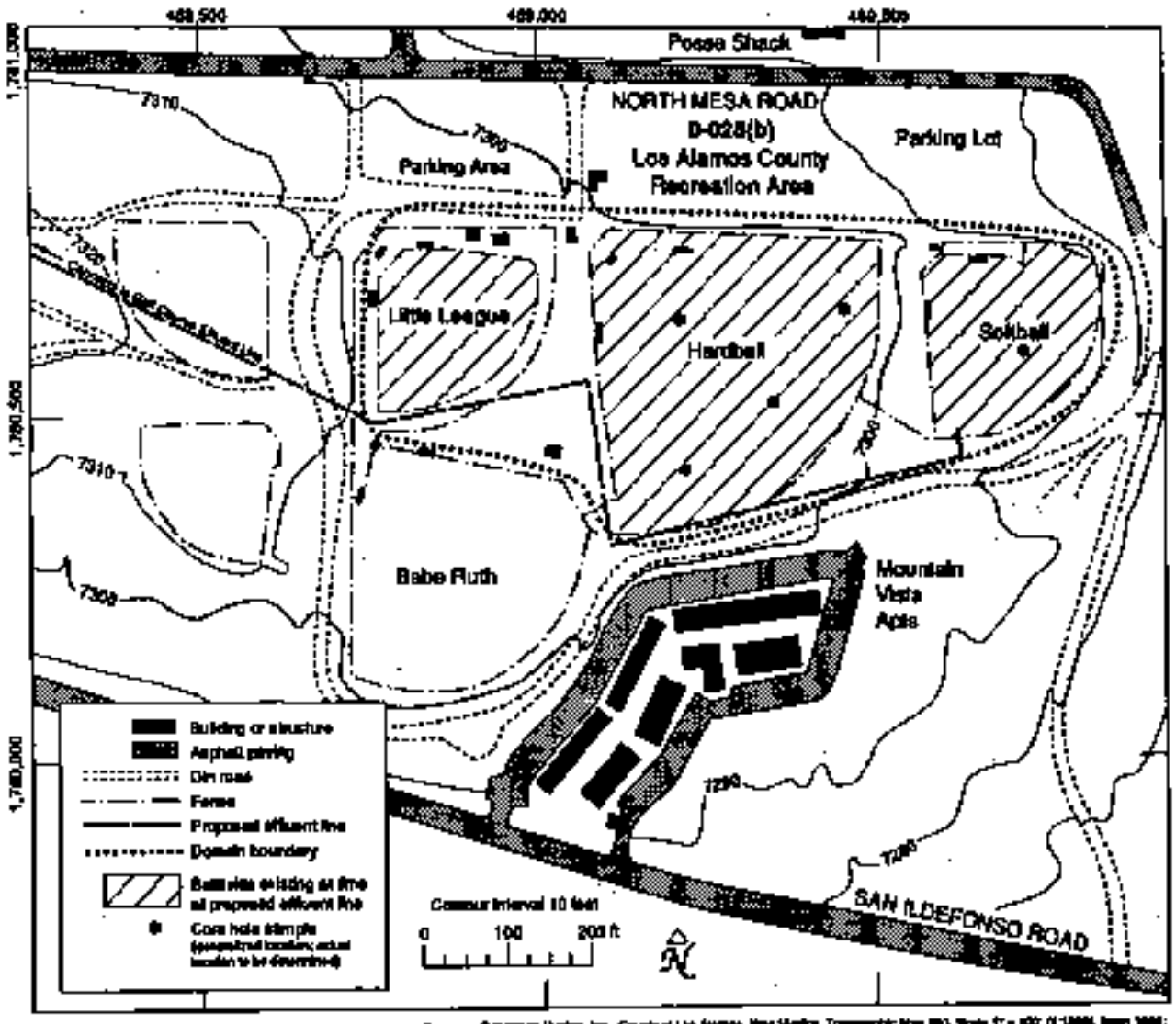


Figure 5-32. Sampling locations at North Mesa athletic fields [SWMU D-028(b)].

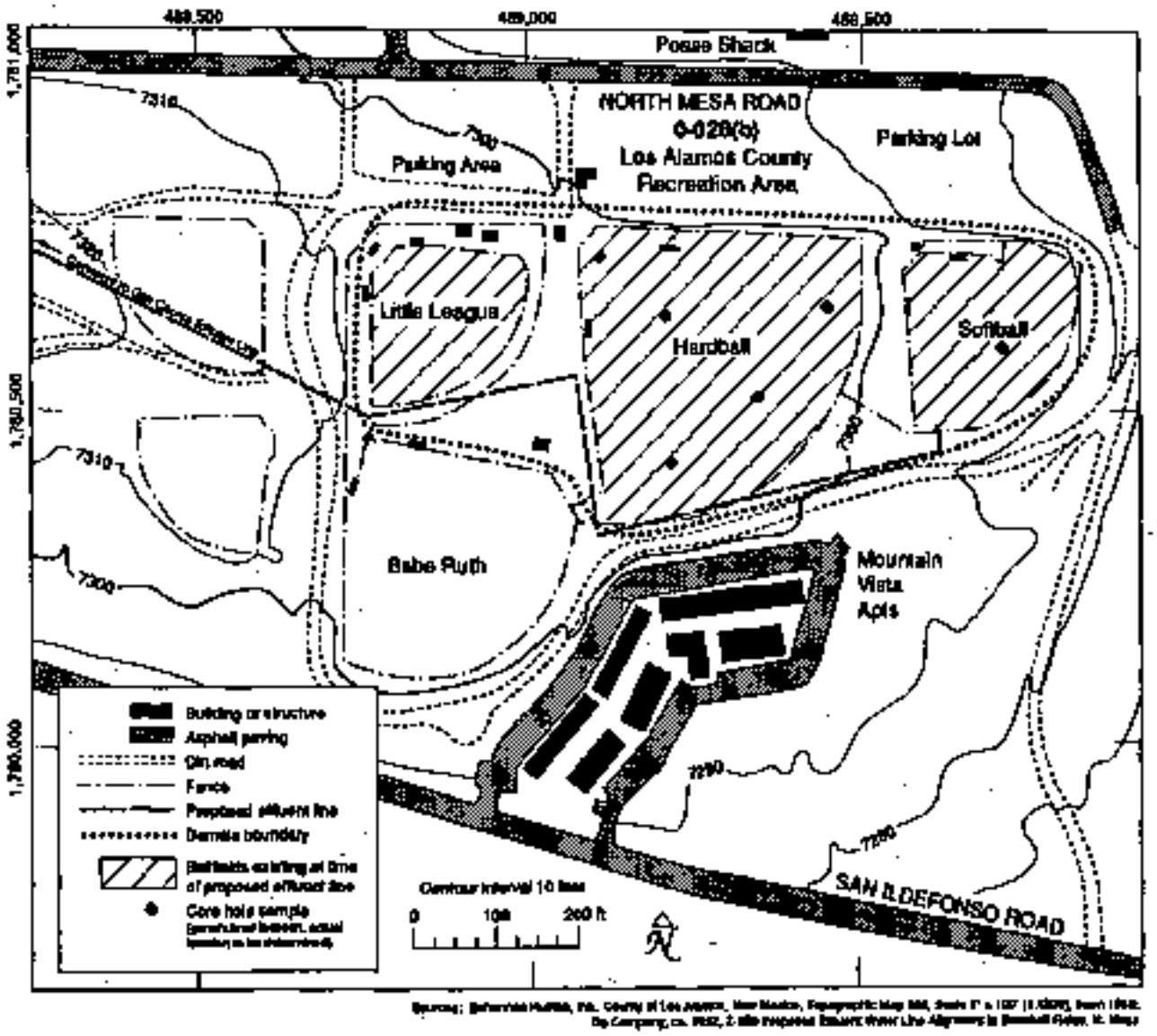


Figure 5-32. Sampling locations at North Mesa athletic fields (SWMU 0-028(b)).

PRS Consolidation Worksheet

Site Type: Former Structures - 6th St. Warehouse

Proposed PRS Number: 00-030(b)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
00-004	Non-HSWA	Container storage area - (inactive)	Metals, SVOCs, VOCs, PCBs	Middle Los Alamos
00-030(b)	HSWA	Septic system - (inactive)	Metals, SVOCs, VOCs, PCBs	Middle Los Alamos
00-030(l)	HSWA	Septic system - (inactive)	Metals, SVOCs, VOCs, PCBs	Middle Los Alamos
00-030(m)	HSWA	Septic system - (inactive)	Metals, SVOCs, VOCs, PCBs	Middle Los Alamos
00-033(b)	Non-HSWA	Soil contamination/drain lines - (inactive)	Metals, SVOCs, VOCs, PCBs	Middle Los Alamos

Consolidation Checklist Criteria:

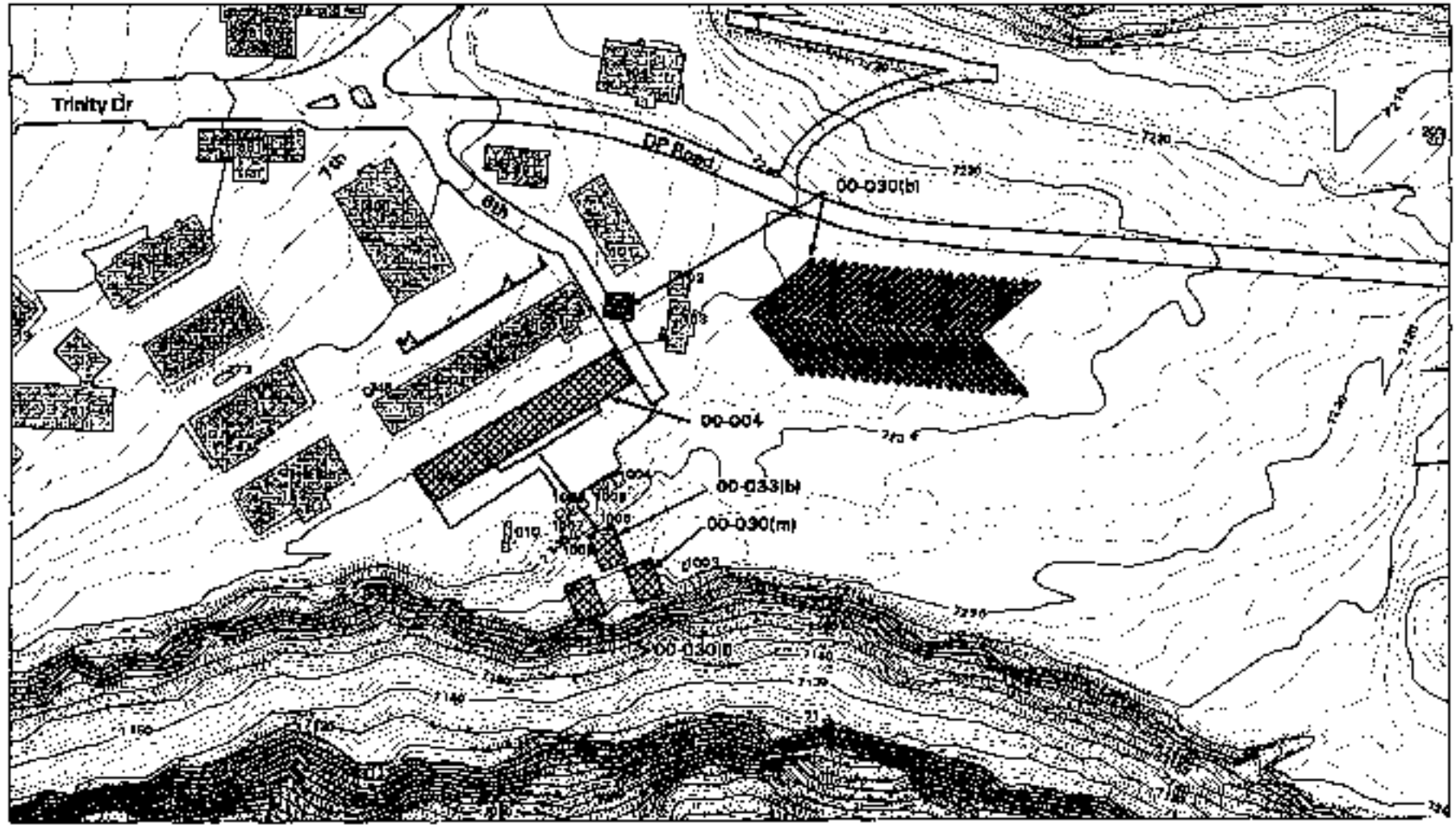
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, indistinguishable source terms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit were all associated with the former 6th Street Warehouse (Zia Warehouses) previously located at the intersection of DP Road and Trinity Drive. PRS 00-004 was a former chemical container storage area that was located inside the 6th Street Warehouse. PRS 00-030(b) known as former Septic System #1, consists of four septic tanks, including drain lines, a leach field and an outfall to Los Alamos Canyon, that served former Zia Warehouses 1, 2, 5, 6, 7, and 8, and an office building. PRS 00-030(l) was a septic system, including drain lines and outfall, that served Zia Warehouses 3 and 4. PRS 00-030(m) was a septic system, including drain lines, that served a residential trash incinerator. The drain line from this septic system connected to the outfall line from 00-030(b) before discharging into Los Alamos Canyon. All three septic systems have been removed. PRS 00-033 consists of potential soil contamination from structures and operations associated with the Zia Warehouses including all other drain lines. COPCs are commingled and the investigation of this consolidated PRS will include the evaluation of all former drain lines.



PRS Consolidation Unit 00-030(b)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Note: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FIMAD G108831 12 Jul 00

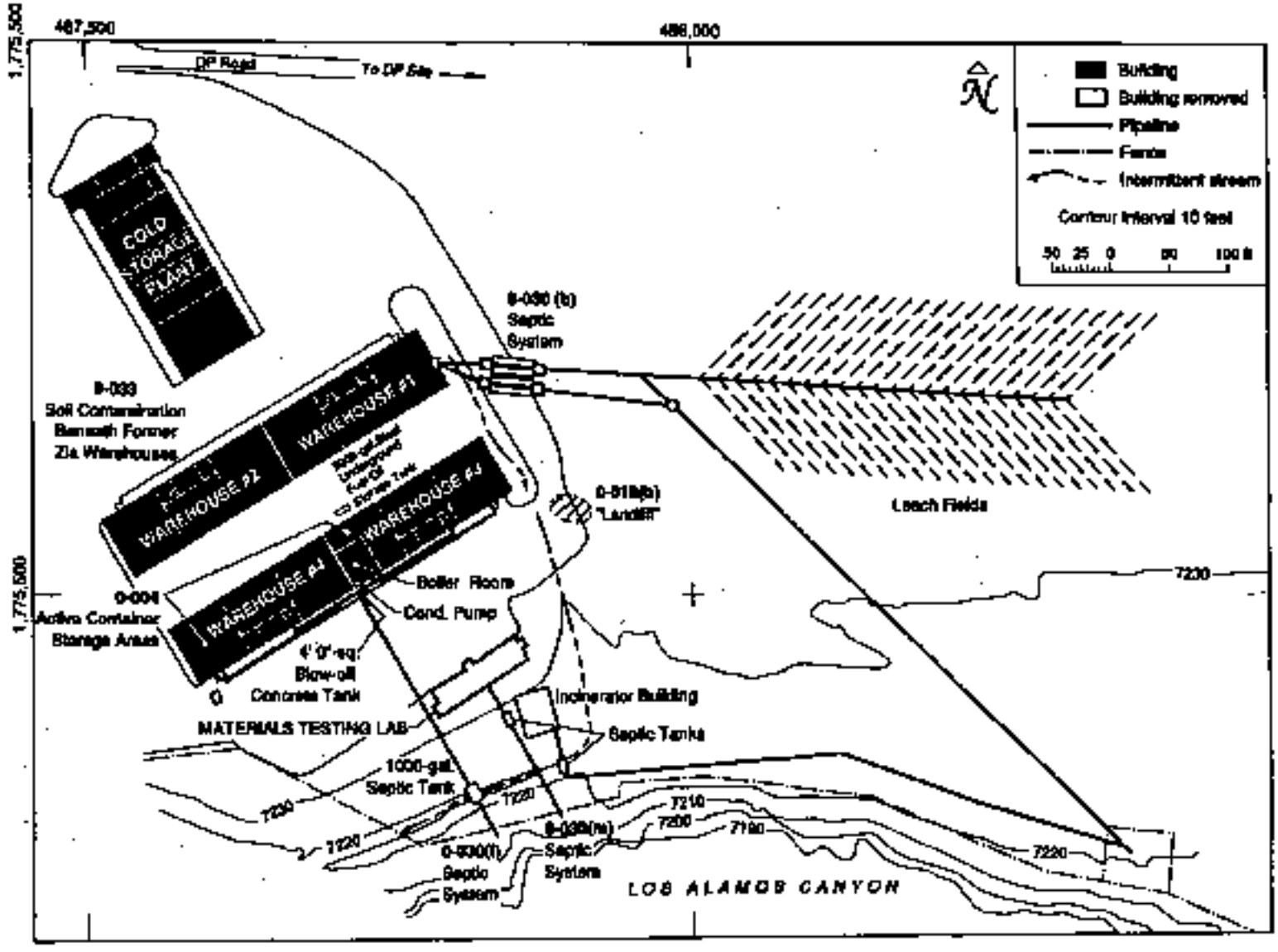


Figure 5-5. SWMU Group 0-1 (6th Street Warehouse Area).

PRS Consolidation Worksheet

Site Type: Miscellaneous - TA-1

Proposed PRS Number: 01-001(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
01-001(a)	HSWA	Former Septic Tank 134	Pu, Cs, Am, U, Metals, SVOCs	Upper Los Alamos
01-001(b)	HSWA	Former Septic Tank 135	Rad, Metals	Upper Los Alamos
01-001(c)	HSWA	Former Septic Tank 137 and Outfall	Rad, Metals	Upper Los Alamos
01-001(d)	HSWA	Former Septic Tank 138 and Outfall	Rad, Metals	Upper Los Alamos
01-001(e)	HSWA	Former Septic Tank 139 and Outfall	Rad, Metals	Upper Los Alamos
01-001(f)	HSWA	Former Septic Tank 140	U, Metals	Upper Los Alamos
01-001(g)	HSWA	Former Septic Tank 141 and Outfall	Rad, Metals	Upper Los Alamos
01-001(o)	HSWA	Former Sanitary Waste Line	Rad, Metals	Upper Los Alamos
01-001(s)	HSWA	Western Sanitary Waste Line	Rad, Metals	Upper Los Alamos
01-001(t)	HSWA	Former Septic System	Rad, Metals	Upper Los Alamos
01-001(u)	HSWA	Sanitary Waste Line	Rad, Metals	Upper Los Alamos
01-002(a)-00	HSWA	Former Acid Waste Line - changed FY00	Rad, Metals, SVOCs, VOCs, HE	Upper Los Alamos
01-003(a)	HSWA	Former Bailey Bridge Hillside Landfill	Rad, Metals	Upper Los Alamos
01-003(b)	Non-HSWA	Former Surface Disposal Area	Rad, Metals	Upper Los Alamos
01-003(e)	HSWA	Former Surface Disposal Area	Rad, Metals	Upper Los Alamos
01-004(a)	Non-HSWA	Former Incinerator Building	Rad, Metals	Upper Los Alamos
01-004(b)	Non-HSWA	Former Incinerator	Rad, Metals	Upper Los Alamos
01-005	Non-HSWA	Former Incinerator	Rad, Metals	Upper Los Alamos
01-006(a)	HSWA	Former Drain Lines and Hillside Outfalls	Rad, Metals	Upper Los Alamos
01-006(b)	HSWA	Former Drain Lines and Hillside Outfalls	Rad, Metals	Upper Los Alamos
01-006(c)	HSWA	Former Drain Lines and Hillside Outfalls	Rad, Metals	Upper Los Alamos
01-006(d)	HSWA	Former Drain Lines and Hillside Outfalls	Rad, Metals	Upper Los Alamos
01-006(e)	Non-HSWA	Former Drain Lines and Outfall	Rad, Metals	Upper Los Alamos
01-006(g)	Non-HSWA	Former Drain Lines and Hillside Outfalls	Rad, Metals	Upper Los Alamos
01-006(h)	HSWA	Former Drain Lines and Outfall	Rad, Metals	Upper Los Alamos
01-006(n)	HSWA	Former Storm Drain	Rad, Metals	Upper Los Alamos
01-006(o)	HSWA	Former Storm Drain	Rad, Metals	Upper Los Alamos
01-006(p)	Non-HSWA	Former Drain Lines	Rad, Metals	Upper Los Alamos
01-007(a)	HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals	Upper Los Alamos
01-007(b)	HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals	Upper Los Alamos
01-007(c)	HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals	Upper Los Alamos
01-007(d)	HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals	Upper Los Alamos
01-007(e)	HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals	Upper Los Alamos

01-007(f)	Non-HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals		Upper Los Alamos
01-007(h)	Non-HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals		Upper Los Alamos
01-007(i)	Non-HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals		Upper Los Alamos
01-007(j)	HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals		Upper Los Alamos
01-007(l)	HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals		Upper Los Alamos
01-007(m)	Non-HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals		Upper Los Alamos
01-007(o)	Non-HSWA	Former Structures - Subsurface Soil Contamination	Rad, Metals		Upper Los Alamos

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

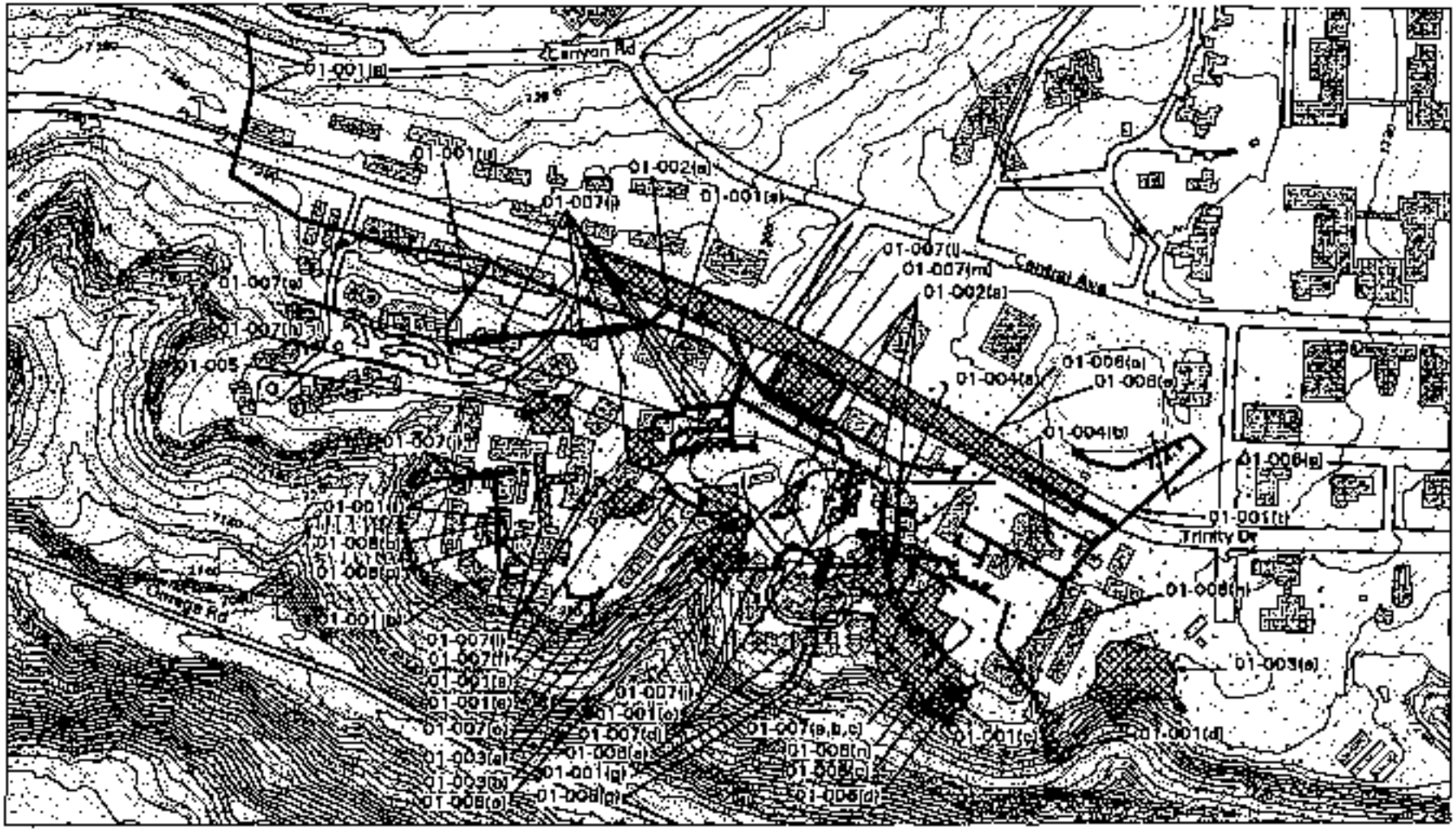
Based on the operational history, waste streams, geographical proximity, transport mechanisms (surface and shallow subsurface), and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The consolidated PRSs are all associated with former TA-1 operations and D&D activities. TA-1 was the site of Manhattan Project activities involving basic chemical operations including wet chemistry experimentation and wet and dry chemistry processing. TA-1 also housed several mechanical operations including casting, machining, and powder metallurgy.

Structures at TA-1 were served by an industrial waste line (PRS 1-002(a)) and three sanitary waste lines (PRSs 1-001(s, u and t)). The three sanitary waste lines discharged (via outfalls, septic tanks, and/or treatment plants) outside of TA-1 boundaries and are being addressed as part of other single or consolidated PRSs. During FY00, PRS 1-002 was divided into two parts: PRS 1-002(a)-00 - the industrial drain lines, and 1-002(b)-00 - the outfall from the TA-45 waste water treatment plant. PRS 1-002(a)-00 will be addressed as part of this consolidated unit and PRS 1-002(b)-00 will addressed as part of consolidated unit 45-001-00. Additionally, PRS 1-001(m), former septic tank 275, was removed from this consolidated unit during FY00 to address site-specific issues regarding the private property owner.

As operations gradually relocated to new technical areas, phased decommissioning and decontamination activities occurred. All former TA-1 buildings have been removed. Soils surrounding the buildings, within former building footprints, and adjacent to former plumbing structures were radiologically surveyed; any identified radioactively-contaminated soil was excavated and disposed and replaced with clean fill. Backfilling and recontouring was completed on the mesa-top area where considerable excavation of contaminated soils and volcanic tuff occurred during D&D activities in the 1970s. The area has been subject to substantial private and commercial development consisting of various retail stores, office buildings, and residences. Any remaining COPCs are commingled.



PRS Consolidation Unit 01-001(a)-99

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:5100

0 200 400

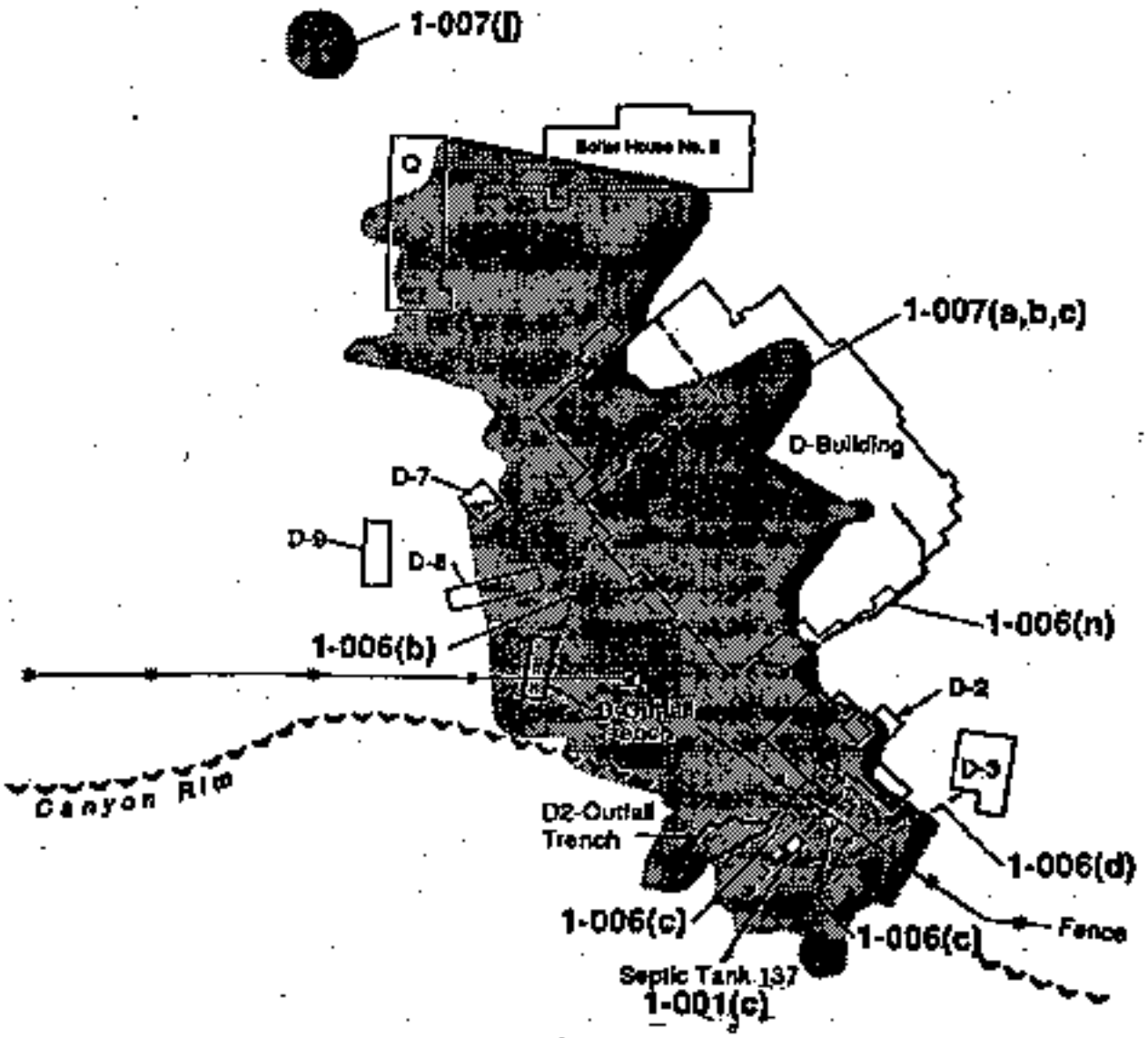
FEET

1983 North American Datum
Projection and Grid Ticks
New Mexico State Plane Coordinate System
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Martin James

FWMAD G108868 19 Jul 00



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.

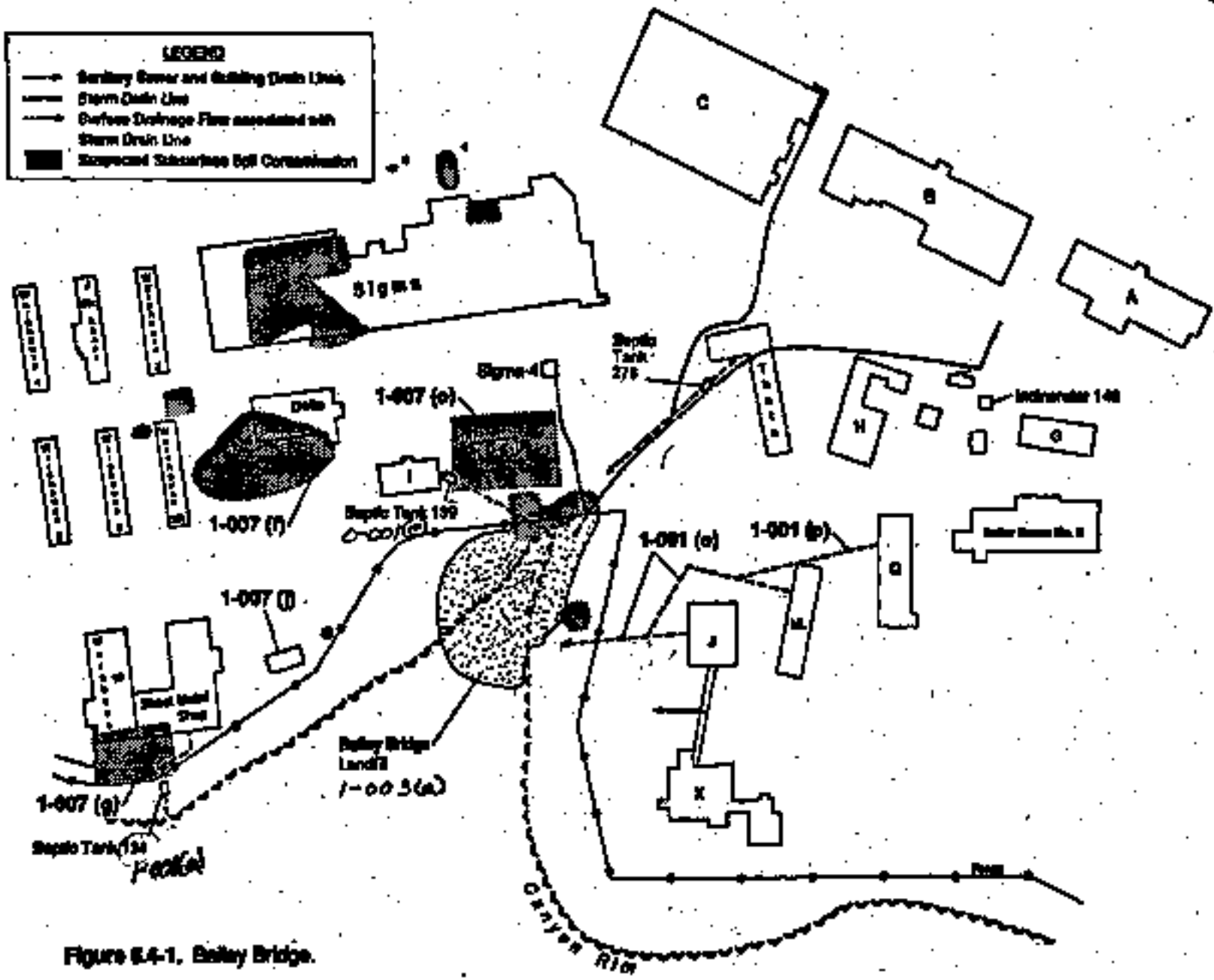


Figure 6.4-1. Bailey Bridge.

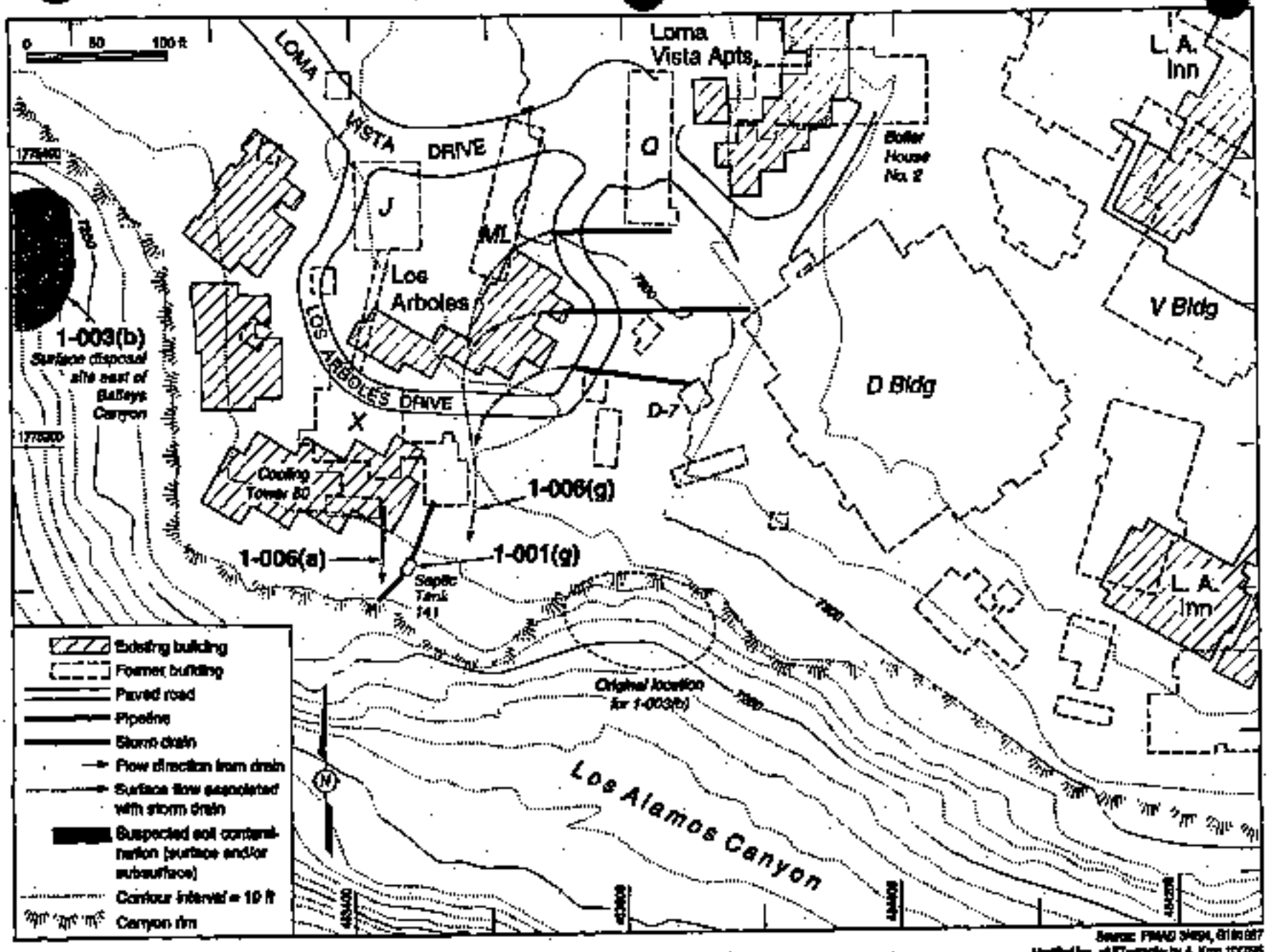


Fig. 1.1-4. Aggregate E (Cooling Tower 80).

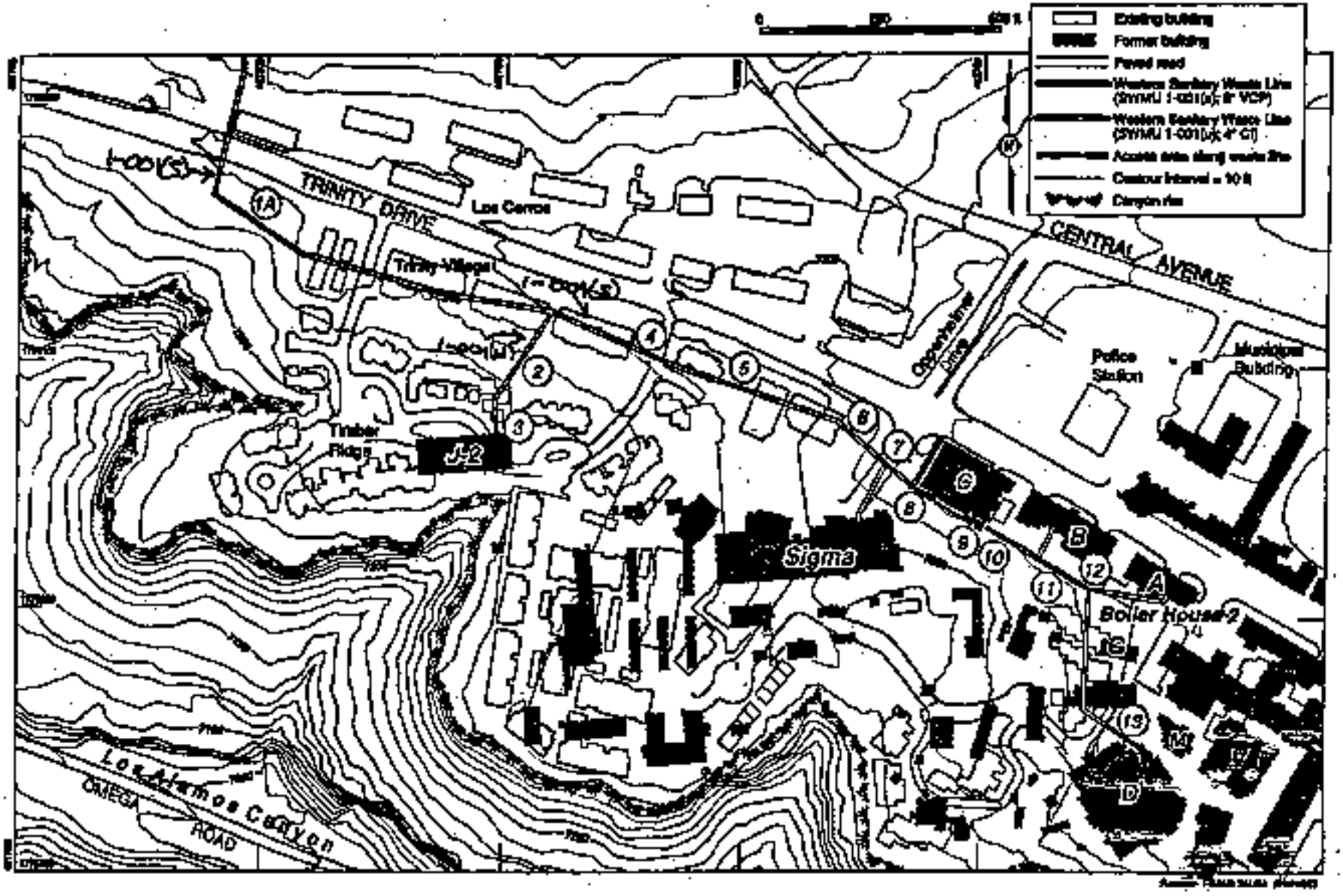


Fig. 5.1.1-1. Location of Western Sanitary Waste Line (highlights former Laboratory buildings).

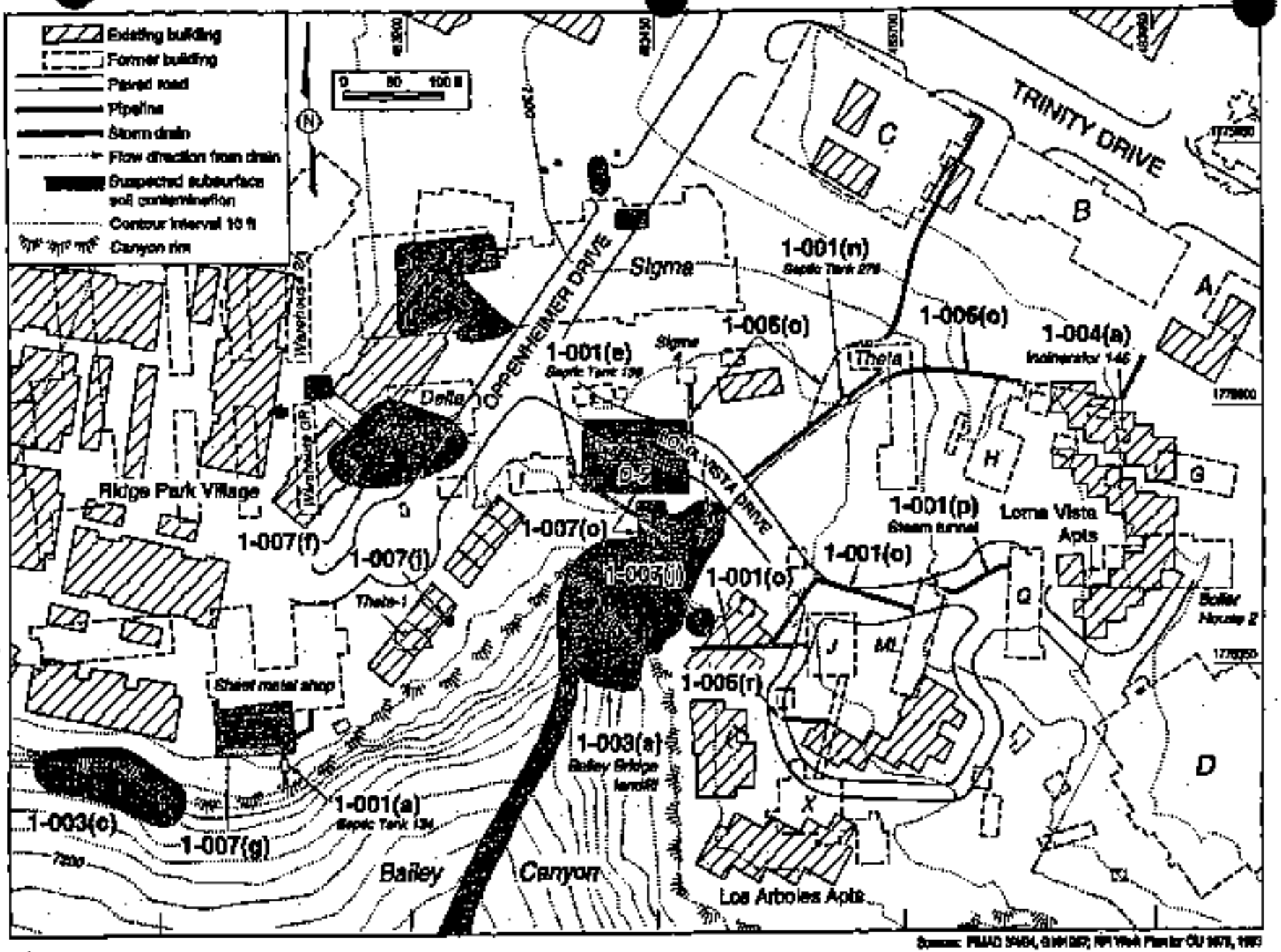
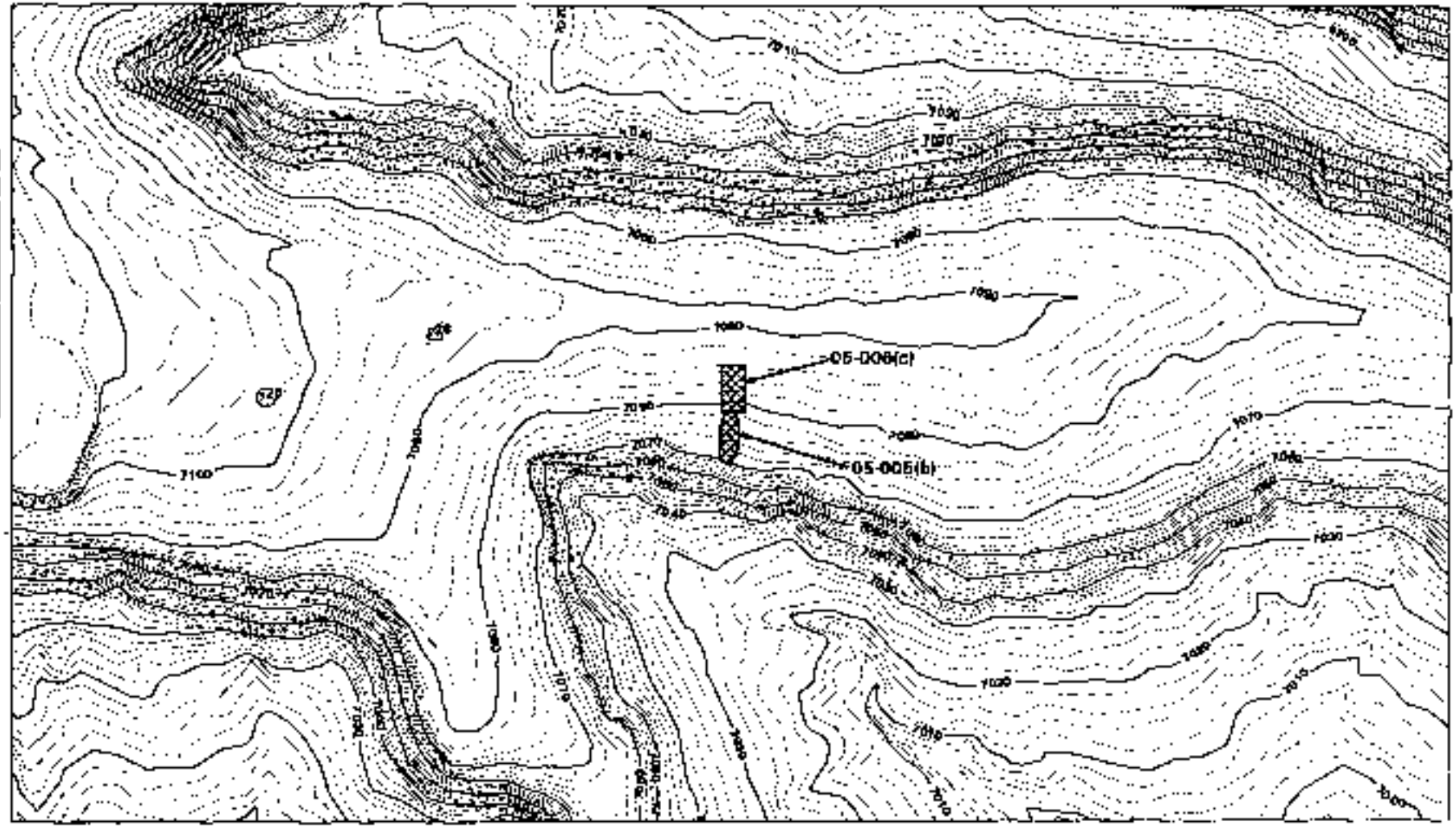


Fig. 5.2-1. Aggregate B PRS locations.



PRS Consolidation Unit 05-005(b)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Martin Jones

FIMAD G108897 12 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site- Eastern Aggregate.

Proposed PRS Number: 06-002-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
06-002	HSWA	Septic system - (inactive)	Rad, Metals, HE	Twomile
06-003(c)	HSWA	Firing site - (inactive)	Rad, Metals, HE	Twomile
C-06-005	Non-HSWA	Support Building - (inactive)	Rad, Metals, HE	Twomile
C-06-006	Non-HSWA	Support Building - (inactive)	Rad, Metals, HE	Twomile
C-06-015	Non-HSWA	Explosives Magazine - (inactive)	Rad, Metals, HE	Twomile
C-06-020	Non-HSWA	Employee Restrouse - (inactive)	Rad, Metals, HE	Twomile

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Proposed consolidation of these sites is based on operational history, geographic proximity, transport mechanisms of similar COPCs, common human health and ecological exposure areas, and the investigation needed to assess potential contamination.

Description:

The PRSs in this consolidated unit are designated as the Eastern Aggregate of TA-6. PRS 6-002 is an abandoned septic system including tank, drain lines and outfall that received process wastewater from PRS 6-003 and sanitary wastewater from C-06-020. PRS 6-003(c) is an inactive firing site used for water recovery shots. PRS C-06-005, TA-6-13, housed detonator assembly operations, a chemistry laboratory and explosives storage. PRS C-06-006, TA-6-14 was used for explosives pressing and storage. PRS C-06-015, TA-6-28 was an explosives storage magazine. PRS C-06-020, TA-6-19 was an employee restrouse

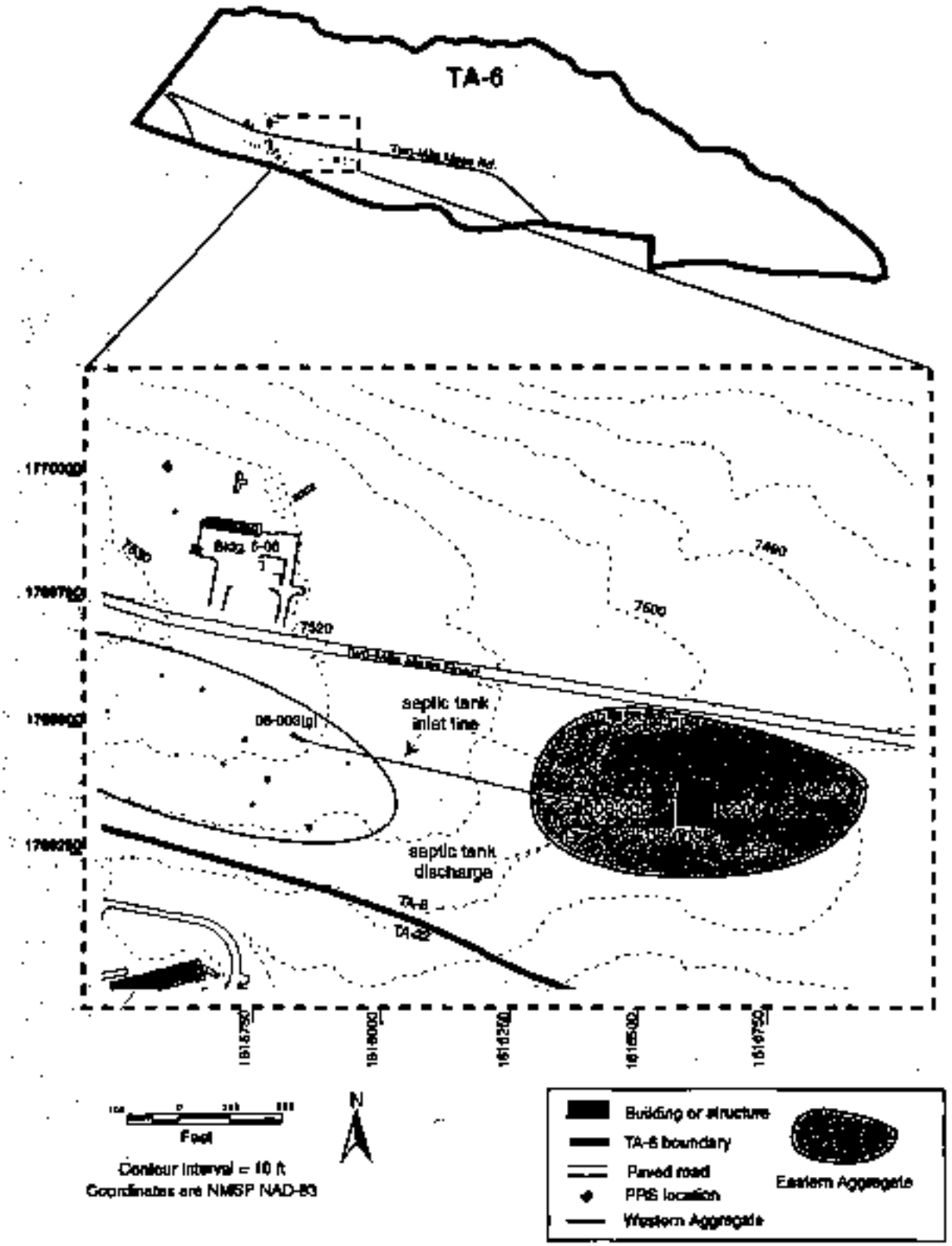
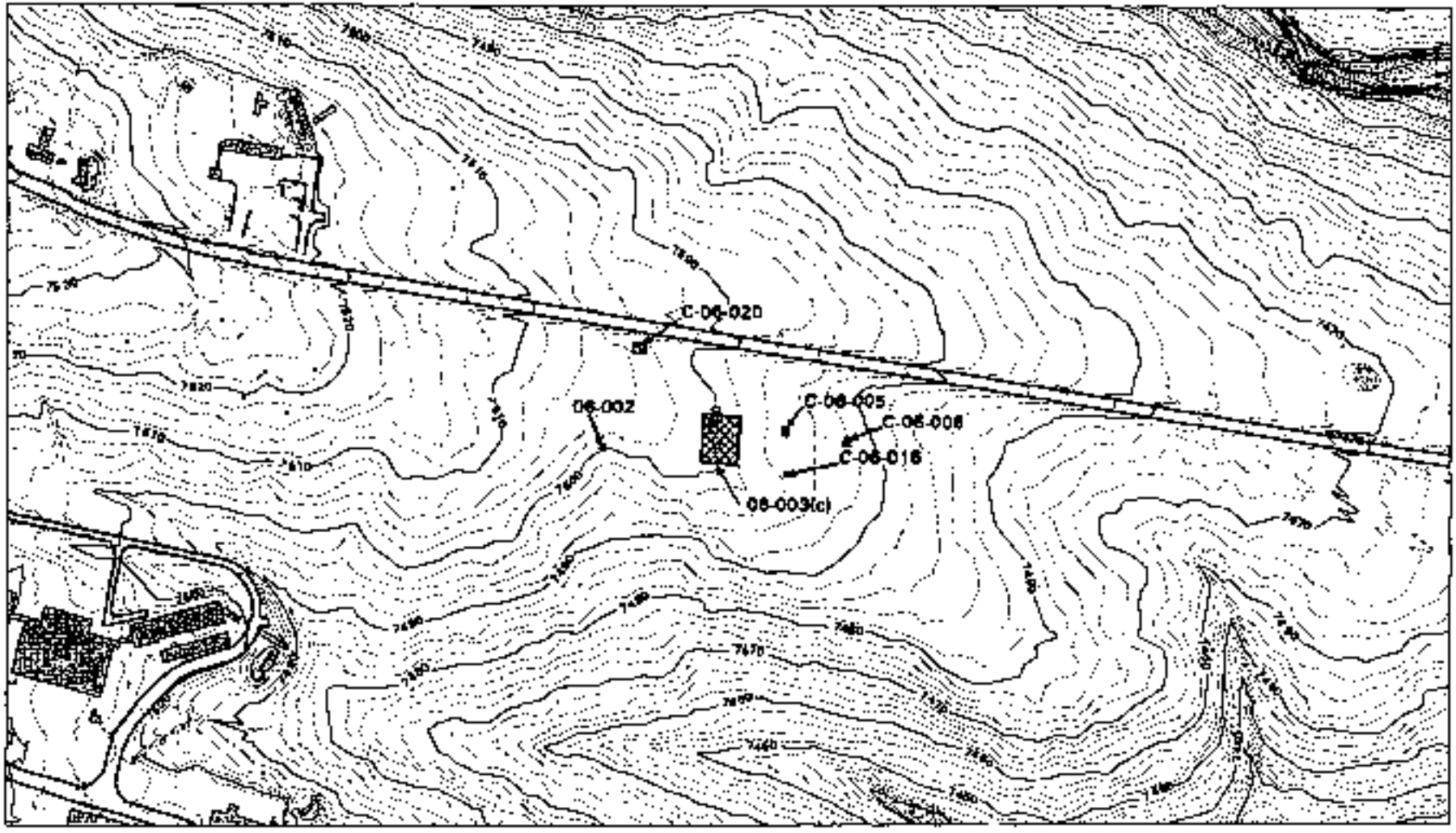


Figure 2.1-1. **Engineering features in the vicinity of the Eastern Aggregate.**



PRS Consolidation Unit 06-002-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:3600

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Mark Jones

FRAAD 01084SB 18 Apr 00

PRS Consolidation Worksheet

Site Type: Firing Site - Western Aggregate.

Proposed PRS Number: 06-003(g)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
06-003(g)	HSWA	Firing site & building - (Inactive)	Rad, Metals, HE	Twomile
C-06-003	Non-HSWA	Support Building - (Inactive)	Rad, Metals, HE	Twomile
C-06-007	Non-HSWA	Support Building - (Inactive)	Rad, Metals, HE	Twomile
C-06-008	Non-HSWA	Explosives Storage Magazine - (Inactive)	Rad, Metals, HE	Twomile
C-06-009	Non-HSWA	Explosives Storage Magazine - (Inactive)	Rad, Metals, HE	Twomile
C-06-010	Non-HSWA	Explosives Storage Magazine - (Inactive)	Rad, Metals, HE	Twomile
C-06-011	Non-HSWA	Explosives Storage Magazine - (Inactive)	Rad, Metals, HE	Twomile
C-06-012	Non-HSWA	Explosives Storage Magazine - (Inactive)	Rad, Metals, HE	Twomile
C-06-013	Non-HSWA	Explosives Storage Magazine - (Inactive)	Rad, Metals, HE	Twomile
C-06-014	Non-HSWA	Explosives Storage Magazine - (Inactive)	Rad, Metals, HE	Twomile
C-06-015	Non-HSWA	Explosives Storage Magazine - (Inactive)	Rad, Metals, HE	Twomile
C-06-017	Non-HSWA	Explosives Storage Magazine - (Inactive)	Rad, Metals, HE	Twomile
C-06-018	Non-HSWA	Explosives Storage Magazine - (Inactive)	Rad, Metals, HE	Twomile
C-06-021	Non-HSWA	Explosives Storage Magazine - (Inactive)	Rad, Metals, HE	Twomile

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Proposed consolidation of these sites is based on operational history, geographic proximity, transport mechanisms of similar COPCs, common human health and ecological exposure areas, and the investigation needed to assess potential contamination.

Description:

The PRSs in this consolidated unit are designated as the Eastern Aggregate of TA-6. PRS 6-003(g) is an inactive firing pad that was converted for the recrystallization of the HE known as pentaerythritol tetranitrate (PETN). PRS C-06-003 was the control building for the firing site, and C-06-007 housed a boiler for steam generation. PRSs C-06-008 through -015, C-06-017, -018, and -021 were all explosives storage magazines for the site.

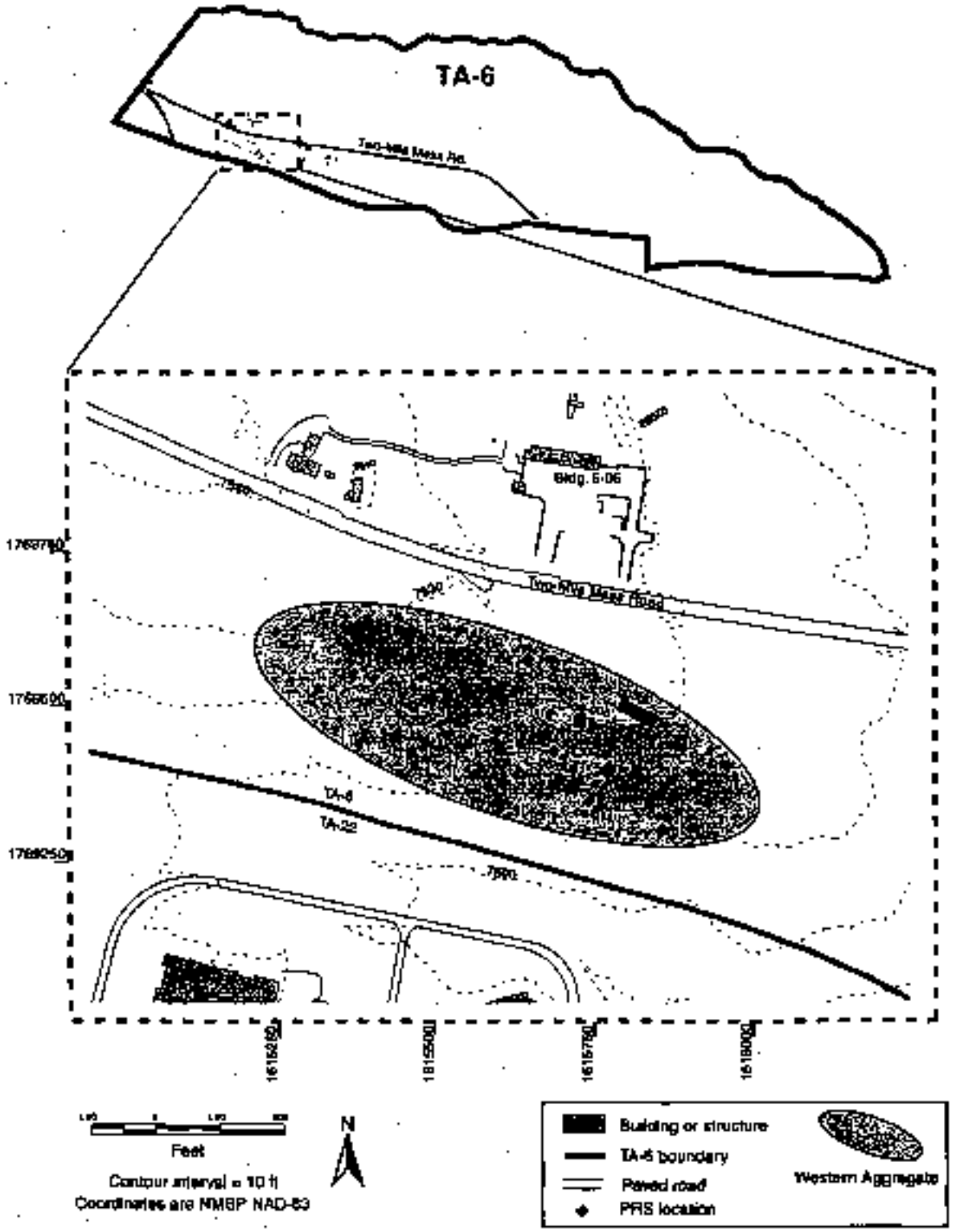
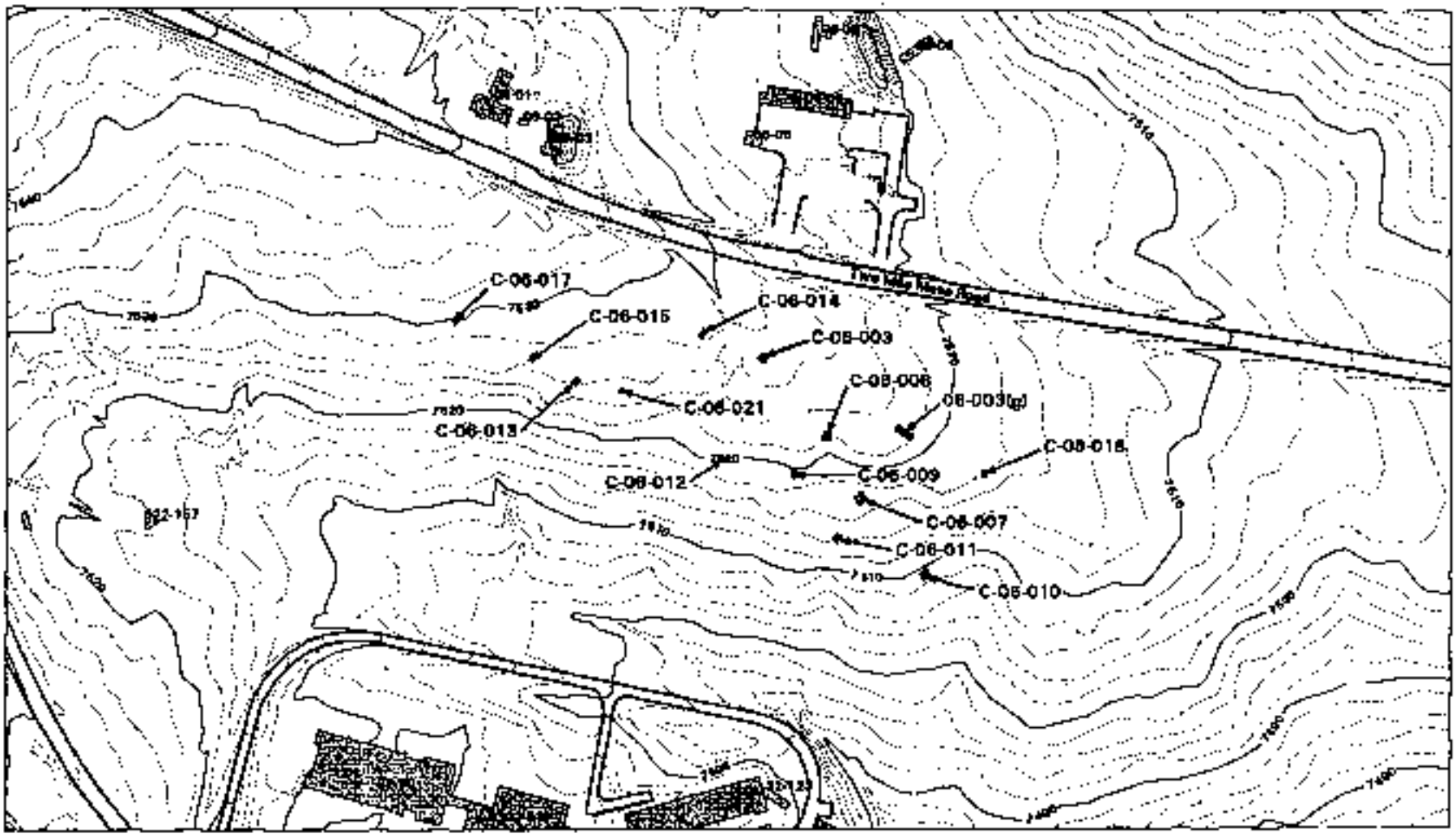


Figure 3.1-1. Engineering features in the vicinity of the Western Aggregate.



PRS Consolidation Unit 06-003(g)-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

RMAD G108457 18 Apr 00

PRS Consolidation Worksheet

Site Type: Septic System - Bunker Site

Proposed PRS Number: 08-003(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
08-003(a)	HSWA	Septic tank and drain line - (inactive)	Rad, Metals, SVOCs, HE	Starmer/Upper Pajarito
08-004(a)	HSWA	Building drains and drain lines - (inactive)	Rad, Metals, SVOCs, HE	Starmer/Upper Pajarito
08-004(b)	HSWA	Drains and lines, TA-8-2 - (inactive)	Rad, Metals, SVOCs, HE	Starmer/Upper Pajarito
08-009(a)	HSWA	Storm drain and outfall, TA-8-2 - (inactive)	Rad, Metals, SVOCs, HE	Starmer/Upper Pajarito

Consolidation Checklist Criteria:

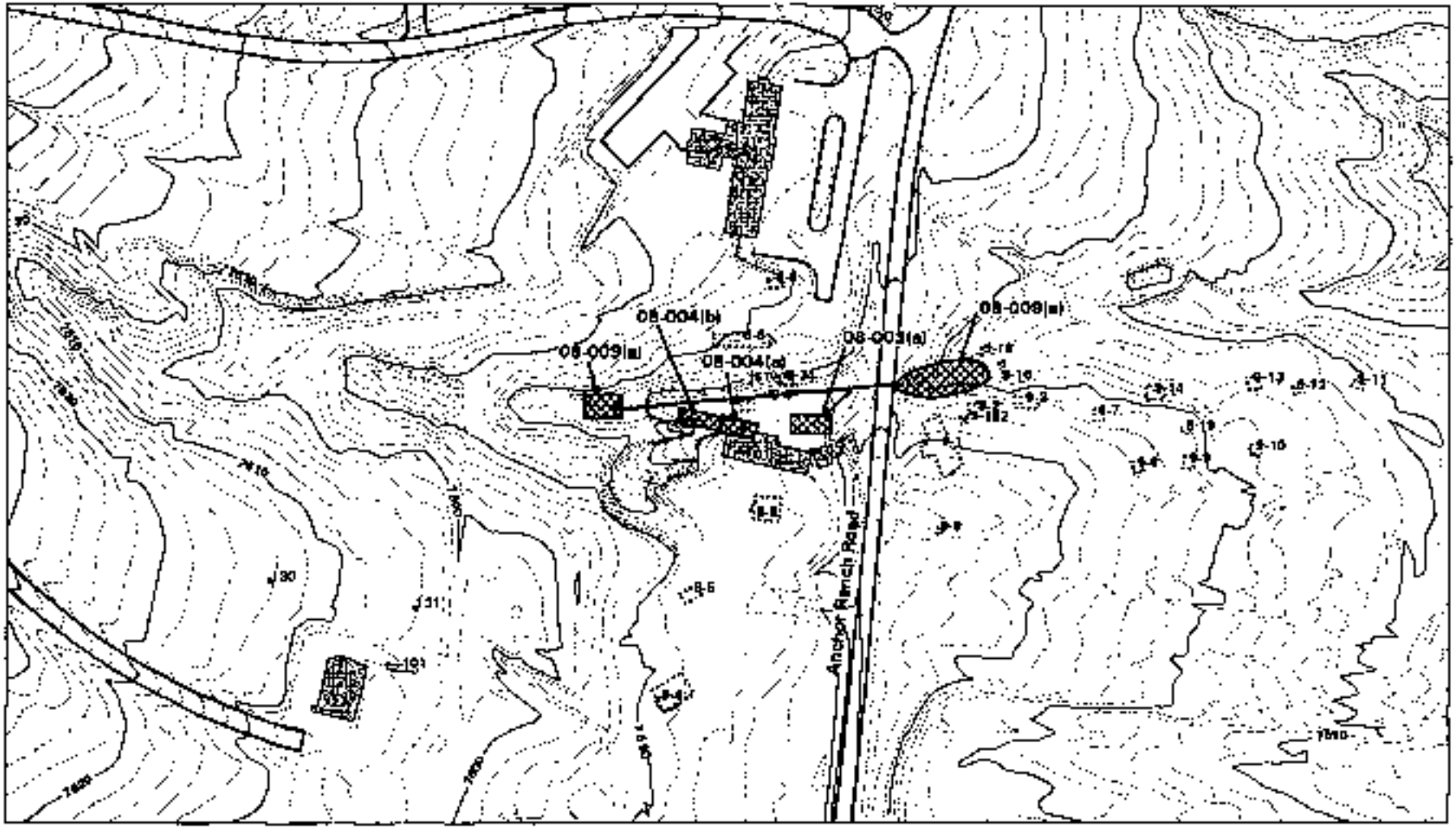
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Proposed consolidation of these sites is based on operational history, waste streams, geographic proximity, transport mechanisms of similar COPCs (subsurface), common human health and ecological exposure areas, and the investigation needed to assess potential contamination.

Description:

PRS 8-003(a) is a former septic tank, including drain lines into and out of the tank, that served buildings TA-8-1 and -3. Activities involving photo-processing, explosives, solvents, radionuclides, and chemicals were conducted in both buildings. The outlet line from the tank tied into the sanitary sewage piping that discharged to outfall PRS 8-009(a). PRS 8-004(a) consists of former drains and drain lines in building TA-8-1 that discharged to PRS 8-003(a). PRS 8-004(b) consists of former drain lines from TA-8-2 that also discharged to septic tank TA-8-59 (PRS 8-003(a)). TA-8-2 housed a machine shop to fabricate parts made of uranium and a variety of metals. PRS 8-009(a) is a former storm drain inlet, drain line and outfall that served the abandoned bunker site. However, just before the drain line crossed under Anchor Ranch Road, the discharge line from septic tank TA-8-59 tied into the line. All structures have been removed and COPCs from all four PRSs are commingled in the subsurface.



PRS Consolidation Unit 08-003(a)-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FIMAD G109636 12 Jul 00

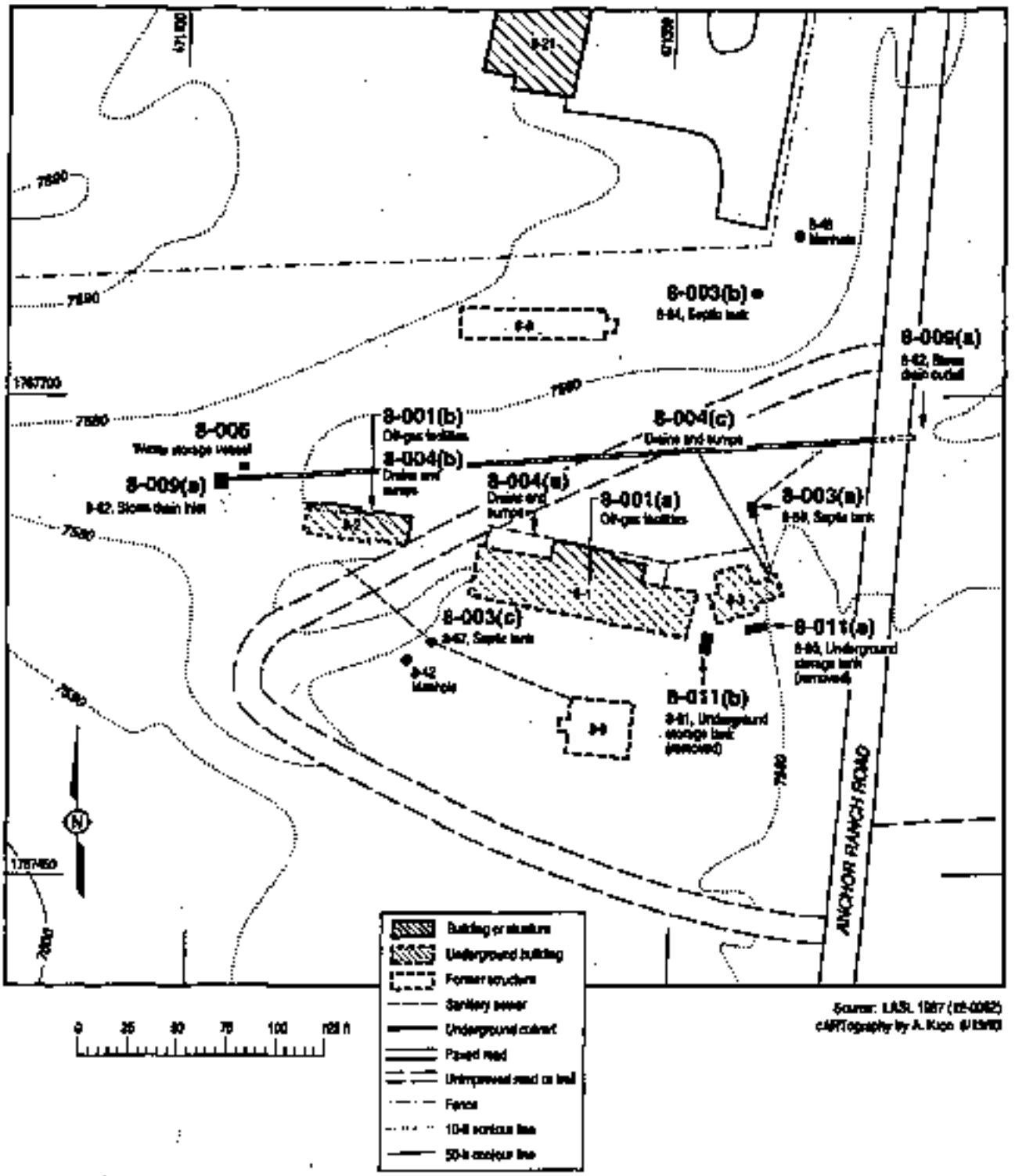


Figure 5-4. Locations of PRSs in Group 3, abandoned bunker site.

PRS Consolidation Worksheet

Site Type: Outfalls

Proposed PRS Number: 11-011(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
11-011(a)	HSWA	Outfall - (Inactive)	Metals, SVOCs	S-Site (Martin)
11-011(b)	HSWA	Outfall - (Inactive)	Metals, SVOCs	S-Site (Martin)

Consolidation Checklist Criteria:

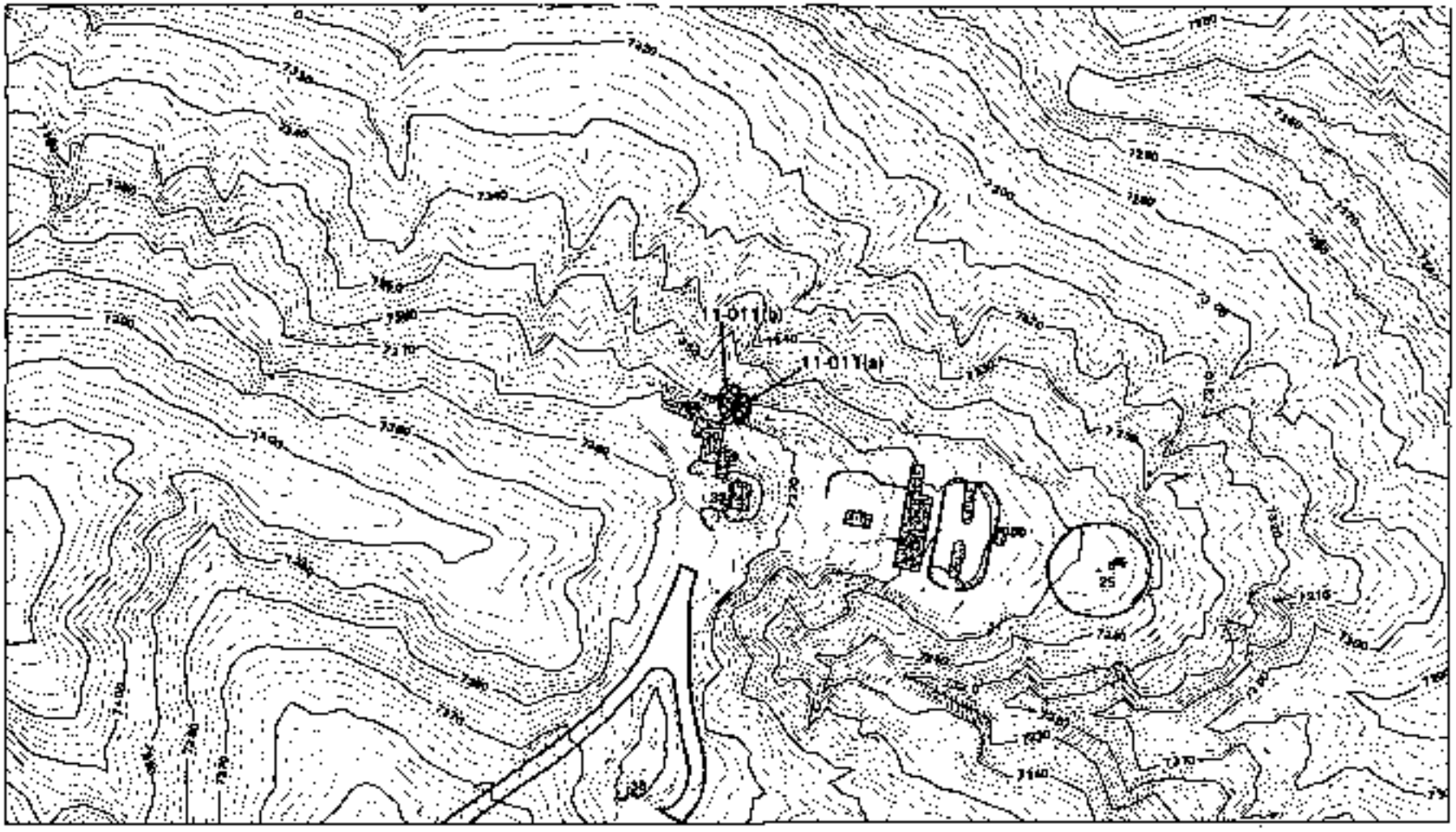
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, indistinguishable COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 11-011(a) was an NPDES-permitted outfall and drain line that received discharges from floor drains and an air conditioning unit (also referred to LANL engineering drawings as a "cooling tower") in TA-11-30A. The building housed support equipment for the vibration test facility located in TA-11-30. PRS 11-011(b) is an inactive outfall and drain lines that received discharges from floor and sink drains in TA-11-30. The outfall areas overlap and COPCs are commingled.



PRS Consolidation Unit 11-011(a)-00

- Drain Line
- Paved Road/Parking
- PRB
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notes: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

RIMAD G108838 12 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site - R40

Proposed PRS Number: 15-002-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
15-002	HSWA	Disposal pit and burn site - (inactive)	Rad, Metals, HE, SVOCs	Potrillo/Fence
15-007(a)	HSWA	Material disposal area (MDA N) - (inactive)	Rad, metals, HE, SVOCs	Potrillo/Fence

Consolidation Checklist Criteria:

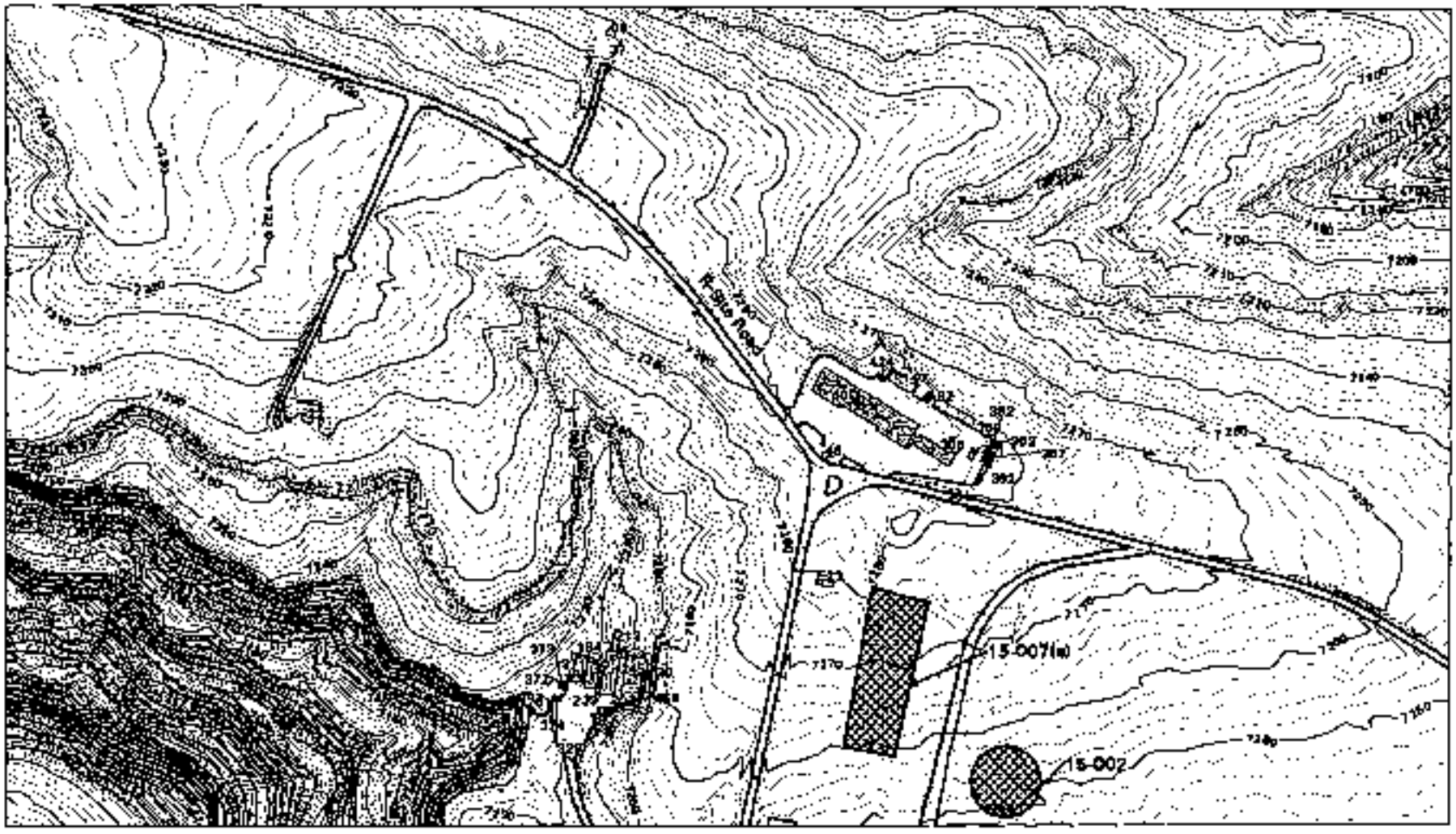
	Yes	No
1. *Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?*	☑	☐
2. *Is the contamination origin non-discernable?*	☑	☐
3. *Are the PRSs in the same geographic proximity?*	☑	☐
4. *Are the transport mechanisms and pathways similar?*	☑	☐
5. *Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?*	☑	☐

Consolidation Rationale:

Based on the operational history, similar waste streams, geographical proximity, similar transport mechanisms (surface and near-surface), indistinguishable source terms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit were all associated with firing site R40. PRS 15-002 was a former disposal pit and burn site at R-40 and is located adjacent to MDA N, PRS 15-007(a). Rubble from adjacent support buildings and debris from the burn site were disposed at MDA N. Building TA-15-1 housed offices, a laboratory and shops, building TA-15-23 was used for storage and housed a laboratory, and TA-15-7 housed a control room and dark room. COPCs from the PRSs were commingled upon decommissioning.



PRS Consolidation Unit 15-002-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:4200

0 200 400

FEET

1983 North American Datum
Projection and Grid Tics:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

RMAD G108827 12 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site G

Proposed PRS Number: 15-004(g)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
15-004(g)	HSWA	Machine firing site - (inactive)	Rad, Metals, HE, SVOCs	Canon de Valle
15-008(c)	HSWA	Surface disposal area (inactive)	Rad, Metals, HE, SVOCs	Canon de Valle

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical, proximity, intermingled COPC, similar transport mechanisms, and the planned simultaneous characterization of all four sites it is proposed that the PRSs be consolidated.

Description:

This consolidate unit consists of an inactive firing site and an associated disposal area located within the blast radius of the firing site. PRS 15-004(g) is inactive firing site G and PRS 15-008(c) was the surface disposal area for demolished buildings and debris from the firing site. COPCs are commingled within the blast radius of the firing site and in the surface disposal area.

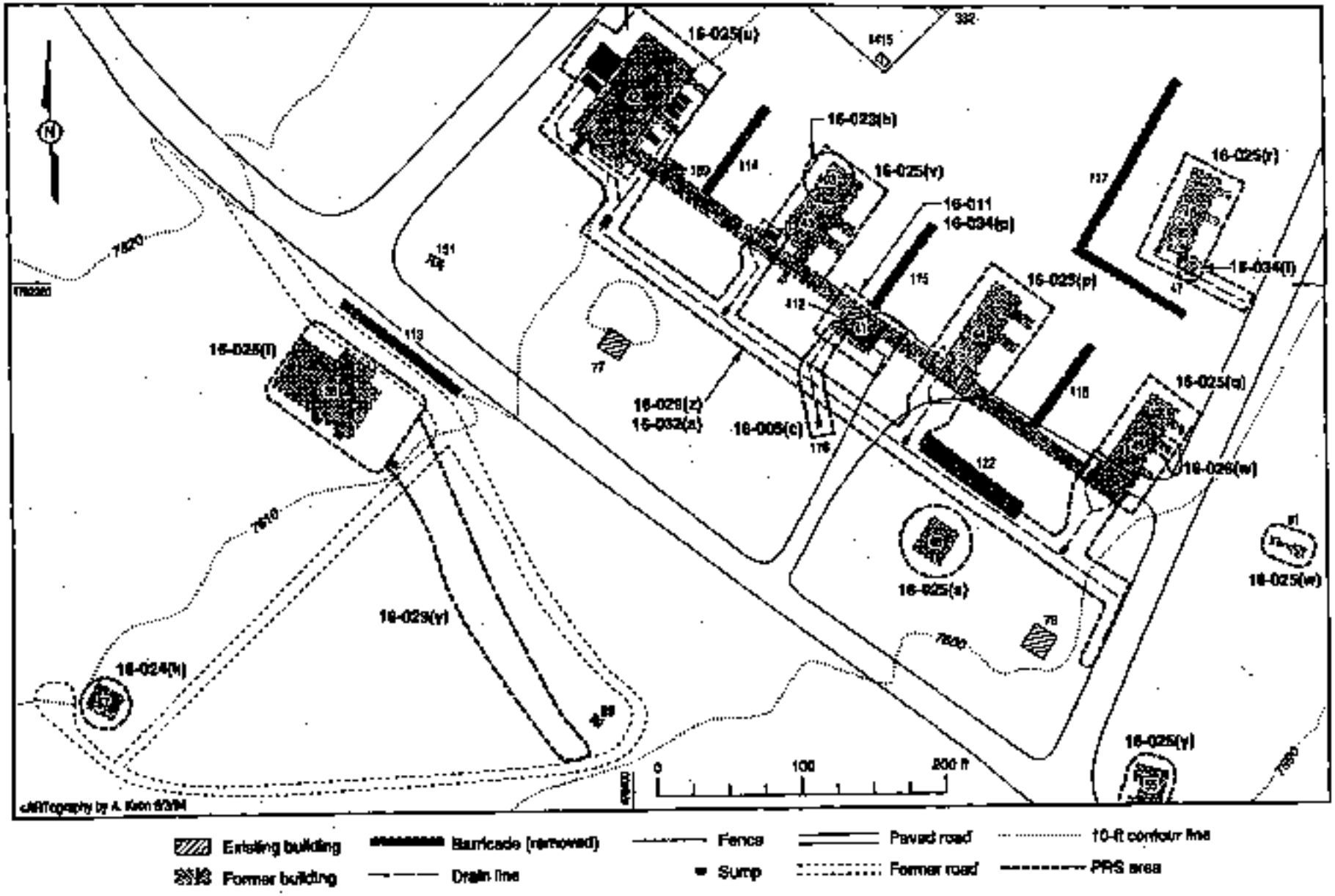


Fig. 5-75. Locations of PRSs at GMX-3 south.

PRS Consolidation Worksheet

Site Type: Firing Site - R45

Proposed PRS Number: 15-007(c)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
15-007(c)	HSWA	Test Shaft (Inactive)	Rad, Metals, HE	Threemile
15-007(d)	HSWA	Test Shaft (Inactive)	Rad, Metals, HE	Threemile

Consolidation Checklist Criteria:

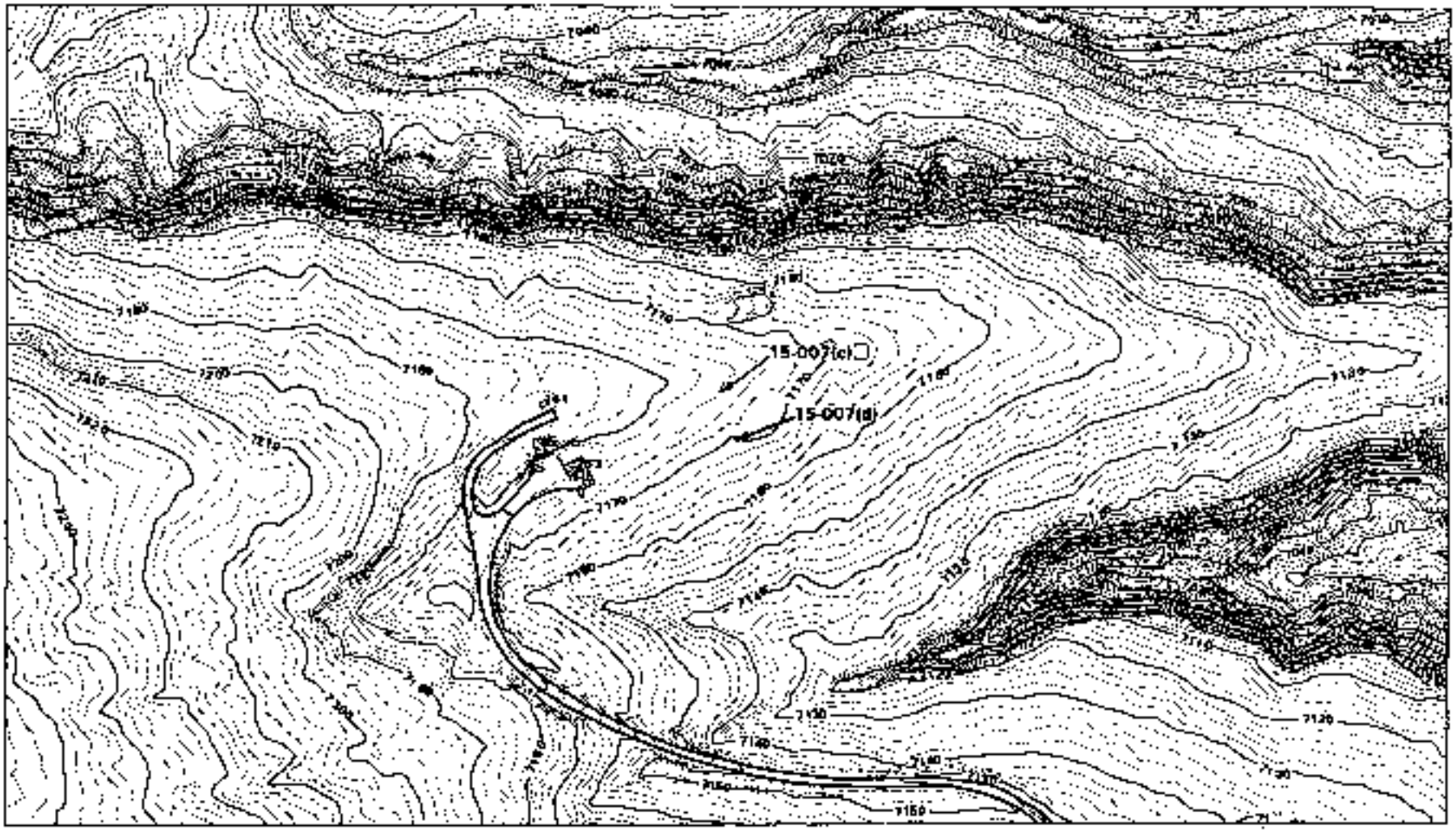
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, identical transport mechanisms (subsurface with surface contamination), similar COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

This consolidated unit consists of two inactive vertical shafts (PRSs 15-007(c) and 15-007(d)) used for one-time explosive tests at firing site R45. The shafts were approximately 130 feet deep and 6 feet in diameter. They were located 300 feet east of building TA-15-263 at firing site R-45. The tests were confined to the bottom of the shafts, which were subsequently filled and sealed with grout and concrete. Lead shot used for shielding is scattered near the surface of both shafts.



PRS Consolidation Unit 15-007(c)-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:3600

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Mark Jones

RMAD 0109840 12 Jul 00

PRS Consolidation Worksheet

Site Type: Former Structures - Hollow

Proposed PRS Number: 15-009(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
15-009(a)	HSWA	Septic system (inactive)	Rad, Metals, HE, SVOCs, VOCs	Canon de Valle
15-011(a)	HSWA	Sump - (inactive)	Rad, Metals, HE, SVOCs, VOCs	Canon de Valle
15-011(b)	HSWA	Dry well - (inactive)	Rad, Metals, HE, SVOCs, VOCs	Canon de Valle
15-011(c)	HSWA	Outfall/Drainage Area - (inactive)	Rad, Metals, HE, SVOCs, VOCs	Canon de Valle
15-014(i)	HSWA	Outfall - (inactive)	Rad, Metals, HE, SVOCs, VOCs	Canon de Valle
15-014(j)	HSWA	Outfall - (inactive)	Rad, Metals, HE, SVOCs, VOCs	Canon de Valle
15-014(k)	HSWA	Outfall - (inactive)	Rad, Metals, HE, SVOCs, VOCs	Canon de Valle

Consolidation Checklist Criteria:

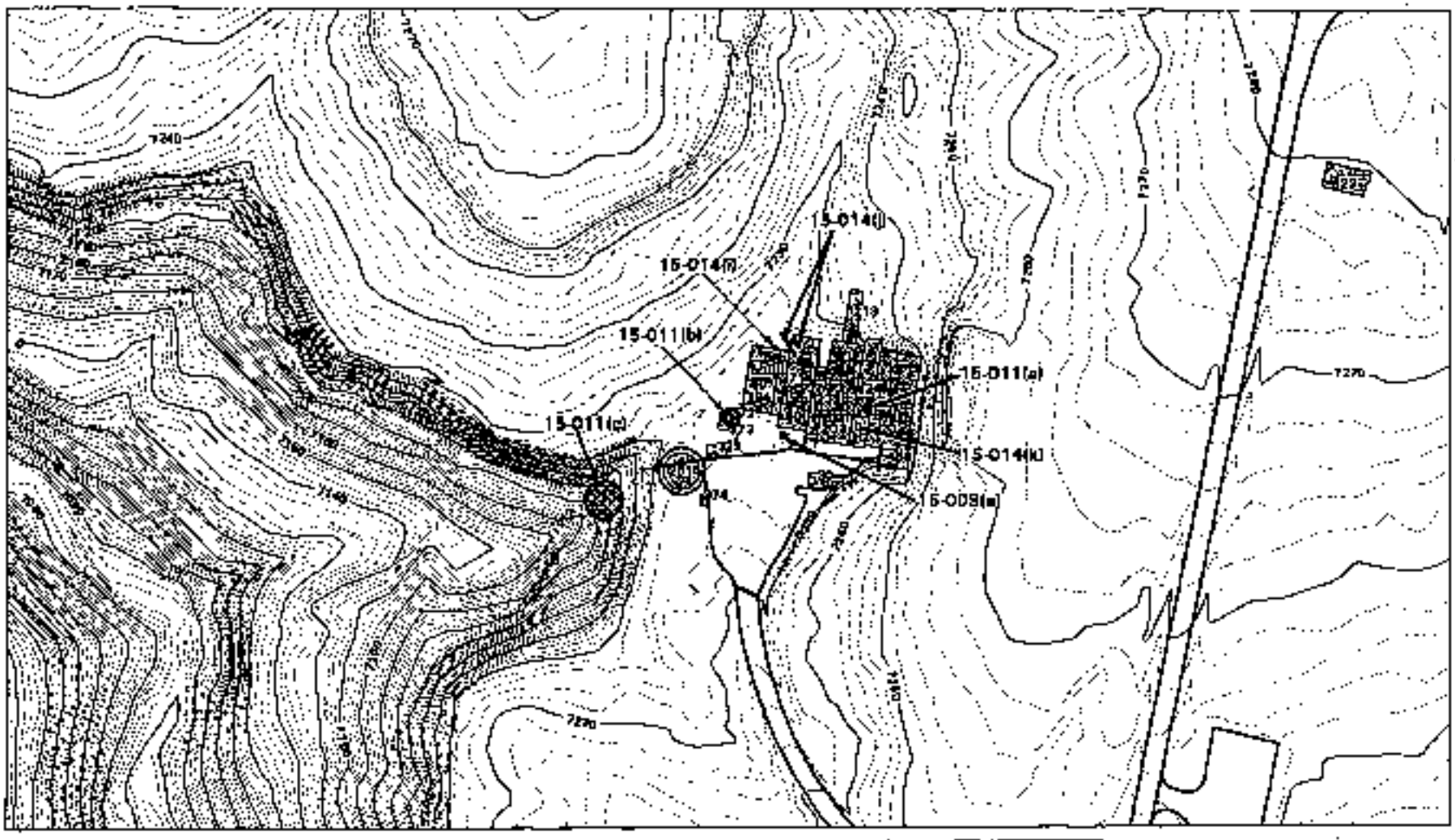
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, commingled waste streams, geographical proximity, interrelated transport mechanisms, similar COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

This consolidated unit consists of former assembly buildings, laboratories, shops, and associated septic systems, drain lines and outfalls that supported many of the TA-15 firing sites. PRS 15-009(a) is the inactive septic system including drain lines that served buildings located in the area of R Site known as The Hollow. PRS 15-011(a) consists of concrete trench drains not a sump, in building TA-15-20 that discharged to PRS 15-011(c). PRS 15-011(b) was a sump and drain line that served building TA-15-194 and an adjacent dry well that also discharged to PRS15-011(c). PRS 15-011(c) is the drainage where all the outfalls from operations within buildings in The Hollow combined to flow to Canon de Valle. PRS 15-014(i), is the former seepage pit, drain line and outfall area from drains in building TA-15-194. PRS 15-014(j) consists of the drain lines and outfall from building TA-15-203 and PRS 15-014(k) consists of the drain lines from building TA-15-20 that also discharged to manholes in TA-15-150 and -151, that were connected to PRS 15-011(a), which in turn drained to PRS 15-011(c). COPCs from these PRSs are commingled in the outfall area of PRS 15-011(c).



PRS Consolidation Unit 15-009(a)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:1800

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notes: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcus Jones

RMAD G108841 13 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 15-009(f)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
15-009(f)	HSWA	Septic tank/leach field - (Inactive)	Uranium, beryllium, lead, HE	Canon de Valle
15-009(k)	HSWA	Septic Tank/leach field - (Inactive)	Uranium, beryllium, lead, HE	Canon de Valle

Consolidation Checklist Criteria:

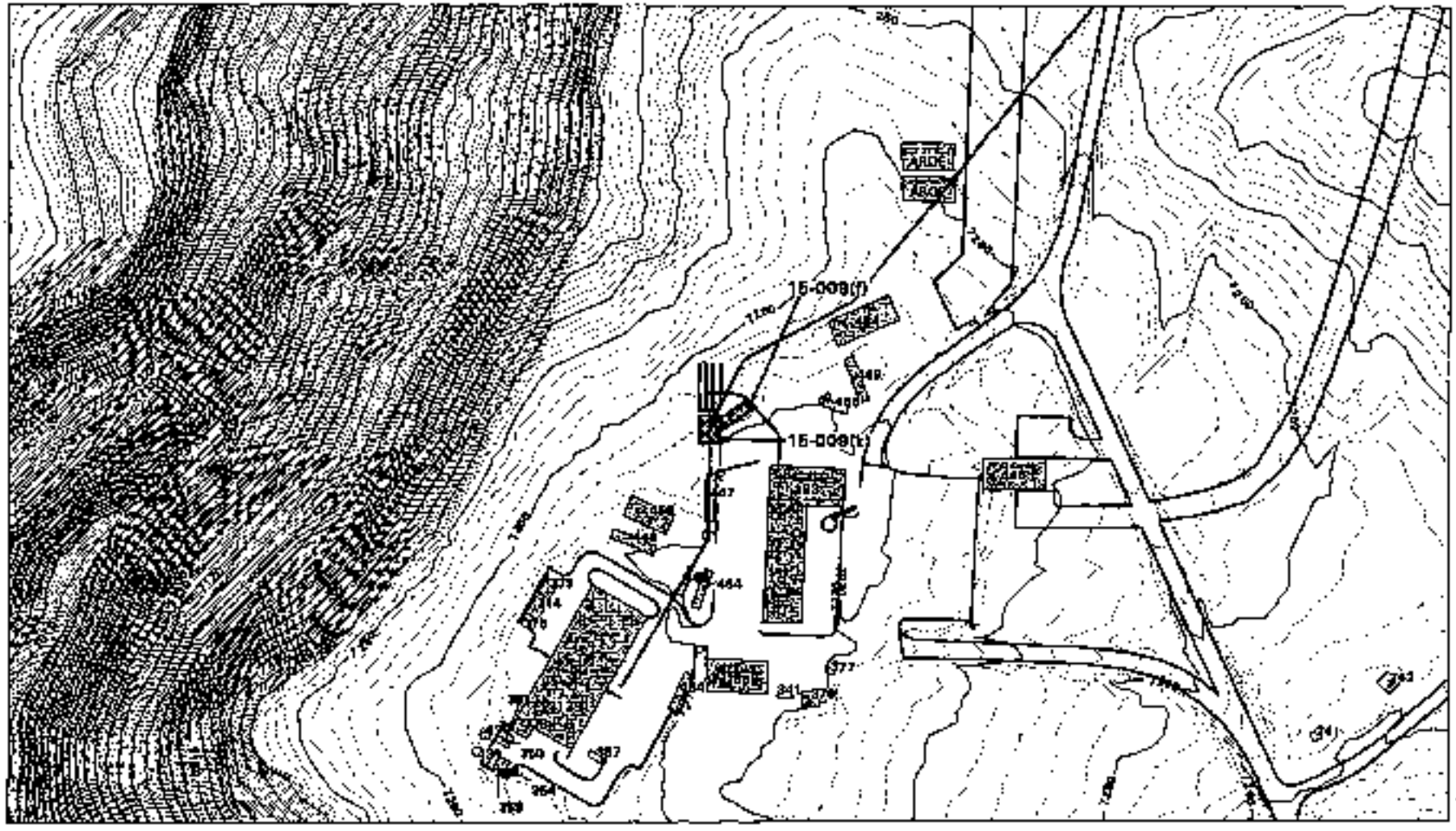
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical, similar transport mechanisms, proximity, intermingled COPCs, and the planned simultaneous characterization of all three sites it is proposed that the PRSs be consolidated.

Description:

The consolidated PRS consists of two septic systems (PRSs 15-009(f) and 15-009(k)) including drain lines and leachfields that served former support buildings of the two firing former firing sites at R-183. These firing sites were small and only active from 1945 through 1952. The sites were subsequently demolished and the land regraded in 1967 spreading COPCs so that they are not discernable between PRSs.



PRS Consolidation Unit 15-009(f)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Alexis Jonsur

FMAD G108642 13 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 15-014(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
15-014(a)	HSWA	Outfall and drain lines - (inactive)	Uranium, beryllium, lead, HE	Canon de Valle
15-014(b)	HSWA	Outfall and drain lines - (inactive)	Uranium, beryllium, lead, HE	Canon de Valle

Consolidation Checklist Criteria:

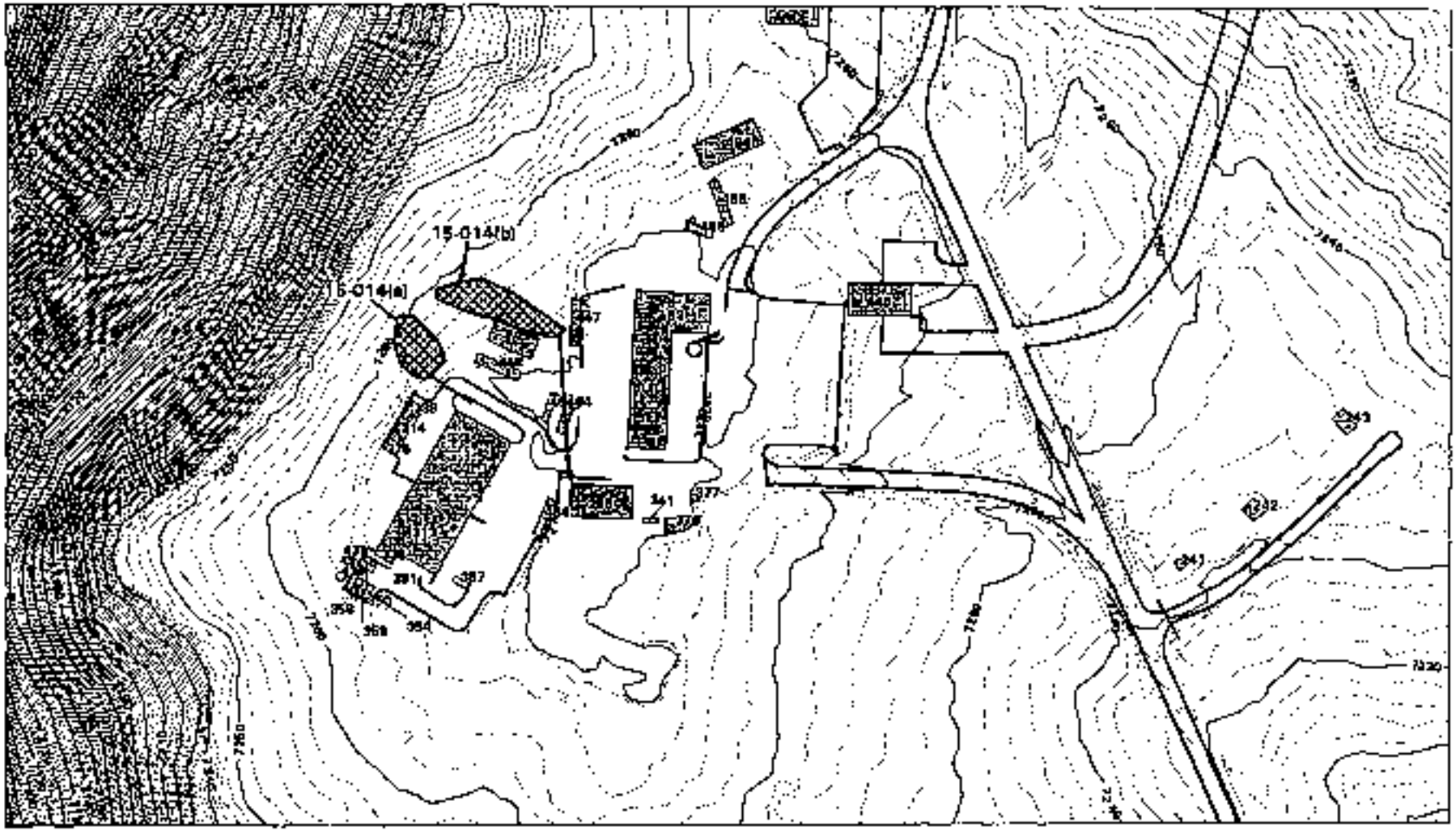
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical, similar transport mechanisms, proximity, intermingled COPCs, and the planned simultaneous characterization of all three sites it is proposed that the PRSs be consolidated.

Description:

The consolidated PRS consists of outfalls and drain lines from support building TA-15-183 for the two former firing sites R-183. These sites were among the first firing sites at the Laboratory that were used to test explosives from 1945 until 1953. These firing sites were small and only active from 1945 through 1952. The sites were subsequently demolished and the land regraded in 1967 spreading COPCs so that they are not discernable between PRSs.



PRS Consolidation Unit 15-004(b)-99

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notes: Information on this map is provisional and has not been checked for accuracy.

Prepared by Marcia Jones

FIMAD G108929 12 Jul 00

PRS Consolidation Worksheet

Site Type: Septic System - TA-16-370

Proposed PRS Number: 16-006(c)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
16-006(c)	HSWA	Septic system - (inactive)	Metals, HE, SVOCs, VOCs	Upper Water
16-026(a)	HSWA	Outfall - (inactive)	Metals, HE, SVOCs, VOCs	Upper Water

Consolidation Checklist Criteria:

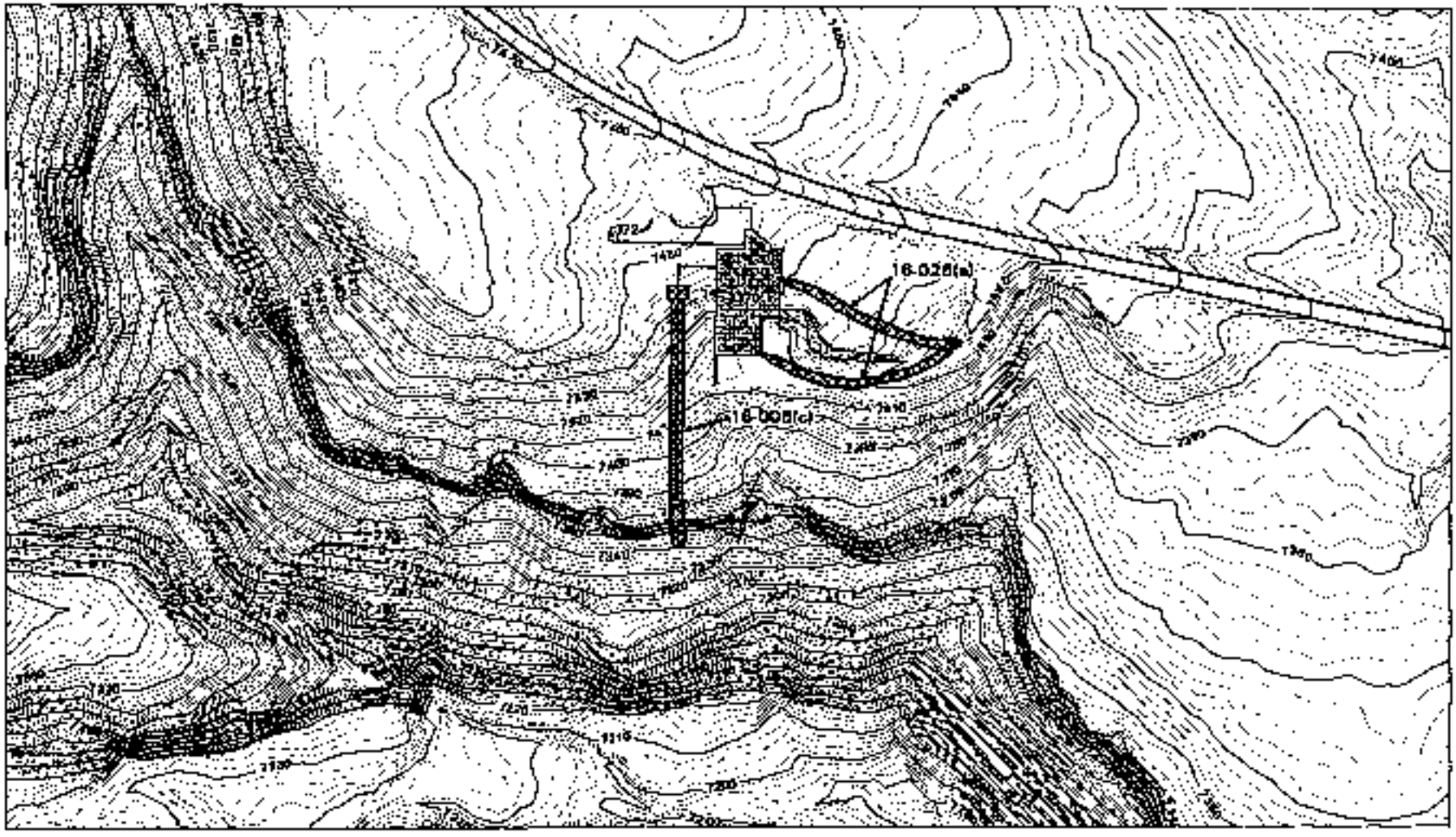
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history (TA-16-370), waste streams (primarily residual HE, metals, barium, and SVOCs), similar transport mechanisms, geographical proximity, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description:

PRS 16-006(c) is a former septic system, including the tank, drain lines, drain field, and outfall that served TA-16-370. The building housed barium nitrate and metal forming operations. The system received discharges from floor drains, water closets and lavatories. PRS 16-026(a) is potential soil contamination associated with two outfalls and associated drain lines from TA-16-370. One outfall received discharge from roof drains and a steam condensate pit, and the other received discharges from PRS 16-006(c). These PRS are all related to the same building (TA-16-370), the outfall areas overlap and COPCs are commingled.



PRS Consolidation Unit 16-006(c)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

PMAD 6108843 13 Jul 00

PRS Consolidation Worksheet

Site Type: Miscellaneous

Proposed PRS Number: 16-010(h)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
16-005(g)	HSWA	Former HE Filter Bed, 16-393	HE, Uranium, Barium	Canon de Valle
16-010(h)	HSWA	Decommissioned HE Basket Wash Facility, 16-390	HE, Uranium, Barium	Canon de Valle
16-010(i)	HSWA	Former HE Filter Bed/Burn Pad, 16-392	HE, Uranium, Barium	Canon de Valle
16-010(j)	HSWA	Former HE Filter Bed/Burn Pad, added Y00	HE, Uranium, Barium	Canon de Valle
16-010(k)	HSWA	Former HE Washwater Steel Trough, 16-1129	HE, Uranium, Barium	Canon de Valle
16-010(l)	HSWA	Former HE Washwater Steel Trough, 16-1134	HE, Uranium, Barium	Canon de Valle
16-010(m)	HSWA	Former HE Washwater Steel Trough, 16-1135	HE, Uranium, Barium	Canon de Valle
16-010(n)	HSWA	Former HE Washwater Steel Trough, 16-1136	HE, Uranium, Barium	Canon de Valle

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

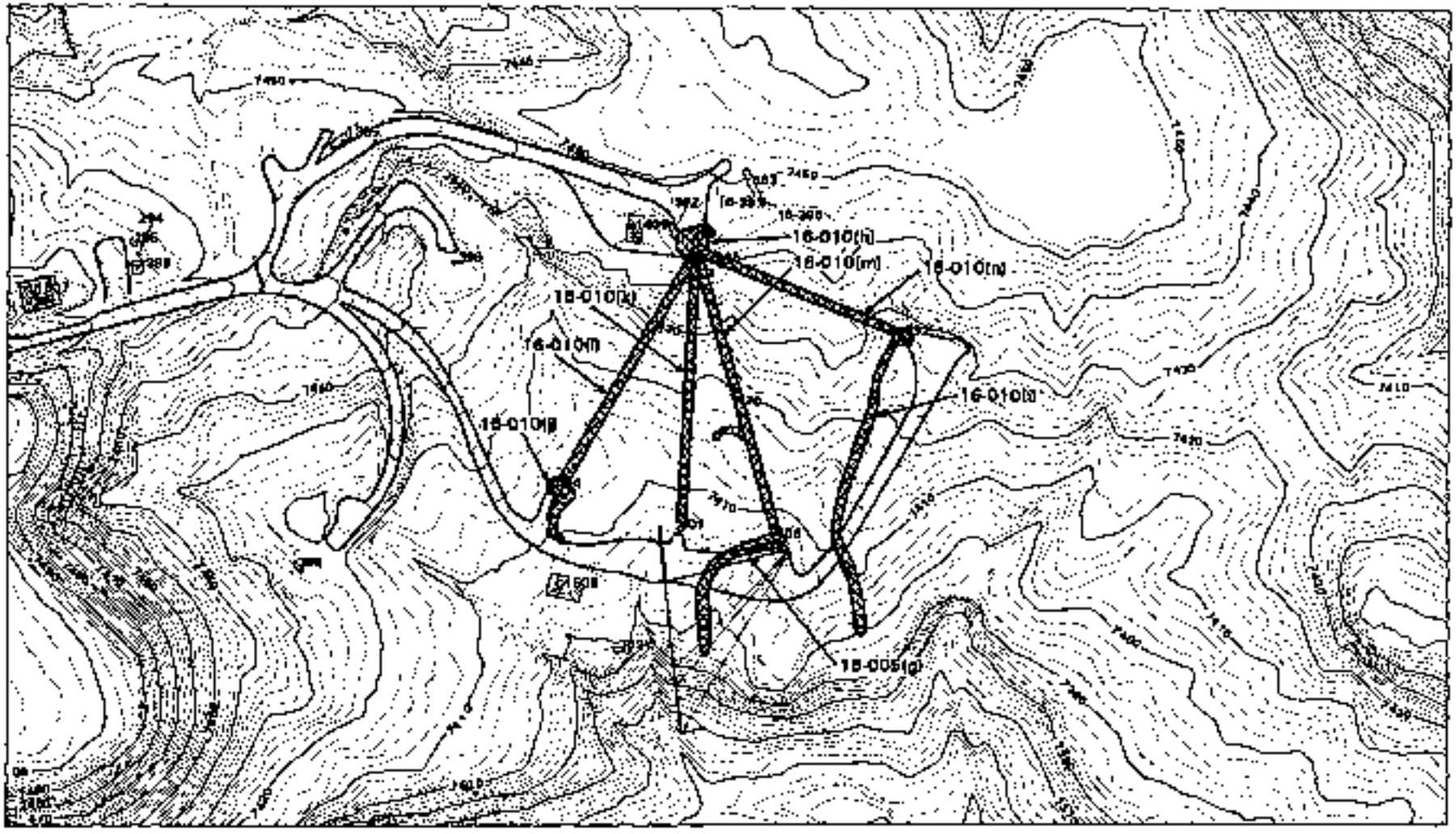
Based on the operational history of the burn ground, the geographical proximity of all the associated PRSs and undistinguishable source terms, similar transport mechanisms (surface and shallow subsurface) of common contaminants, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRSs located at the Technical Area (TA)-16 Burn Ground have been consolidated into one site, consolidated PRS 16-010(h)-99. These PRSs are associated with the basket wash facility (TA-16-390), PRS 16-010(h), and are identified as PRSs 16-010(i, j, k, l, m, and n) and 16-005(g). The basket wash facility operated from 1951 to 1968 and was used to clean filters from HE sumps. HE-contaminated waste water was then diverted into open steel troughs that discharged into filter beds. The filter beds consisted of concrete structures that were lined with firebricks and contained gravel and sand. Filtered wash water collected within perforated piping along the bottom of the concrete structure and gravity-drained through a pipe to adjacent outfall areas. Filtered material/sludge that dried atop the sand and gravel filter beds was burned, collected, and taken to a scrap HE burning pit where it was re-burned. The wash system initially consisted of the TA-16-390 basket wash facility (PRS 16-010(h)), three open steel troughs and three filter beds. The three steel troughs, designated as TA-16-1134, TA-16-1135, and TA-16-1136 (PRSs 16-010(l), 16-010(m), and 16-010(n), respectively), discharged HE-contaminated wash water into filter beds TA-16-394, TA-16-393, and TA-16-392, respectively. Filter beds TA-16-394, TA-16-393, and TA-16-392 are also identified as PRSs 16-010(j), 16-005(g), and 16-010(i), respectively.

In 1961, an additional open steel trough designated as TA-16-1129 was added to the wash system; it discharged to filter vessel TA-16-401. In 1965, filter bed TA-16-393 (PRS 16-005(g)) was removed, disposed, and replaced by filter vessel TA-16-408 (at the same location as filter bed TA-16-393). The basket wash facility was decommissioned in 1968. In October 1990, filter vessels TA-16-401 and TA-16-408 along with burn tray TA-16-394 (which was placed on top of inactive filter bed TA-16-394 (PRS 16-010(j)), were included as hazardous waste treatment structures in the "Los Alamos National Laboratory General Part A Permit Application." Additional information regarding the filter vessels and the burn tray, including operations and waste management practices, is found in the Part B Permit Application for TA-16. Filter vessels TA-16-401 and TA-16-408 are also identified as PRSs 16-010(e and f), respectively.

These individual PRSs have been consolidated into one because they are located in the same geographic proximity, related by a single process/system, and have similar types of contamination exhibiting similar transport mechanisms and pathways. Additionally, the potential contamination present at each of the individual sites may also be present within the area encompassing all of these sites. The consolidated PRS will be investigated, characterized, assessed (including human health and ecological assessments), and potentially remediated as part of future corrective action activities at the TA-16 Burn ground.



PRS Consolidation Unit 16-010(h)-99

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

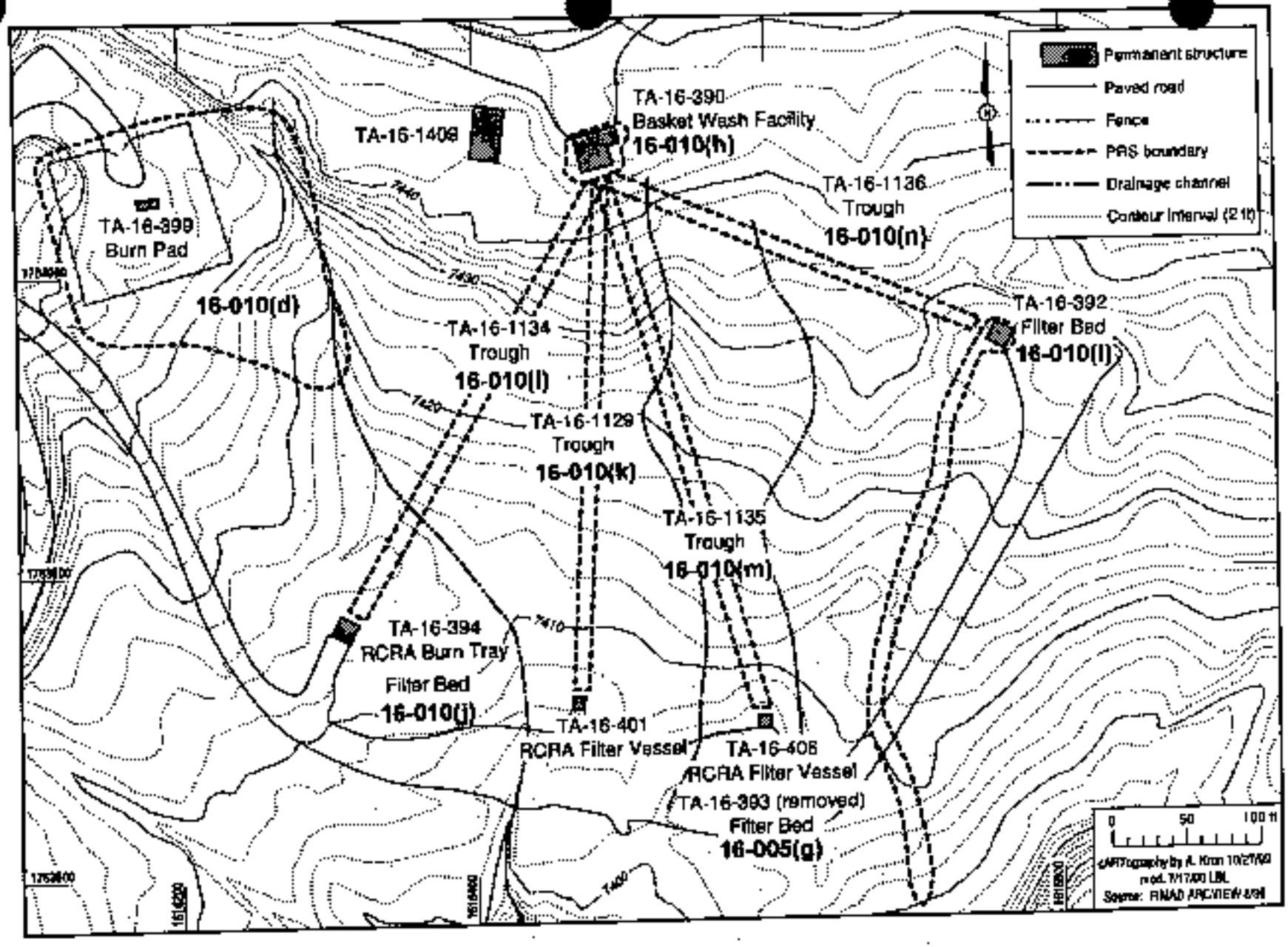
FEET

1992 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FIMAD 6108648 18 Jul 00


Permanent structure
Paved road
Fence
PRS boundary
Drainage channel
Contour interval (2 ft)
TA-16-390
Basket Wash Facility
16-010(h)
TA-16-1408
TA-16-1136
Trough
16-010(n)
TA-16-399
Burn Pad
16-010(d)
TA-16-392
Filter Bed
16-010(l)
TA-16-1134
Trough
16-010(l)
TA-16-1129
Trough
16-010(k)
TA-16-1135
Trough
16-010(m)
TA-16-394
RCRA Burn Tray
Filter Bed
16-010(j)
TA-16-401
RCRA Filter Vessel
TA-16-406
RCRA Filter Vessel
TA-16-393 (removed)
Filter Bed
16-005(g)
7440
7430
7420
7410
7400
0
50
100 ft

PRS Consolidation Worksheet

Site Type: Drain Lines and Outfalls

Proposed PRS Number: 16-026(b2)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
16-026(b2)	HSWA	Outfall and Drain Line, TA-16-202 - (Inactive)	Metals, SVOCs, VOCs, HE	Upper Water
16-026(d)	HSWA	Outfall and Drain line, TA-16-202 - (inactive)	Metals, SVOCs, VOCs, HE	Upper Water

Consolidation Checklist Criteria:

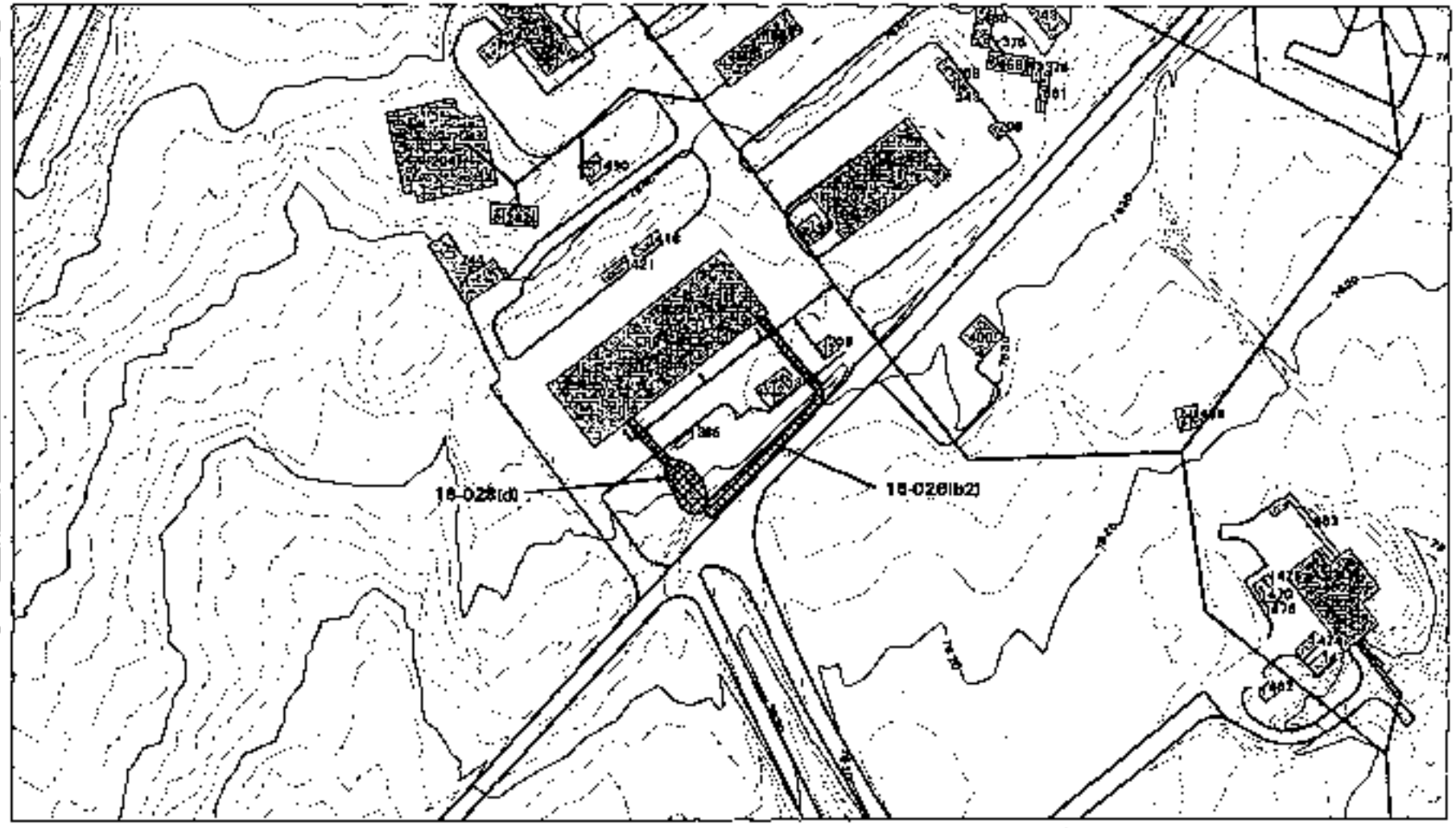
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history (of TA-16-202), waste streams (primarily residual HE, metals, SVOCs, VOCs), transport mechanisms (primarily surface and near surface contamination with some potential subsurface contamination), geographical proximity, common human health and ecological exposure areas, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description:

PRS 16-026(b2) is an overflow drain and associated drain line and outfall from a former oil interceptor in a decommissioned machine shop in building TA-16-202. PRS 16-026(d) is a former NPDES-permitted outfall and drain lines which previously received discharges from drains throughout TA-16-202. The outfall currently receives only storm water runoff. The outfall areas overlap and COPCs are commingled.



PRS Consolidation Unit 16-026(b2)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FMAD G108644 13 Jul 00

PRS Consolidation Worksheet

Site Type: Drain Lines and Outfalls

Proposed PRS Number: 16-026(l)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
16-026(l)	HSWA	Outfalls and Drain Lines - (inactive)	Metals, SVOCs, VOCs, HE	Canon de Valle
16-026(c)	HSWA	Drain Lines and Outfalls - (inactive)	Metals, SVOCs, VOCs, HE	Canon de Valle

Consolidation Checklist Criteria:

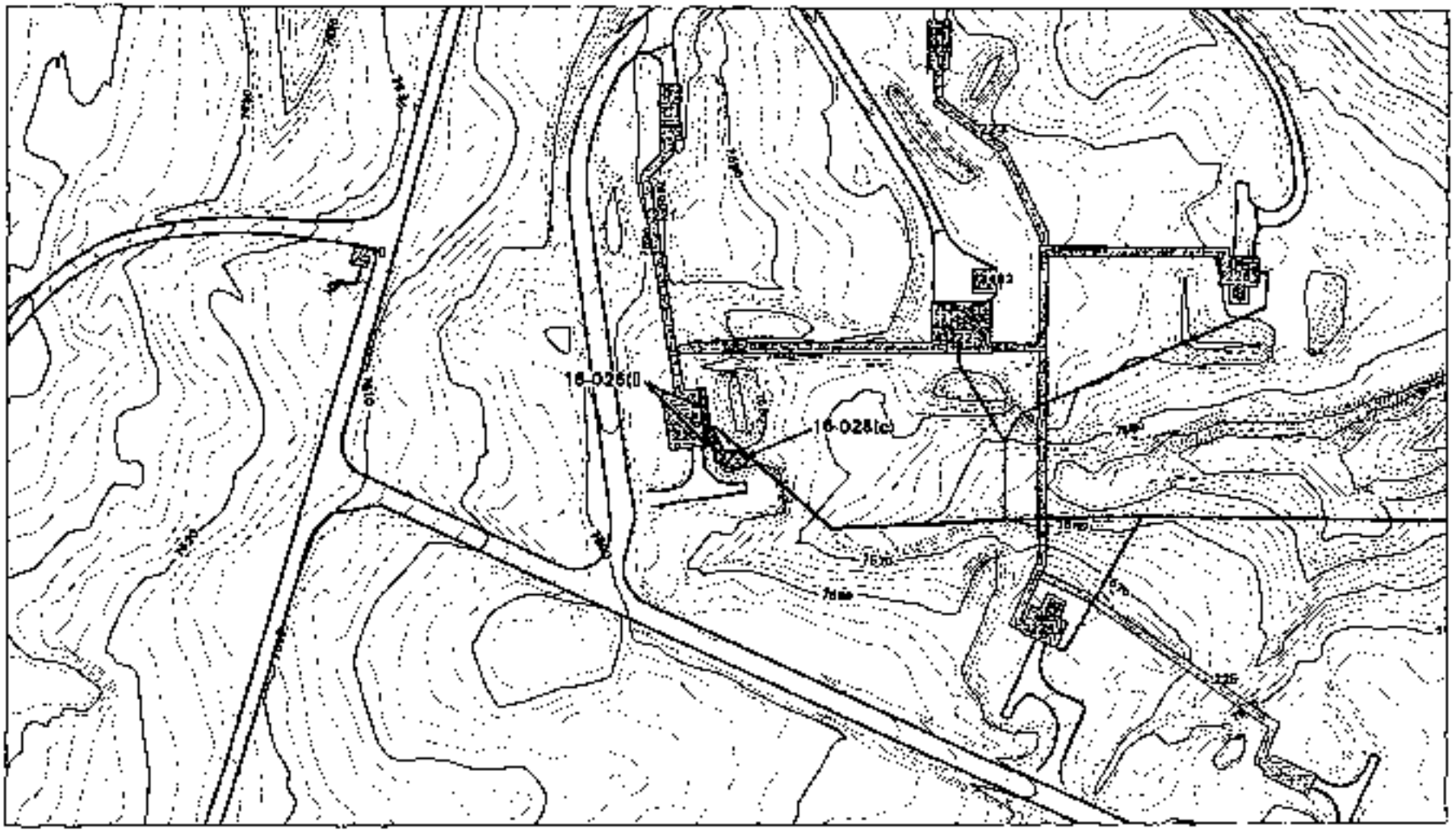
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history (of TA-16-220), waste streams (primarily residual HE, metals, SVOCs, VOCs), transport mechanisms (primarily surface and near surface contamination with some potential subsurface contamination), geographical proximity, common human health and ecological exposure areas, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description:

PRS 16-026(l) consists of former drain lines and outfalls from drains throughout TA-16-220 which was an x-ray facility for HE components. PRS 16-026(c) is an NPDES-permitted outfall and drain lines that also received discharges from a variety of drains in TA-16-220. The outfalls discharged from similar processes in the same building (TA-16-220) to an overlapping area where COPCs are commingled.



PRS Consolidation Unit 16-026(l)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is preliminary and has not been checked for accuracy.

Produced by Miracle Jones

RNMO G109845 13 Jul00

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 16-029(g)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
16-021(a)	HSWA	Systematic release site - (inactive) added FY00	Metals, SVOCs, VOCs, HE	Upper Water
16-029(e)	HSWA	One HE Sump and Drain Line - (active)	Rad, SVOCs, VOCs, HE	Upper Water
16-029(g)	HSWA	Outfall from HE Sump and Drain Line - (active)	Rad, SVOCs, VOCs, HE	Upper Water

Consolidation Checklist Criteria:

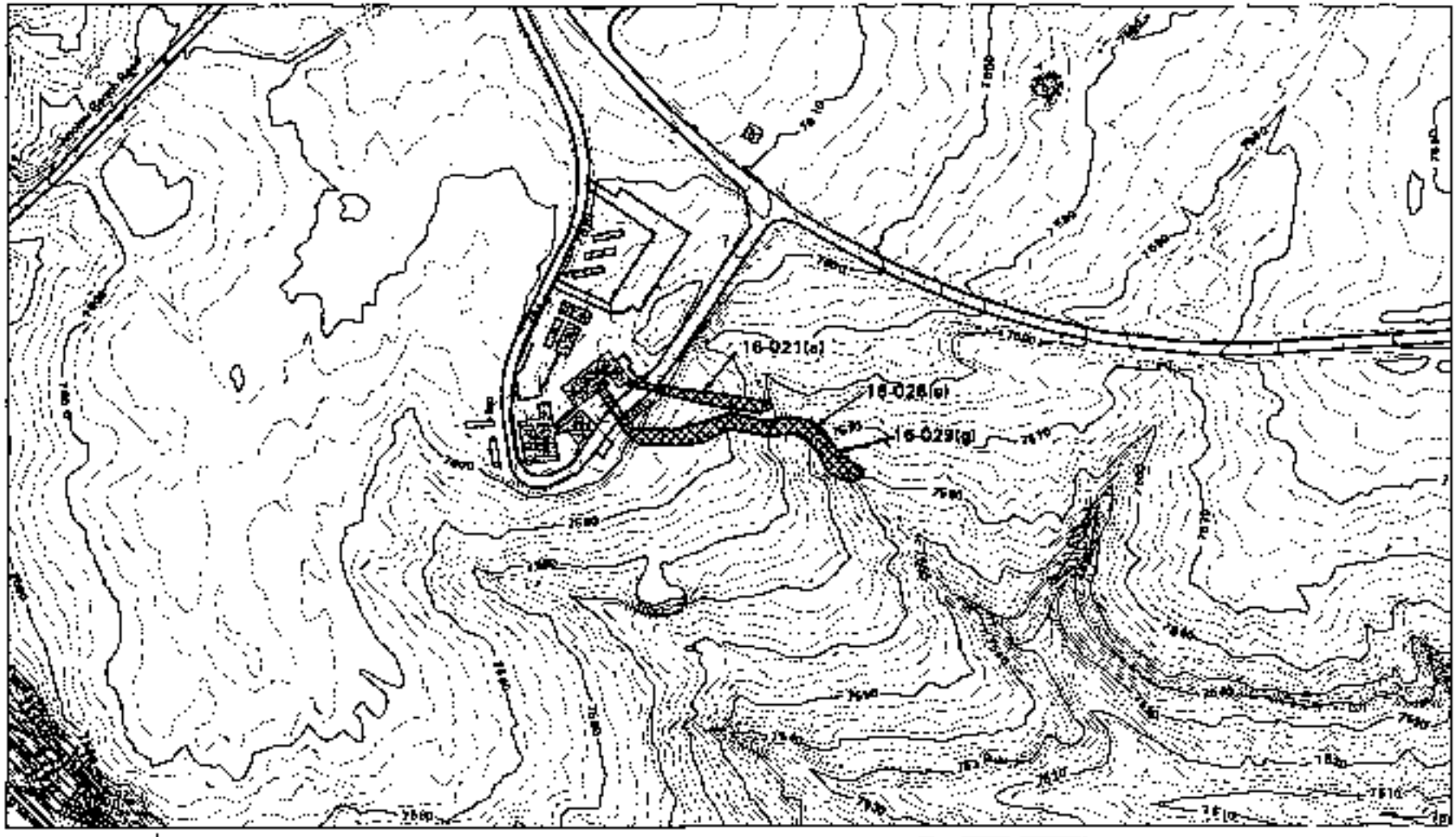
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms (surface, subsurface and sediments), and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The consolidated PRS consists of an HE sump, drain line and outfall associated with TA-16-450, a materials testing facility. TA-16-450 was constructed in the early 1950s as a chemical engineering laboratory for explosives; however, it was never used as such and HE was never used in the building. PRS 16-029(e), the sump that receives wash-down water from the floor trenches in Room 101 which is discharged to the NPDES-permitted outfall (EPA 04A091) designated as PRS 16-029(g). PRS 16-021(a), added to this consolidated PRS in FY00, is an area where metals are suspected to have been released to soils and a stream channel from similar processes in the same building (TA-16-450). This area of potential contamination overlaps with PRS 16-029(g) and COPCs are commingled.



PRS Consolidation Unit 16-029(g)-99

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:3600

0 200 400
FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

RMAD G108477 19 Apr 00

PRS Consolidation Worksheet

Site Type: Former Structures - 40s Line

Proposed PRS Number: 16-029(z)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
16-005(c)	HSWA	Former septic system - (inactive) added FY00	Metals, HE	Upper Water
16-011	Non-HSWA	Incinerator - (inactive)	Metals, HE, barium, SVOCs	Upper Water
16-023(b)	Non-HSWA	Former Incinerator Cage	Metals, HE, barium, SVOCs	Upper Water
16-025(p)	Non-HSWA	Former Raw HE Inspection Room	HE and barium	Upper Water
16-025(q)	HSWA	Former HEX-ray Examination Room	Metals, HE, barium cyanide	Upper Water
16-025(r)	HSWA	Former HE rasthouse	Metals, HE, barium	Upper Water
16-025(s)	HSWA	Former Radiography Bldg.	Rad, Metals, HE, barium	Upper Water
16-025(u)	HSWA	Former HE Machining Room	Metals, HE, barium	Upper Water
16-025(v)	HSWA	Former HE Machining and Casting Room	Metals, HE, barium	Upper Water
16-025(w)	HSWA	Former Outfall from Photography Lab	Metals, SVOCs, VOCs, HE, barium, cyanide	Upper Water
16-029(z)	HSWA	Former Sumps and Drain Line	Metals, SVOCs, VOCs, HE, cyanide	Upper Water
16-032(a)	HSWA	Former Secondary Pumps, Drain Line and Outfall	Metals, SVOCs, VOCs, HE, barium, cyanide	Upper Water
16-034(l)	HSWA	Former Equipment Bldg.	Metals, HE, barium	Upper Water
16-034(p)	HSWA	Former Trash Incinerator	Metals, HE SVOCs, barium	Upper Water

Consolidation Checklist Criteria:

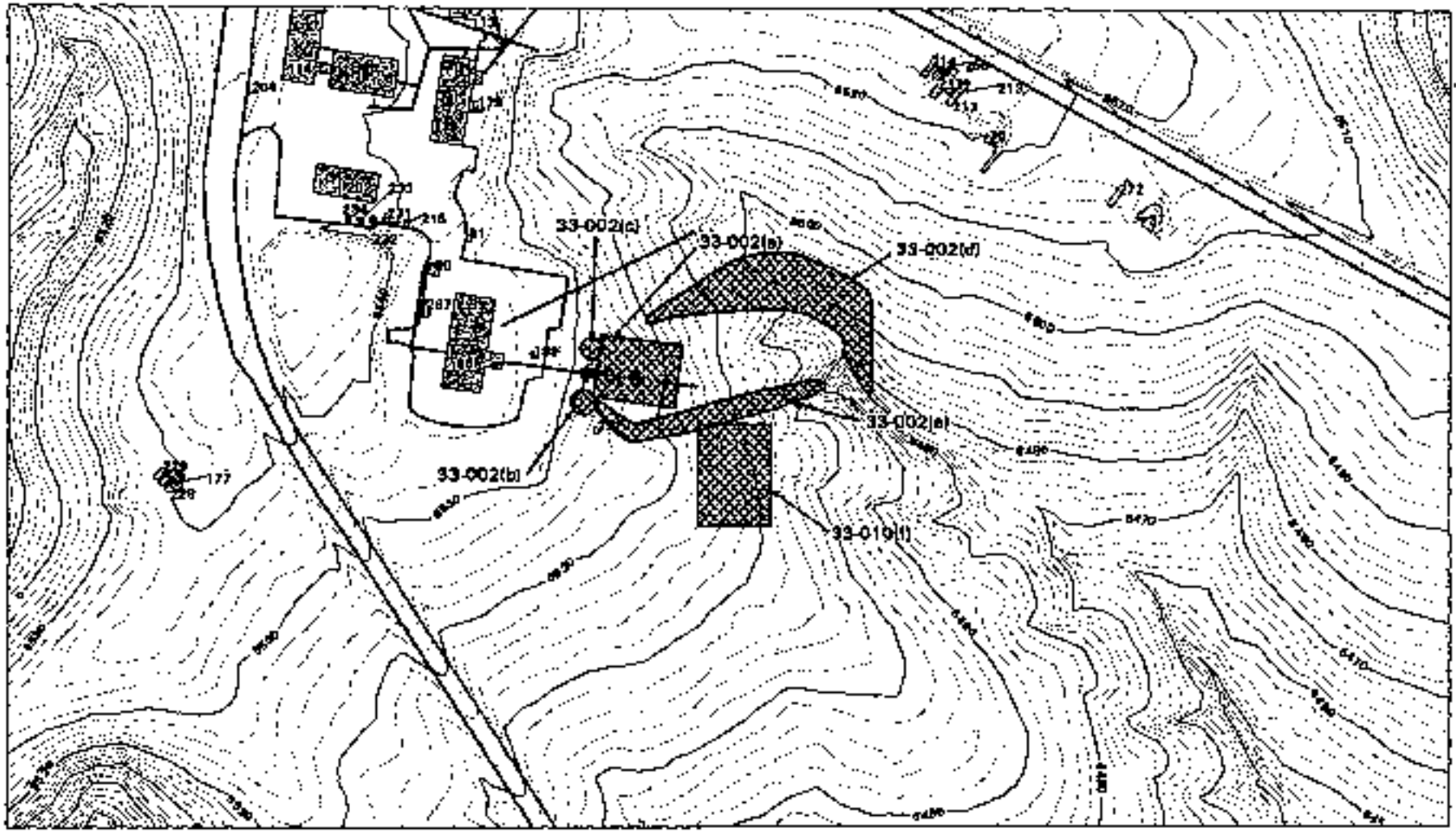
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history (40s Line), waste streams (primarily residual HE, metals, barium, and SVOCs), transport mechanisms (primarily surface and near surface contamination with some potential subsurface contamination), geographical proximity, common human health and ecological exposure areas, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description:

The consolidated PRS encompasses an area which is the location of five footprints of former HE process buildings, three former sump, drain line, and outfall systems associated with the 40s-Line of HE process buildings, three former trash incinerators also associate with the 40s-Line, one former equipment building, and one former radium source building. All of the former structures are related to and located along or in close proximity to the 40s-Line of HE process buildings. The 40s-Line contained several HE production facilities in a single line of buildings that were connected by enclosed walkways. PRS 16-025(p), (TA-16-44) was used for physical inspection and sifting of raw HE materials; PRS 16-025(q), (TA-16-45) housed an x-ray facility for examination of HE lenses; and PRS 16-025(r), (TA-16-46) was a rest house used for temporary storage of HE products awaiting radiography in TA-16-45, and was separate from the process buildings. PRS 16-025(u) (TA-16-42) housed HE casting operations; and PRS 16-025(v), (TA-16-43) housed experimental HE casting and/or machining operations. All of these buildings were of wood construction, with wooden floors on pillars. Each of the buildings had floor troughs that discharged to sumps, that with the exception of TA-16-46, discharged to a common outfall. PRS 16-026(w) consisted of a drain line and outfall from the dark room at TA-16-45. PRS 16-029(z) includes the sumps that were previously located in the former HE processing buildings (TA-16-42, -43, -44, and -45. PRS 16-032(a) includes the secondary sumps for these buildings and the common drain line linking them all. PRSs 16-011, -023(b), and -034(p) (TA-16-412, -403, and -41, respectively) were the locations of incinerators used to burn paper and cloth that may have been contaminated with low levels of HE. All three incinerators were located with the 40s-Line. PRS 16-034(l) is the former location of an equipment storage building (TA-16-47). The structure may have stored HE or HE-contaminated materials and was intentionally burned down in early 1960. PRS 16-025(s) (TA-16-46) was a radium source storage building along the 40s-Line. PRS 16-005(c) was a septic system, including drain lines, that served TA-16-41. The building contained offices and lavatories.



PRS Consolidation Unit 33-002(a)-99

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Mundy Jones

RMAD 0108861 13 Jul 00

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 16-034(b)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
16-005(j)	HSWA	HE Septic System - (inactive)	Rad, Metals, SVOCs, cyanide	Canon de Valle
16-005(m)	HSWA	HE Sump, Drain Line and Outfall - (inactive)	Rad, Metals, SVOCs, cyanide	Canon de Valle
16-025(m)	HSWA	Soil Contamination - added FY00	Rad, Metals, SVOCs	Canon de Valle
16-025(n)	HSWA	Former Source Storage Hutment, added FY00	Rad, Metals	Canon de Valle
16-025(o)	HSWA	Former Source Storage Hutment, added FY00	Rad, Metals	Canon de Valle
16-034(b)	HSWA	Former HE X-ray Radiography Building	Rad, Metals, SVOCs, HE, cyanide	Canon de Valle
16-034(c)	HSWA	Former HE Warehouse	Rad, Metals, SVOCs, HE, cyanide	Canon de Valle
16-034(d)	HSWA	Former HE Machine Shop	Metals, SVOCs, HE	Canon de Valle
16-034(e)	HSWA	Former HE Storage Building	He, barium	Canon de Valle
16-034(f)	HSWA	Former HE Laboratory	Rad, Metals, SVOCs, VOCs, HE	Canon de Valle

Consolidation Checklist Criteria:

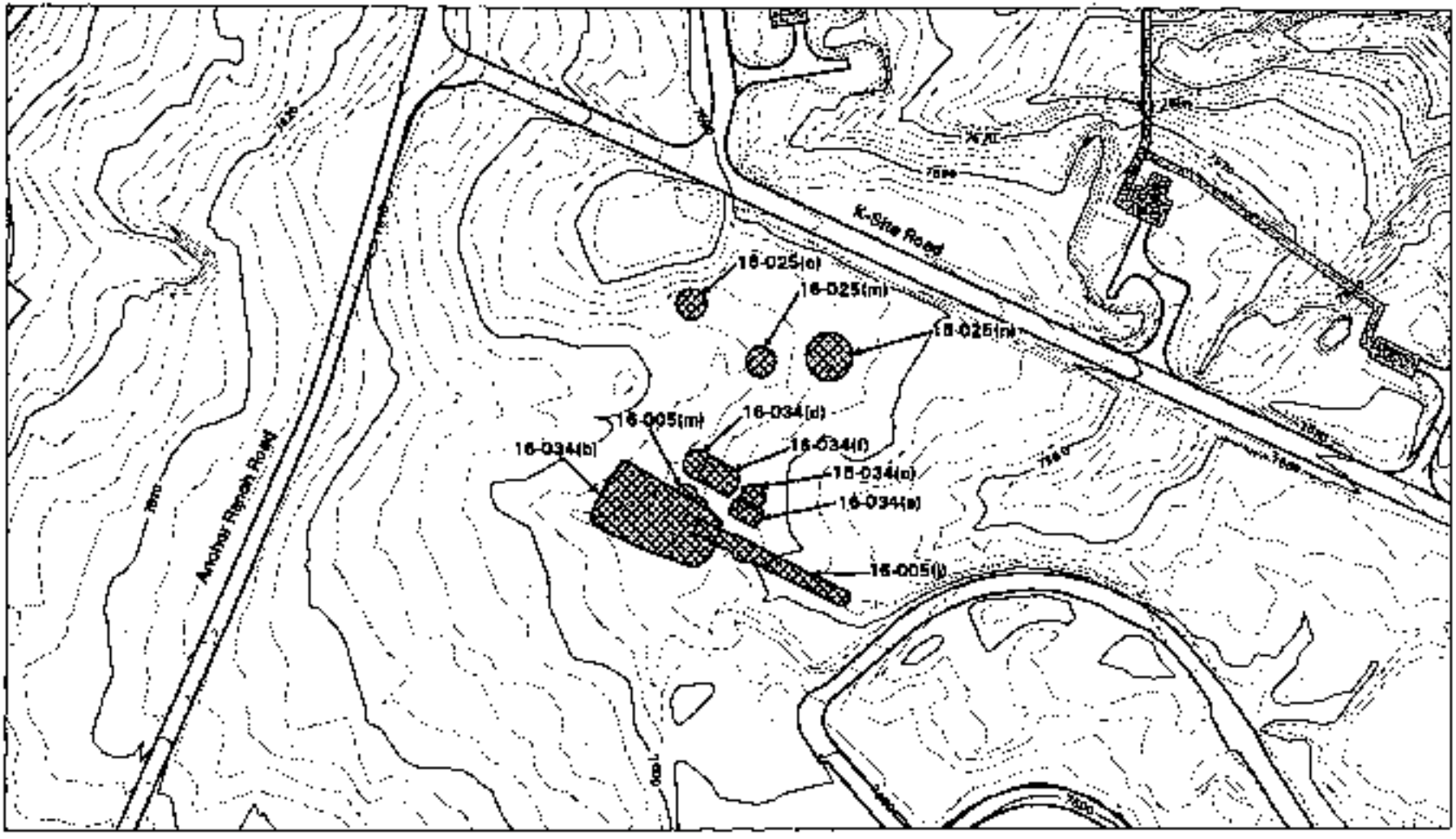
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history of the T-Site waste streams (primarily residual HE, metals, barium, radionuclides, VOCs, and SVOCs), transport mechanisms (primarily surface and near surface contamination with some potential subsurface contamination), geographical proximity, common human health and ecological exposure areas, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description:

The consolidated PRS encompasses an area which was formerly the location of the T-Site (TA-24) HE-related magazines, hutments, warehouses, shops, laboratories, and septic system. The site is currently devoid of structures and has been overgrown with trees. TA-24 was used primarily for radiographic operations of HE charges. Construction of structures at T-Site began in 1944 and continued until it ceased being used as an active site in 1950. Most of the structures remaining at TA-24 were destroyed by intentional burning in 1960, with residual debris and subsurface structures being removed in 1968. HE was reported to have been removed to better than 3% wt, and radionuclides cleaned up to background. PRS 16-034(b) is the former location of TA-16-490, a decommissioned primary laboratory and office building. The building housed X-ray radiography of HE, photoprocessing, electron microscopy and storage. Solvents were also used in the building. PRS 16-005(j) is the location of the former septic tank and drain line (TA-16-507) which served TA-16-490. PRS 16-005(m) is the former location of TA-16-507, a decommissioned sump (chemical pit), drain line and outfall that received effluent from the large room in the central section of TA-16-490. The sump drained to the east of TA-16-490 and was shown to be contaminated with HE prior to its removal in 1960. PRS 16-034(d) is the former location of TA-16-492, a decommissioned machine shop and was shown to be contaminated with residual HE prior to burning in 1960. PRS 16-034(f) is the former location of TA-16-488, a decommissioned laboratory. Small-scale photoprocessing was conducted in the building in addition to plutonium autoradiography experiments. PRS 16-034(c) is the former location of TA-16-491, a decommissioned warehouse hut. During WWII the hut was used to store equipment, but by 1950 was the site of X-ray exposure experiments on rabbits and rats. PRS 16-034(e) is the former location of TA-16-495, a former storage building. PRSs 16-025(m, n and o), added to this unit in FY00, are three areas of potentially contaminated soils associated with the former x-ray facility (TA-16-495) and two identical source hutments (TA-16-499 and -500).



PRS Consolidation Unit 16-034(b)-99

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marna Jones

RMAD G108478 18 Apr 00

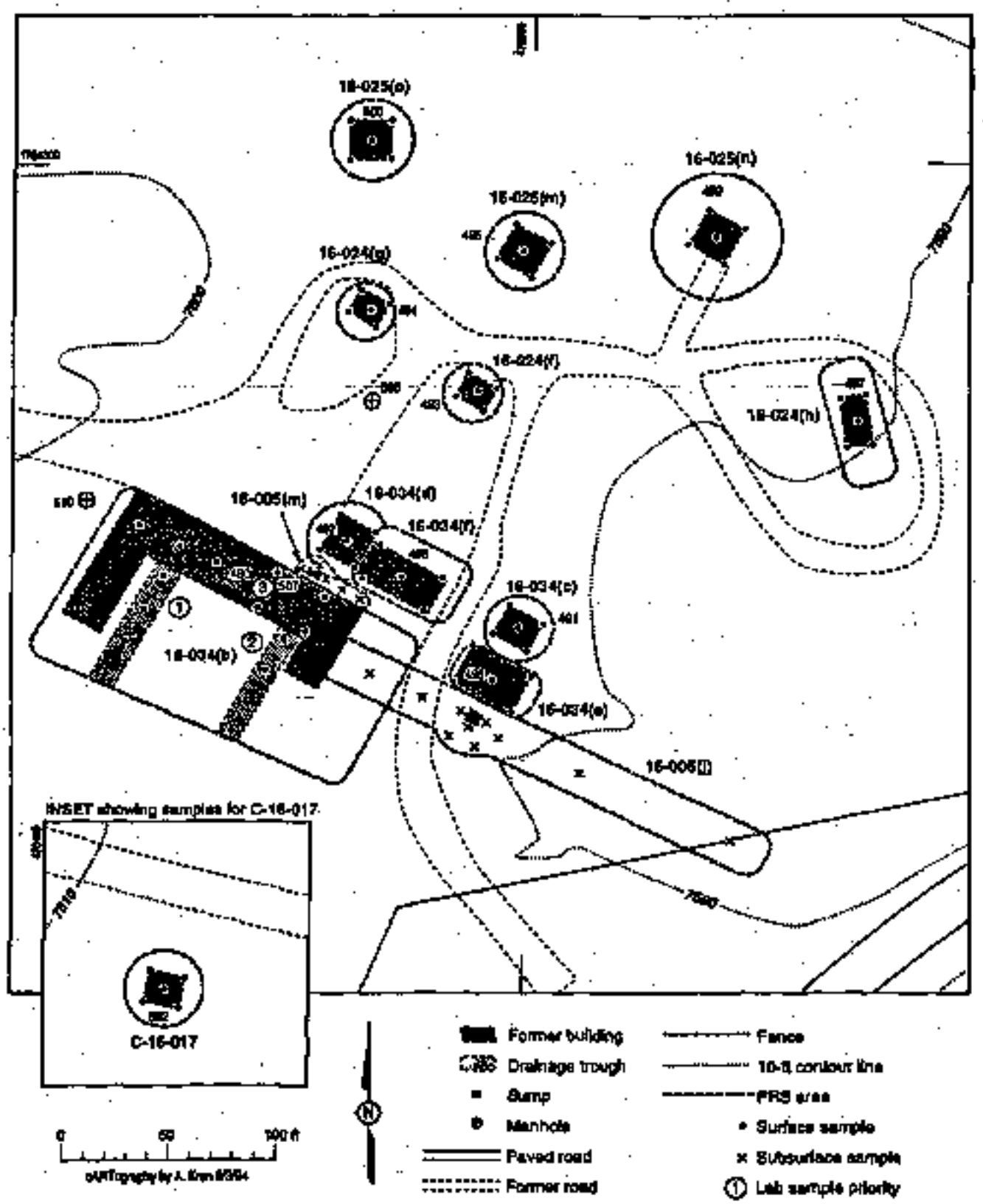


Fig. 5-92. Sampling locations at T-Site.

PRS Consolidation Worksheet

Site Type: Ind. or San. Waste Water Treatment

Proposed PRS Number: 18-001(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
18-001(a)	HSWA	Sanitary Lagoons - (inactive)	Rad, Metals, VOCs	Lower Pajarito
18-001(b)	HSWA	Sewer lines - (inactive)	Rad, Metals, VOCs	Lower Pajarito

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, commingled waste streams, geographical proximity, interrelated transport mechanisms, similar COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 18-001(a) was the former location of sanitary sewage lagoons on Pajarito Road. 18-001(b) consisted of the associated drain lines that carried sanitary wastewater from buildings at TA-18 to the lagoons and drain lines that discharged the waste water from the lagoons into an NPDES-permitted outfall in Pajarito Canyon. The system was in operation from the 1960s until 1992 when the TA-46 WWTP came on line.

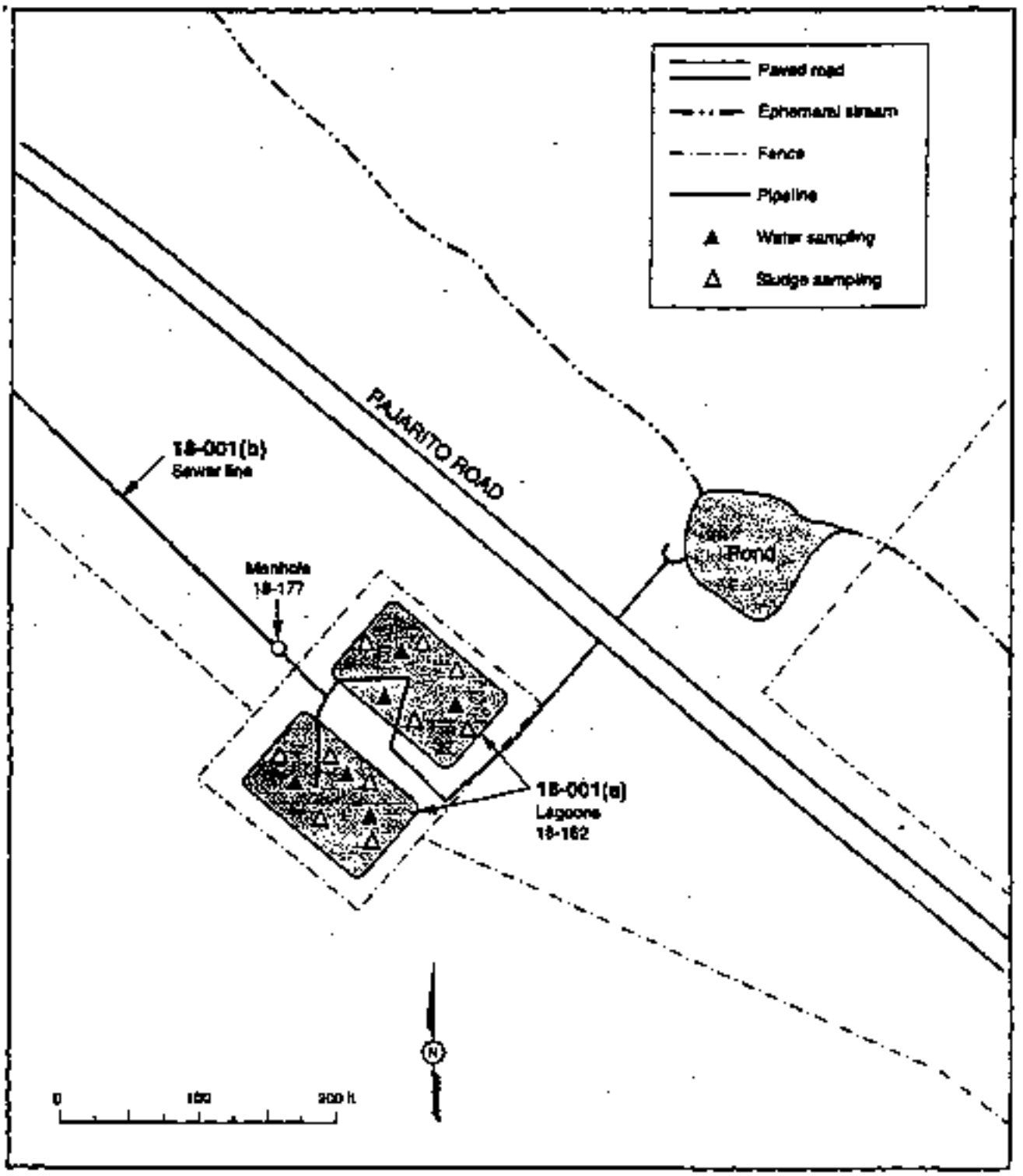


Figure 5-9. Proposed sampling locations at SWMU 16-001(a), sewage lagoons.

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls - Kiva 1

Proposed PRS Number: 18-001(c)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
18-001(c)	HSWA	Sump - (inactive)	Rad, Metals, SVOCs, VOCs	Lower Pajarito
18-012(b)	HSWA	Outfall - (inactive)	Rad, Metals, SVOCs, VOCs	Lower Pajarito

Consolidation Checklist Criteria:

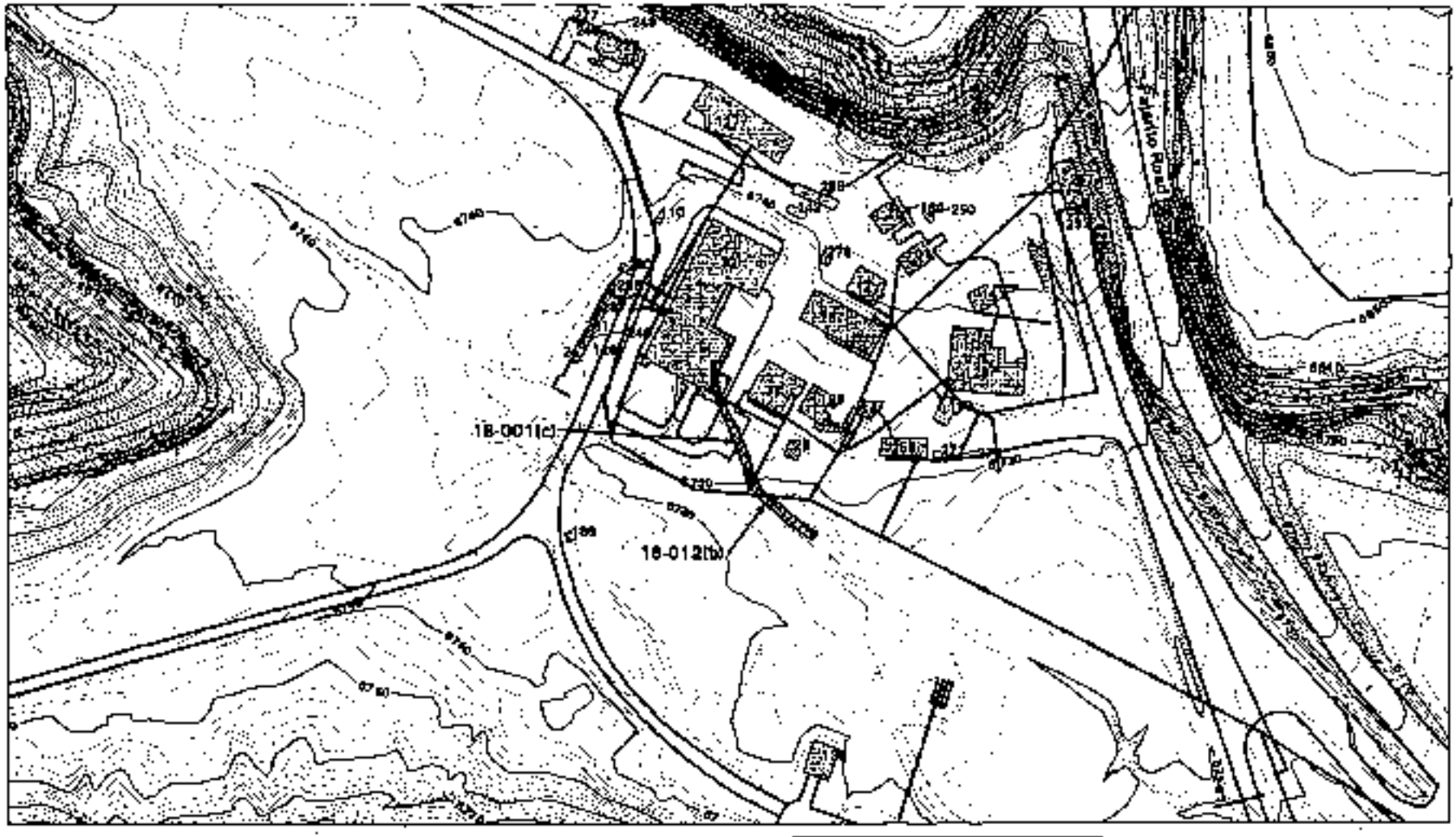
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, commingled waste streams, geographical proximity, interrelated transport mechanisms, similar COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRSs in this consolidated unit include a sump, acid drain lines and an outfall that previously served TA-18-30. PRS 18-001(c) is a sump in the basement of building TA-18-30. Discharge from the sump was combined with other discharges including floor, sink and roof drains from TA-18-30 and -31 and released to an outfall identified as PRS 18-012(b). The outfall is located within 20 feet of the main drainage channel in Pajarito Canyon. TAs-18-30 housed laboratories and offices, while TA-18-31 housed utilities for TA-18.



PRS Consolidation Unit 18-001(c)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Mission Jones

FMAD 0108847 13 Jul 00

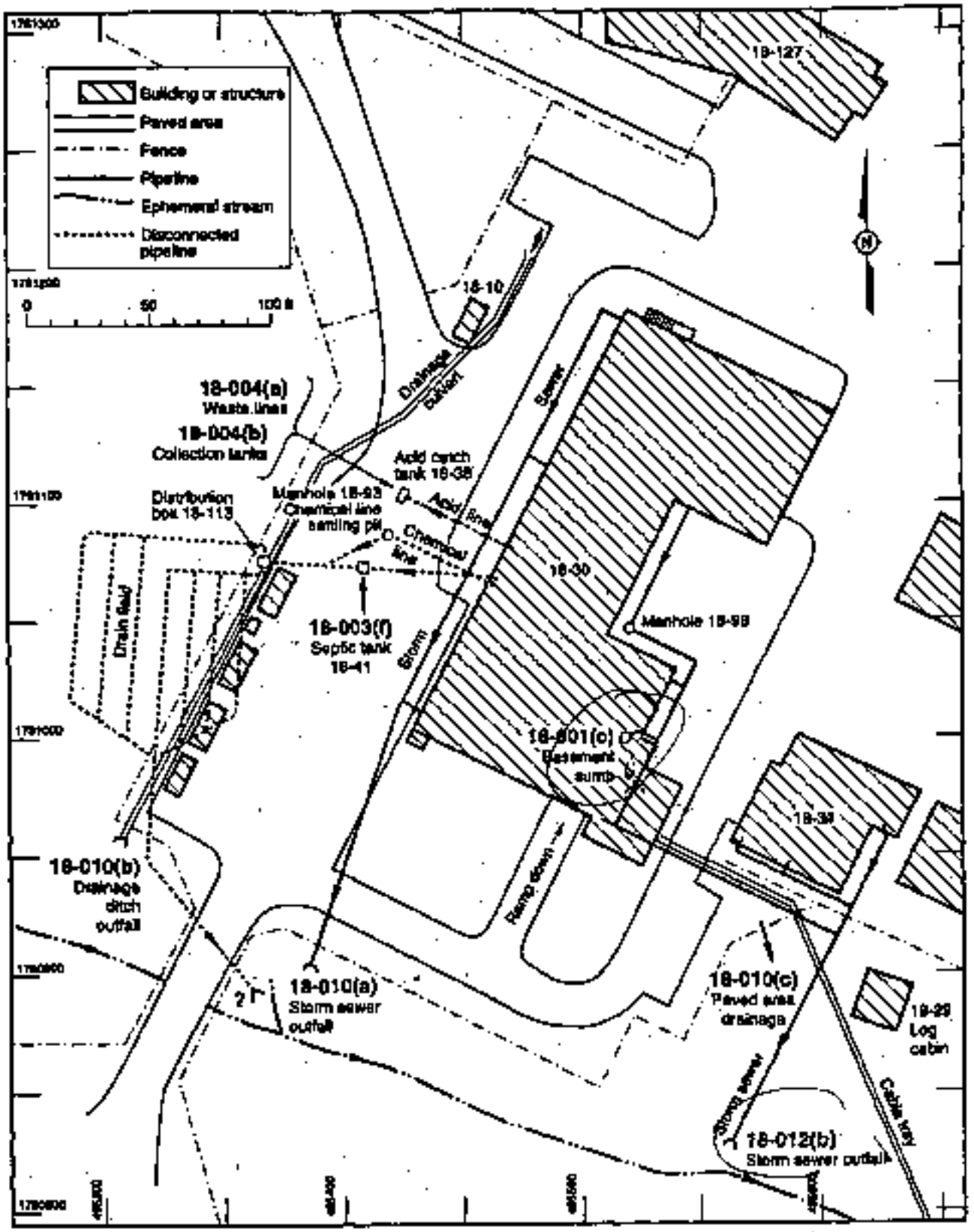


Figure 5-6. Potential release sites near Building 30, TA-18.

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 18-003(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
18-003(a)	HSWA	Settling pit - (inactive)	Rad, Metals, SVOCs, VOCs	Lower Pajarito
18-003(b)	HSWA	Septic system - (inactive)	Rad, Metals, SVOCs, VOCs	Lower Pajarito

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, commingled waste streams, geographical proximity, interrelated transport mechanisms, similar COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 18-003(a) is a settling pit and drain lines that served building TA-18-23 (Kiva 1). The pit was equipped with a steel catch basin that was emptied annually. The acid sinks in Kiva 1 would drain into the settling pit. Any overflow from the catch basin would enter the Kiva 1 sanitary sewer system downstream of PRS 18-003(b), but would end up in the leach field. PRS 18-003(b) consists of the septic tank, drain lines and drain field which also served building TA-18-23. TA-18-2, known as Kiva 1 was the site of uranium mockup tests and critical assembly work.

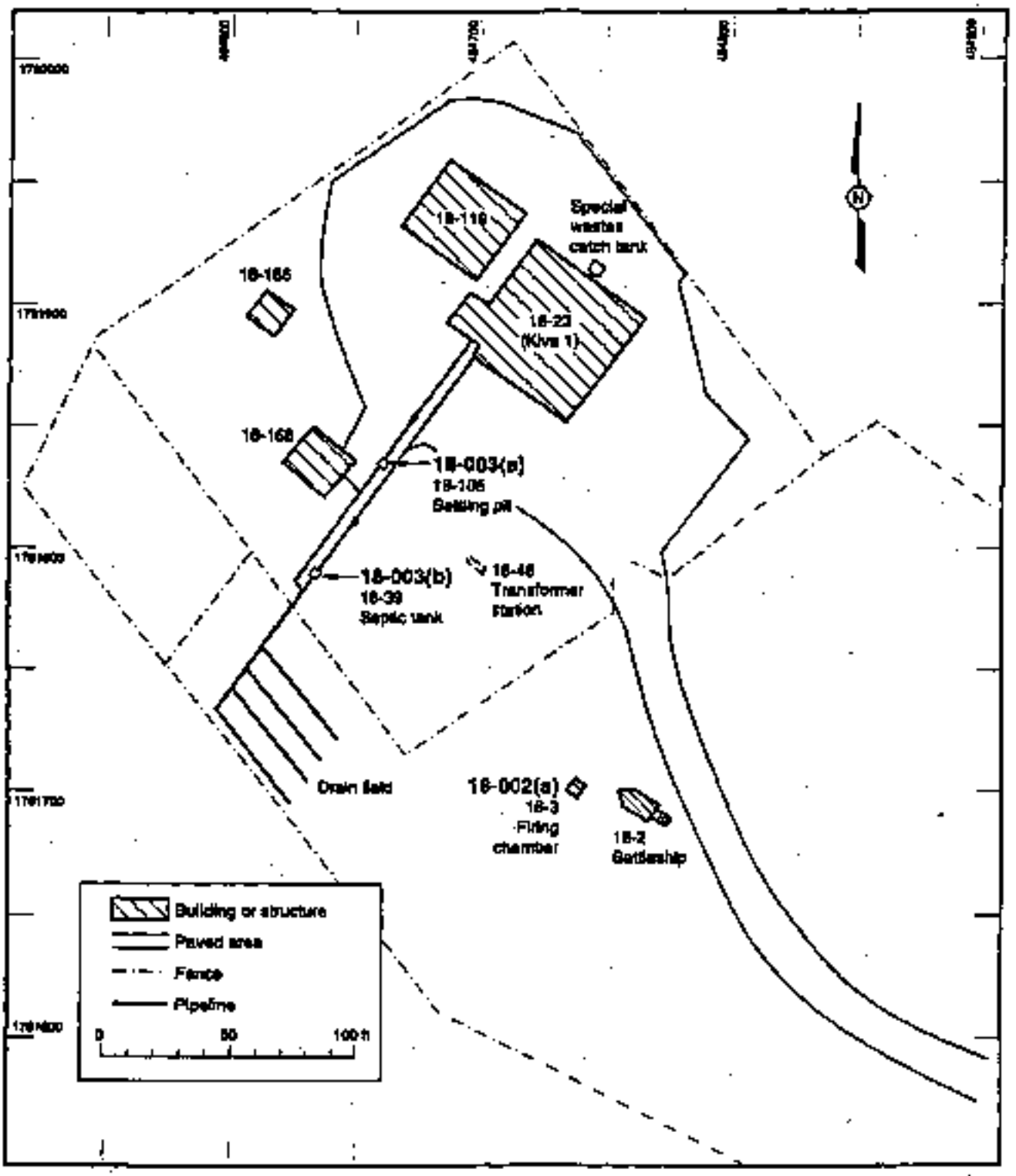


Figure 5-2. Potential release sites near Kiva 1, TA-18.

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 18-004(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
18-004(a)	HSWA	Waste lines - (inactive)	Rad, Metals, SVOCs, VOCs	Lower Pajarito
18-004(b)	HSWA	Collection tanks and vault - (inactive)	Rad, Metals, SVOCs, VOCs	Lower Pajarito

Consolidation Checklist Criteria:

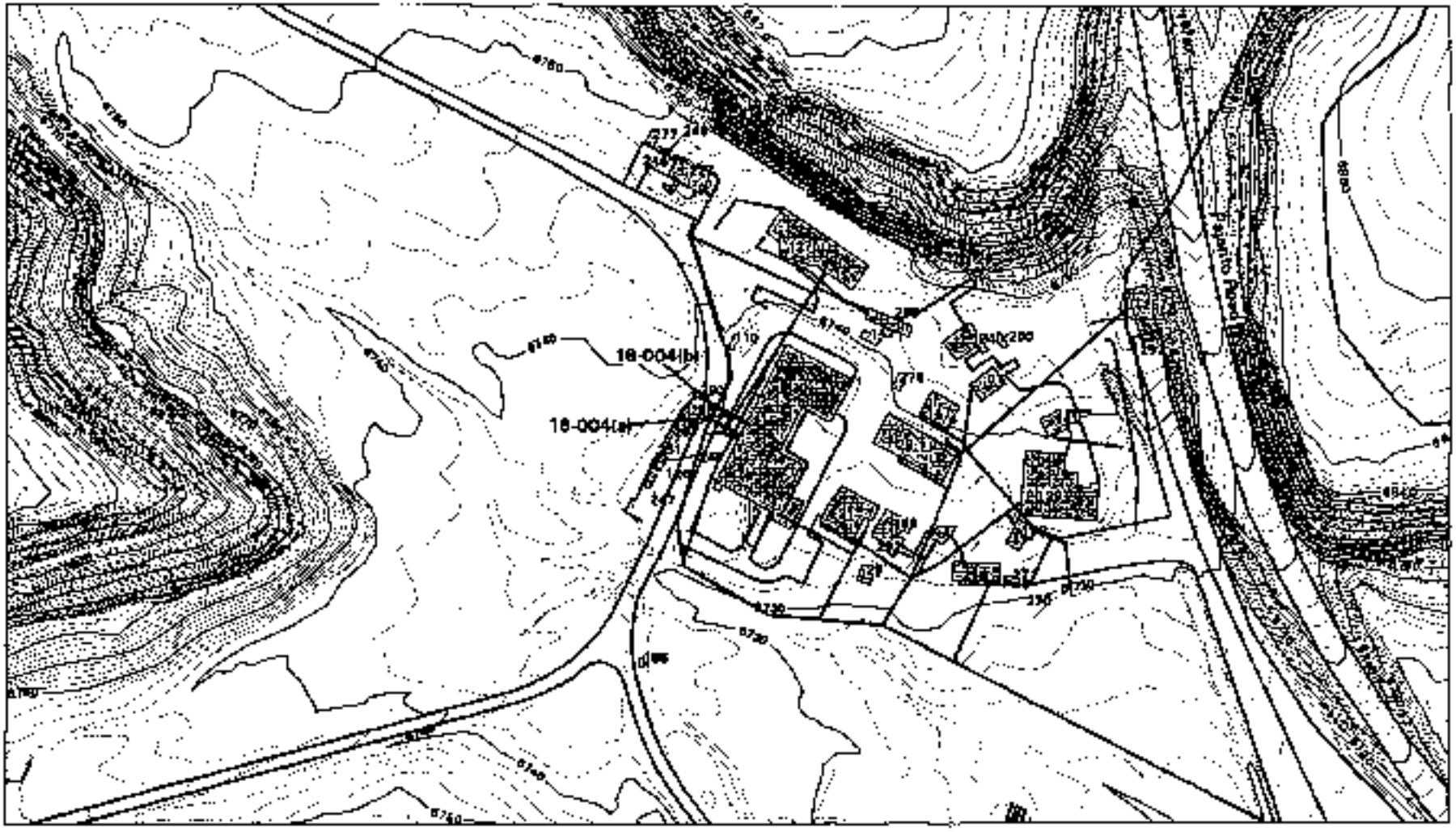
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, commingled waste streams, geographical proximity, interrelated transport mechanisms, similar COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 18-004(a) consists of former acid waste lines from building TA-18-30 which discharged into two stainless steel tanks in a subsurface concrete containment vault (PRS 18-004(b)). The containment vault was equipped with a sump that had no drain. The tanks were periodically pumped and the wastewater disposed of at TA-50. The tanks have been removed, inlet drain lines capped, concrete walls razed and the area backfilled to grade. TA-18-30 housed laboratories and offices.



PRS Consolidation Unit 18-004(a)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Title:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Martin Jones

RMAD G108948 13 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 20-001(b)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
20-001(b)	HSWA	Landfill Area 2 - (Inactive)	Rad, Metals, HE	Lower Sandia
20-002(c)	HSWA	Firing site - (Inactive)	Rad, Metals, HE	Lower Sandia
20-003(c)	Non-HSWA	Former Firing Site	Rad, Metals, HE	Lower Sandia

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 20-001(b) is a small landfill known as Sandia Canyon Area 2. Debris from the adjoining firing site (PRS 20-002(c)), the former navy gun site (20-003(c)), and from the decommissioned control building and berm were disposed of in the landfill. A VCA was implemented at the navy gun site (PRS 20-003(c)) in 1995 to remove the concrete pad, rubble electrical conduit and wires. The area will still require confirmation sampling along with the other two sites. All of the structures associated with the firing site were within its blast radius.

PRS Consolidation Worksheet

Site Type: Drain Lines and Outfalls

Proposed PRS Number: 03-052(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-052(a)	HSWA	Storm drain - (active)	Metals, SVOCs, TPH	Twomile
03-052(e)	HSWA	Storm drain - (active)	Metals, SVOCs, TPH	Twomile
03-054(b)	HSWA	Storm Water Outfall - (active)	Metals, SVOCs, TPH	Twomile

Consolidation Checklist Criteria:

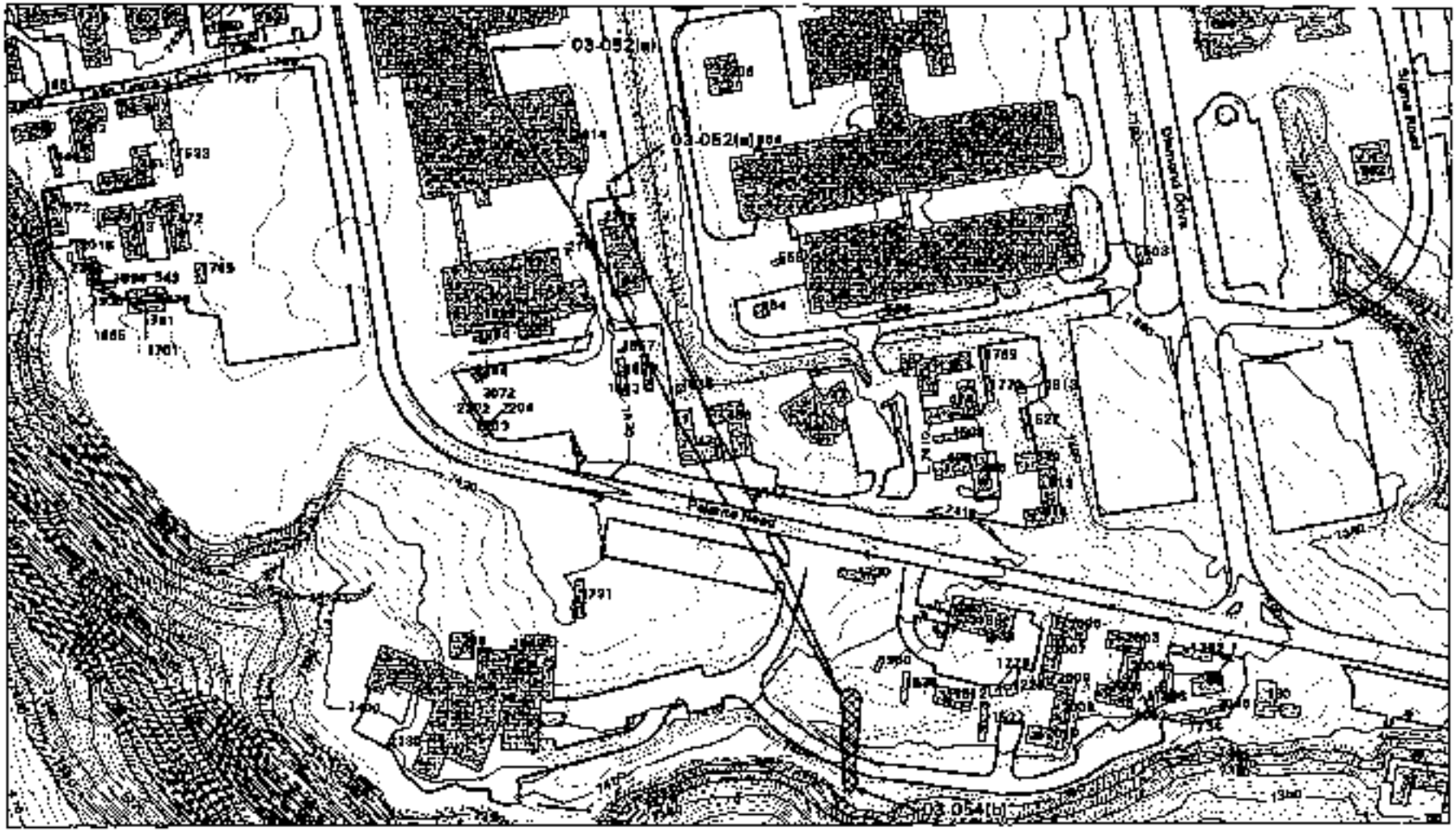
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit include two storm drains that discharge to a single storm sewer and outfall. PRS 3-052(a) is a storm drain near a loading dock adjacent to TA-3-39 which housed machining operations. Metal filings and cutting oils previously stored in dumpsters may have seeped into the drain. This situation has been remedied. PRS 3-052(e) is another storm drain located adjacent to TA-3-39. The drain lines from these PRSs combine and discharge to the NPDES-permitted outfall designated as PRS 3-054(b). The outfall also received noncontact cooling water and cooling water blowdown which has been rerouted.



PRS Consolidation Unit 03-052(a)-00

Drain Line
Paved Road/Parking
PRS
Structure

Contour Interval: 2 ft

Scale: 1:3000

0 200 400
FEET

1983 North American Datum
Projection and Grid Tiles:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Mercie Jones

RMAD-G106826 12 Jul 00

PRS Consolidation Worksheet

Site Type: Drain Lines and Outfalls

Proposed PRS Number: 03-054(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-054(a)	HSWA	Drain Lines and Outfall - (Inactive)	Metals, SVOCs, TPH	Twomile
03-054(d)	HSWA	Drain Lines and Outfall - (Inactive)	Metals, SVOCs, TPH	Twomile

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 3-054(a) is a decommissioned outfall that received wastewater from cooling towers TA-3-19, and -16, and from floor drains in TA-3-208. PRS 3-054(d) is an NPDES-permitted outfall that received wastewater from air conditioning equipment on TA-3-16 and from drains in TA-3-208. The outfall areas overlap south of TA-3-16. COPCs are commingled

PRS Consolidation Unit 03-054(a)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Table
Upper Mesdop State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Metric Annex

FSMAD G108828 18 Jul 00

PRS Consolidation Worksheet

Site Type: Storage Area

Proposed PRS Number: 03-059-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-003(n)	Non-HSWA	Transformer Storage Area - (inactive)	PCBs, TPH	Upper Sandia
03-059	HSWA	Salvage yard - (inactive)	Metals, PCBs, SVOCs/TPH	Upper Sandia

Consolidation Checklist Criteria:

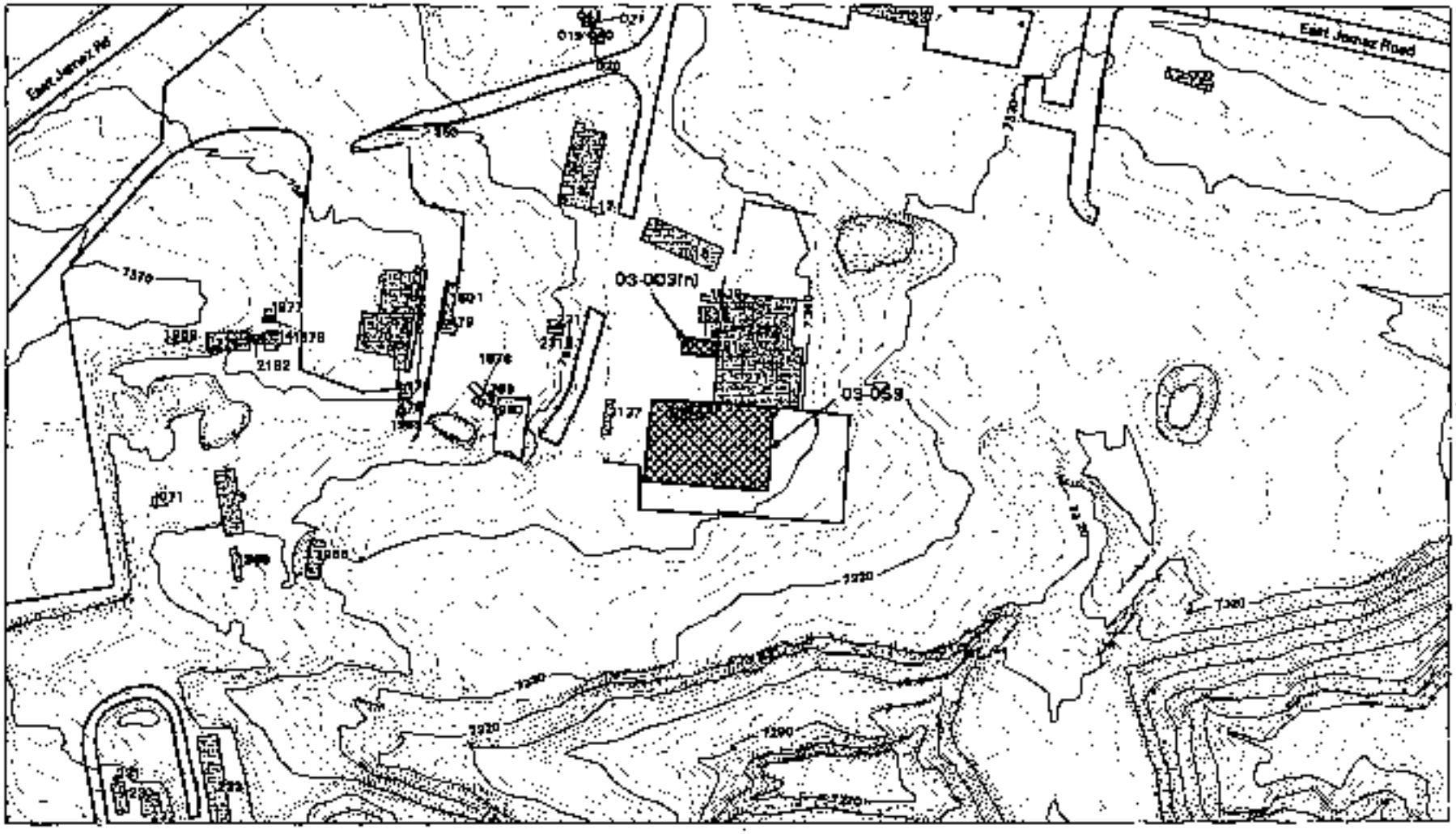
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, identical waste streams, geographical proximity, similar transport mechanisms (surface), commingled COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 3-059 is a former salvage yard adjacent to TA-3-271. From the early 1960s through May 1993, the area was used for the storage of transformers, electrical equipment, batteries, and scrap metal. PRS 3-003(n) is the former location of a transformer storage area adjacent to TA-3-271, where at least one documented PCB spill occurred. This second area was used for storage of electrical equipment when there was no room for additional equipment at PRS 3-059. Storm water runoff from both storage areas flowed to the southwest allowing COPCs to commingle.



PRS Consolidation Unit 03-059-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Rhonda Jones

FINAL G109823 12 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site - Alpha Site

Proposed PRS Number: 04-001-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
04-001	HSWA	Firing Site - (inactive)	Rad, Metals	Middle Mortandad/Ten-Site
04-002	HSWA	Surface Disposal Site - (inactive)	Rad, Metals	Middle Mortandad/Ten-Site
04-003(b)	HSWA	Outfall (inactive) - added FY00	Rad, Metals	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

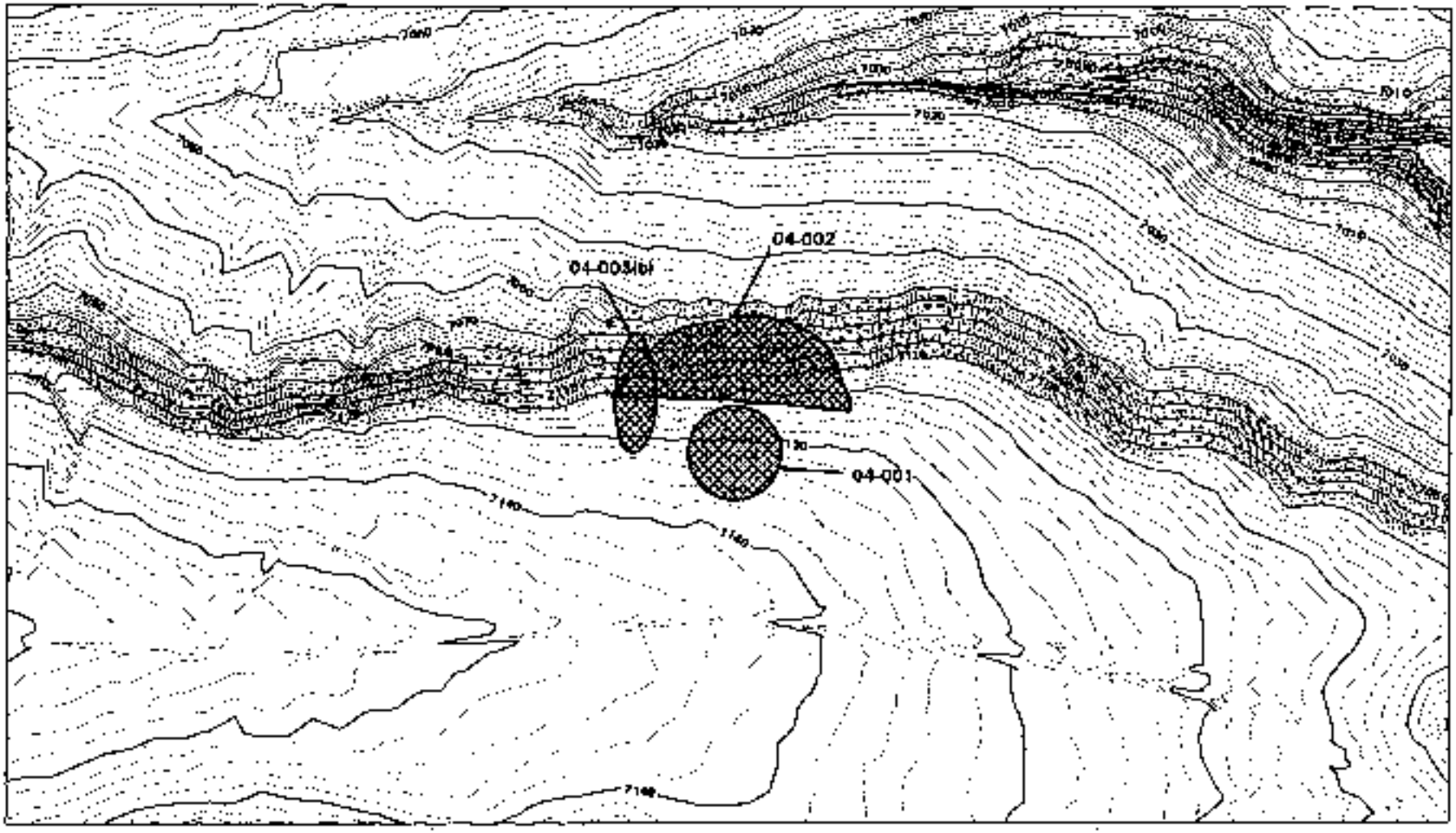
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history and geographic proximity of the firing site and disposal site, indistinguishable source terms, the common waste streams managed, transport mechanisms of similar contaminants, and the investigation required to assess the potential contamination, it is proposed that the above PRSs be consolidated.

Description:

PRSs 4-001 and 4-002 consist of an inactive firing site and its associated surface disposal site. After a shot, residual material from the firing site was bulldozed over the edge of the canyon to the area designated as the surface disposal site. The firing site was constructed in 1945 and abandoned in 1946. PRS 4-003(b), added in FY00, was the drain line and outfall from control building TA-4-3 located at PRS 4-001. All structures have been removed. The outfall area from this PRS overlaps PRSs 4-001 and 4-002 and they will be investigated simultaneously.



PRS Consolidation Unit 04-001-99

Drain Line
Paved Road/Parking
PRS
Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notes: Information on this map is provisional and has not been checked for accuracy.

Produced by Mark Jones

FIMAD G108833 12 Jul 00

PRS Consolidation Worksheet

Site Type: Outfall - Alpha Site

Proposed PRS Number: 04-003(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
04-003(a)	HSWA	Outfall - (inactive)	Metals, Rad	Upper Canada del Buey
04-004	Non-HSWA	Soil contamination beneath bldg.	Rad, Metals	Upper Canada del Buey

Consolidation Checklist Criteria:

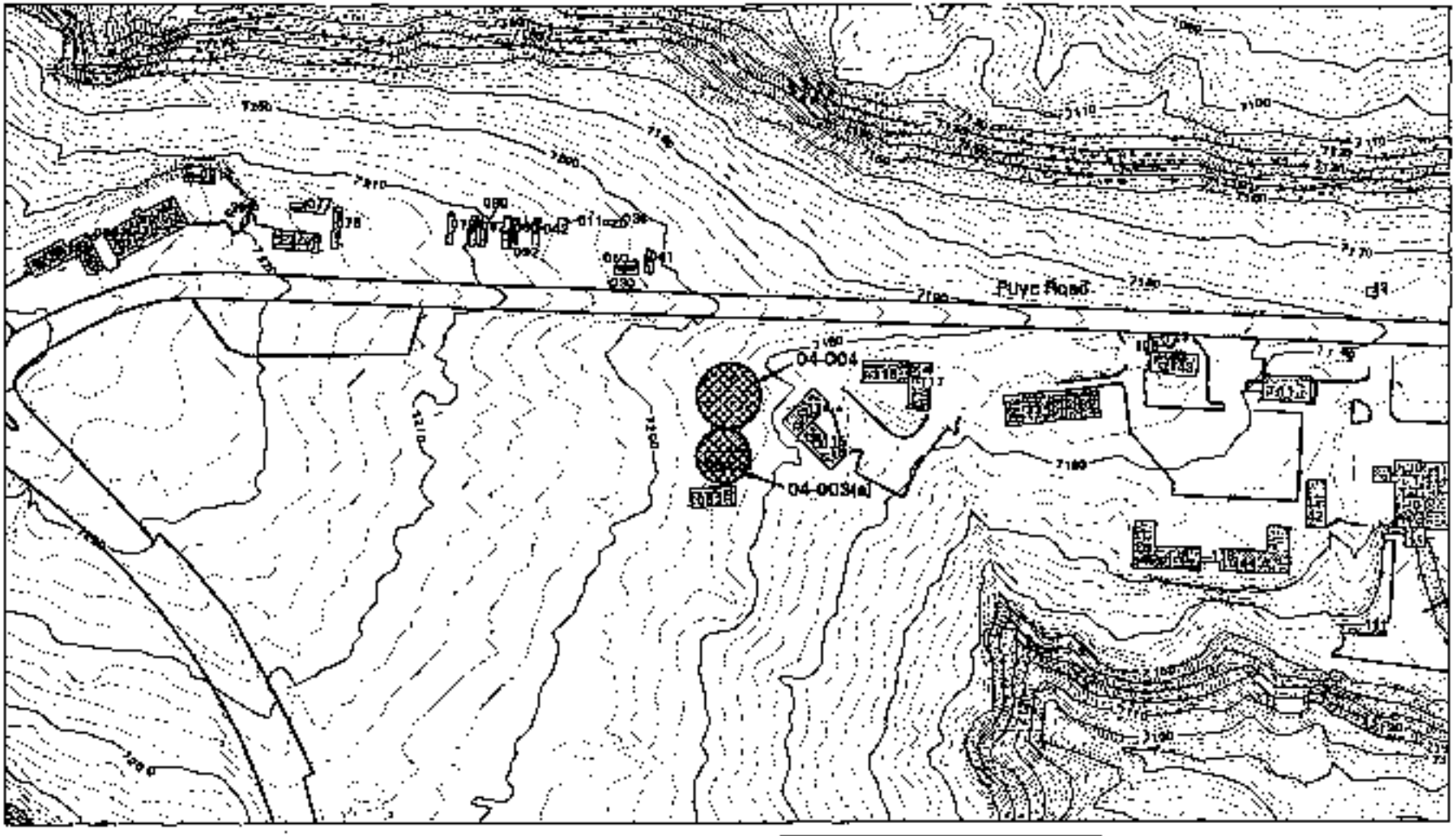
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history and geographic proximity, the common waste streams managed, indistinguishable source term, similar transport mechanisms of similar contaminants, and the investigation required to assess the potential contamination, it is proposed that the PRSs be consolidated.

Description:

PRS 4-003(a) was the outfall and drain lines from building TA-4-7 which housed a photo processing laboratory. PRS 4-004 is the building footprint of TA-4-7 where film of firing tests performed at TA-4 was developed. The structures have been removed and potential soil contamination may remain in the vicinity of the building footprint and associated drain lines and outfall.



PRS Consolidation Unit 04-003(a)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Morris Jones

RMAD G108834 12 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site - Beta Site

Proposed PRS Number: 05-001(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
05-001(a)	HSWA	Firing Site - (inactive)	Rad, Metals, HE	Middle Mortandad/Ten-Site
05-001(b)	HSWA	Firing Site - (inactive)	Rad, Metals, HE	Middle Mortandad/Ten-Site
05-002	HSWA	Disposal Site - (inactive)	Rad, Metals, HE	Middle Mortandad/Ten-Site
05-006(h)	HSWA	Soil cont. beneath former bldg - added in FY00	Rad, Metals, HE	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

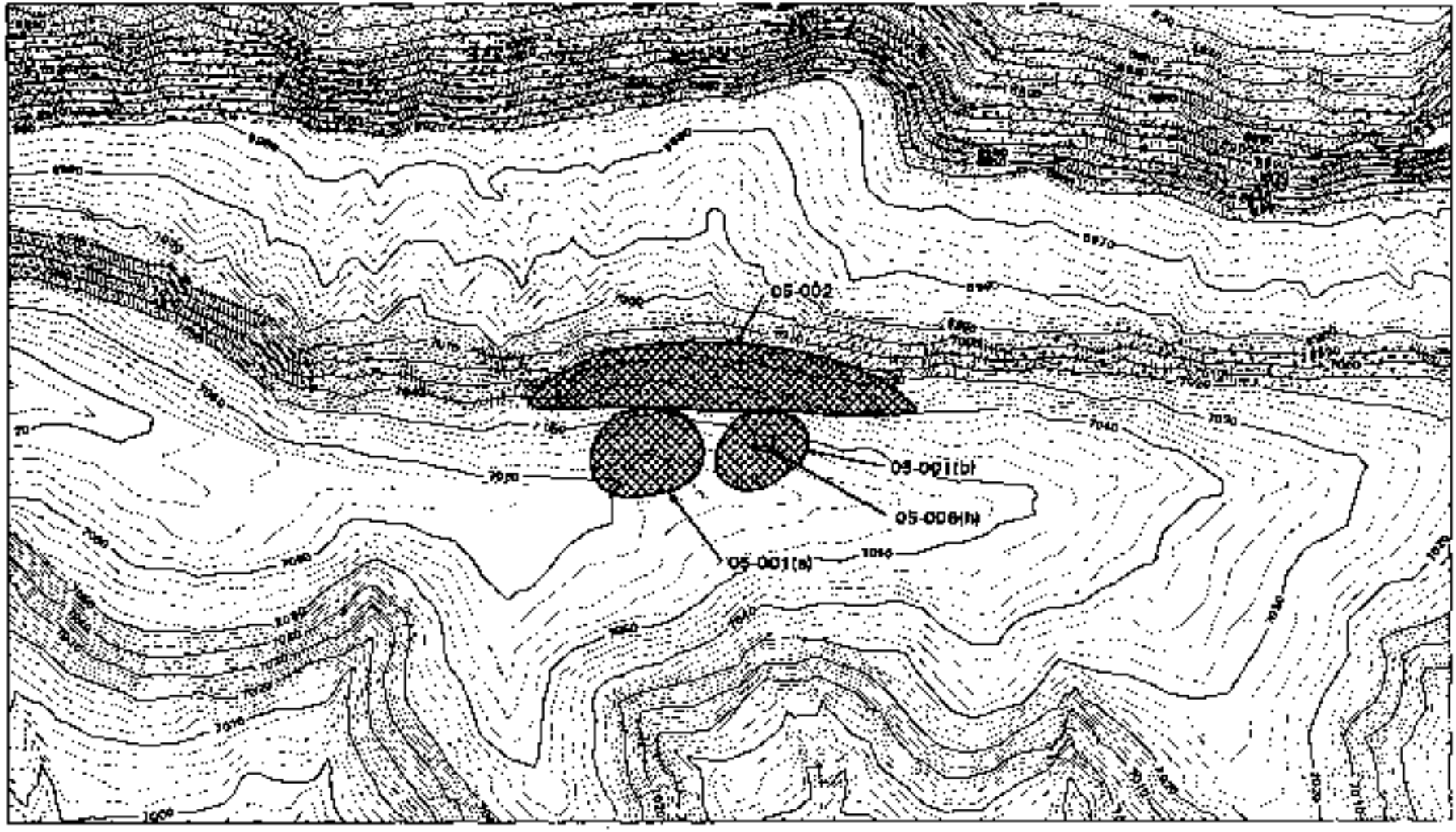
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative affect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms and the investigation required to assess the potential contamination at the firing sites, canyon side disposal area, and control building footprint, it is proposed that these PRSs be consolidated.

Description:

TA-5 also known as Beta Site consisted of firing sites and associated support facilities. The technical area was established in 1944 and was subsequently decontaminated and decommissioned in 1965. Firing Sites 5-001(a and b) are inactive. PRS 5-002 is the canyon side disposal area for both firing sites. After a shot, residual material was bulldozed over the side of the mesa. PRS 5-006(h) was a former control building TA-5-9 which was located within the blast radius of PRS 5-001(b) and supported both firing sites. The entire area was razed when TA-5-9 was removed spreading COPCs from the building and firing sites so that they are not discernable between PRSs. PRS 5-006(h) was added to this consolidated unit in FY00.



PRS Consolidation Unit 05-001(a)-99

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notes: Information on this map is provisional and has not been checked for accuracy.

Produced by Morris Jones

FIMAD C108835 12 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site - Beta Site

Proposed PRS Number: 05-005(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
05-005(a)	HSWA	Former French drain - (Inactive)	U, HE, Metals, SVOCs	Middle Mortandad/Ten-Site
05-008(b)	HSWA	Soil contamination beneath former bldg.	U, HE, Metals, SVOCs	Middle Mortandad/Ten-Site
05-008(e)	HSWA	Soil contamination beneath former bldg.	U, HE, Metals, SVOCs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

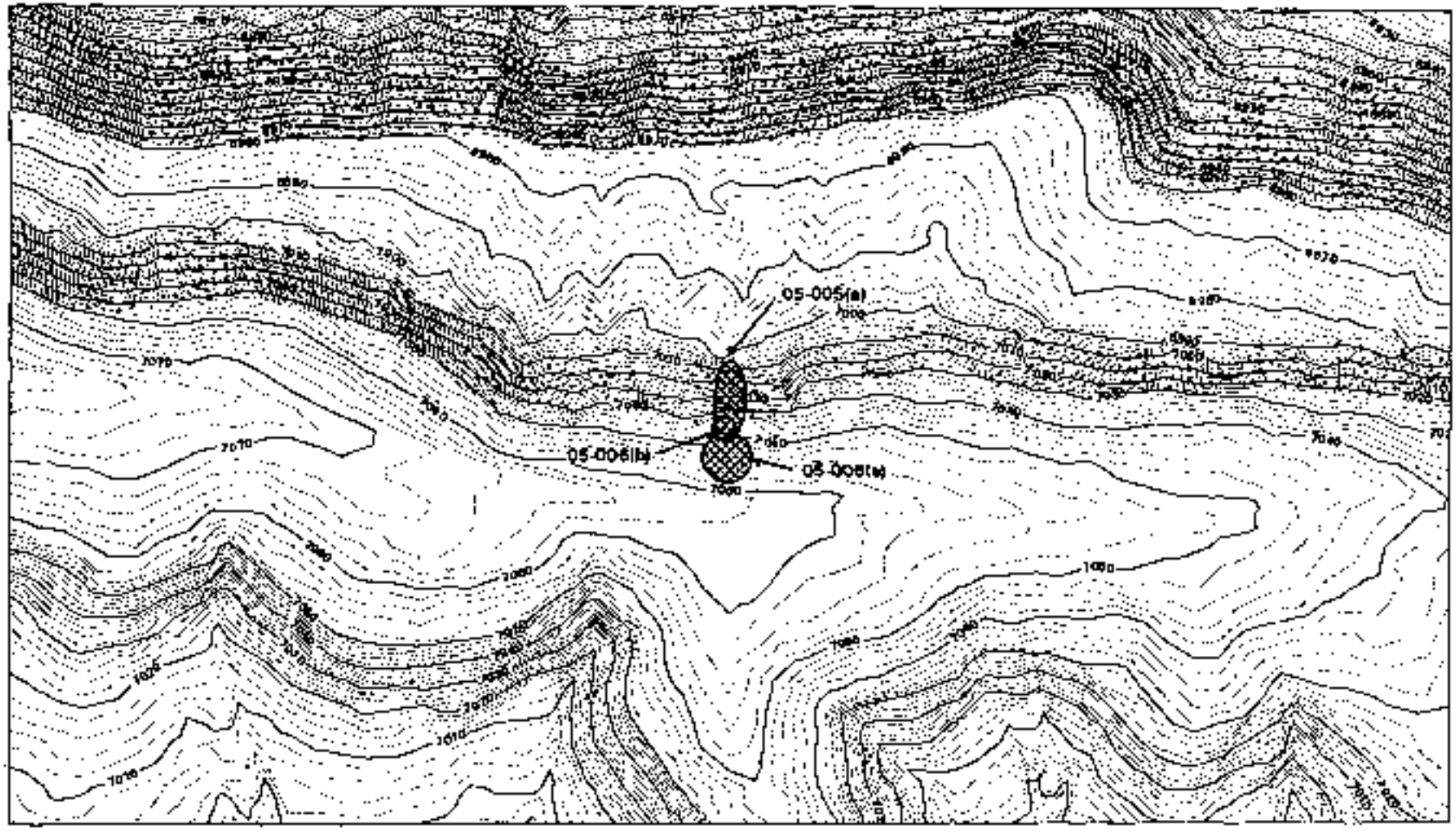
	Yes	No
1. *Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?*	☑	☐
2. *Is the contamination origin non-discernable?*	☑	☐
3. *Are the PRSs in the same geographic proximity?*	☑	☐
4. *Are the transport mechanisms and pathways similar?*	☑	☐
5. *Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?*	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms, indistinguishable COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

TA-5 also known as Beta Site consisted of firing sites and associated support facilities. The technical area was established in 1944 and was subsequently decontaminated and decommissioned in 1985. PRS 5-005(a) was a French drain that ran from the firing site control building (TA-5-4) toward Mortandad Canyon to the north. The drain was constructed in 1945 and abandoned along with the control building in 1959. PRS 5-008(b) is potential soil contamination at the former location of the control building (TA-5-4). PRS 5-008(e) is potential soil contamination associated with a former platform (TA-5-19) that was constructed adjacent to TA-5-4. The entire area was razed when TA-5-4 was removed in 1985 spreading COPCs from the control building, French drain and platform so that they are not discernable between PRSs.



PRS Consolidation Unit 05-005(a)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notes: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

RMAD G108838 12 Jul 00

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 05-005(b)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
05-005(b)	HSWA	Outfall - (inactive)	Rad, Metals, SVOCs, HE	Lower Mortandad/Cedro
05-006(c)	HSWA	Soil contamination beneath former bldg.	Rad, Metals, SVOCs, HE	Lower Mortandad/Cedro

Consolidation Checklist Criteria:

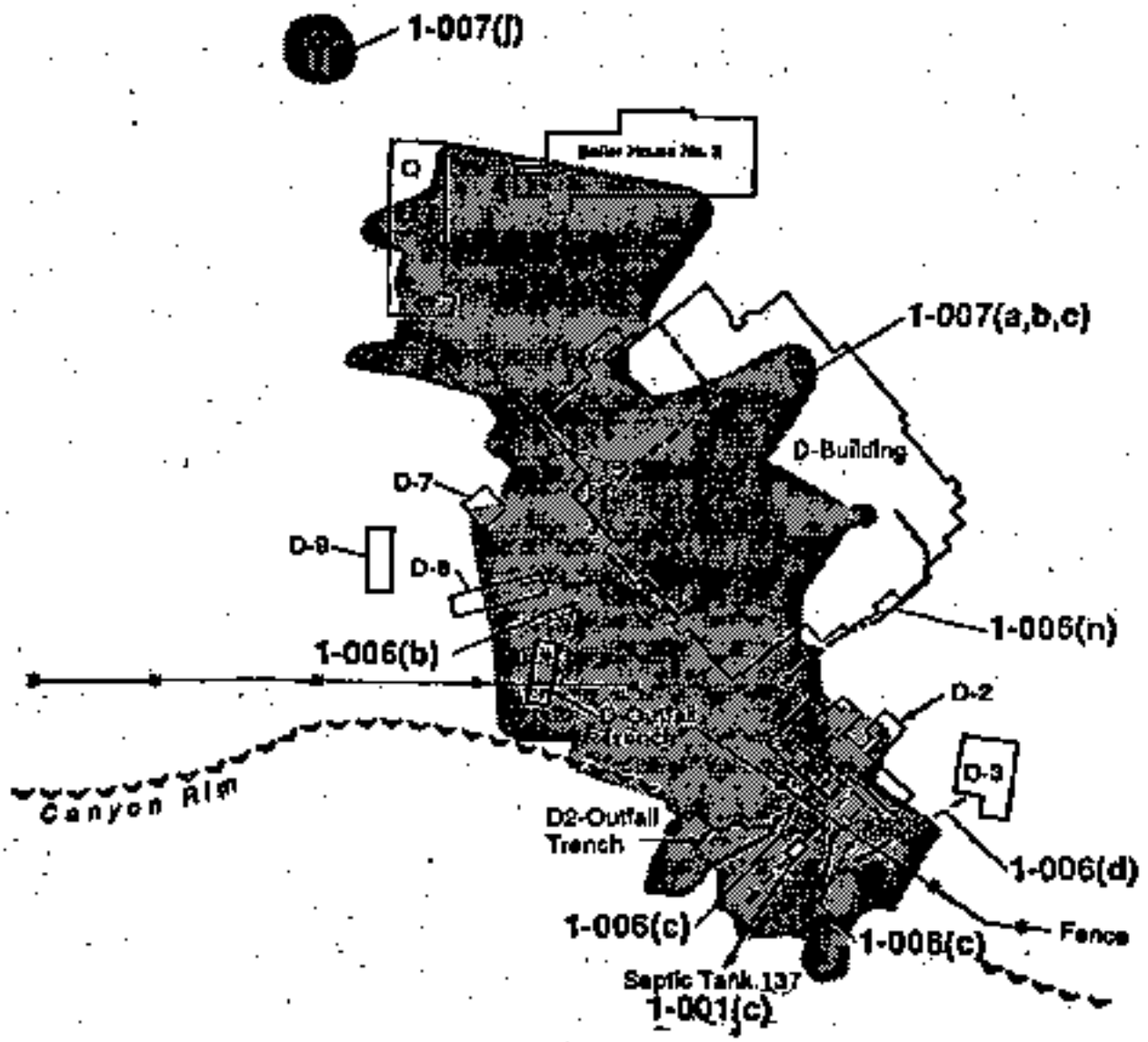
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms, indistinguishable COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The consolidated PRS consists of an outfall and associated drain lines (PRS 5-005(b)) from former building TA-5-5 and the potential soil contamination from the building itself. Building TA-5-5 housed a shop and darkroom from 1944 through 1958 in support of firing site activities at Bete Site. The entire area was razed when TA-5-5 was removed spreading COPCs from the building over the entire area so that they are not discernable between PRSs.



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.

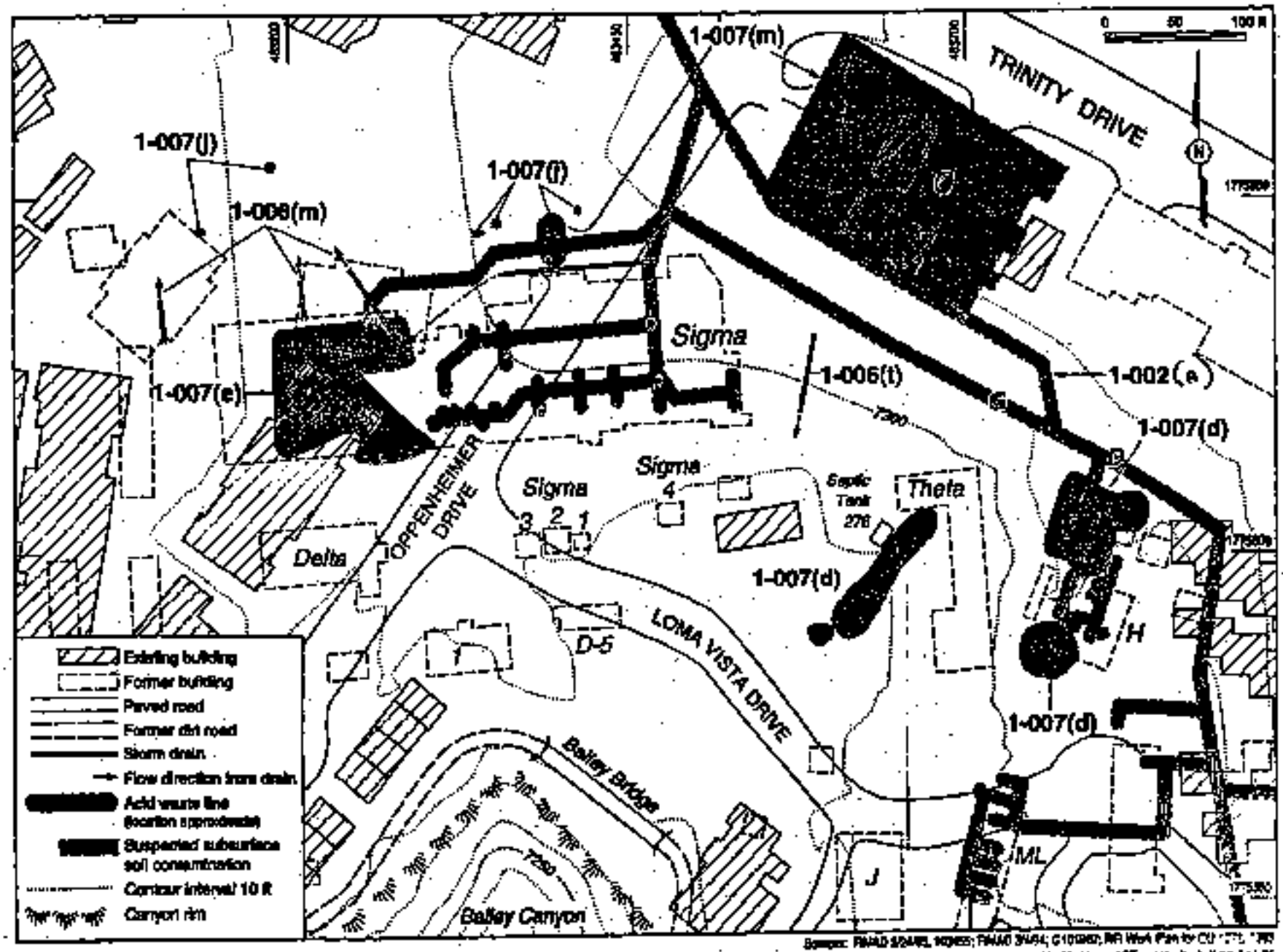


Fig. 5.1-1. Aggregate A PRS locations.

PRS Consolidation Worksheet

Site Type: Former Structures - Omega West Reactor

Proposed PRS Number: 02-007-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
02-007	HSWA	Septic System - (inactive)	Rad, Metals	Middle Los Alamos
02-009(a)	HSWA	Former Structures - Soil Contamination	Rad, Metals	Middle Los Alamos
02-009(b)	HSWA	Former Structures - Soil Contamination	Rad, Metals	Middle Los Alamos
02-009(c)	HSWA	Former Structures - Soil Contamination	Rad, Metals	Middle Los Alamos

Consolidation Checklist Criteria:

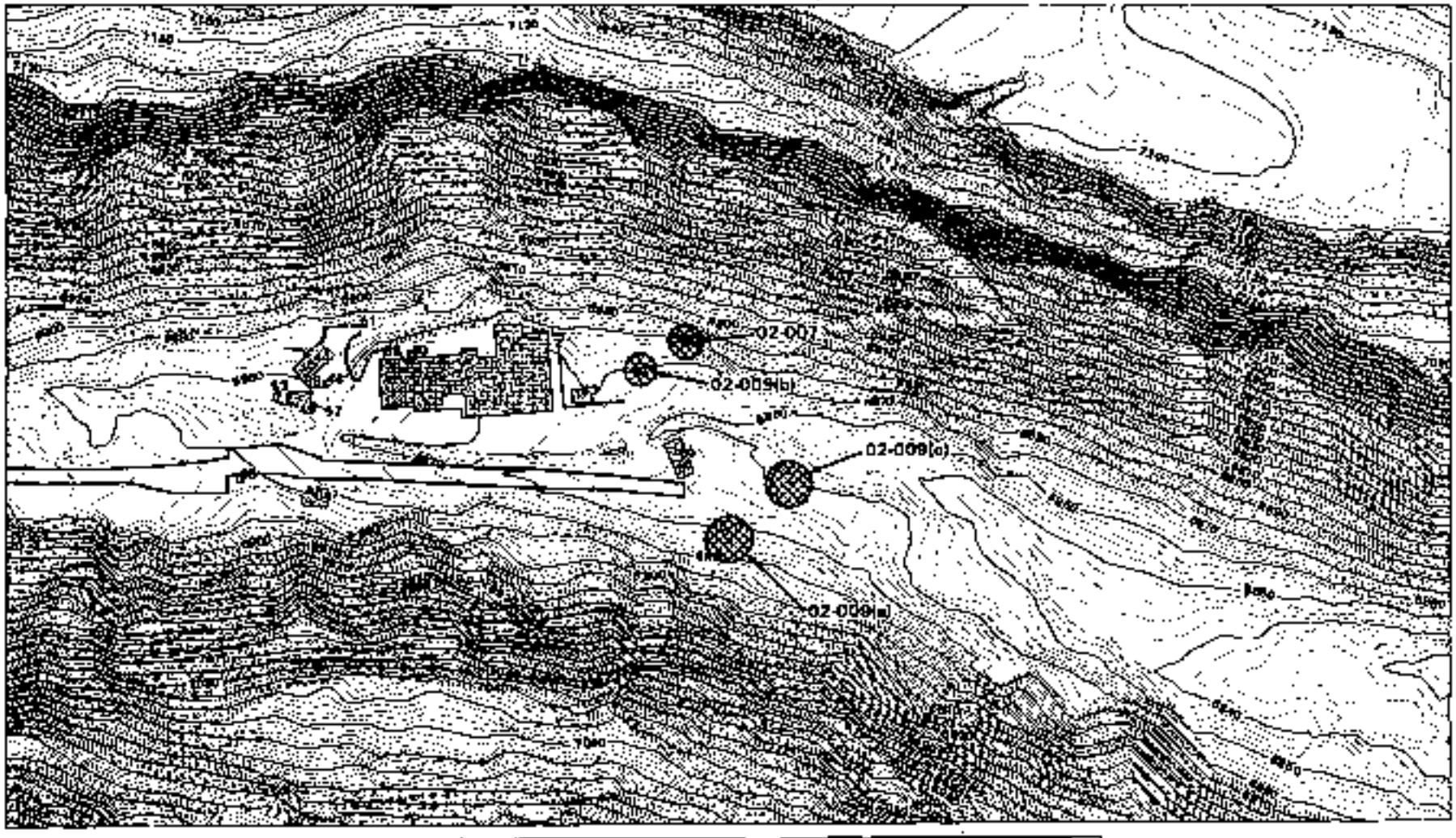
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms (near surface and subsurface), indistinguishable source terms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

Since 1943, Technical Area 2 has been the site of a series of research reactors. The Omega West Reactor (OWR) began operations in 1956, and was fueled by highly enriched uranium contained as a solid fuel. All of TA-2 is located in the bottom of Los Alamos Canyon and is inactive and all structures except for building TA-2-1 have been decommissioned and removed in the 1980s. Residual radionuclide contamination remaining after decommissioning was backfilled with clean fill. PRS 2-007 is the location of the former septic system including drain lines and a leach field. The system served building TA-2-1 which housed the OWR. The tank, drain lines, and soil from the leach field were removed in 1986. PRSs 2-009(a-c) are areas of potential soil contamination associated with the removal of former structures at TA-2. PRS 2-009(a) is residual radionuclide contamination from the former water boiler reactor which was housed in TA-2-50. PRS 2-009(b) consists of residual radionuclide contamination associated with the truck staging area during the site decommissioning, and PRS 2-009(c) is the former location of a condensate trap for the gaseous effluent stack line at TA-2-48. Inlet and outlet lines from the trap were found adjacent to drain lines for PRS 2-007. Contamination during decommissioning was found to overlap with PRS 2-007 and decommissioning has resulted in commingled COPCs consisting of radionuclides. No sampling and analyses have been completed for chemical constituents.



PRS Consolidation Unit 02-007-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Tics:
New Mexico State Plane Coordinate System:
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

RMAD 0108932 12 Jul 00

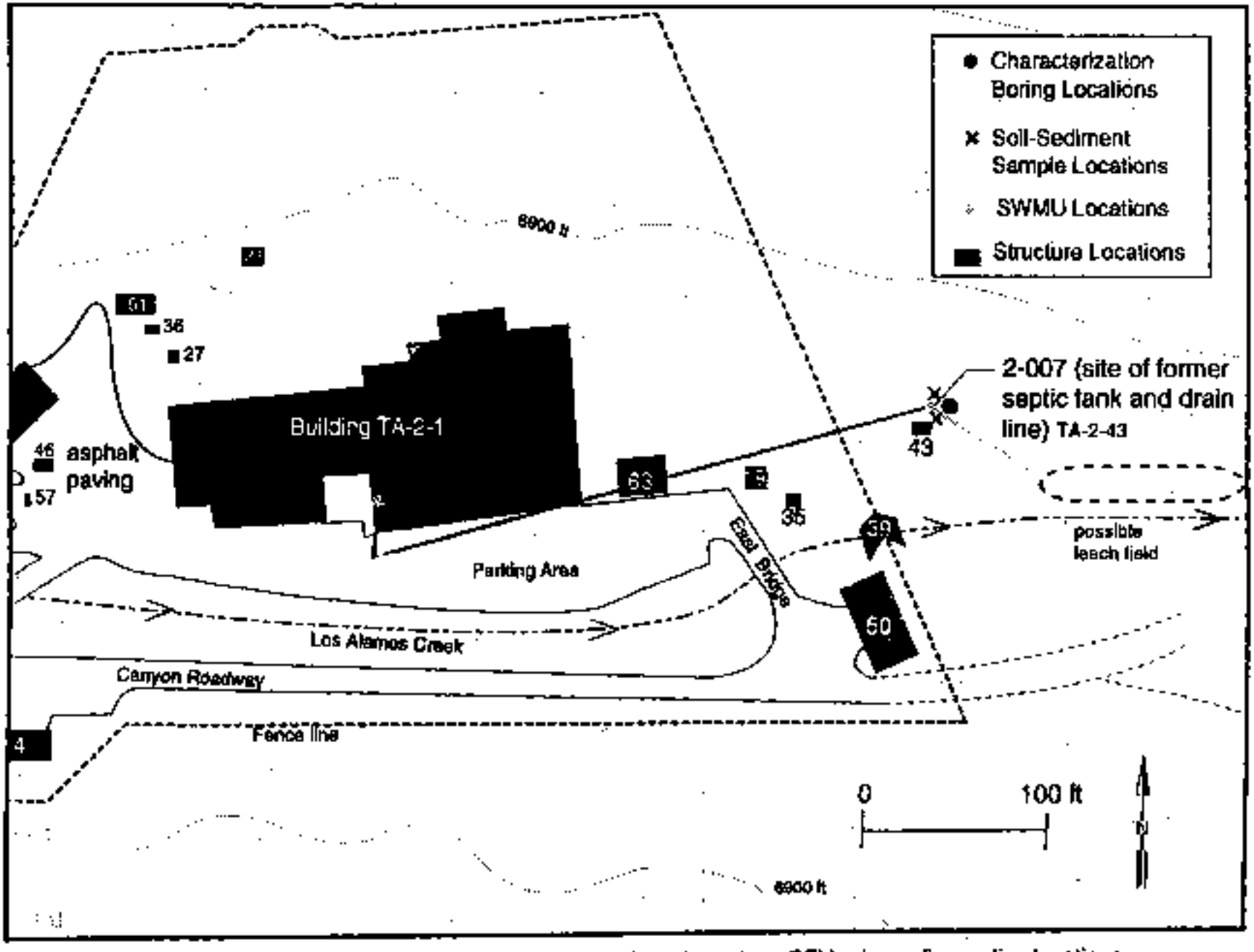


Figure 7.6-1 Proposed SWMU no. 2-007, decommissioned septic system, RFI boring-soil sampling locations.

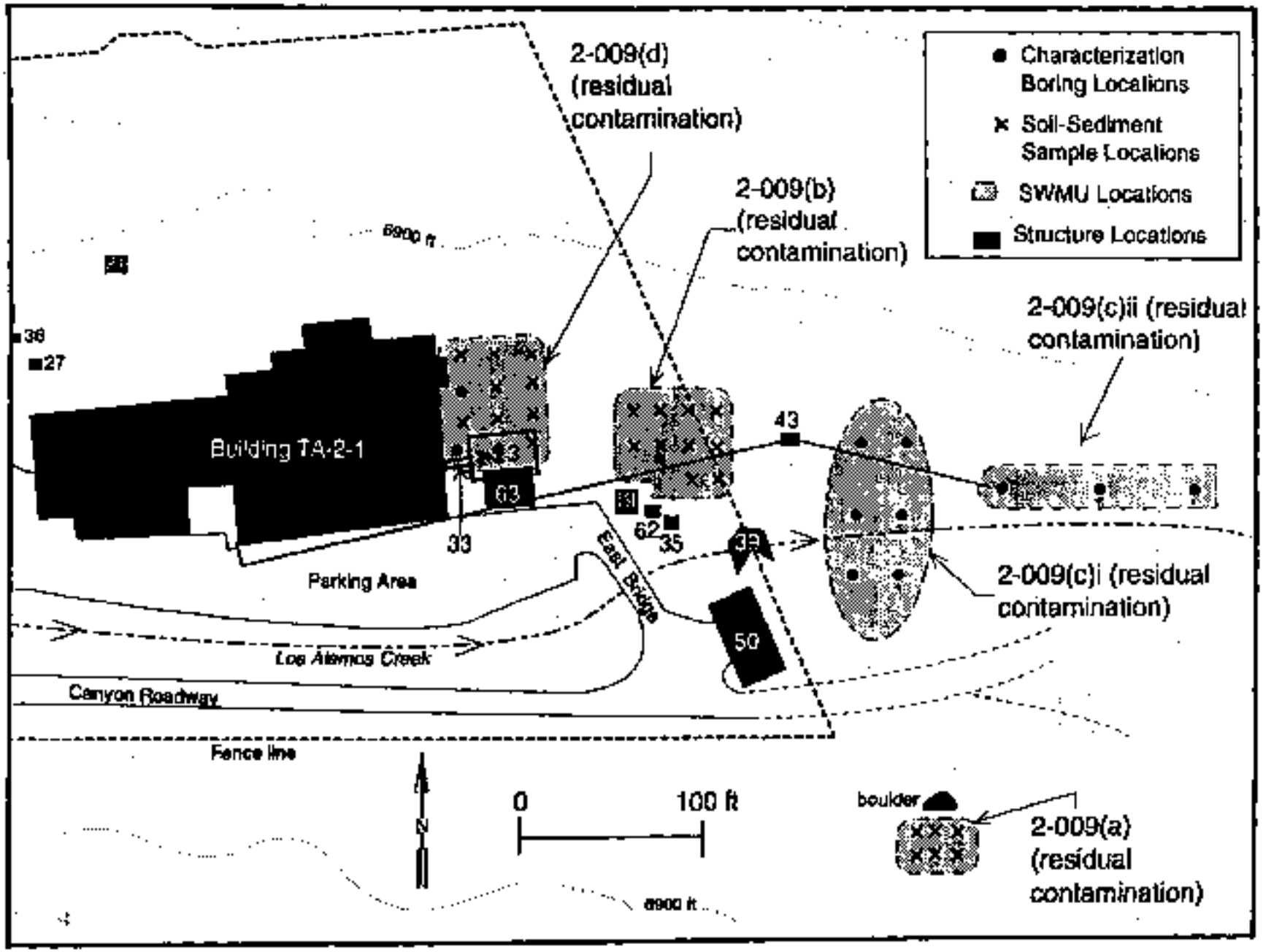


Figure 7.10-1 Proposed SWMU no. 2-009, operational releases, RFI boring-soil sampling locations.

PRS Consolidation Worksheet

Site Type: Asphalt Batch Plant

Proposed PRS Number: 03-009(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-009(a)	HSWA	Surface disposal - (inactive)	Metals, SVOCs/TPH	Upper Sandia
03-028	HSWA	Stormwater holding pond - (active)	Metals, Asbestos, SVOCs/TPH	Upper Sandia
03-029	HSWA	Disposal area - (inactive)	Metals, SVOCs/TPH	Upper Sandia
03-036(a)	HSWA	Aboveground tank - (inactive)	Metals, SVOCs/TPH	Upper Sandia
03-036(c)	HSWA	Aboveground tanks - (inactive)	Metals, SVOCs/TPH	Upper Sandia
03-036(d)	HSWA	Aboveground tank - (inactive)	Metals, SVOCs/TPH	Upper Sandia
03-043(b)	Non-HSWA	Aboveground tank - (inactive)	Metals, SVOCs/TPH	Upper Sandia
03-043(d)	Non-HSWA	Aboveground asphalt tank - (inactive)	Metals, SVOCs/TPH	Upper Sandia
03-043(h)	Non-HSWA	Aboveground asphalt tank - (inactive)	Metals, SVOCs/TPH	Upper Sandia
03-045(g)	HSWA	Storm Drain - (active)	Metals, SVOCs/TPH	Upper Sandia

Consolidation Checklist Criteria:

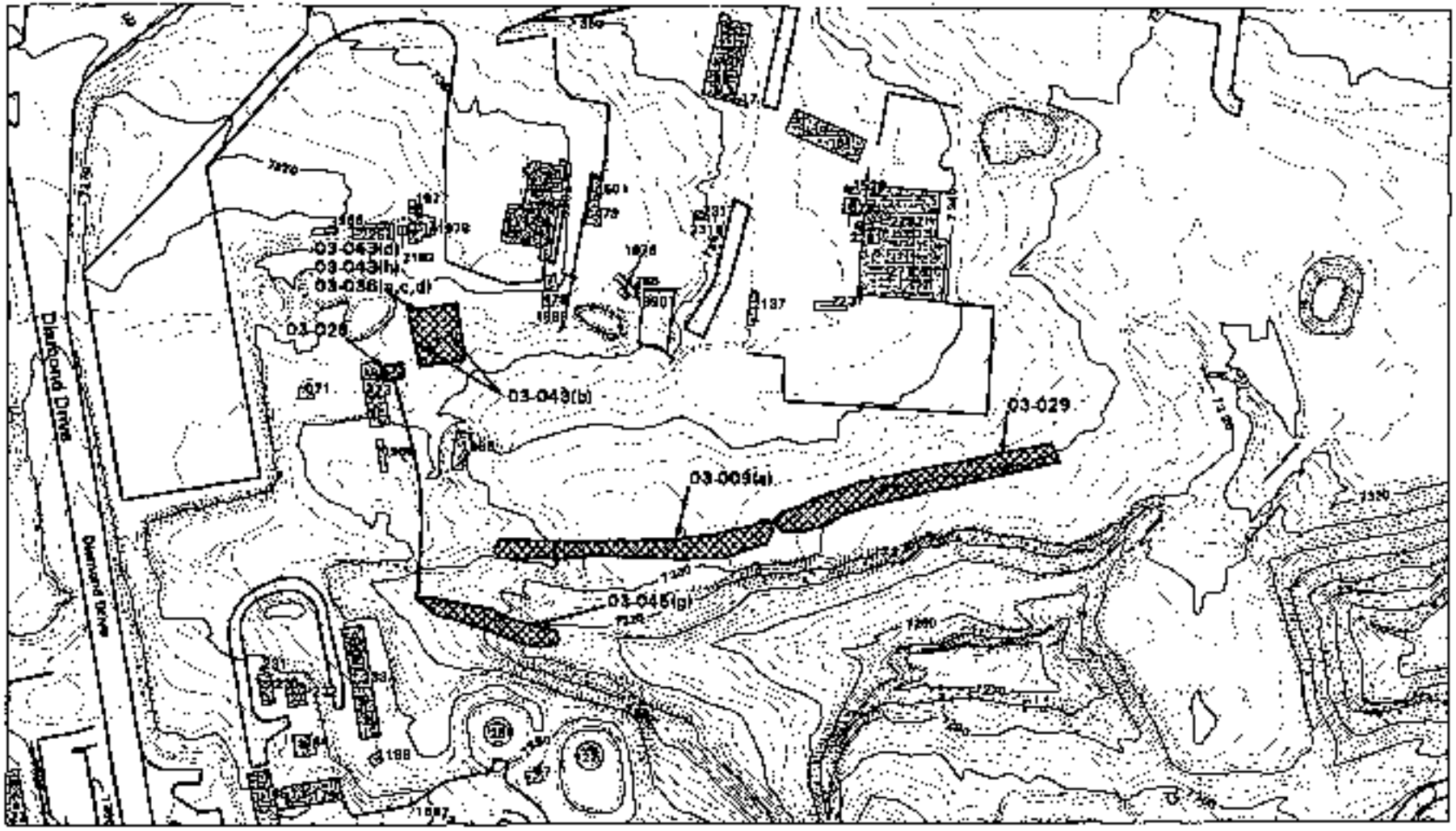
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, commingled COPCs, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit are associated with the asphalt batch plant at TA-3. PRS 3-009(a) is a former surface disposal site located just south of the batch plant where soil fill, and building debris from the plant were disposed. PRS 3-028 is an active concrete holding pond including a drain line and outfall that serves as a settling pond for mineral dust and particulate captures by scrubber from the plant. The NPDES-permitted outfall discharges to Sandia Canyon. PRS 3-029 is an inactive landfill used for the disposal of asphalt-related wastes including asphalt emulsion and sealer, and cured asphalt. PRSs 3-036(a, c and d) and PRSs 3-043(b, d and h) are the locations of former aboveground asphalt emulsion storage tanks at the plant. PRS 3-045(g) is a storm drain including drain line and NPDES-permitted outfall that collects storm water runoff from the areas around the batch plant and discharges to Sandia Canyon.



PRS Consolidation Unit 03-009(a)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Tics:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

RMAD-G106890 12 Jul 00

PRS Consolidation Worksheet

Site Type: Miscellaneous - TA-3 Power Plant

Proposed PRS Number: 03-012(b)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-012(b)	HSWA	Operational release and outfall - (active)	Metals, SVOCs, TPH	Upper Sandia
03-014(q)	HSWA	Treated effluent storage tank	Metals, SVOCs, TPH	Upper Sandia
03-045(b)	HSWA	Outfall and drain lines - (active)	Metals, SVOCs, TPH	Upper Sandia
03-045(c)	HSWA	Outfall and drain lines - (active)	Metals, SVOCs, TPH	Upper Sandia

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit are all associated with waste water from the TA-3 Power Plant. PRS 3-012(b) is an NPDES-permitted outfall, including drain lines, from TA-3-22. Between 1951 and 1985, treated effluent from the TA-3 WWTP was used in Power Plant's cooling towers. The effluent was pumped from the WWTP to a holding tank in the power plant (PRS 3-014(q)). The use of treated effluent water was discontinued in 1990. PRS 3-045(b) is the NPDES-permitted outfall, including drain lines, from cooling towers TA-3-25 and -58 which served the Power Plant. This outfall overlaps PRS 3-012(b). Cooling tower TA-3-25 was demolished in 1990. PRS 3-045(c) is an NPDES-permitted outfall, including drain lines, that receives effluent from cooling tower TA-3-285 which serves the Laboratory's computer center. This outfall is adjacent to PRS 3-012(b). Waste water discharged to all three outfalls was treated with the same chemicals.

PRS Consolidation Unit 03-012(b)-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy

Produced by Mandis Jones

RMAD G106442 07 Apr 00

PRS Consolidation Worksheet

Site Type: Drain Lines and Outfalls

Proposed PRS Number: 03-013(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-013(a)	HSWA	Storm drain and outfall - (active)	Metals, SVOCs, TPH, PCBs	Upper Sandia
03-052(f)	HSWA	Drain lines and outfall - (inactive)	Metals, SVOCs, TPH, PCBs	Upper Sandia

Consolidation Checklist Criteria:

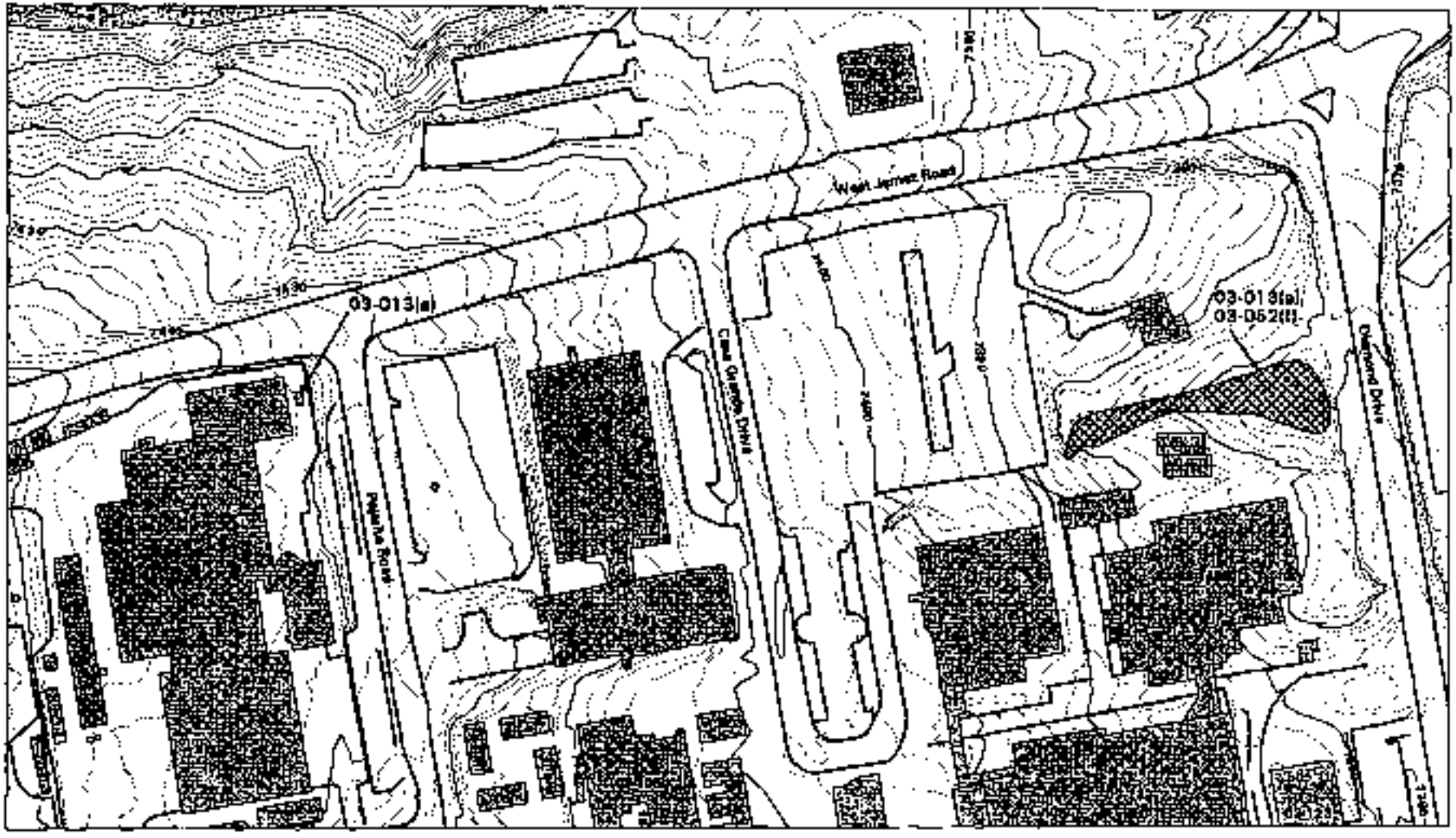
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The two PRSs in this consolidated unit consist of storm drains, drain lines and an outfall. PRS 3-013(a) is storm drain serving the area around the JCI shop building (TA-3-38). The drain line consists of a corrugated metal pipe that runs beneath TA-3 and daylights 100 feet east of the Otowi Building. Floor drains from the basement of TA-3-38 may have previously discharged to the drain line, but they are now tied to the sanitary sewer. PRS 3-052(f) consists of drains, drain lines and an outfall that received flow from TA-3-207, and possibly from TA-3-105. The drains in these buildings were tied to the sanitary sewer in 1991. The outfalls are collocated.



PRS Consolidation Unit 03-013(a)-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Trimmers Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marvin Jones

RMAD G108443 10 Apr 00

PRS Consolidation Worksheet

Site Type: Waste Water Treatment Plant

Proposed PRS Number: 03-014(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-014(a)	HSWA	Former Imhoff Tanks	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(b)	HSWA	Former Dosing siphons	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(b2)	Non-HSWA	Former Outfall	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(c)	HSWA	Former Trickling filters	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(c2)	Non-HSWA	Former Outfall	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(d)	HSWA	Former Secondary clarifiers	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(e)	HSWA	Former Imhoff tanks	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(f)	HSWA	Former Dosing siphons	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(g)	HSWA	Former Trickling filters	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(h)	HSWA	Former Secondary clarifiers	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(i)	HSWA	Former Comminutor and bar rack	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(j)	HSWA	Former Effluent pump pit	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(k)	HSWA	Former Drying beds	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(l)	HSWA	Former Drying beds	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(m)	HSWA	Former Drying beds	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(n)	HSWA	Former Drying beds	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(o)	HSWA	Former Drying beds (3)	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(p)	HSWA	Former Sewage lift station	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-014(u)	HSWA	Former Holding Tank	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia
03-056(d)	HSWA	Former Drum Storage Area, added FY00	Rad, Metals, cyanide, PCBs, pest., Herb., SVOCs, VOCs	Upper Sandia

Consolidation Checklist Criteria:

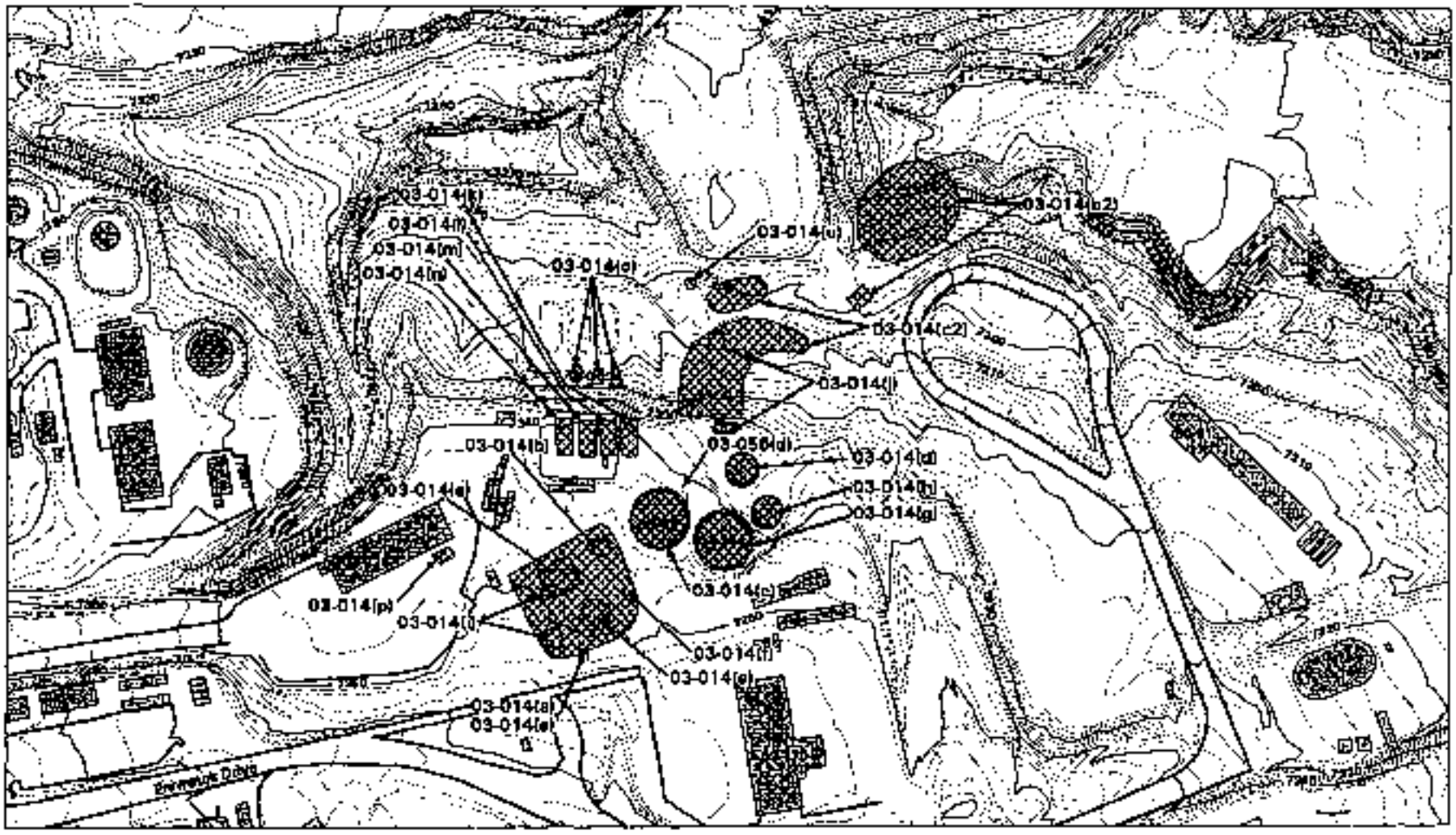
	Yes	No
1. *Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?*	☑	☐
2. *Is the contamination origin non-discernable?*	☑	☐
3. *Are the PRSs in the same geographic proximity?*	☑	☐
4. *Are the transport mechanisms and pathways similar?*	☑	☐
5. *Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?*	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, transport mechanisms (surface and shallow subsurface), and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The TA-3 waste water treatment plant (WWTP) is a large operation and consists of two plants, designated as plant 1 (built in 1951) and plant 2 (built in 1965). The components of each plant are similar. The plants were used for the biological treatment of sanitary waste from TA-3, TA-43, and liquids from septic tanks. The 1990 SWMU report also notes that floor and sink drains from some industrial areas within TA-3 are also connected to the sanitary sewer. It is expected that contamination at the WWTP will not be discernable between the two plants and the ancillary equipment including interconnecting piping and drain lines between WWTP components. One former sewage lift station (PRS 3-014(p)) and associated drain line which served Building TA-3-265 located approximately 100 feet east of the plant is also included in this consolidated unit. The plant is currently inactive since the sewer lines were tied into the Laboratory SWSC in the early 1990s. PRS 3-056(d), added to this unit in FY00 is a former drum storage area previously located adjacent to trickling filter TA-3-47 at the TA-3 WWTP. Drums of lubricating oil used at the plant were stored in this area during the period of time the WWTP was in operation.



PRS Consolidation Unit 03-014(a)-99

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

RMAD G108444 10 Apr 00

PRS Consolidation Worksheet

Site Type: Drain lines and Outfalls

Proposed PRS Number: 03-015-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-015	HSWA	Outfall and drain lines - (Inactive)	Rad, Metals, SVOCs, PCBs	Upper Sandia
03-053	Non-HSWA	Facility and drain lines - (Inactive)	Rad, Metals, SVOCs, PCBs	Upper Sandia

Consolidation Checklist Criteria:

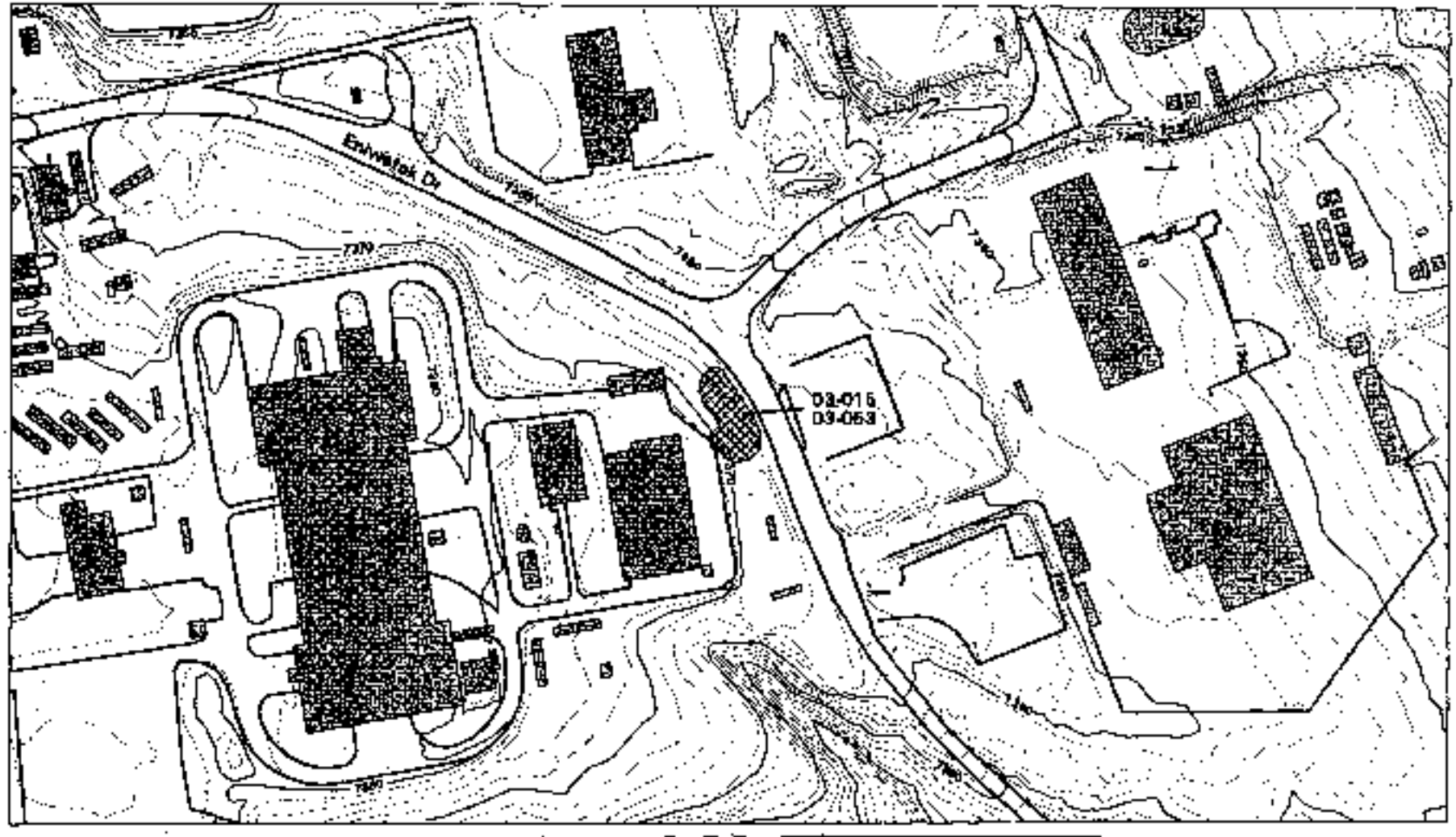
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, common waste streams, geographical proximity, similar transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 3-015 is an inactive outfall and drain lines that previously received discharges from floor, sink and roof drains in TA-3-141, the Rolling Mill Building. PRS 3-053 is designated as the basement area of the Rolling Mill Building with floor drains that formerly discharged to PRS 3-015. Areas of the building that may have discharged to the outfall include the former beryllium facility, mezzanine floor drains and roof drains. Floor and sink drains have since been rerouted to TA-50 and the roof drains to another outfall. The drain lines were decommissioned in 1993. COPCs are commingled within PRS 3-015.



PRS Consolidation Unit 03-015-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FIMAD G108445 10 Apr 00

PRS Consolidation Worksheet

Site Type: Tanks and/or Assoc. Equipment

Proposed PRS Number: 03-038(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-038(a)	HSWA	Acid waste tank - (inactive)	Rad, Metals, SVOCs	Upper Los Alamos
03-038(b)	HSWA	Acid waste tank - (inactive)	Rad, Metals, SVOCs	Upper Los Alamos

Consolidation Checklist Criteria:

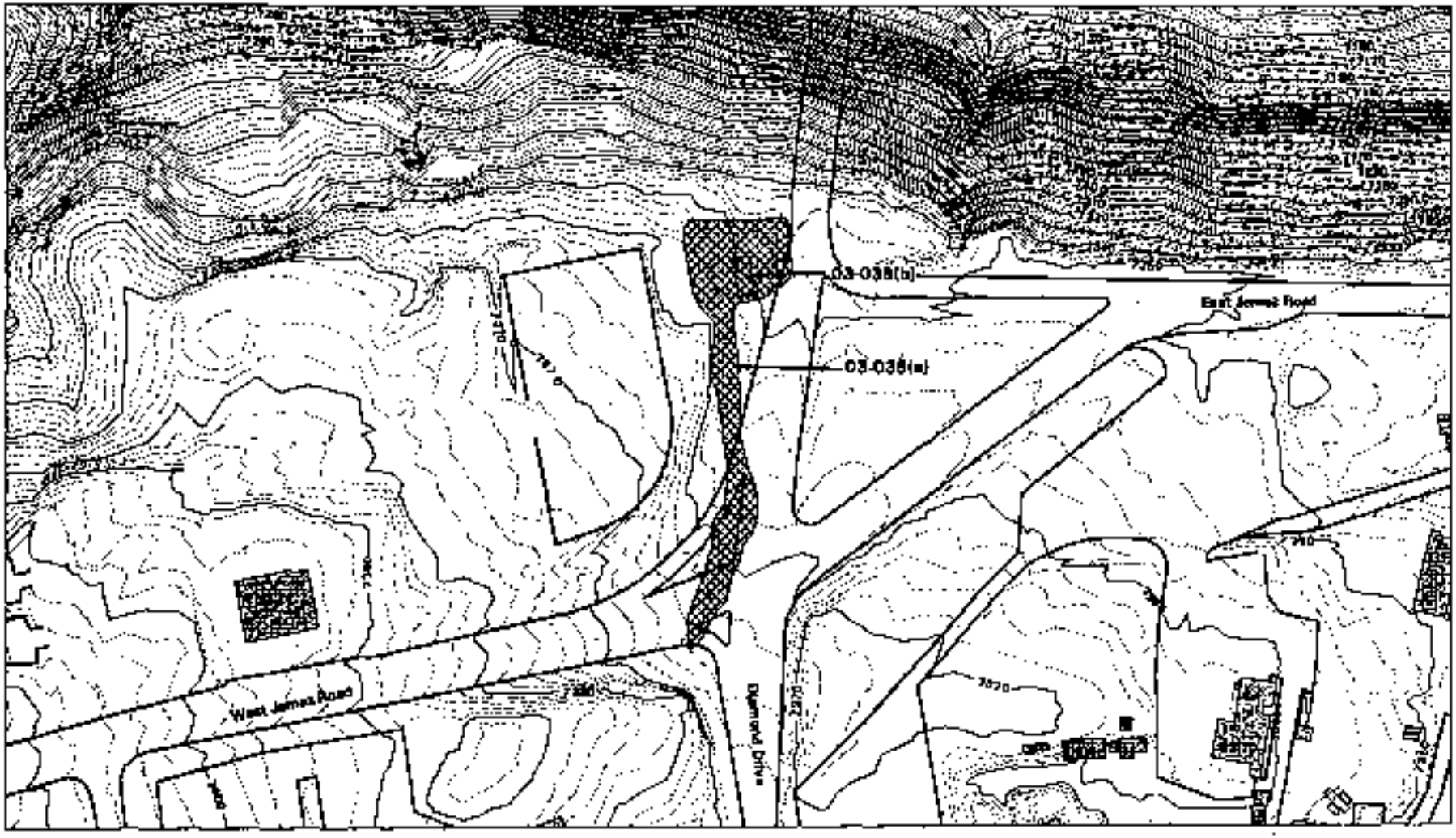
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The two PRSs in this consolidated unit were components of the Radioactive Liquid Waste Lines Removal Project of 1981-1986. PRS 3-038(a) was an acid neutralizing and pumping building with two concrete underground storage tanks (TA-3-700). This was the central collection point for industrial waste from TA-3. The tanks were routinely pumped and the wastes taken to TA-50. PRS 3-038(b) was a 26,500-gal. acid waste retention tank located just north of PRS 3-038(a). In 1982, the tanks and building were removed and taken to TA-54, and all drain lines leading into and out of the PRSs were removed and the soils around the drain lines remediated. COPCs are commingled.



PRS Consolidation Unit 03-038(a)-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400
FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marvin Jones

FMAD G108448 10 Apr 00

PRS Consolidation Worksheet

Site Type: Drain Lines and Outfalls

Proposed PRS Number: 03-045(h)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-045(h)	HSWA	Cooling Tower Outfall - (Inactive)	Metals	Upper Sandia
03-049(a)	HSWA	Cooling Tower Outfall - (inactive)	Rad, Metals	Upper Mortandad

Consolidation Checklist Criteria:

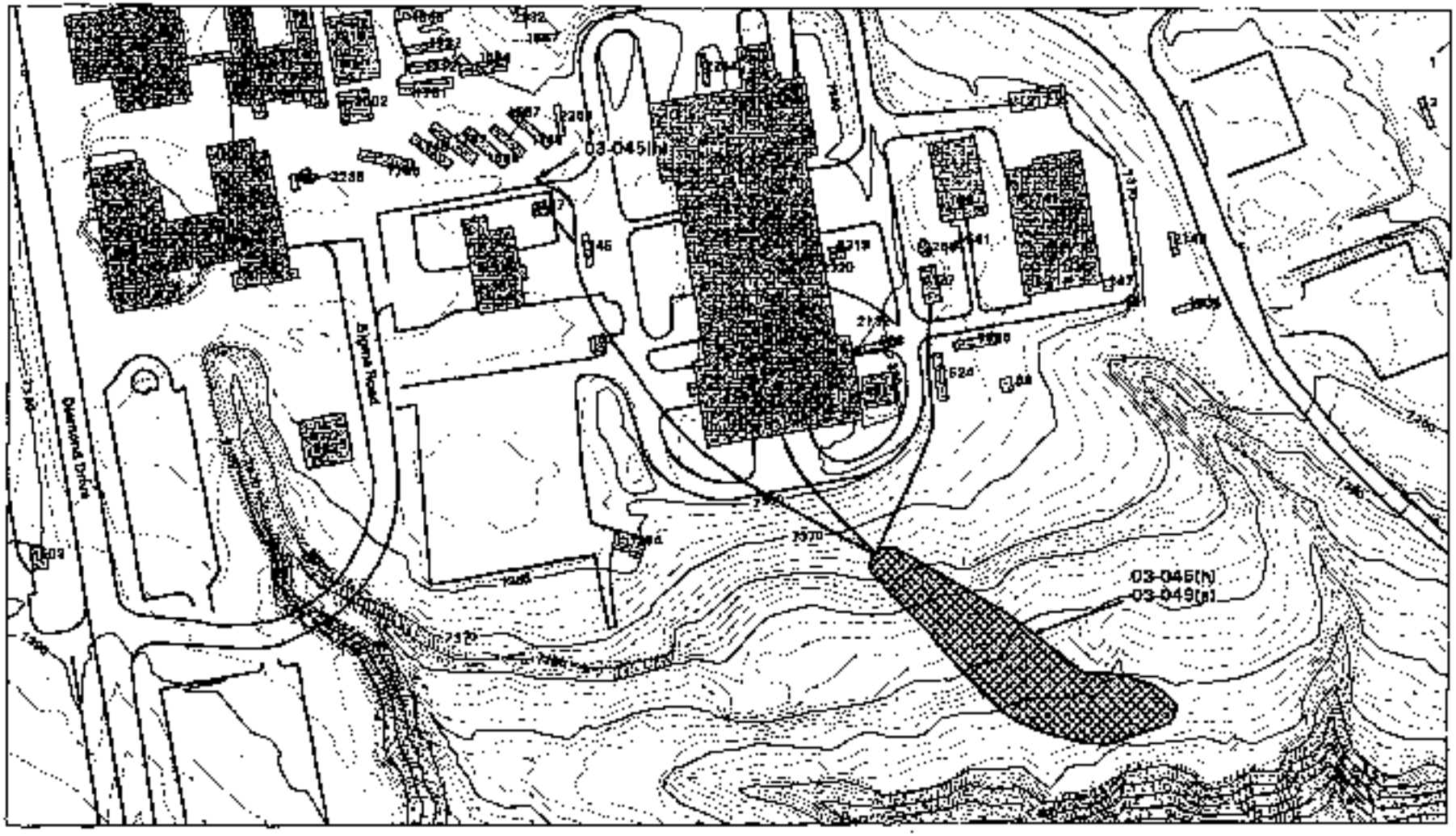
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative affect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 3-045(h) is the former NPDES-permitted outfall and drain line that received treated wastewater from cooling tower TA-3-187. PRS 3-049(a) is a former NPDES-permitted outfall and drain lines that received treated wastewater from cooling tower TA-3-127. From 1984 to 1990, the outfall also received discharge from rinse tanks associated with an electroplating operation in TA-3-66 (Sigma Building). The outfall areas of these two PRSs overlap allowing COPCs to commingle.



PRS Consolidation Unit 03-045(h)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Nancie Jones

FMAD G108624 18 Jul 00

PRS Consolidation Worksheet

Site Type: Miscellaneous

Proposed PRS Number: 03-049(b)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-049(b)	HSWA	Operational release - (inactive)	Rad. Metals, TPH	Upper Mortandad
C-03-014	Non-HSWA	Equipment Storage area - (inactive)	Rad, Metals, TPH	Upper Mortandad

Consolidation Checklist Criteria:

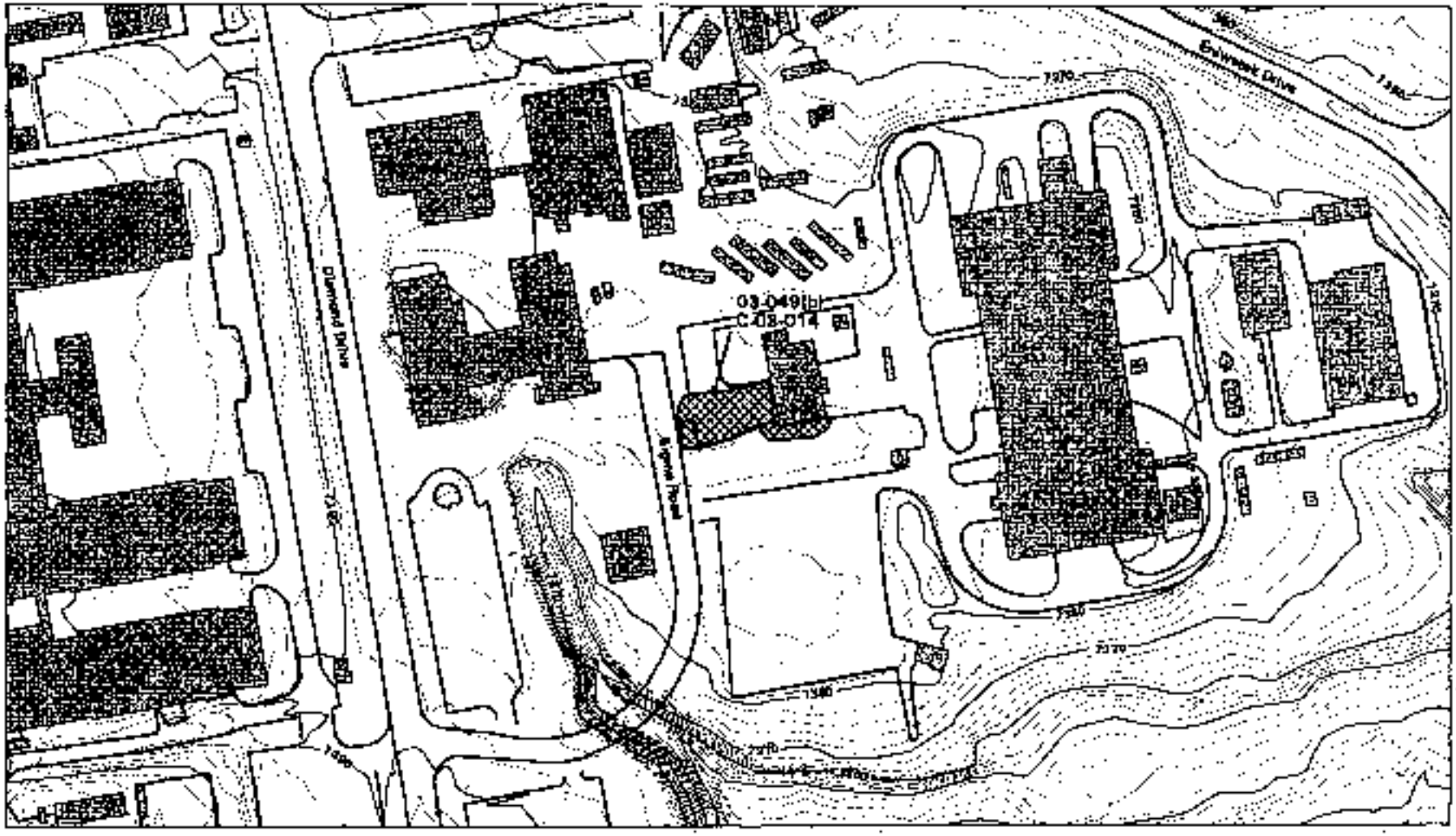
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 3-049(b) is the location of a former exhaust outlet from an inactive vacuum pump in the Press Building (TA-3-35). The pump was used to remove oil from furnaces in the building. The exhaust outlet was located 8 feet above the ground on the south wall of TA-3-35. PRS C-03-014 is the former location of an equipment storage area where scrap (containing oil) and radioactively-contaminated equipment was stored. Boundaries of the storage area overlap the area of the exhaust outlet and storm water runoff from both PRSs is commingled.



PRS Consolidation Unit 03-049(b)-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Prepared by Marcia Jones

RMAD-G 109449 10 Apr 00

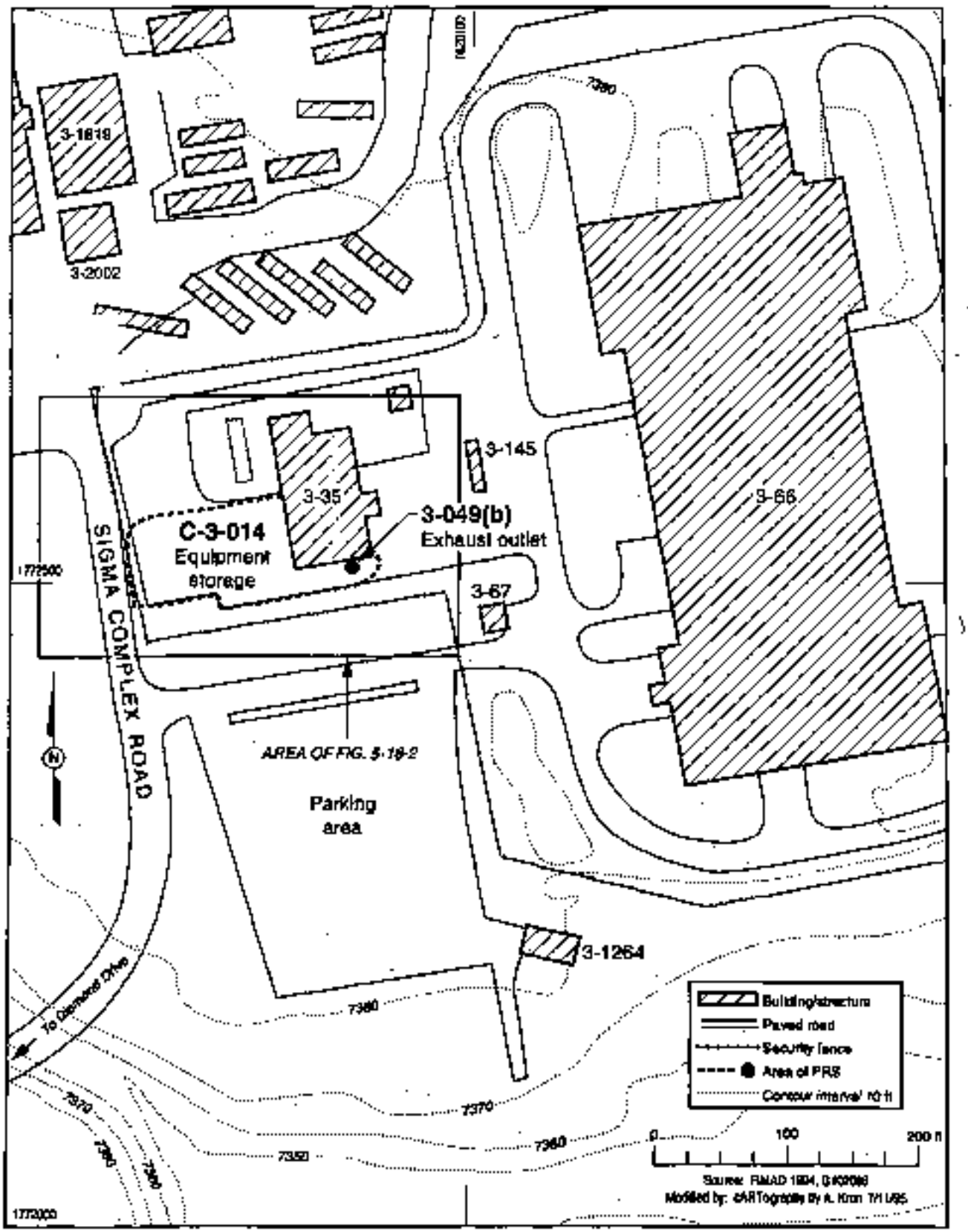


Fig. 5-18-1. Site location map of SWMU 3-049(b) and C-3-014.

PRS Consolidation Worksheet

Site Type: Soil Contamination

Proposed PRS Number: 03-050(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
03-050(a)	HSWA	Stack emissions, CMR Bldg. - (active)	Rad, Metals	Upper Mortandad
03-050(d)	HSWA	Stack emissions, Bldg.TA-3-102 - (inactive)	Rad, Metals	Twomile
03-050(f)	HSWA	Stack emissions, Bldg.TA-3-40 - (inactive)	Rad, Metals	Twomile
03-050(g)	HSWA	Stack emissions, Bldg.TA-3-16 - (inactive)	Rad, Metals	Twomile

Consolidation Checklist Criteria:

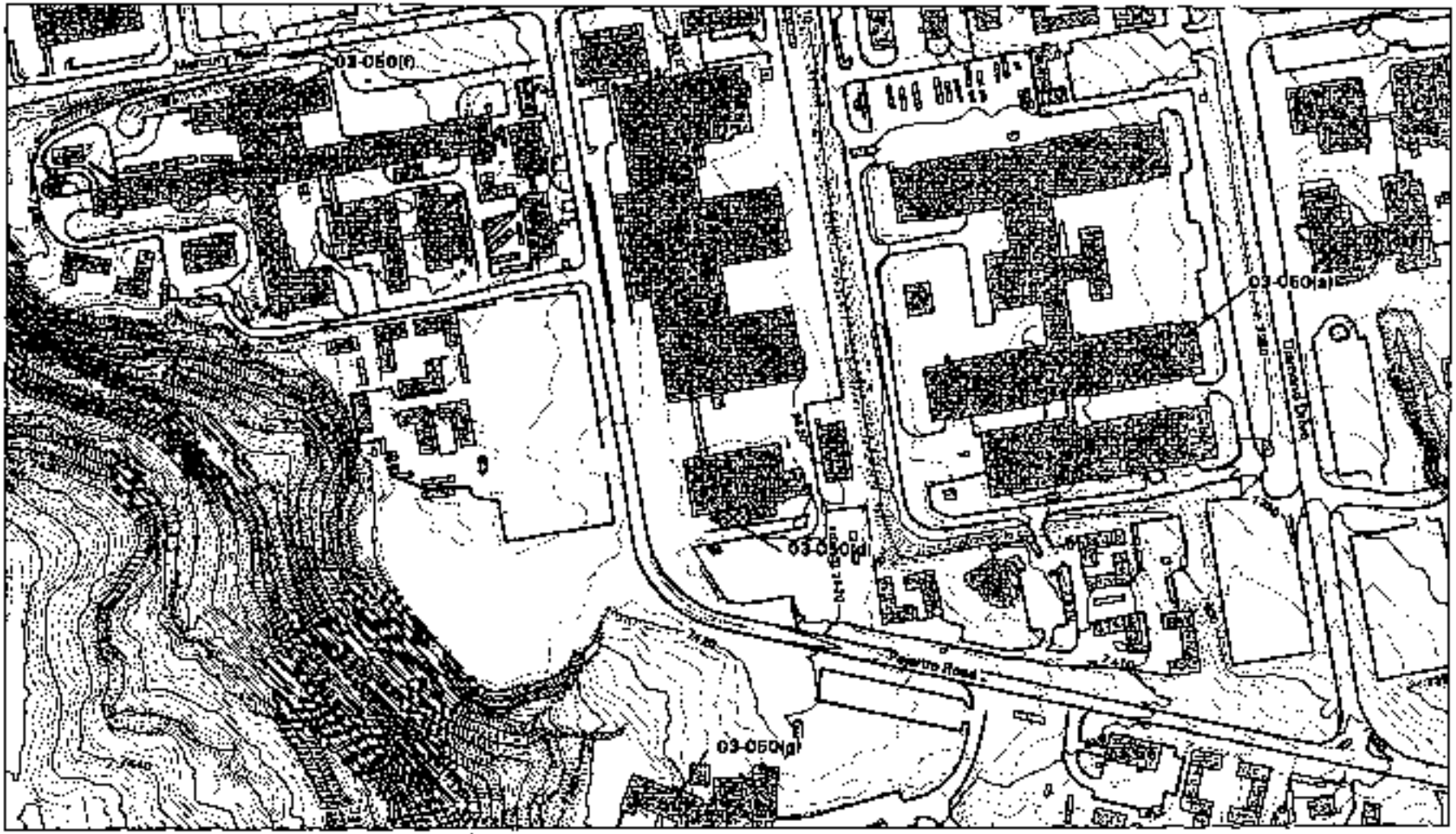
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit are associated with stack emissions from buildings located within TA-3, and the potential soil contamination resulting from these emissions. COPCs are commingled throughout TA-3. PRS 3-050(a) is attributed to emissions from exhaust stacks located at TA-3-29 (CMR Building). PRS 3-050(d) is where potential soil contamination may have occurred from the exhaust system on TA-3-102 where radioactive materials were machined for the Power Program. PRS 3-050(g) is the potential soil contamination resulting from exhaust stacks at TA-3-40 which housed a variety of operations using radioactive materials. PRS 3-050(g) is the potential soil contamination attributed to tritium emissions from stack on the Van de Graaff Building (TA-3-16) which is now inactive. The majority of these building stack systems have been upgraded and operations generating the emissions ceased. These units were identified for consolidation by NMED during discussions in FY98 regarding PRSs proposed for NFA in previous permit mod. requests.



PRS Consolidation Unit 03-050(a)-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:3600

0 200 400

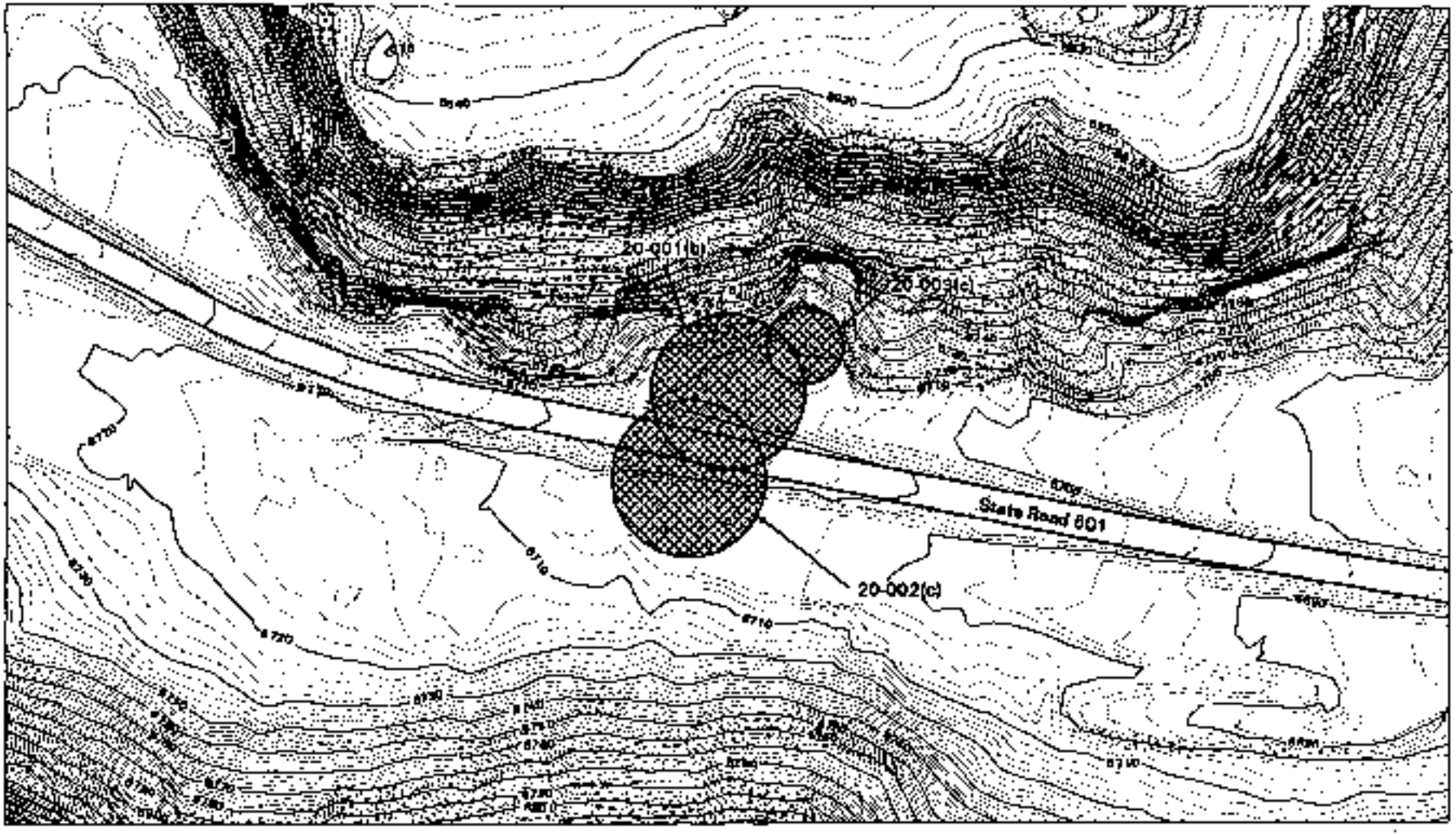
FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

RMAD G108460 10 Apr 00



PRS Consolidation Unit 20-001(b)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Mark Jones

FIMAD-G109849 13 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site

Proposed PRS Number: 20-001(c)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
20-001(c)	HSWA	Landfill - (inactive)	Rad., Metals, HE	Lower Sandia
20-002(a)	HSWA	Firing site - (inactive)	Rad, Metals, HE	Lower Sandia
20-002(b)	HSWA	Firing site - (inactive)	Rad, Metals, HE	Lower Sandia

Consolidation Checklist Criteria:

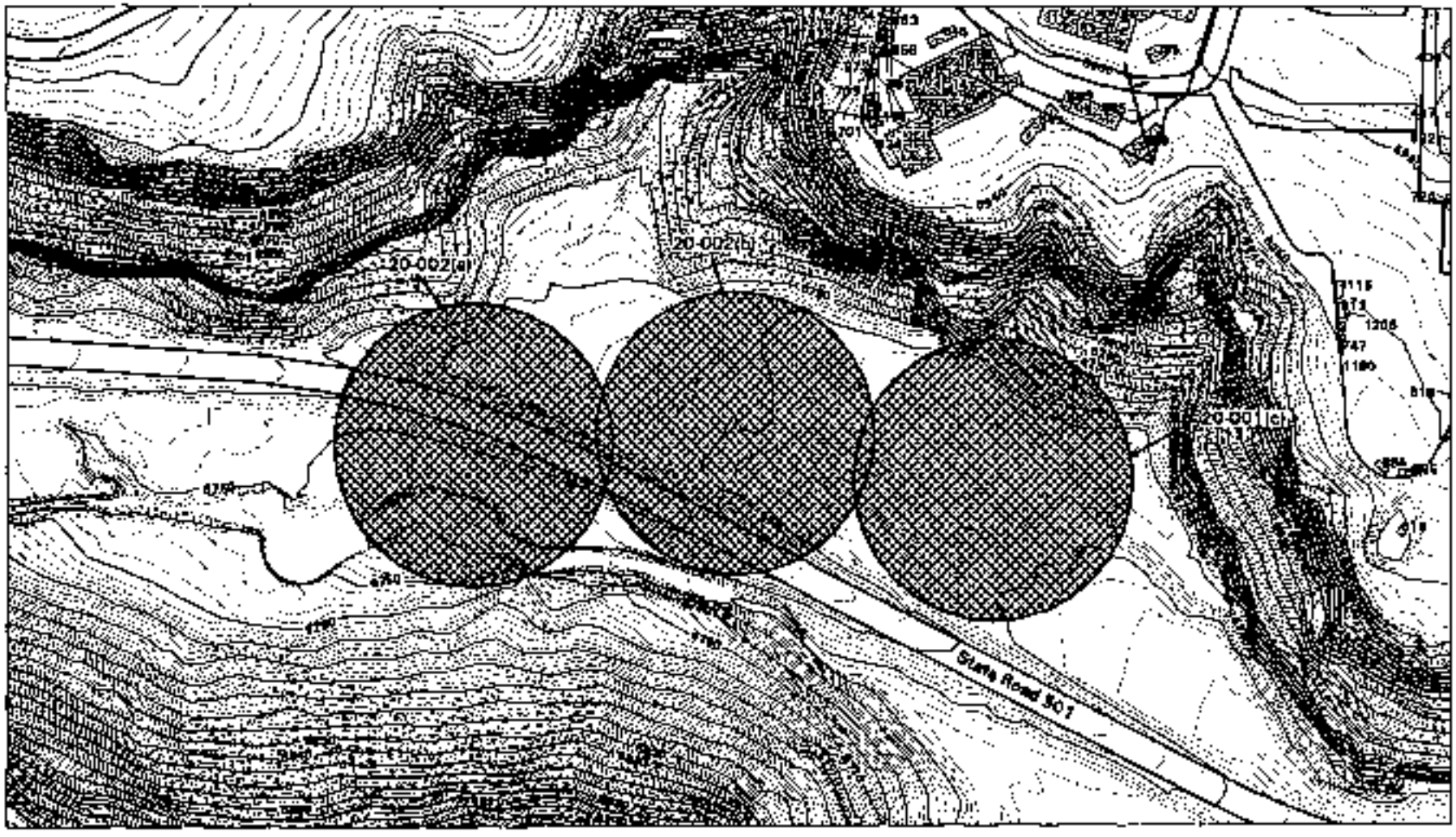
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams; geographical proximity, transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 20-001(c) is a small landfill known as Sandia Canyon Area 3. Debris from the adjoining firing sites (PRS 20-002(a and b)), and from the decommissioned control building and berm were disposed in the landfill. The blast radii of the two firing sites overlapped each other and all associated structures



PRS Consolidation Unit 20-001(c)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Martin Jones

RMAD G106850 13 Jul 00

PRS Consolidation Worksheet

Site Type: Miscellaneous

Proposed PRS Number: 21-006(c)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
21-006(a)	HSWA	Disposal pit Bldg. 21-2 - (Inactive)	Ethylene glycol, phosphoric acid, Pu	Middle Los Alamos
21-006(b)	HSWA	Disposal pit - (Inactive)	Ethylene glycol, phosphoric acid, Pu	Middle Los Alamos
21-006(c)	HSWA	Subsurface Unit - (Inactive) added FY00	Ethylene glycol, phosphoric acid, Pu	Middle Los Alamos
21-006(d)	HSWA	Subsurface Unit - (Inactive) added FY00	Ethylene glycol, phosphoric acid, Pu	Middle Los Alamos

Consolidation Checklist Criteria:

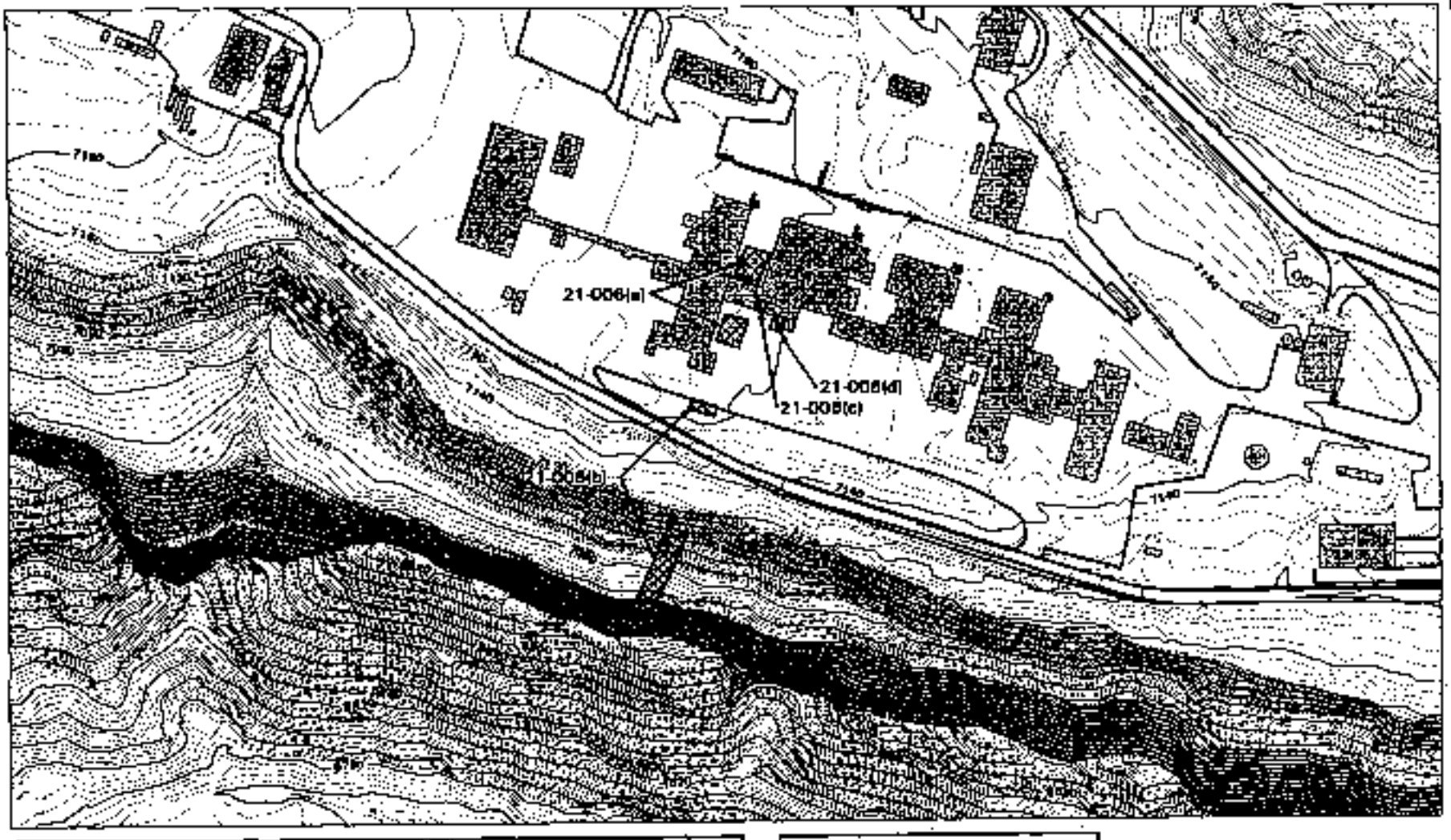
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

These PRSs are thought to be the same PRS or located in the same area, received the same waste streams, and are therefore proposed for consolidation.

Description:

PRS 21-006(c) is the site of an inactive underground seepage pit located outside of room 322 in building TA-21-3, and was used to decontaminate radioactive materials containers from a drain in room 322. Because of additions to building TA-21-3, the location of the pit is under rooms 3133 and 3131 of the addition. PRS 21-006(d) may be the same PRS as 21-006(c) or collocated. PRSs 21-006(a and b) were added to this unit in FY00. PRS 21-006(a) is a former seepage pit and drain lines that appears to be either a duplicate of or collocated with PRSs 21-006(c and d). PRS 21-006(b) also consists of a former seepage pit and drain line from TA-21-2 with an outfall to Los Alamos Canyon. Buildings TA-21-2 and -3 both housed similar laboratories



PRS Consolidation Unit 21-006(c)-99

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FIMAD G1084.78 18 Apr 00

PRS Consolidation Worksheet

Site Type: Waste Water Treatment Plant

Proposed PRS Number: 21-016(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
21-001	Non-HSWA	Rad Waste Storage Area - (inactive)	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-007	HSWA	Former Incinerators - (inactive) added FY00	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-010(a)	HSWA	Former Industrial Liquid Waste Treatment Plant	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-010(b)	HSWA	Former Acid Waste Manhole	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-010(c)	HSWA	Former Acid Waste Storage Tank	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-010(d)	HSWA	Former Acid Waste Storage Tank	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-010(e)	Non-HSWA	Industrial Septic Tank	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-010(f)	HSWA	Former Grit Chamber	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-010(g)	HSWA	Former Acid Tank	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-010(h)	HSWA	Former Acid Waste Manhole	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-011(a)	HSWA	Building 21-257	Rad, Metals, VOCs	Middle Los Alamos
21-011(c)	HSWA	Former Acid Tank and Sump	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-011(d)	HSWA	Aboveground Acid Holding Tank	Rad, Metals, VOCs	Middle Los Alamos
21-011(e)	HSWA	Aboveground Acid Holding Tank	Rad, Metals, VOCs	Middle Los Alamos
21-011(f)	HSWA	Aboveground Effluent Holding Tank	Rad, Metals, VOCs	Middle Los Alamos
21-011(g)	HSWA	Aboveground Effluent Holding Tank	Rad, Metals, VOCs	Middle Los Alamos
21-011(h)	Non-HSWA	Aboveground acid storage tank	Rad, Metals, VOCs	Middle Los Alamos
21-011(i)	HSWA	Aboveground NaOH storage tank	Rad, Metals, VOCs	Middle Los Alamos
21-011(j)	HSWA	Aboveground Am raffinate storage tank	Rad, Metals, VOCs	Middle Los Alamos
21-016(a)	HSWA	4 Absorption Beds	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-016(b)	HSWA	Cassson Building, 21-188	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-016(c)	HSWA	82 Asphalt-Lined Shafts	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-026(a)	Non-HSWA	Former Waste Storage Area	Rad, Metals, VOCs	Middle Los Alamos
C-21-009	Non-HSWA	Cement Paste Spill	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
C-21-012	Non-HSWA	Cement Paste Spill	Rad, Metals, SVOCs, VOCs	Middle Los Alamos

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

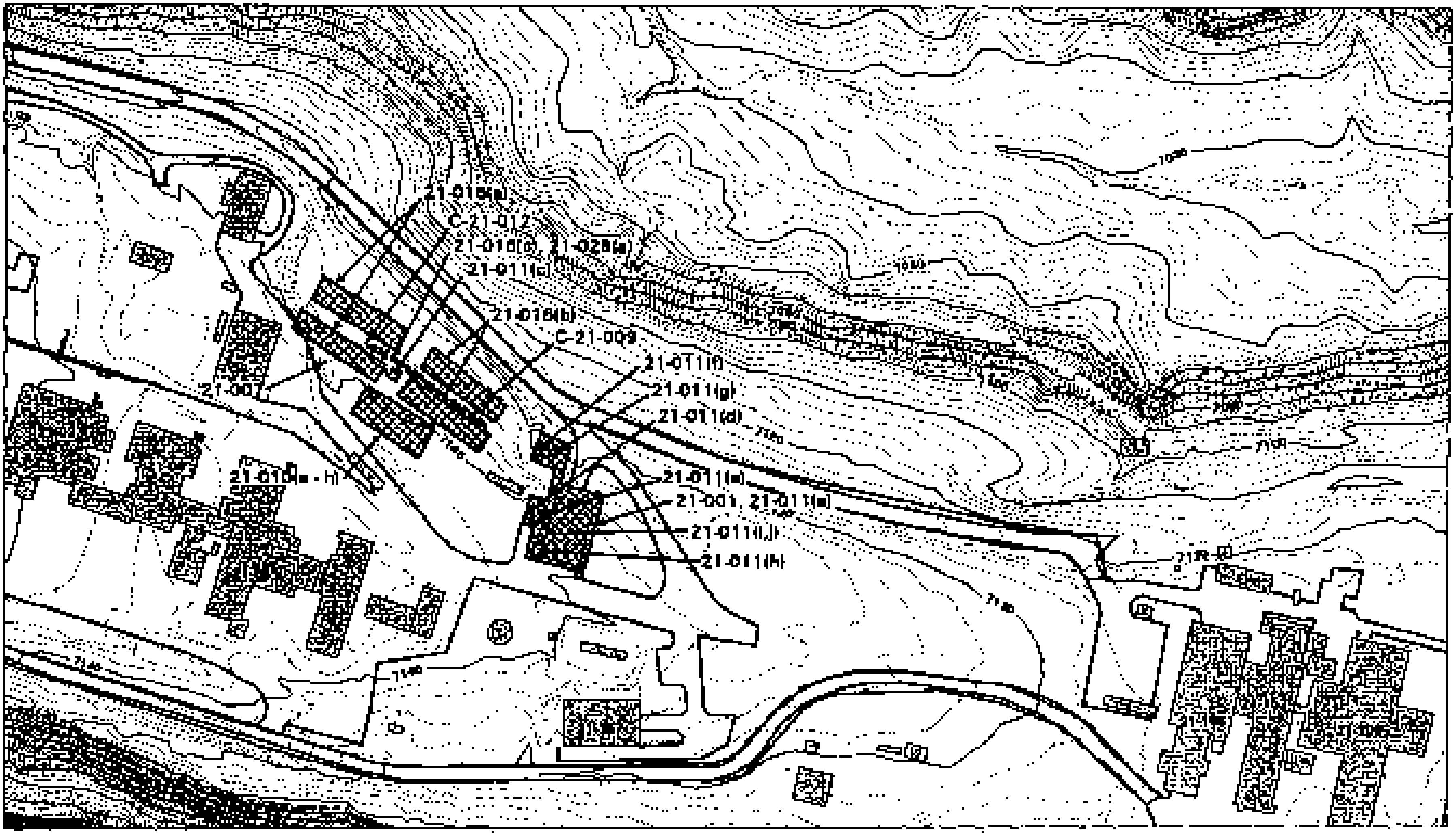
Consolidation Rationale:

Based on the operational history and the geographical proximity of the waste water treatment plant, the holding tanks, and the outfalls, the common waste streams managed, the transport mechanisms (surface to subsurface) of identical contaminants and the investigation needed to assess all of the components of the WWTP, it is proposed that these PRSs be consolidated.

Based on the operational history, waste streams, transport mechanisms (surface to subsurface), geographical proximity, and the investigation needed to assess the above PRSs/AOCs, it is proposed that the PRSs/AOCs be consolidated to identify them as being part of the MDA T inventory.

Description:

These PRSs are associated with the waste water treatment plant at TA-21. PRS 21-011(a) was the waste treatment plant TA-21-257 put into operation in 1967. The plant treated liquid waste from plutonium processing operations associated with DP site for disposal at MDA T and discharged through an outfall (21-011(k)) to DP Canyon. PRSs 21-011(d & e) were 13,500-gal. aboveground acid holding tanks (TA-21-110 & -111) located near building TA-21-257, that received acid waste from DP East, DP West and from the "General's Tanks" (two 50,000-gallon tanks used to store highly enriched plutonium solutions) buried at MDA A. PRS 21-011(f) was a 12,700-gal. aboveground effluent holding tank (TA-21-112) located near building TA-21-257, that received effluent originally from TA-21-35, then after 1967, from TA-21-257. The treated effluent was retained in the tank for three to five days, then discharged to DP Canyon at outfall 21-011(k). After 1982 the effluent was pumped to TA-50 for disposal. PRS 21-011(g) was a 12,700-gal. aboveground effluent holding tank (TA-21-113) located near building TA-21-257, that received effluent originally from TA-21-35, then after 1967, from TA-21-257. The treated effluent was retained in the tank for three to five days, then discharged to DP Canyon. After 1982 the effluent was pumped to TA-50 for disposal. PRS 21-011(h) was a 2,000-gal. aboveground acid storage tank (TA-21-258) located near building TA-21-257, that was known as Pug Mill Tank. The tank was removed in 1986. PRS 21-011(i) was a 1,000-gal. aboveground sodium hydroxide storage tank (TA-21-288) located near building TA-21-257, installed in 1967. PRS 21-011(j) was a 1,600-gal. aboveground americium raffinate storage tank (TA-21-289) located near building TA-21-257, installed in 1967. Reported spills during tanker truck transfer operations occurred to the surrounding area not originally asphalted. The exact date the tank was taken out of operation is not known. PRS 21-001 was a storage area for the WWTP. TA-21 (DP Mesa) has several MDAs associated with it. MDA T consists of four absorption beds, a distribution sump, retrievable waste storage area (currently empty and backfilled), a series of disposal shafts (up to 8 ft. in diameter and 70 ft. deep), the former waste treatment plant (TA-21-35), and cement paste spills on the surface and within the retrievable waste storage area. Historic operations at MDA T involved the disposal of radioactive liquid process wastes from the purification of radioactive materials. PRS 21-007, added to this unit in FY00, was the location of an incinerator used to burn salamanders after testing. The incinerator was located on top of MDA T. The remainder of the PRS in this consolidated unit (PRSs 21-010(a-h) and 21-026(a)) are comprised of PRSs associated with decommissioned waste treatment facilities and various storage areas. These PRSs are either adjacent to or within the PRS boundary of MDA T. TA-21 (DP Mesa) has several MDAs associated with it. MDA T consists of four absorption beds, a distribution sump, retrievable waste storage area (currently empty and backfilled), a series of disposal shafts (up to 8 ft. in diameter and 70 ft. deep), the former WWTP (TA-21-35), and cement paste spills on the surface and within the retrievable waste storage area. Historic operations at MDA T involved the disposal of radioactive liquid process wastes from the purification of radioactive materials.



PRS Consolidation Unit 21-016(a)-99

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400
FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FIMAD G108400 18 Apr 00

PRS Consolidation Worksheet

Site Type: MDA V

Proposed PRS Number: 21-018(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
21-013(b)	HSWA	Surface Disposal Site - (inactive)	Rad, Metals, VOCs	Middle Los Alamos
21-013(g)	Non-HSWA	Surface disposal site - (inactive)	Rad, Metals, VOCs	Middle Los Alamos
21-018(a)	HSWA	Liquid disposal pits - (inactive)	Rad, Metals, VOCs	Middle Los Alamos
21-018(b)	HSWA	Former laundry facility - (inactive)	Rad, Metals, VOCs	Middle Los Alamos
21-023(c)	HSWA	Septic system - (inactive) added FY00	Rad, Metals, VOCs	Middle Los Alamos

Consolidation Checklist Criteria:

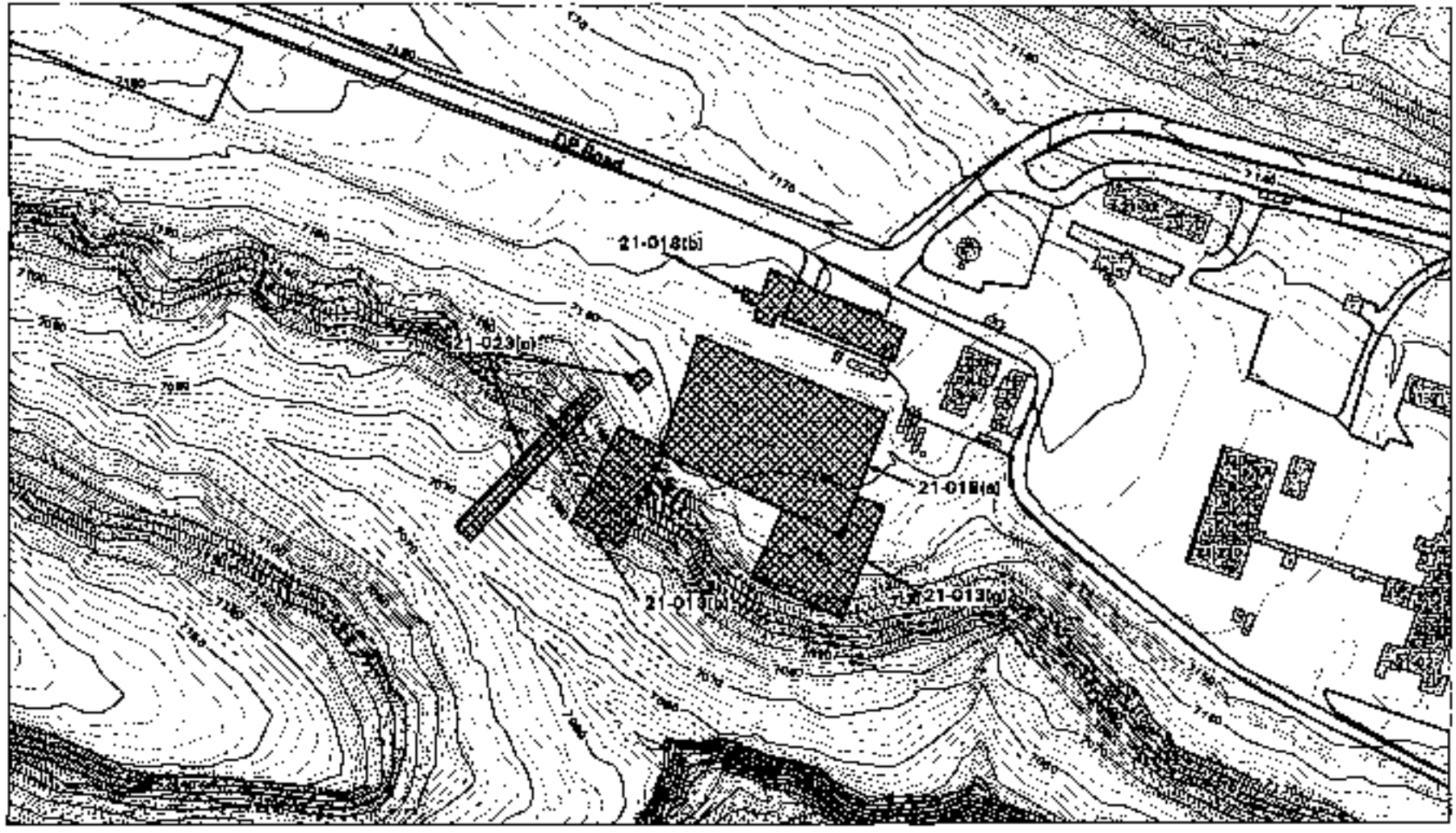
	Yes	No
1. *Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?*	☑	☐
2. *Is the contamination origin non-discernable?*	☑	☐
3. *Are the PRSs in the same geographic proximity?*	☑	☐
4. *Are the transport mechanisms and pathways similar?*	☑	☐
5. *Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?*	☑	☐

Consolidation Rationale:

Based on operational history of the laundry facility, geographic proximity of each of the associated PRSs, transport mechanisms (surface and subsurface) of identical contaminants, and the type of investigation needed to assess these PRSs and surrounding area, they are proposed for consolidation.

Description:

PRSs 21-013(b, g) and 21-018(a, b) are associated with Material Disposal Area (MDA) V. PRS 21-018(a) consists of three liquid absorption beds (20 ft x 200 ft x 8 ft deep) designed to dispose of the outflow from the radioactive laundry facility (PRS 21-018(b)) and the 6" iron pipe that piped the outflow from PRS 21-018(b). The beds were in continuous use from 1945 to 1961. Historic evidence shows the bed were under-designed for the volume of waste water discharged, resulting in overflows into the adjacent drainage and into Los Alamos Canyon. PRSs 21-013(b, g) are surface disposal areas (building debris pushed over the mesa edge) immediately down gradient from the absorption beds; overflows from the beds flowed over these PRSs. The laundry facility structure has been removed. PRS 21-023(c), added to this unit in FY00, was the septic system including tank, drain lines and outfall, that served the waste treatment laboratory, TA-21-33. This PRS was located adjacent to MDA V and has identical COPCs.



PRS Consolidation Unit 21-018(a)-99

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FIMAD G109481 19 Apr 00

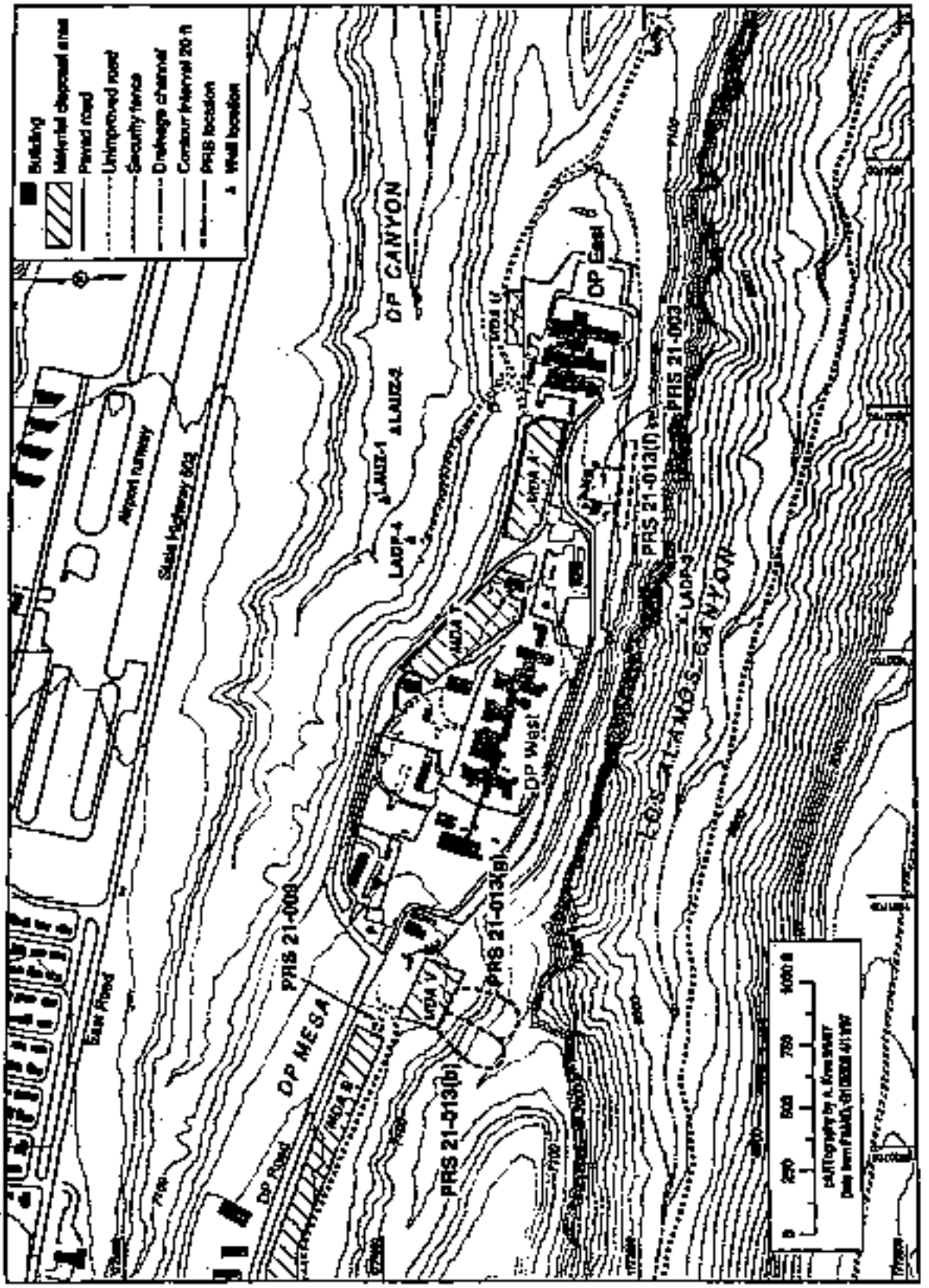


Fig. 1.1-3 Location of PRSs 21-013(b, f, and g)

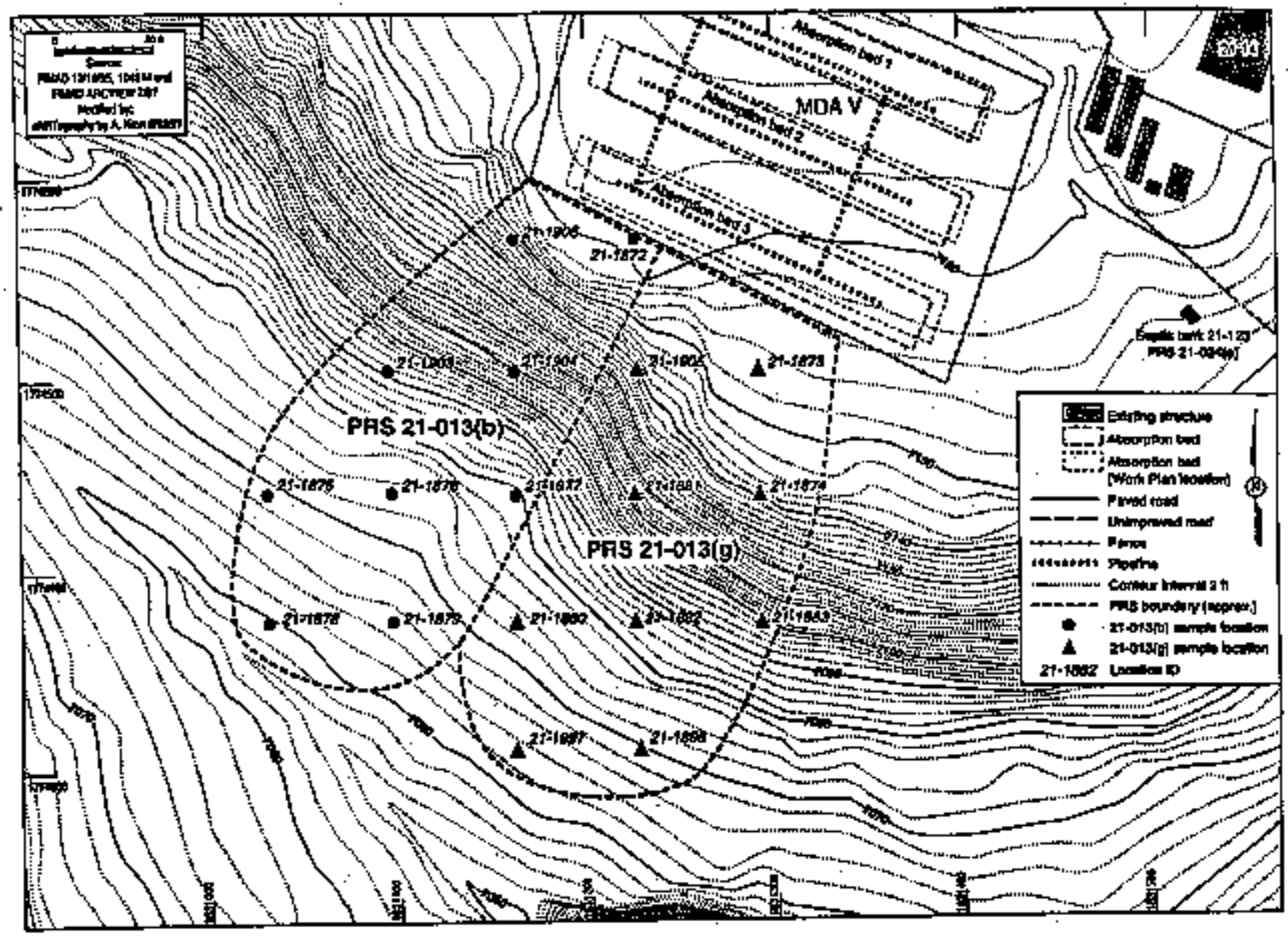


Fig. 5.1.4-1. Locations of samples collected at PRSs 21-013(b,g).

PRS Consolidation Worksheet

Site Type: Tanks/Sumps/Outfalls

Proposed PRS Number: 21-024(l)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
21-004(a)	Non-HSWA	Aboveground Tank - (Inactive)	Rad, VOCs	Middle Los Alamos
21-022(a)	HSWA	Former Sump - (inactive), added FY00	Rad, Metals, SVOCs, VOCs	Middle Los Alamos
21-024(l)	HSWA	Outfall - (Inactive)	Rad, VOCs	Middle Los Alamos

Consolidation Checklist Criteria:

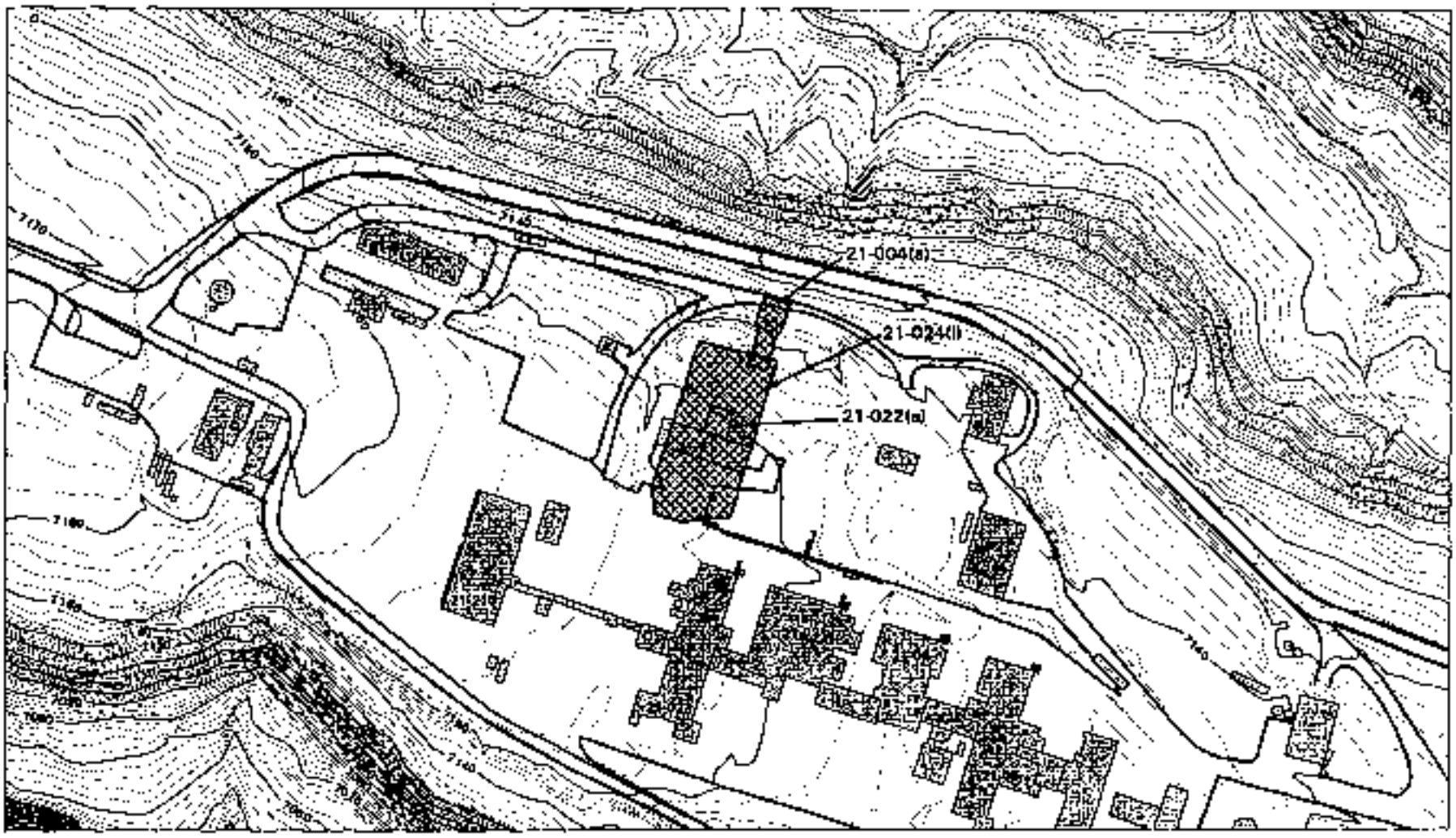
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Because the three PRS's are in the same location any investigation or remediation will incorporate them all, these PRSs are therefore proposed for consolidation.

Description:

PRS 21-004(a) is an aboveground tank (4335) and drain line north of building TA-21-21. The tank replaced outfall PRS 21-024(l) that was connected to floor drains in TA-21-021. TA-21-021 was known as the vault where all finished metal products (plutonium and uranium) were stored. Wash-down water from floor cleaning may have been discharged to the outfall and subsequently to the tank. The interior of the tank has been swiped and no radioactive contamination was detected. The vault is currently inactive and scheduled for D&D. PRS 21-022(a), added to this unit in FY00, is an inactive containment sump inside the vault in TA-21-21 (PRS 21-024(l)). COPCs are collocated and the PRSs (including drain lines) will be investigated simultaneously.



PRS Consolidation Unit 21-024(f)-99

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

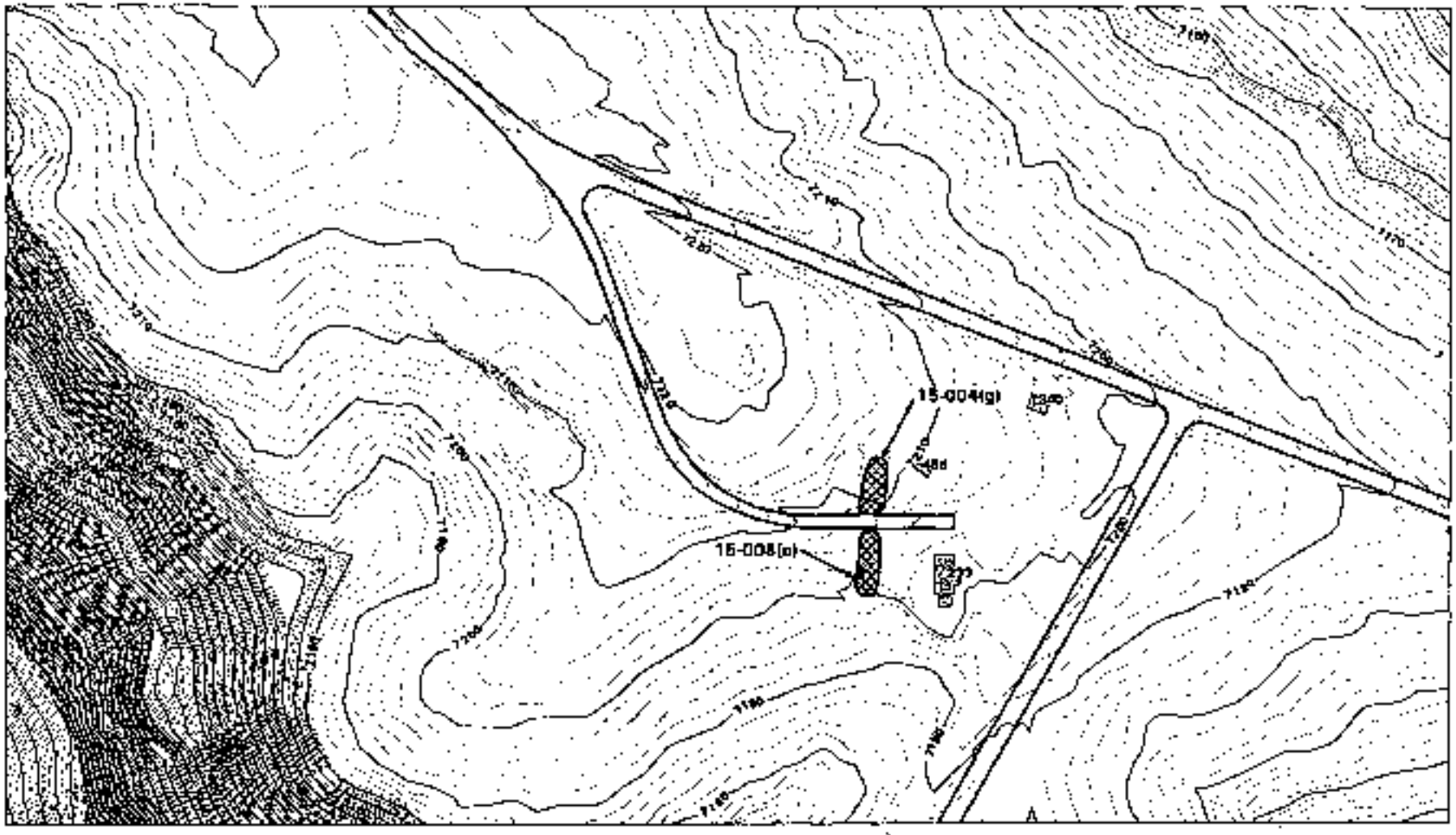
0 200 400
FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FIMAD GT084-83 19 Apr 00



PRS Consolidation Unit 15-004(g)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is preliminary and has not been checked for accuracy.

Produced by Marcia Jones

FIMAD G108928 12 Jul 00

PRS Consolidation Worksheet

Site Type: MDA K

Proposed PRS Number: 33-002(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
33-002(a)	HSWA	Septic Tank - (Inactive)	Rad, Metals, SVOCs	Chaquehui
33-002(b)	HSWA	Sump - (Inactive)	Rad, Metals, SVOCs	Chaquehui
33-002(c)	HSWA	Sump - (Inactive)	Rad, Metals, SVOCs	Chaquehui
33-002(d)	HSWA	Sump and Outfall - (Inactive)	Rad, Metals, SVOCs	Chaquehui
33-002(e)	HSWA	Roof Drain Outfall - (Inactive)	Rad, Metals, SVOCs	Chaquehui
33-010(f)	HSWA	Surface disposal area- (Inactive) added FY00	Rad, Metals, SVOCs	Chaquehui

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Because the PRSs are located in the same geographic proximity, they will be investigated concurrently, the have similar transport mechanisms (near-surface and subsurface), and the contaminants are identical and commingled, the PRSs listed above are proposed for consolidation.

Description:

MDA K contains a septic system, two sumps, a siphon tank, leach field, outfall, and a roof drain that served building TA-33-65, the TA-33 tritium facility. The tritium facility experienced accidental releases of tritium during its operating life, but is presently inactive. The associated septic system, sumps, leach field, cooling water outfall and roof drain are contaminated with tritium. Solvents were used in the building to clean contaminated parts. The septic system was used primarily for sanitary wastes, but also received tritium and possible uranium-contaminated waste. In 1961, the septic system received two emergency releases of plutonium-contaminated liquid. The sump received organic contaminants and tritium. The cooling water and roof drains also contained tritium. PRS 33-010(f) is a surface disposal area consisting of buried building debris located directly adjacent to the boundary of MDA K. It was added to this consolidated unit in FY00.

PRS Consolidation Worksheet

Site Type: Firing Site - Main Site

Proposed PRS Number: 33-004(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
33-004(a)	HSWA	Septic system - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Chaquehui
33-004(h)	HSWA	Outfall - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Chaquehui
33-004(i)	HSWA	Outfall - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Chaquehui
33-011(d)	HSWA	Storage area - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Chaquehui
33-015	HSWA	Incinerator - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Chaquehui
33-017	HSWA	Operational release/Drainage - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Chaquehui

Consolidation Checklist Criteria:

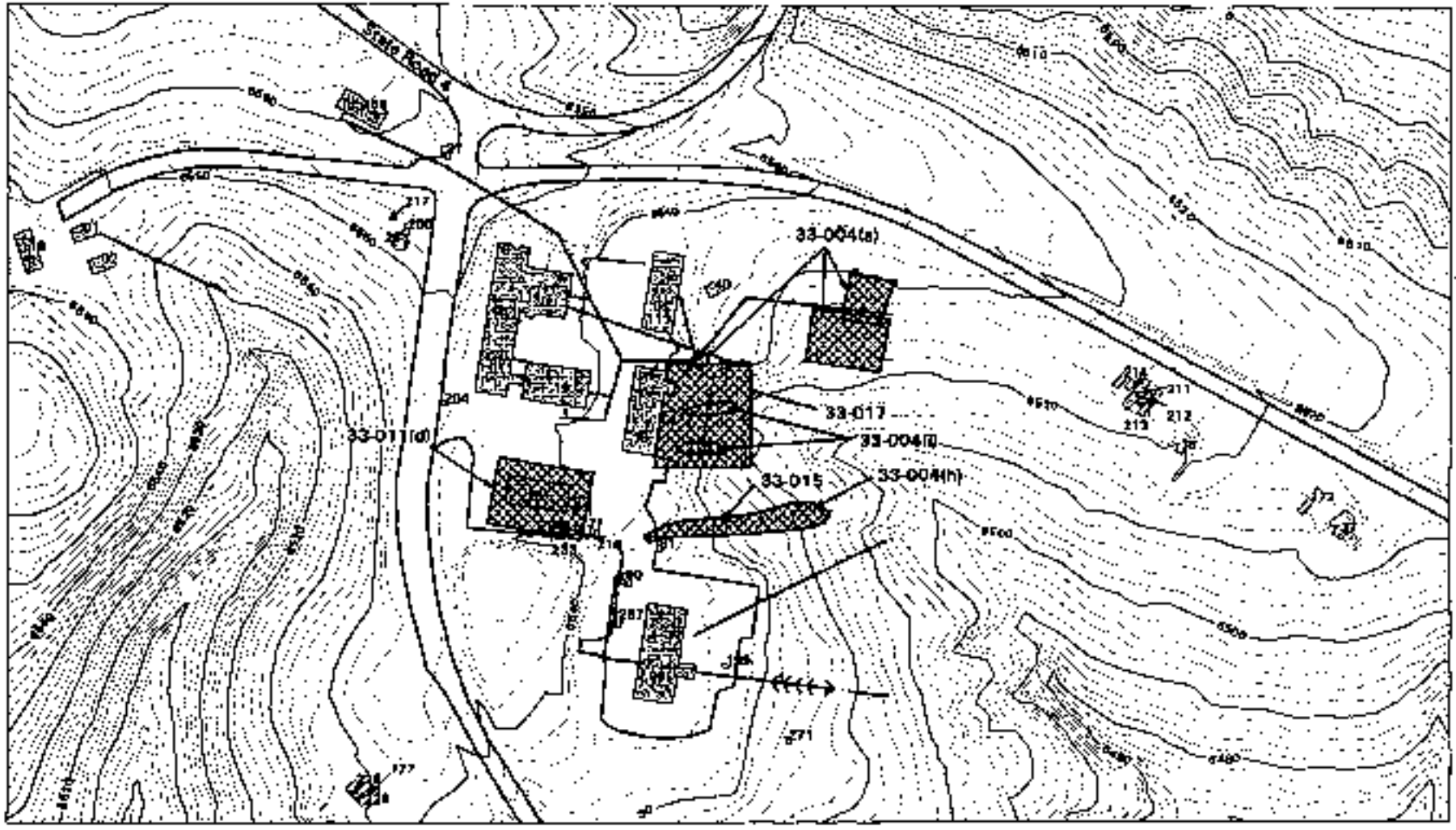
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history of Main Site, similar and commingled waste streams, geographical proximity, similar transport mechanisms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated

Description:

Main Site is located just inside the entrance gate to TA-33. Main Site was the location of offices, laboratories and shops established to support activities conducted at the TA-33 firing sites. PRS 33-004(a), a septic tank, sampling box, drain lines, two seepage pits and a drain field, received sanitary and industrial waste from buildings TA-33-19, -39, -113, -114, and -188. PRS 33-004(i) consists of two former outfalls and drain lines from building TA-33-39 that discharged to PRS 33-017. TA-33-39 housed a welding and soldering shop and a machine shop. PRS 33-004(h) was a drain line and outfall that served building TA-33-20 where beryllium and uranium were stored. The outfall discharged to PRS 33-017. PRS 33-011(d) was the asphalt storage area around building TA-33-20 where beryllium, uranium, and scrap from shots were stored. Storm water runoff from this area discharged to PRS 33-017. PRS 33-015 was an incinerator located within the boundary of PRS 33-017, just east of building TA-33-20. Materials burned in the incinerator are not confirmed. PRS 33-017 is a drainage area located northeast of Main Site, which received runoff from all of the paved area around Main Site in addition to the PRSs in this consolidated unit.



PRS Consolidation Unit 33-004(a)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marole Jones

FIMAD 0108952 13 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site - Area 6

Proposed PRS Number: 33-004(g)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
33-004(g)	HSWA	Outfall - (inactive)	Rad, Metals, SVOCs, HE	Chaquehui
33-007(c)	HSWA	Firing range - (inactive)	Rad, Metals, SVOCs, HE	Chaquehui

Consolidation Checklist Criteria:

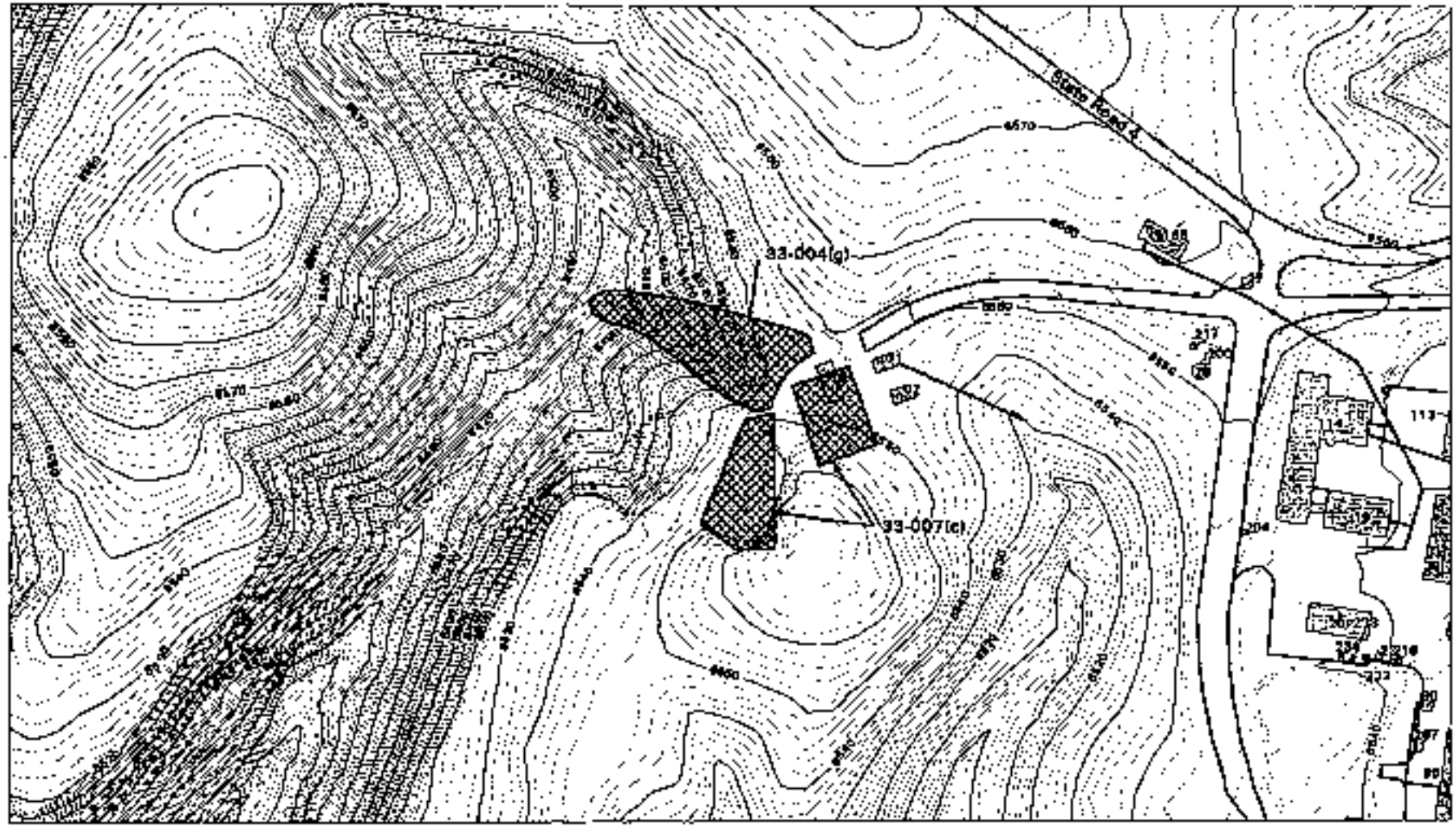
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, commingled waste streams, geographical proximity, similar transport mechanisms, indistinguishable source terms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit are all associated with the former TA-33 firing site known as Area 6 which was developed in 1946 for initiator experiments. Shots were discontinued by 1955, however, machining continued until the site was decommissioned in the 1970s. Building TA-33-16 housed an air gun and electronic equipment used to measure neutron production in initiators. PRS 33-004(g) is the drain line and outfall from TA-33-16. Military guns were also stationed on concrete pads around the building. PRS 33-007(c) consists of the two firing areas at Area 6 that consisted of shot pads, surrounded by concrete aprons and catcher boxes. Decommissioning of Area 6 resulted in the commingling of COPCs from these PRSs.



PRS Consolidation Unit 33-004(g)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Tick:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marvin Jones

RMAD 0108853 13 Jul 00

PRS Consolidation Worksheet

Site Type: Firing Site - South Site

Proposed PRS Number: 33-004(j)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
33-004(j)	HSWA	Outfall - (inactive)	Rad, Metals, SVOCs, HE	Chaquehui
33-006(a)	HSWA	Firing site - (inactive)	Rad, Metals, SVOCs, HE	Chaquehui
33-007(b)	HSWA	Firing range - (inactive)	Rad, Metals, SVOCs, HE	Ancho Canyons
33-008(a)	HSWA	Surface disposal area - (inactive)	Rad, Metals, SVOCs, HE	Chaquehui
33-010(c)	HSWA	Surface disposal - (inactive)	Rad, Metals, SVOCs, HE	Chaquehui
33-010(h)	HSWA	Surface disposal - (inactive)	Rad, Metals, SVOCs, HE	Chaquehui
33-011(c)	HSWA	Storage area - (inactive)	Rad, Metals, SVOCs, HE	Chaquehui
33-014	HSWA	Burn site - (inactive)	Rad, Metals, SVOCs, HE	Chaquehui

Consolidation Checklist Criteria:

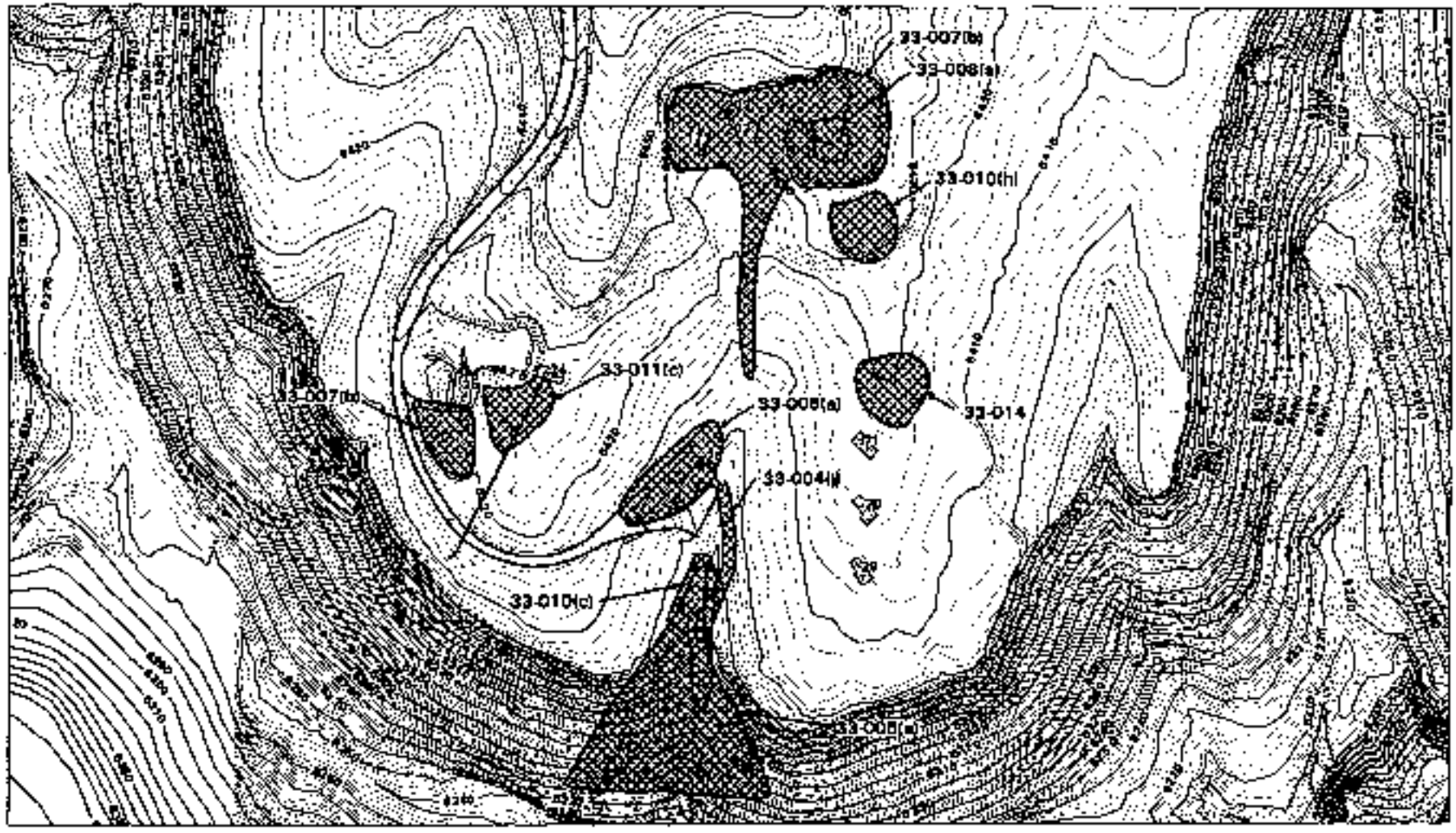
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, commingled waste streams, geographical proximity, similar transport mechanisms, indistinguishable source terms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRSs in this unit are all located within an area known as South Site at TA-33. Uranium shells containing beryllium used in implosion test devices spread shot debris and shrapnel over the entire South Site. The northeast end of the bowl was elevated by a horseshoe-shaped berm. The entire site drains to the south to Chaquehui Canyon which was within the blast radius of the site. TA-33-24 was the control building which housed electronics. PRS 33-004(j) is the drain line and outfall from building TA-33-26 which also housed electronic detonating devices. PRS 33-006(a) was the former shot pad atop TA-33-26. PRS 33-007(b) was two former gun-firing areas near TA-33-25 and -26. PRS 33-008(a) is a former surface disposal area for debris from South Site. PRS 33-010(c) is a surface disposal area where debris from shots was placed. PRS 33-010(h) is a surface disposal area also used for debris from shot pads at the site. PRS 33-011(c) is the former location of a bivet storage area between TAs-33-53, -25, and -24. PRS 33-014 was a burn pit for building debris from South Site. Decommissioning of the site resulted in commingling of COPCs.



PRS Consolidation Unit 33-004(j)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:3000

0 200 400

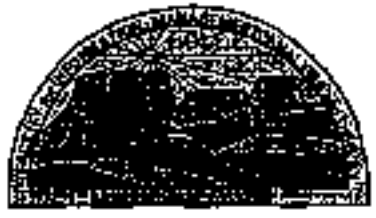
FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FMAD G108B54 13 Jul 00



PRS Consolidation Worksheet

Site Type: Former Structures - Main Site

Proposed PRS Number: 33-005(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
33-005(a)	HSWA	Septic system - (inactive)	Rad, metals, SVOCs, PCBs	Chaquehui
33-005(b)	HSWA	Drain lines - (inactive)	Rad, metals, SVOCs, PCBs	Chaquehui
33-005(c)	HSWA	Drain Lines - (inactive)	Rad, metals, SVOCs, PCBs	Chaquehui
33-011(a)	HSWA	Storage area - (inactive)	Rad, Metals, SVOCs, PCBs	Chaquehui

Consolidation Checklist Criteria:

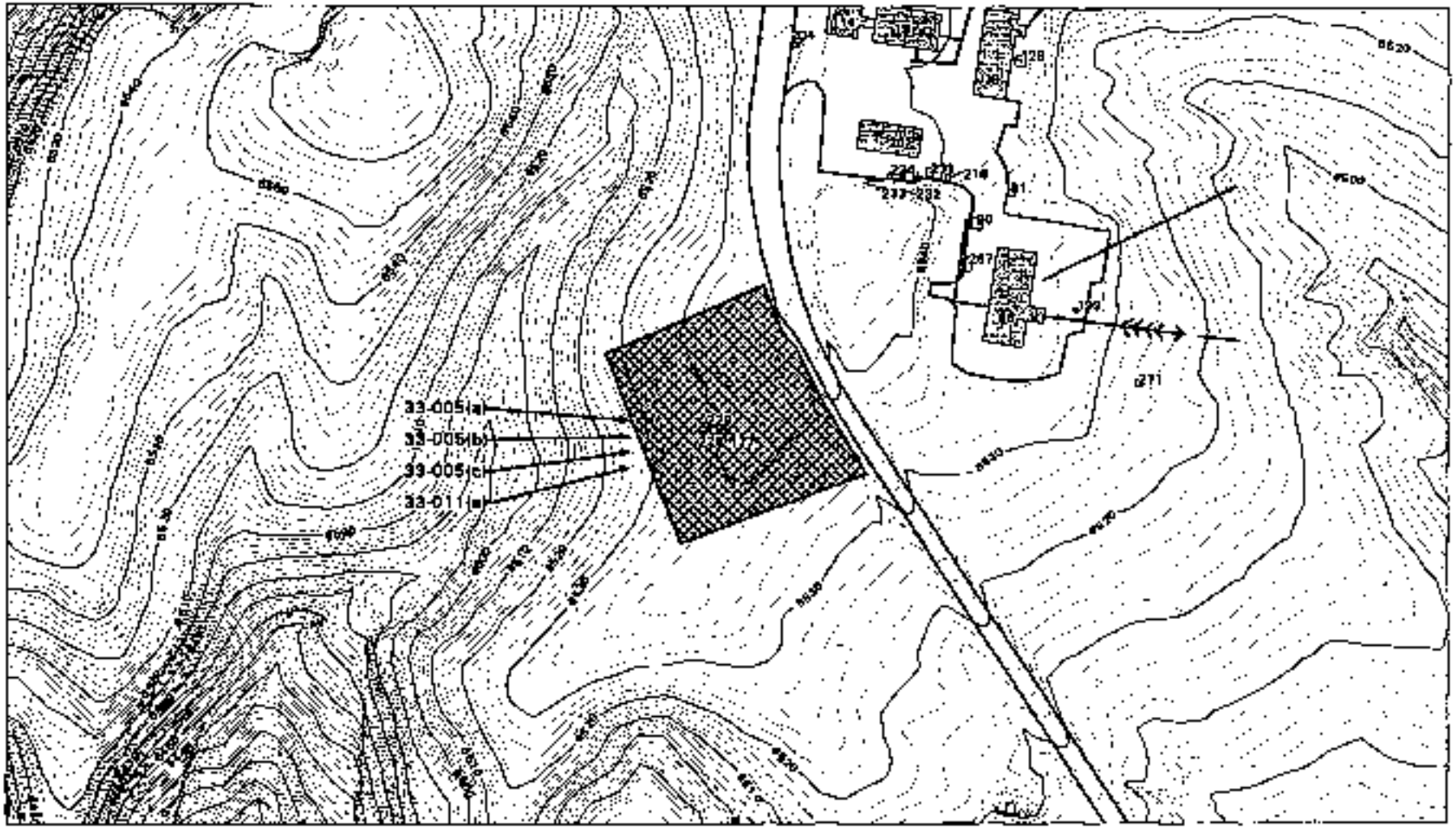
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, identical waste streams, geographical proximity, similar transport mechanisms, indistinguishable source terms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRSs in this consolidated unit were associated with former processing building TA-33-21 located south and west of the Main Site support facilities. TA-33-21 was constructed in 1950 and contained gloveboxes housing saws to section projectiles made of uranium, beryllium and polonium. Experiments using plutonium were also conducted in the gloveboxes. The entire building was contaminated in 1960 and never used again. PRS 33-005(a) was a septic system including drain lines and leach field that served restrooms and change room lavatories in TA-33-21. PRSs 33-005(b and c) were drain lines from sinks, showers, gloveboxes in the process and hot change rooms. The drain lines discharged to the septic tank (PRS 33-005(a)) which discharged to the leach field approximately 50 feet south of the building. PRS 33-011(a) was the drum storage area for building TA-33-21. The building storage area and septic system were removed in 1974; the debris was disposed of at Area G.



PRS Consolidation Unit 33-005(a)-00

- Drain Line
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FIMAD G108655 17-Jul-00

PRS Consolidation Worksheet

Site Type: Firing Site - East Site

Proposed PRS Number: 33-006(b)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
33-006(b)	HSWA	Firing range - (inactive)	Rad, Metals, HE	South Ancho
33-007(a)	HSWA	Firing range - (inactive)	Rad, Metals, HE	South Ancho
33-008(b)	HSWA	Landfill - (inactive)	Rad, Metals, HE	South Ancho
33-010(a)	HSWA	Surface disposal - (inactive)	Rad, Metals, HE	South Ancho

Consolidation Checklist Criteria:

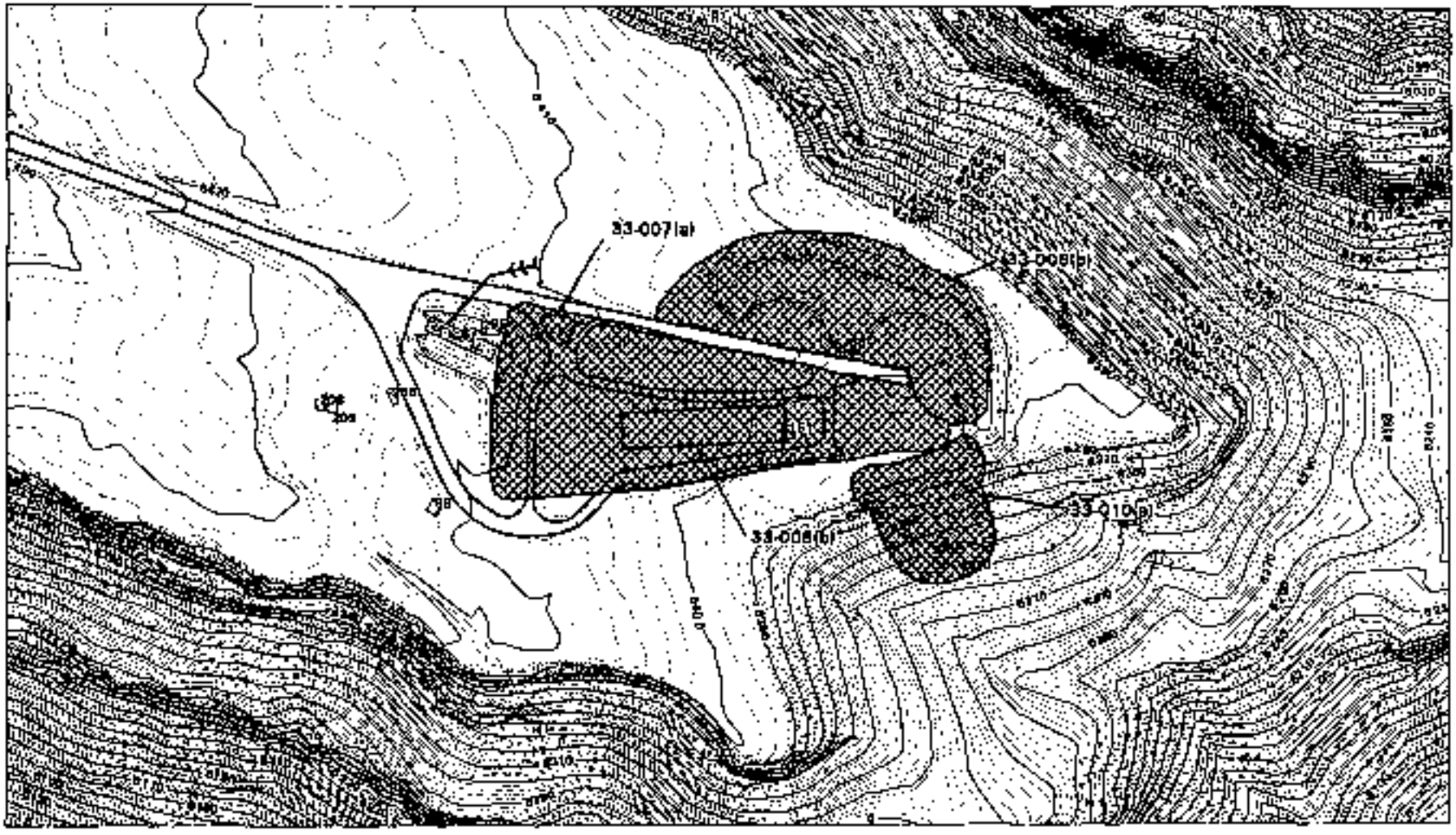
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, commingled waste streams, geographical proximity, similar transport mechanisms (surface and near-surface), indistinguishable source terms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRSs in this consolidated unit are all associated with the former TA-33 firing site known as East Site. East Site was established in 1955 to test gun-type initiators. Projectiles containing beryllium and polonium-210 or cobalt-60 were shot into berms or catcher boxes. The site was decommissioned in 1964. The developed area of the site consists of three bunkered structures and a large w-shaped berm. The main drainage through the site flows to the east. PRS 33-006(b) consists of two adjacent crescent-shaped berms with a concrete shot pad in the center of each bermed area, (TAs -33-97 and -98, respectively). PRS 33-007(a) is the area south of the berms where two gun mounts (TAs-33-118 and -135) were previously located. PRS 33-008(b) was a former disposal area for debris from decommissioning of the site. PRS 33-010(a) is a canyonside disposal site where debris from the shot pads at East Site was moved prior to each subsequent shot. Decommissioning of East Site resulted in the commingling of COPCs.



PRS Consolidation Unit 33-006(b)-00

Drain Line
Paved Road/Parking
PRS
Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400
FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Bonnie Jones

RMAD G108656 17 Jul 00

PRS Consolidation Worksheet

Site Type: Waste Water Treatment Plant

Proposed PRS Number: 35-003(a)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-003(a)	HSWA	Former Holding Tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(b)	HSWA	Former Holding Tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(c)	HSWA	Former Holding Tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(e)	HSWA	Former Surge tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(f)	HSWA	Former Surge tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(g)	HSWA	Former Surge tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(h)	HSWA	Former Retention Tank	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(m)	HSWA	Former Surge tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(misc)	Non-HSWA	Former Miscellaneous piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(n)	HSWA	Former Holding tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(o)	HSWA	Former Surge tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(p)	HSWA	Former Air filter building - added in FY00	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

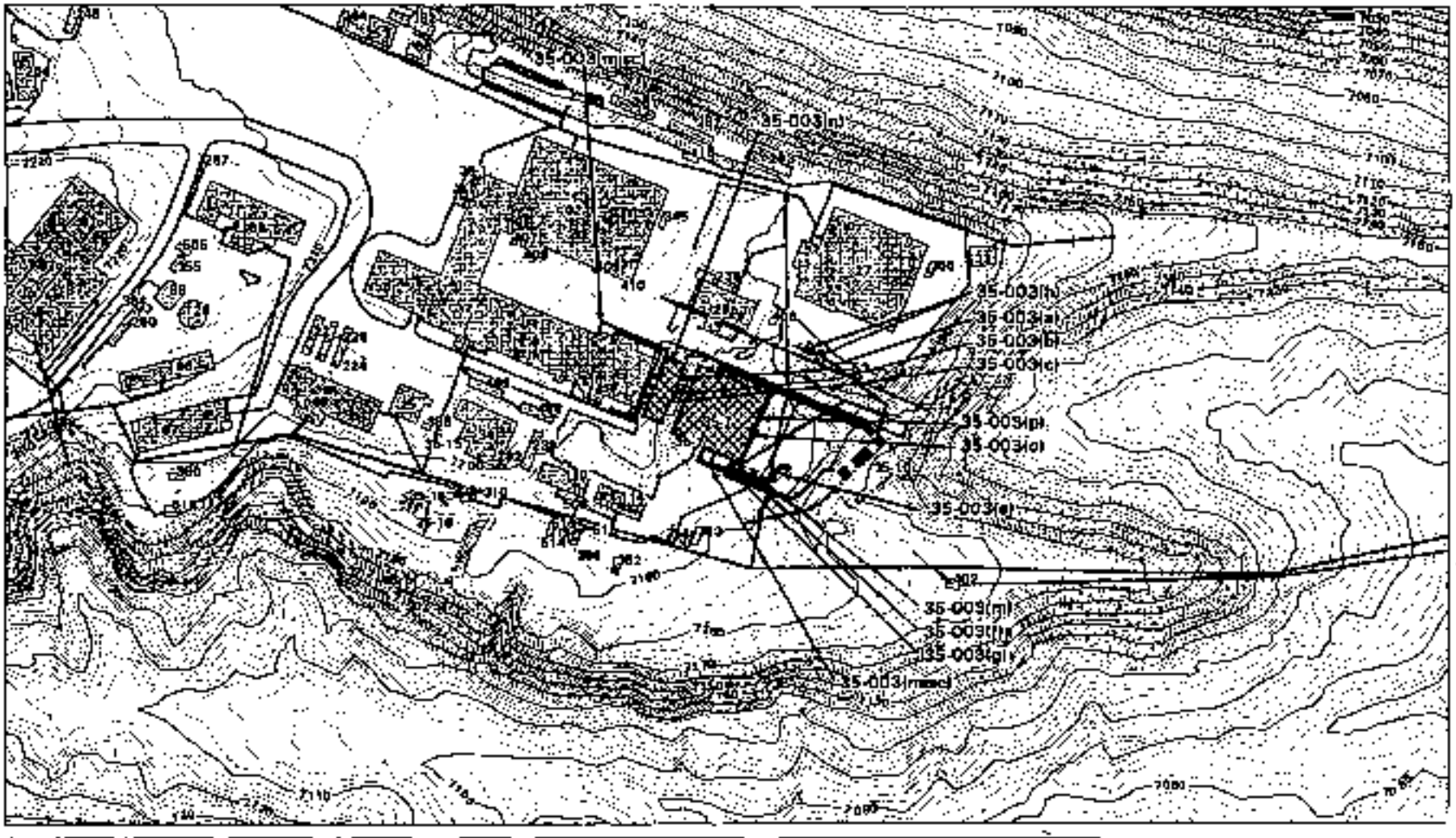
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface, subsurface and sediment), geographical proximity, overlapping dispersion areas, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description:

The TA-35 waste water treatment plant (WWTP) was a large operation located on the east end of Ten Site mesa that operated from 1951 until 1993. It consisted of an array of underground waste lines, storage tanks, and chemical treatment precipitation tanks. The plant treated liquid waste that originated from the radiochemistry laboratories and operation of the radioactive lanthanum-140 hot cells in Building TA-35-2. PRS 35-003(misc.) consists of the network of underground lines that connected the various structures that composed the Ten Site WWTP. All buildings, foundations, and structures were removed during D&D activities in 1981 and 1985. It is expected that contamination at the WWTP will not be distinguishable from each PRS at the site. PRS 35-003(p), added to this consolidated unit in FY00 was the Air Filter building at the TA-35 WWTP, where air contaminated with radioactivity from the facility was sent. Consolidated PRS 35-003(a)-99 was broken out into the mesa top component (this consolidated PRS) and the canyon component (PRS 35-003(d)-00) in FY00.



PRS Consolidation Unit 35-003(a)-99

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Tics:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is preliminary and has not been checked for accuracy.

Produced by Merle Jones

FIMAD G108867 17 Jul 00

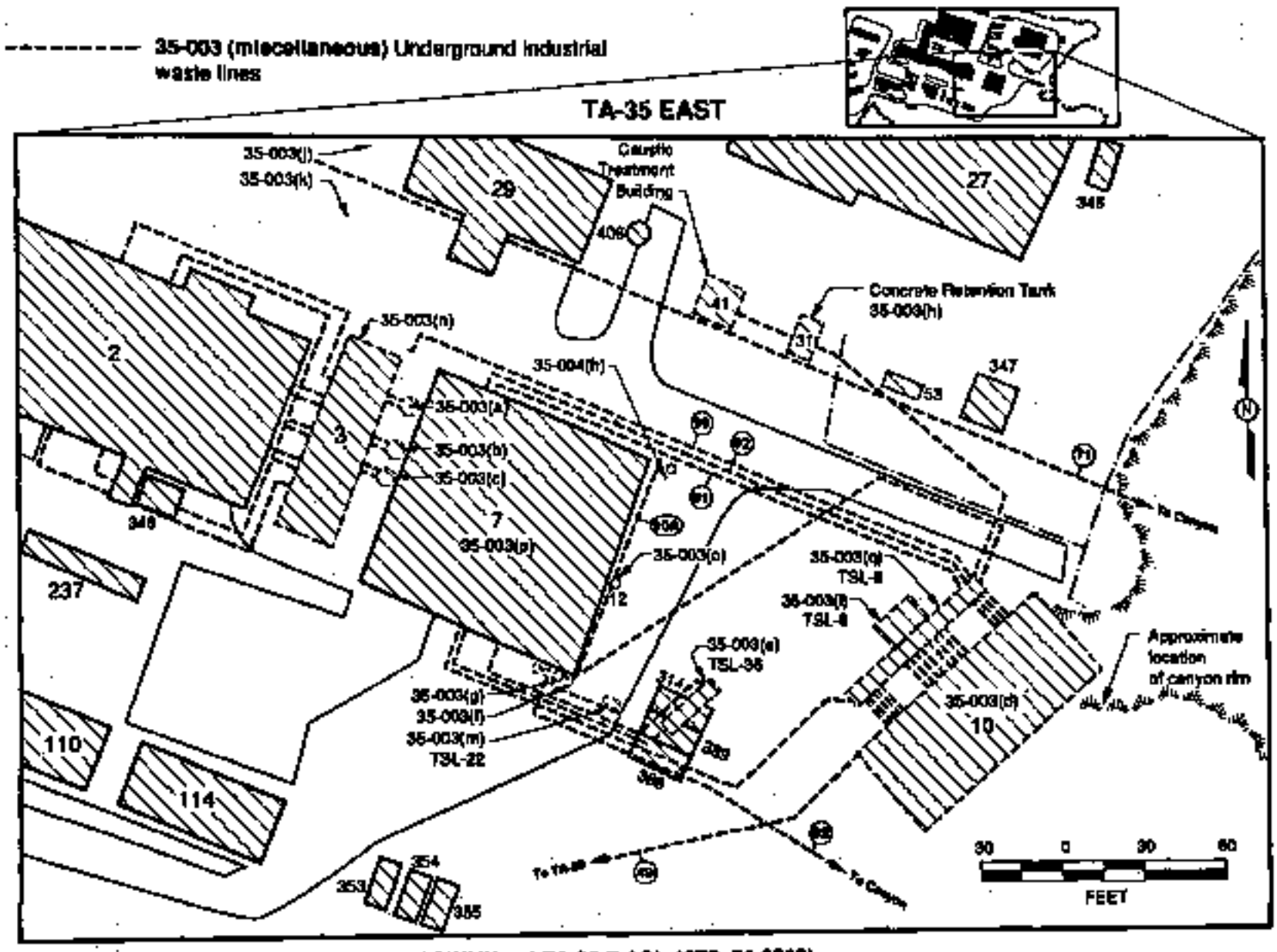


Figure 3-5. Locations of structures and SWMUs at TA-35 (LASL 1975, 04-0250).

PRS Consolidation Worksheet

Site Type: WWTP - Pratt Canyon

Proposed PRS Number: 35-003(d)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-003(d)	HSWA	Former Holding Tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(l)	HSWA	Former Holding tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(q)	HSWA	Former Holding tanks and associated piping	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site
35-003(r)	Non-HSWA	Former Outfall and receiving canyon	Rad, Metals, VOCs, SVOCs, PCBs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

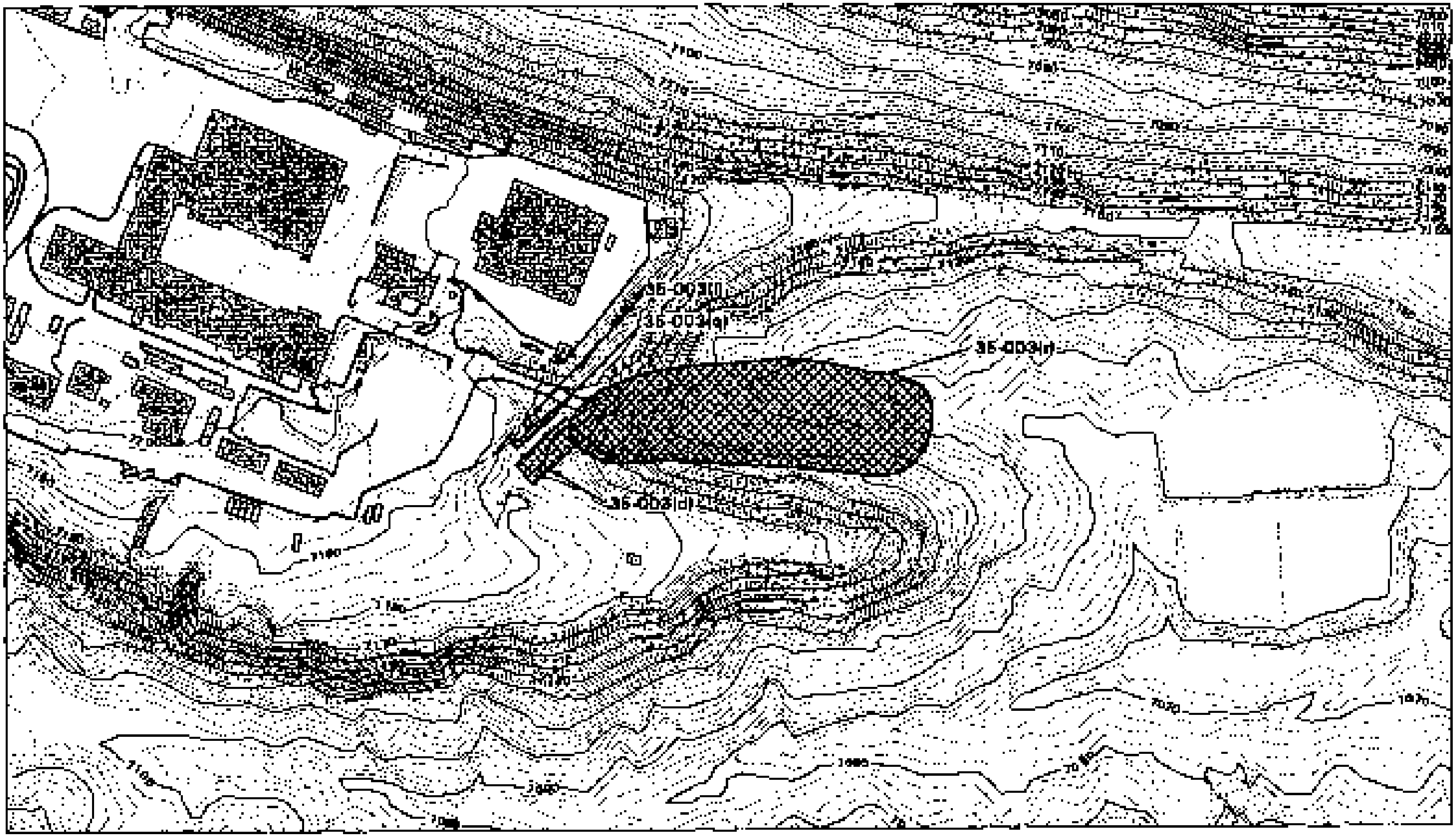
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, transport mechanisms (surface, subsurface and sediment), geographical proximity, overlapping dispersion areas, and the investigation required to assess contamination, it is proposed that the above PRSs be consolidated.

Description:

The PRSs in this consolidated unit represent the canyon component of the WWTP consolidated unit 35-003(a)-99. PRS 35-003(d) was the former holding tank building, TA-35-10 at the WWTP. PRS 35-003(l) was a former pump pit for the drain lines (PRS 35-003(q)) that carried wastewater to and from TA-35-10, and on to TA-50 or the canyon. Two of the lines had direct outfalls to the small side canyon east of the WWTP, PRS 35-003(r). PRS 35-003(r) is a small shallow canyon located immediately east of the former WWTP. The canyon received effluent discharge and spills from the WWTP holding tanks. All buildings, foundations, and structures were removed during D&D activities in 1981 and 1985. It is expected that contamination at the WWTP will not be distinguishable from each PRS at the site.



PRS Consolidation Unit 35-003(d)-00

- 10-ft Contour
- 2-ft Contour
- Paved Road/Parking
- PRS
- Structure

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FIMAD G108486 18 Apr 00

PRS Consolidation Worksheet

Site Type: Former Structures

Proposed PRS Number: 35-003(j)-99

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-003(j)	HSWA	Former Oil Storage Tank	VOCs, PCBs, Rad	Middle Mortandad/Ten-Site
35-003(k)	HSWA	Former Location of oil tanks	VOCs, PCBs, Rad	Middle Mortandad/Ten-Site
35-014(b)	HSWA	Former Leaking Drum, added FY00	VOCs, PCBs, Rad	Middle Mortandad/Ten-Site
35-014(d)	Non-HSWA	Former Location of dielectric spill	VOCs, PCBs, Rad	Middle Mortandad/Ten-Site
35-015(b)	HSWA	Location of former waste oil treatment facility	VOCs, PCBs, Rad	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

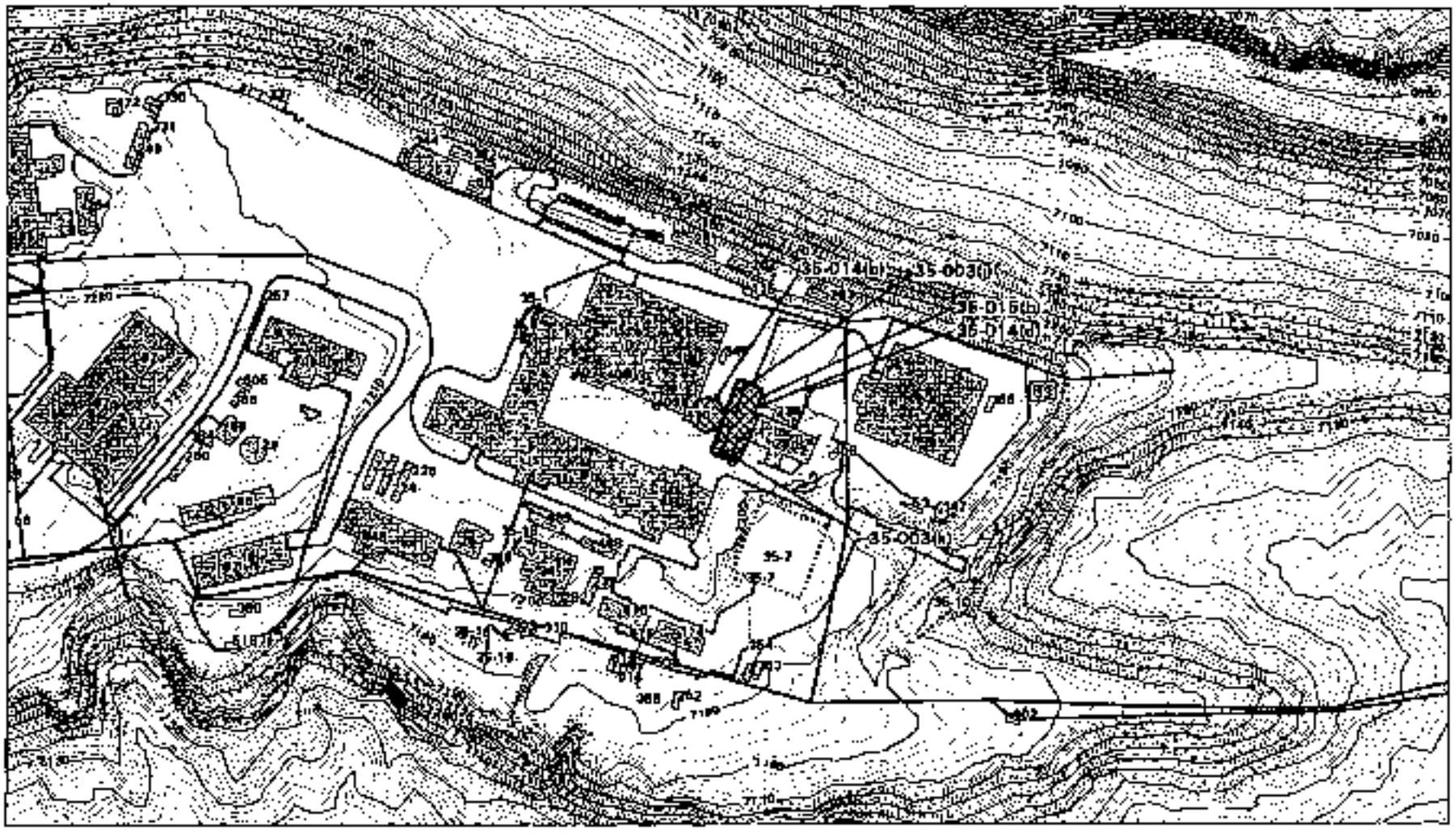
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Since the PRSs are all in close proximity, have the same COPCs, undistinguishable source terms, were part of one system, and the investigation required to assess contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit are all located on Ten Site Mesa in a highly industrialized area of TA-35. There are no PRS boundaries allowing COPCs to intermingle. All of the PRSs will be investigated simultaneously. PRS 35-015(b) is the location of a former waste oil treatment facility. The facility processed used oil from the Helios CO2 laser in TA-35-85. The facility was removed in 1988/1989 and some of the area has been paved while other portions remain unpaved with oil-contaminated soil. PRSs 35-003(j) and (k) are the locations of former above-ground oil siege tanks near the former waste oil treatment facility. The tanks were used for storage of dielectric oil in association with the waste oil treatment facility (PRS 35-015(b)). The tanks were piped to the waste oil treatment facility. PRS 35-014(d) was the location of a dielectric oil spill at the former location of two oil siege tanks at the southwest corner of TA-35-29. Leaks of dielectric oil from the valve system on the siege tanks were the likely source of the release. The tanks were installed in 1974 and removed in the late 1980s. PRS 35-014(b), added to this consolidated unit in FY00, was the location where a 55-gallon drum of dielectric fluid was found to be leaking.



PRS Consolidation Unit 35-003(j)-99

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

RMAD 01088556 17 Jul 00

PRS Consolidation Worksheet

Site Type: Septic System

Proposed PRS Number: 35-004(g)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-004(g)	HSWA	Container storage area - (inactive)	Rad, Metals, SVOCs, VOCs	Middle Mortandad/Ten-Site
35-009(b)	HSWA	Septic system - (inactive)	Rad, Metals, SVOCs, VOCs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

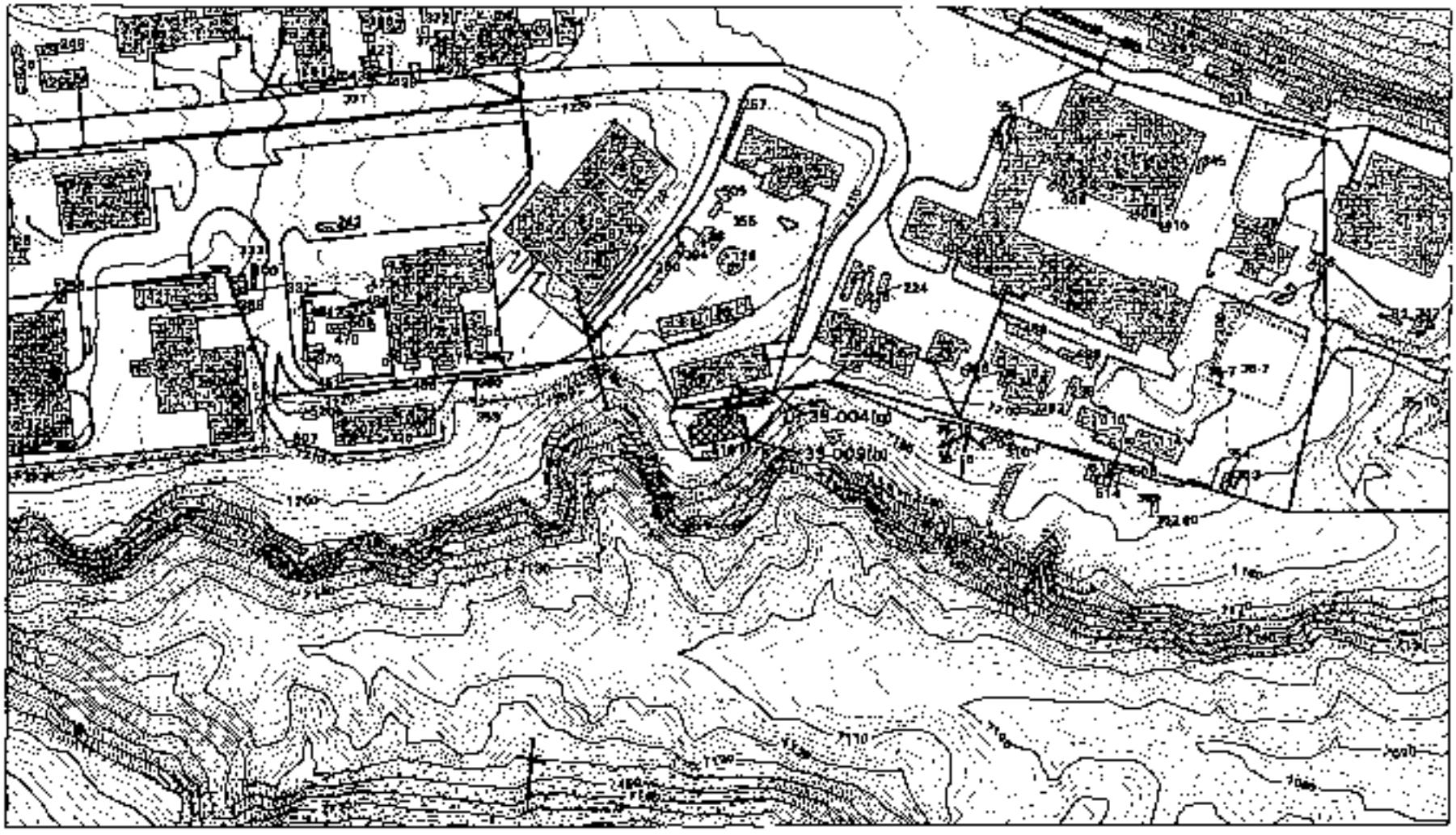
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, indistinguishable source terms, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

COPCs from the two PRSs in this consolidated unit are commingled and will be investigated simultaneously. PRS 35-004(b) is a former container storage area adjacent to TA-35-67 which was used as a warehouse. PRS 35-009(b) is an abandoned septic system including drain lines and a leach field which served TA-35-67. Storm water runoff and any spills from PRS 35-004(b) migrated toward PRS 35-009(b) causing COPCs to commingle.



PRS Consolidation Unit 35-004(g)-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FIMAD G108958 17 Jul 00

PRS Consolidation Worksheet

Site Type: Surface Disposal

Proposed PRS Number: 35-008-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-008	HSWA	Surface disposal - (inactive)	Rad, Metals, SVOCs, VOCs, PCBs	Middle Mortandad/Ten-Site
35-014(e)	HSWA	Former Oil Spill Location	SVOCs, PCBs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, commingled contaminants, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 35-008 is a canyonside disposal area located along the rim of Mortandad Canyon. Debris in the area is believed to include scrap metal, paint cans, building materials, asphalt, a 55-gallon drum, etc. PRS 35-014(e), which is the same as 35-014(e1), was an operational release of dielectric fluid possibly contaminated with PCBs which occurred on the north side of TA-35-85. Soil from the spill area was bulldozed over the side of Mortandad Canyon on top of PRS 35-008. As a result, COPCs from both PRSs are commingled.

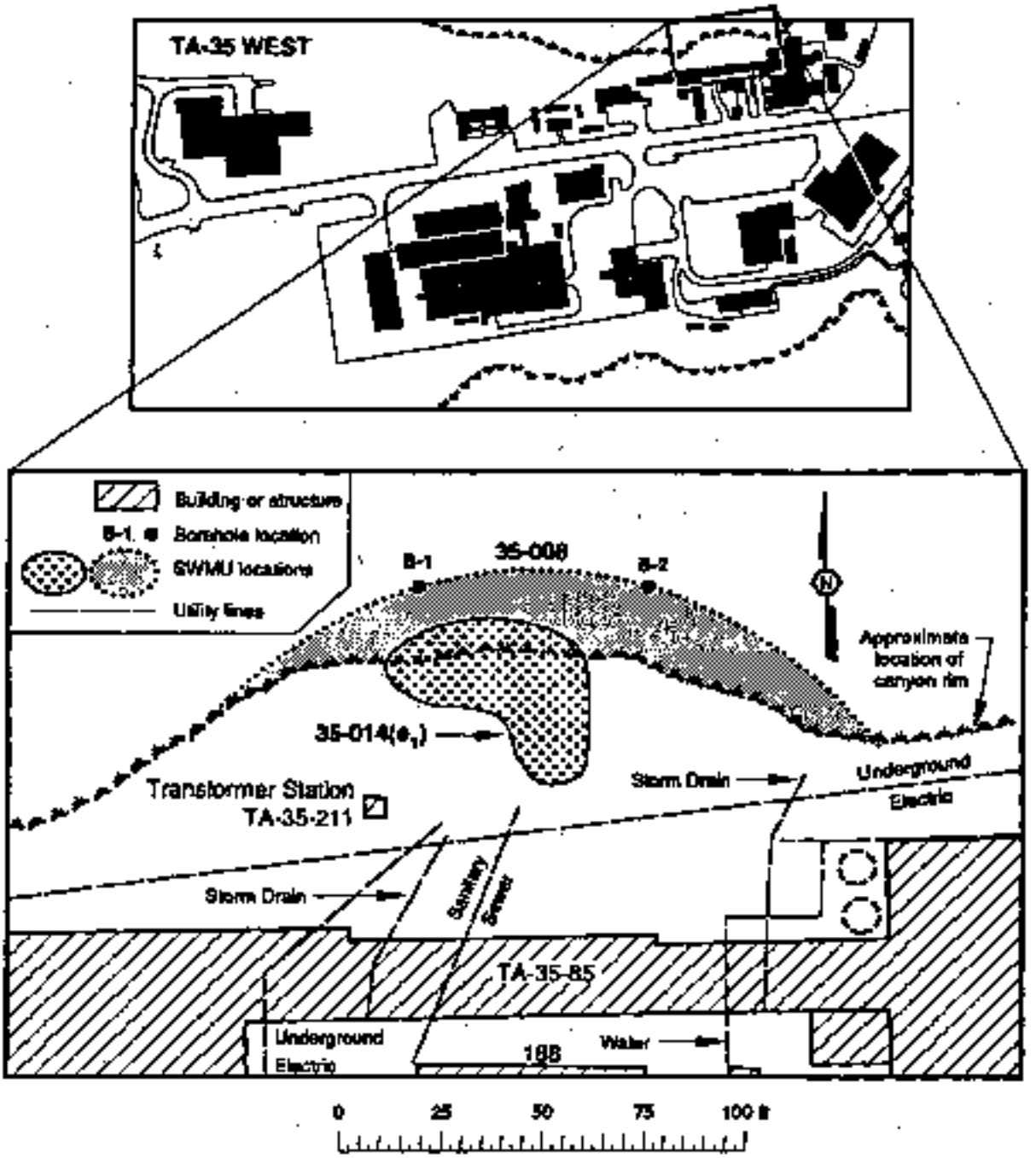


Figure 7-17. Schematic sample location map for SWMU Aggregate E.

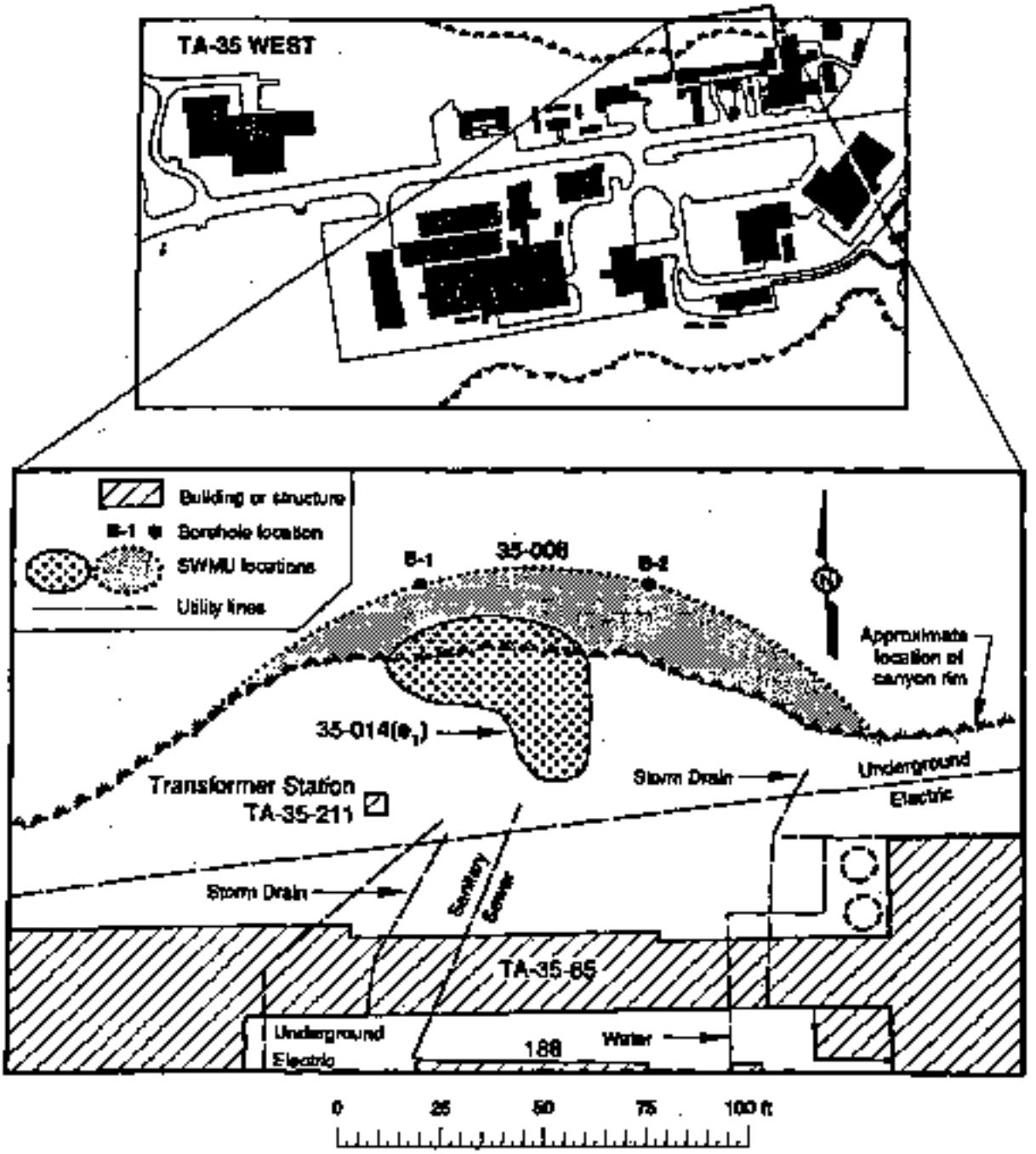


Figure 7-17. Schematic sample location map for SWMU Aggregate E.

PRS Consolidation Worksheet

Site Type: Container Storage Area

Proposed PRS Number: 35-014(g1)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-004(m)	Non-HSWA	Container storage area - (inactive)	Rad, Metals, SVOCs, PCBs/pesticides	Middle Mortandad/Ten-Site
35-014(g1)	HSWA	Soil contamination	Rad, Metals, SVOCs, PCBs/pesticides	Middle Mortandad/Ten-Site
35-014(g2)	Non-HSWA	Soil contamination	Rad, Metals, SVOCs, PCBs/pesticides	Middle Mortandad/Ten-Site
35-016(n)	Non-HSWA	Storm drain and outfall - (inactive)	Rad, Metals, SVOCs, PCBs/pesticides	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

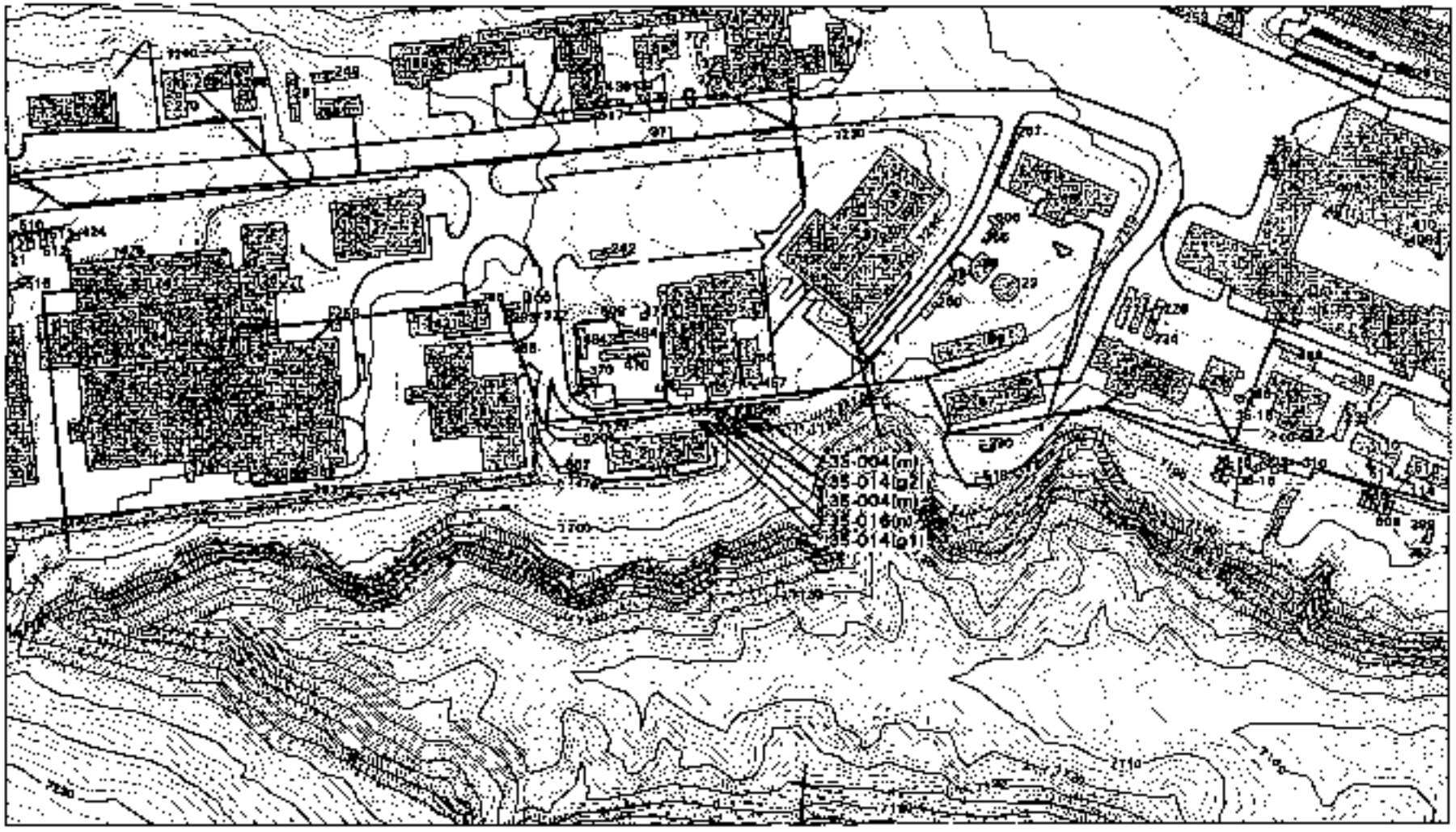
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, commingled contaminants, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 35-014(g1) is an oil-stained area in the vicinity of a storm water outfall near the northeast corner of TA-35-207, the experimental support laboratory. PRS 35-016(n) is a corrugated metal drain line installed in 1977 to channel storm water runoff from the roof and parking lot of TA-35-86 to an outfall in Ten Site Canyon. This outfall also receives surface water runoff from PRS 35-014(g1). PRS 35-004(m) is an inactive container storage area located on the south side of TA-35-86, and PRS 35-014(g2) is an oil-stained asphalt area that resulted from leaking containers stored at PRS 35-004(m). Storm water runoff from these two PRSs flows toward the outfall area of storm drain PRS 35-016(n).



PRS Consolidation Unit 35-014(g1)-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FINAD-G108880 17 Jul 00

PRS Consolidation Worksheet

Site Type: Drains and Outfalls

Proposed PRS Number: 35-016(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-016(a)	HSWA	Storm drain and outfall - (active)	Rad, Metals, SVOCs, VOCs	Middle Mortandad/Ten-Site
35-016(q)	HSWA	Storm drain and outfall - (active)	Rad, Metals, SVOCs, VOCs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

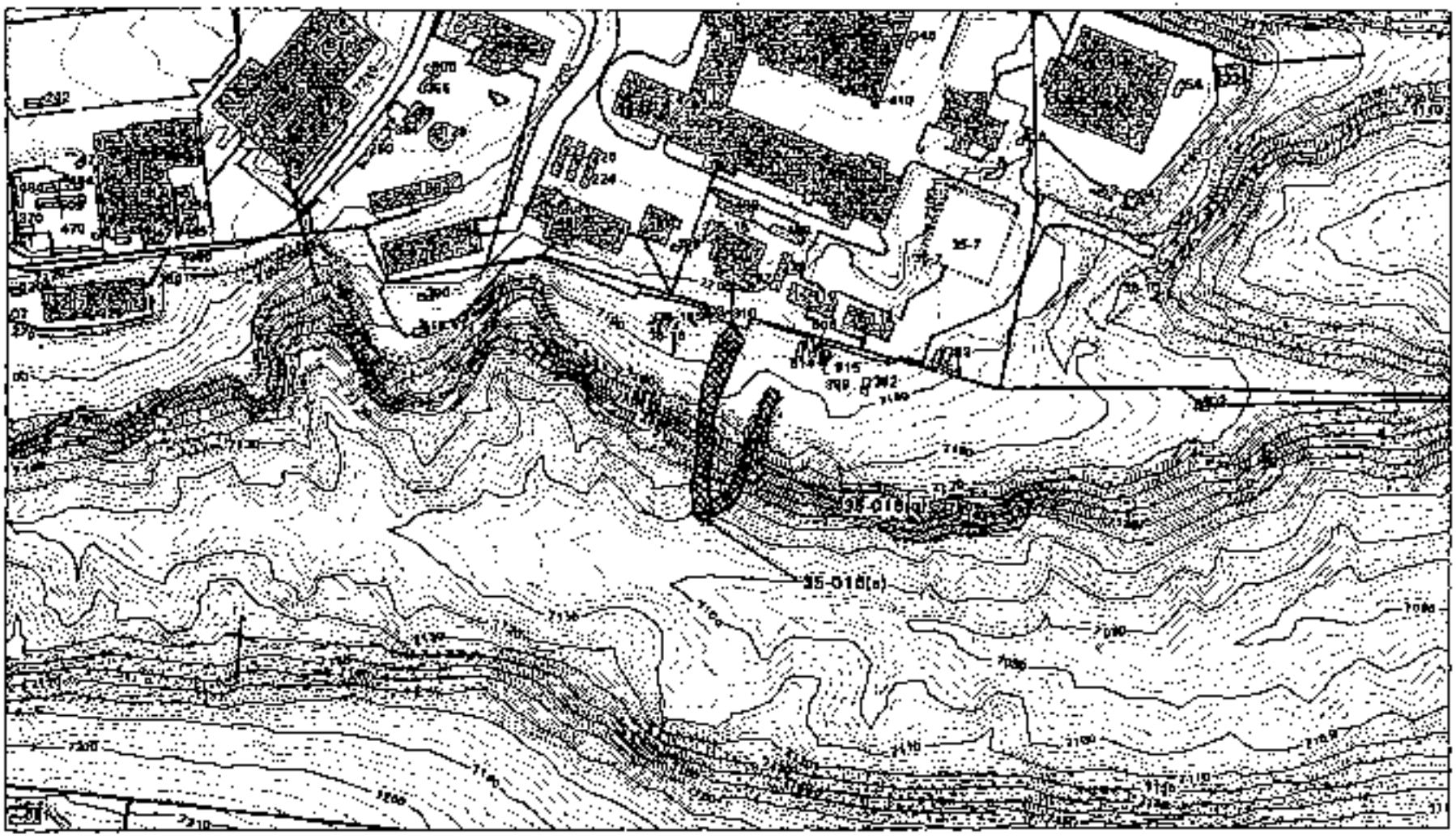
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Since the PRSs are all in close proximity, have the same COPCs, undistinguishable source terms, are part of one system, and the investigation required to assess contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 35-016(a) was established in 1958 to handle noncontact cooling water from the Sodium Testing building (TA-35-34). The PRS originally consisted of a metals pipe placed in a trench cut into the tuff with a valve with a 6-inch VCP outfall that discharged into Ten Site Canyon (NPDES Permit No. 04A089). The drain lines were decommissioned and removed in 1967, and the trench now serves as a storm water collection channel for an area on the south side of Ten Site Mesa. PRS 35-016(q) is a parallel trench eroded into the tuff that discharges storm water from Ten Site mesa in the same outfall area in Ten Site Canyon.



PRS Consolidation Unit 35-015(a)-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft.

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Tics:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FIMAD-G108981 17 Jul 00

PRS Consolidation Worksheet

Site Type: Drain lines and outfall

Proposed PRS Number: 35-016(c)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-016(c)	HSWA	Drain line and Outfall - (Inactive)	Rad, Metals, VOCs, SVOCs	Middle Mortandad/Ten-Site
35-016(d)	HSWA	Drain line and Outfall - (Inactive)	Rad, Metals, VOCs, SVOCs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

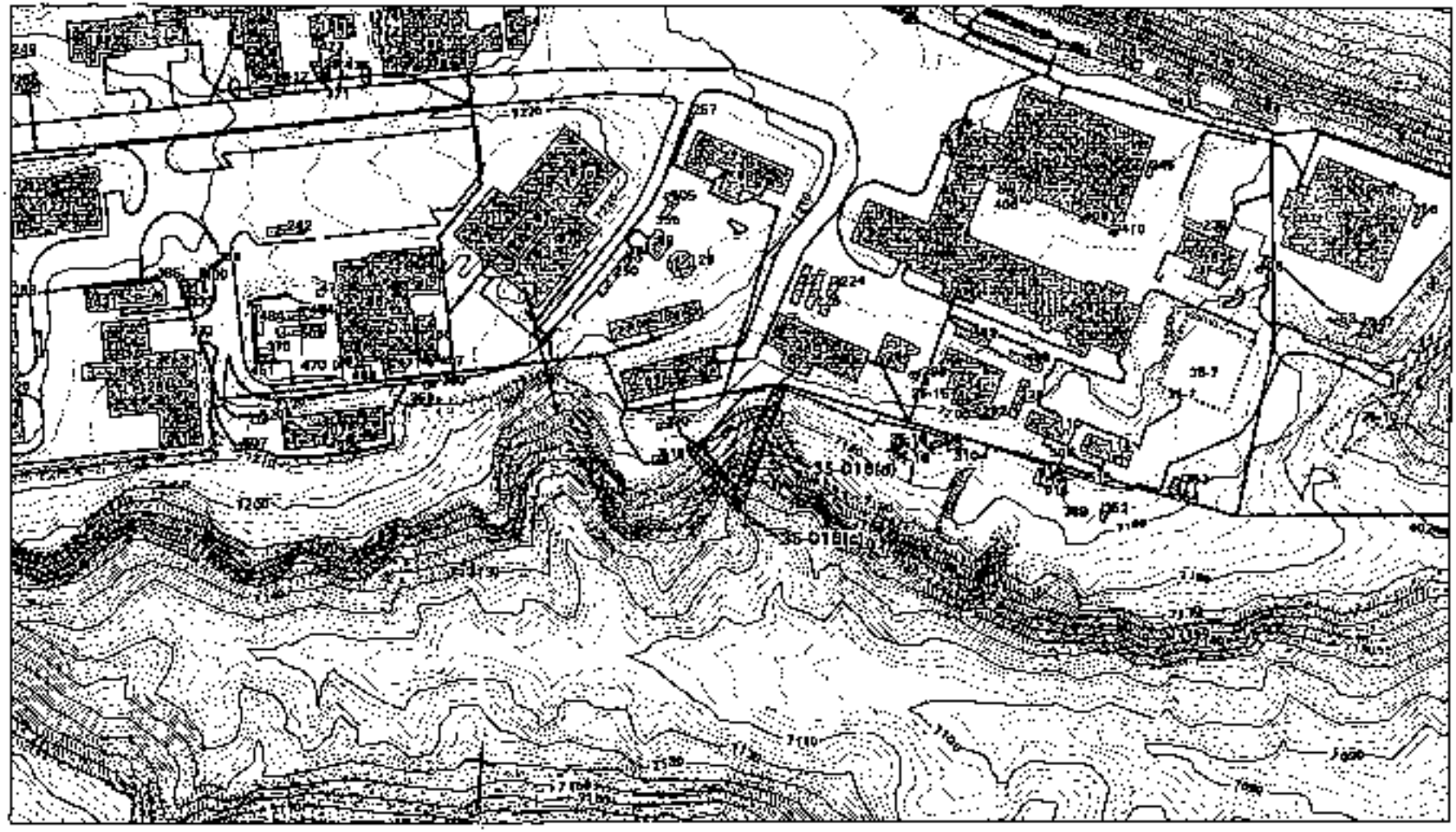
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, commingled contaminants, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The two PRSs in this consolidated unit are former drain lines that discharged noncontact cooling water to outfalls that overlap thereby allowing COPCs to commingle. PRS 35-016(c) consists of two formerly permitted outfalls established in 1964 to discharge noncontact cooling water from TA-35-67. The drain lines were connected to each other in 1985 and discharged to only one outfall in Ten Site Canyon. The outfall was deactivated in 1987. PRS 35-016(d) is a formerly permitted outfall established in 1962 to discharge noncontact cooling water from TA-35-46. Both buildings housed offices and heating and cooling systems in support of other TA-35 buildings. The noncontact cooling water was from building cooling systems and was not process-specific. The outfall areas of both PRSs overlapped. The date of deactivation of the buildings is not known.



PRS Consolidation Unit 35-018(c)-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Prepared by Mercia Jones

RMAD-G106862 17 Jul 00

PRS Consolidation Worksheet

Site Type: Operational release

Proposed PRS Number: 35-016(i)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-014(a2)	Non-HSWA	Operation releases - (inactive)	Metals, PCBs, SVOCs	Middle Mortandad/Ten-Site
35-016(i)	HSWA	Storm water drain line and outfall - (active)	Metals, PCBs, SVOCs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

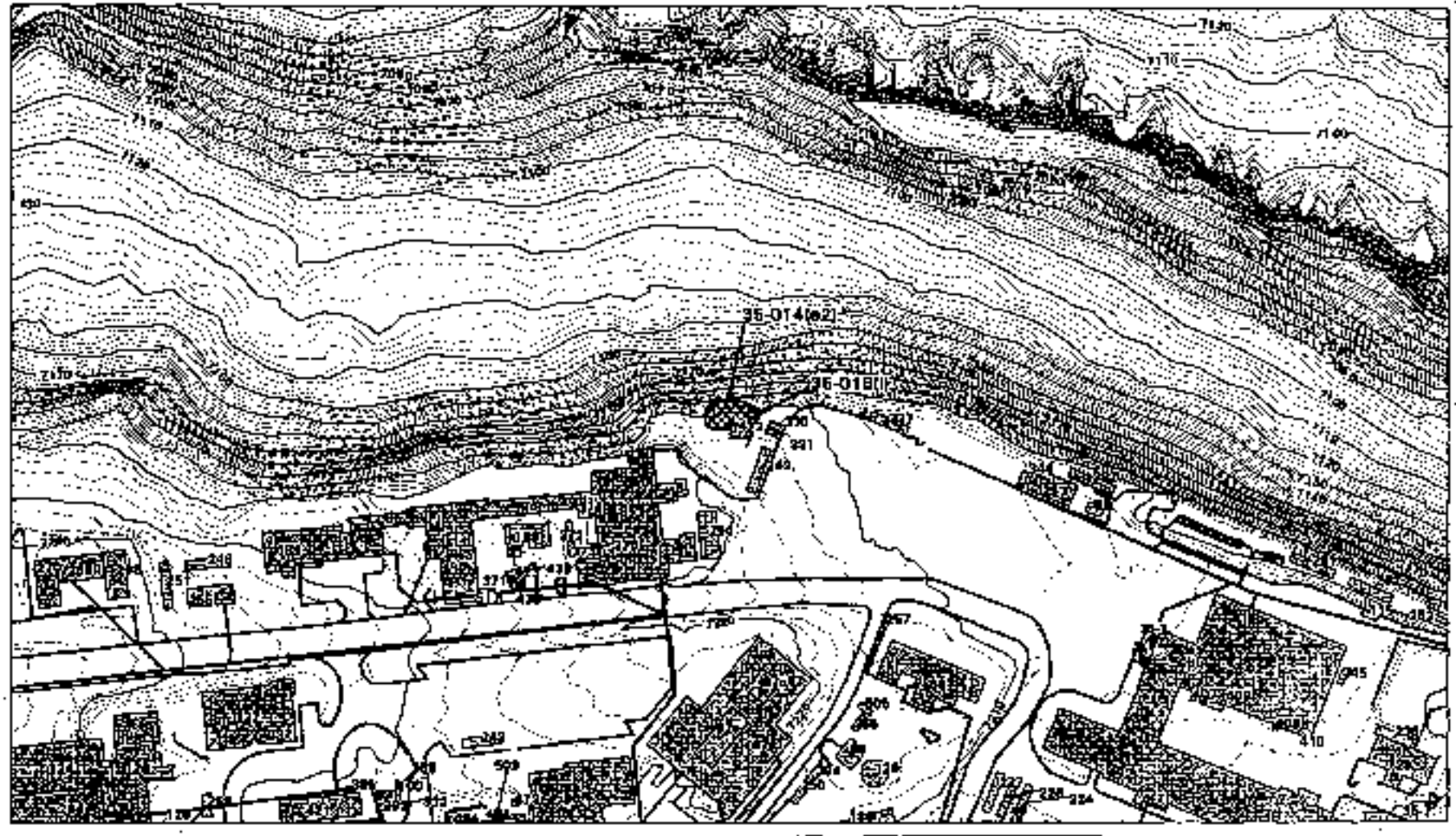
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, commingled contaminants, and the investigation needed to assess potential contamination, it is proposed that these PRGs be consolidated.

Description:

PRS 35-016(i) consists of a corrugate metal pipe that collects storm water runoff from drains along Pecos Drive and adjacent to a former waste oil impoundment. The impoundment previously collected dielectric fluid used in TA-35-85, Chemical Laser Facility and was located just south of the building. The storm drain discharges to an outfall in Mortandad Canyon. PRS 35-014(a2) is the site of an oil spill that originated from overflows of a waste oil impoundment that commingled with the storm water outfall. The impoundment was removed and remediated in 1989. The two PRSs are included in the same decision set for risk.



PRS Consolidation Unit 35-016(f)-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Northing information on this map is provisional and has not been checked for accuracy.

Produced by Marcia Jones

FIMAD-G108863 17 Jul 00

PRS Consolidation Worksheet

Site Type: Drain lines and outfalls

Proposed PRS Number: 35-016(k)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
35-016(k)	HSWA	Drain lines and outfall - (inactive)	Rad, Metals, PCBs, SVOCs	Middle Mortandad/Ten-Site
35-016(l)	Non-HSWA	Storm drainage channel and outfall - (active)	Rad, Metals, PCBs, SVOCs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

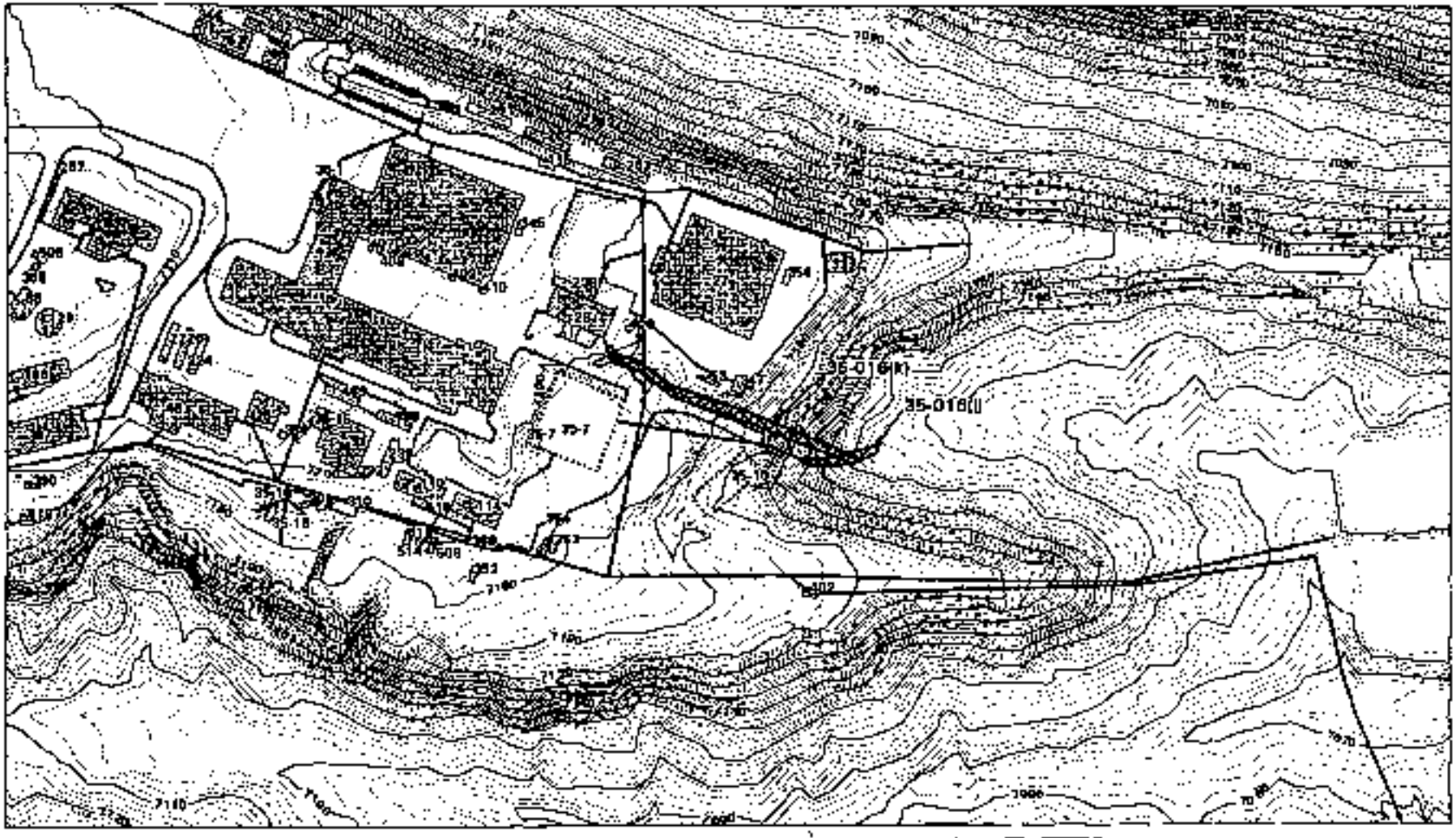
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, commingled contaminants, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 35-016(k) consisted of drains situated in concrete catch basins that collected water leaks from the UV sterilizer and once-through cooling water from a closed heat exchange system in TA-35-29, the Gas Laser Building. The drain line runs eastward and discharged to a shallow tributary of Ten Site Canyon. PRS 35-016(l) is a daylight discharge channel carved in tuff and established in 1961 to handle storm water runoff from TA-35-29 and -7. The channel runs eastward and discharges to the same outfall area as PRS 35-016(k) causing COPCs to be commingled.



PRS Consolidation Unit 35-016(k)-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Marcus Jones

RMAD G108884 17 Jul 00

PRS Consolidation Worksheet

Site Type: MDA Y

Proposed PRS Number: 39-001(b)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
39-001(b)	HSWA	MDA Y - (Inactive)	Rad, Metals, SVOCs, PCBs, VOCs	North Ancho
39-008	HSWA	Firing range - (Inactive)	Rad, Metals, SVOCs, PCBs, VOCs	North Ancho

Consolidation Checklist Criteria:

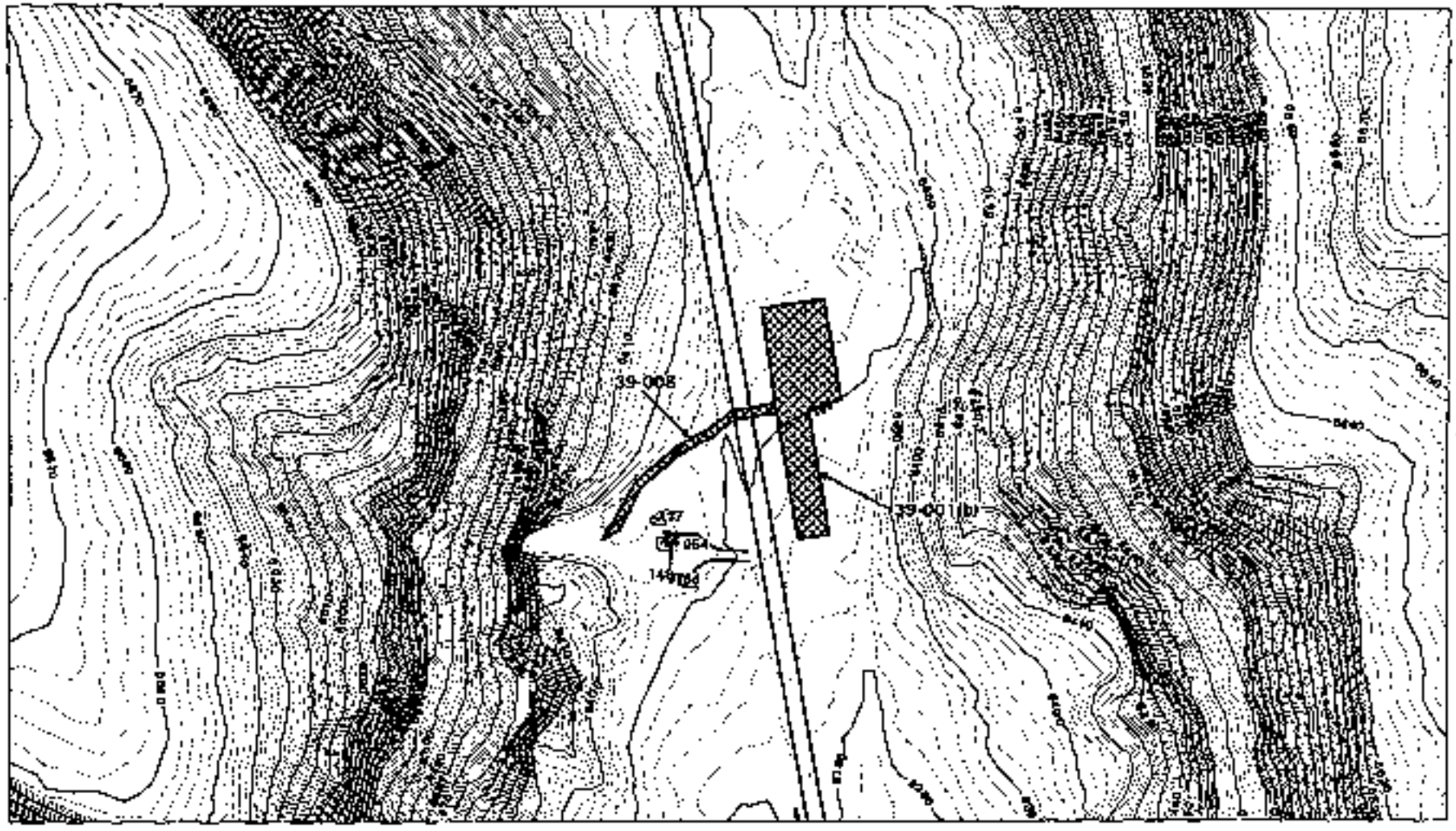
	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, commingled contaminants, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 39-001(b), also known as MDA Y, consists of three pits excavated beginning in the late 1960s that were used for the disposal of office waste and debris from former firing range PRS 39-008. PRS 39-008 is soil contamination remaining from TA-39-137 that housed a single-stage gas gun that was used to fire projectiles at targets attached to the end of the gun. Debris scattered around the outside of the building was subsequently pushed to a mound near the test area, and then placed in MDA Y. Therefore, COPCs are commingled.



PRS Consolidation Unit 39-001(b)-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Tiling:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Mercia Jones

FIMAD G108865 17 Jul 00

PRS Consolidation Worksheet

Site Type: Waste Water Treatment Plant - TA-45

Proposed PRS Number: 45-001-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
01-002(b)-00	HSWA	Outfall Portion - (inactive) - changed FY00	Rad, Metals, SVOCs, VOCs, HE	Pueblo
45-001	HSWA	TA-45 Waste water treatment plant - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Pueblo
45-002	HSWA	Vehicle Decontamination facility - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Pueblo
45-003	HSWA	Waste lines at TA-45 WWTP - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Pueblo
45-004	HSWA	Sanitary Sewer Outfall - (inactive)	Rad, Metals, SVOCs, VOCs, HE	Pueblo
C-45-001	Non-HSWA	Parking lot of Former Treatment Plant	Rad, Metals, SVOCs, VOCs, HE	Rendija/Barrancas/Guaje

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Based on the operational history, commingled waste streams, geographical proximity, similar transport mechanisms, indistinguishable source terms, common human health and ecological exposure areas, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

The PRSs in this consolidated unit were all associated with the former TA-45 Waste Water Treatment Plant (WWTP) which received radioactive liquid waste from TA-1 and TA-3. The plant began operation in 1951 and was decontaminated and decommissioned in 1966 and 1967. PRS 45-001 is the former location of the WWTP itself, and PRS 45-003 consists of the former WWTP inlet and outlet drain lines. PRS 45-002 was a vehicle decontamination facility adjacent to PRS 45-001, where large radioactively contaminated items and vehicles were steamed cleaned. Waste water from the facility was initially discharged directly to Acid Canyon, and was subsequently pumped to PRS 45-001. PRS 45-004 is the former location of a sanitary sewer outfall is directly adjacent to PRS 45-001. PRS 1-002 was divided into two PRSs; 01-002(a)-00 - the drain line portion; and 1-002(b)-00 - the outfall portion. The outfall portion was added to this consolidated PRS in FY00, and is described as an outfall that received untreated radioactive waste water from TA-1 prior to construction of the TA-45 WWTP. The outfall areas from PRSs 1-002(b)-00, 45-001, 45-002 and 45-004 overlap and COPCs are commingled. AOC C-45-001was the parking lot of the former WWTP. The drain line component of former PRS 1-002 (now designated as 01-002(a)-00) will be addressed as part of the investigation of consolidated PRS 01-001(a)-99.

PRS Consolidation Unit 45-001-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:4800

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Melvin Jones

RMAD G108966 17 Jul 00

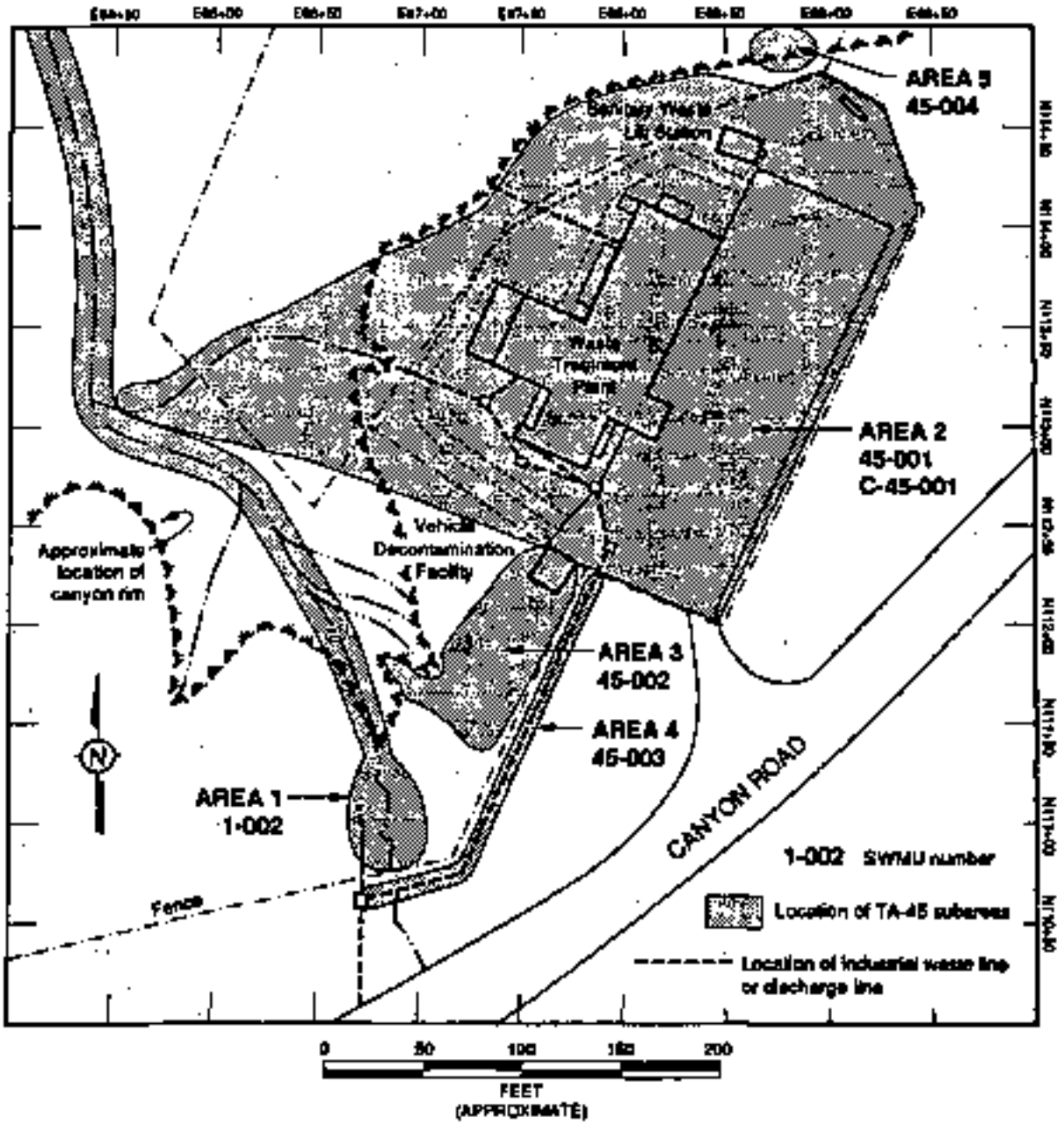


Figure 3.4-9. Location of five geographic areas and related SWMUs at TA-45 (modified from LANL 1981, 0141).

PRS Consolidation Worksheet

Site Type: Drain lines and outfalls

Proposed PRS Number: 48-007(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
48-007(a)	HSWA	Drain line and outfall - (inactive)	Metals, Gross Rad	Upper Mortandad
48-007(d)	HSWA	Drain line and outfall - (inactive)	Rad, Metals	Upper Mortandad
48-010	HSWA	Surface Impoundment - (inactive)	Metals, Gross Rad	Upper Mortandad

Consolidation Checklist Criteria:

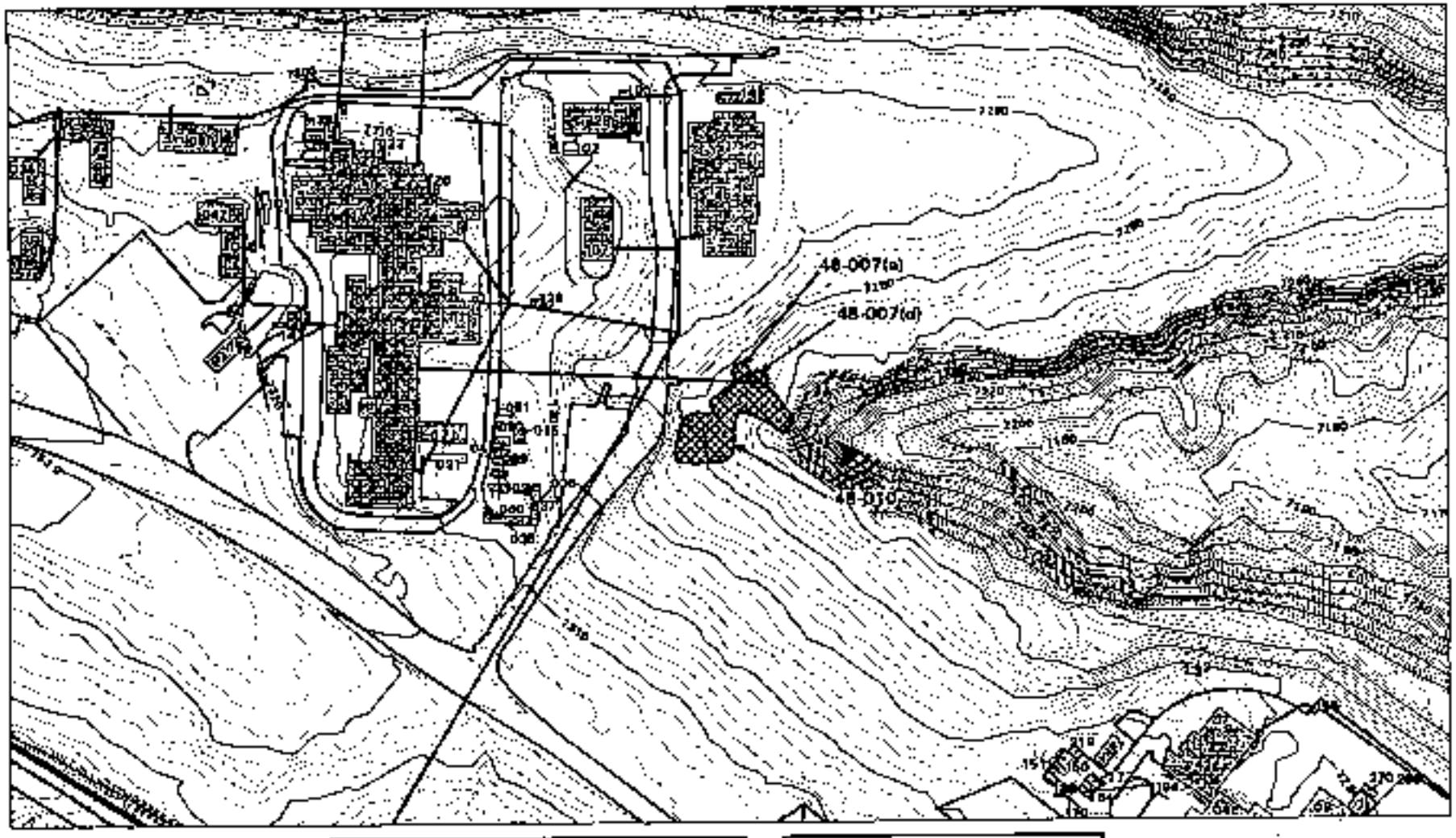
	Yes	No
1. *Are the PRSs part of or related to a process or system that treated, stored or released hazardous constituents to the environment?*	☑	☐
2. *Is the contamination origin non-discernable?*	☑	☐
3. *Are the PRSs in the same geographic proximity?*	☑	☐
4. *Are the transport mechanisms and pathways similar?*	☑	☐
5. *Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?*	☑	☐

Consolidation Rationale:

Based on the operational history, waste streams, geographical proximity, similar transport mechanisms, same process, commingled contaminants, and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

PRS 48-007(a) consists of drain lines that collect treated cooling-water blowdown from two "cooling towers" that are part of the air conditioning system on the roof of TA-48-1. Water treatment chemicals were used to control scale, corrosion, and algal/microbial growth. The NPDES-permitted outfall discharged to an unlined surface impoundment PRS (48-010) east of TA-48-1. PRS 48-007(d) consists of a drain line that collects noncontact cooling water used to cool a vacuum pump house at TA-48-1. This outfall also discharged to the surface impoundment designated as PRS 48-010 that is part of this consolidated unit. Outfall areas overlap causing COPCs to be commingled.



PRS Consolidation Unit 48-007(a)-00

- Drain Line
- Former Structure
- Paved Road/Parking
- PRS
- Structure

Contour Interval: 2 ft

Scale: 1:2400

0 200 400

FEET

1983 North American Datum
Projection and Grid Ticks:
New Mexico State Plane Coordinate System,
Central Zone (Transverse Mercator)

Notice: Information on this map is provisional and has not been checked for accuracy.

Produced by Merce Jones

RMAD-G108867 17 Jul 00

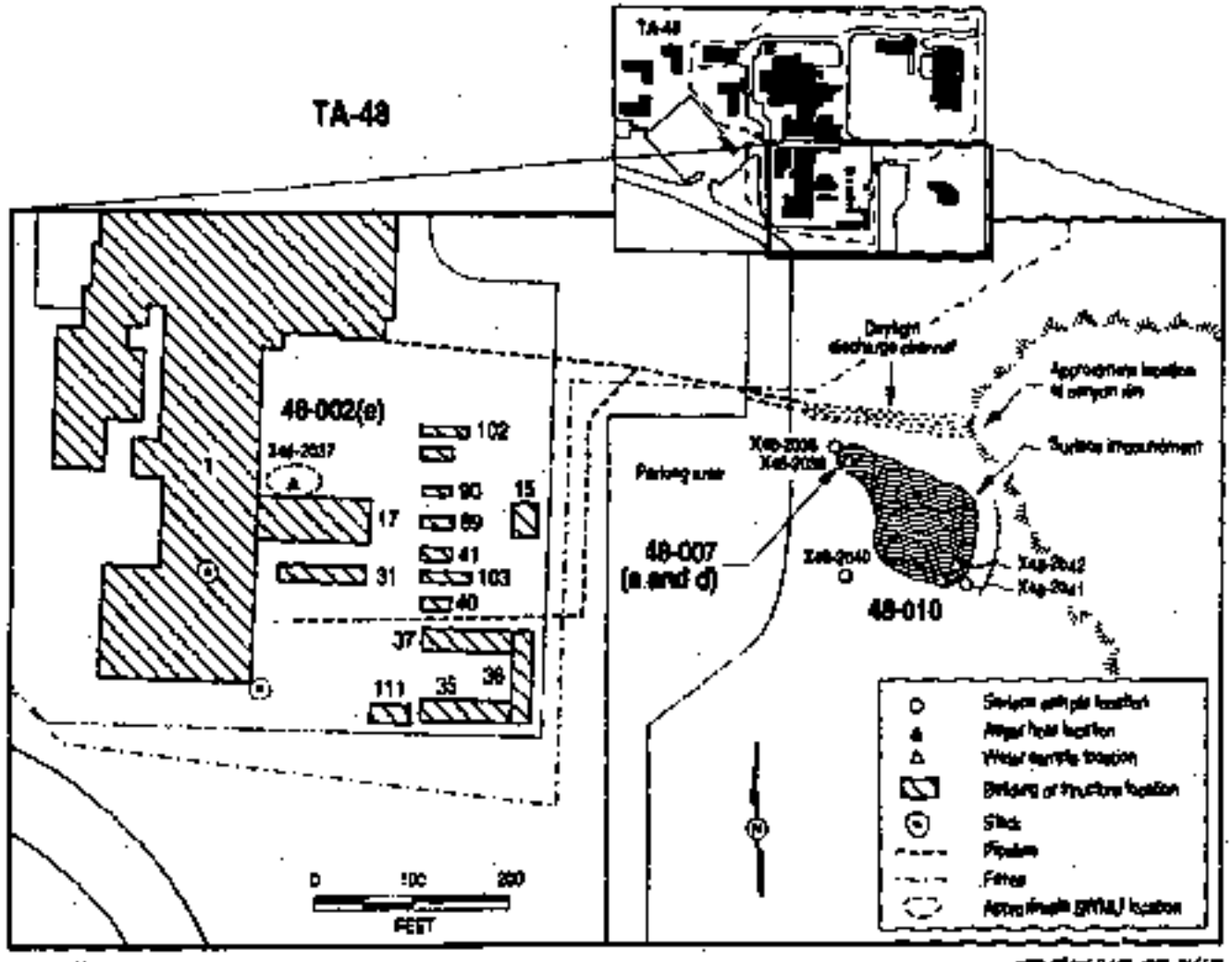


Figure 7-65. Schematic sample location map for SWMU Nos. 48-002(e), 48-007(a and d), and 48-010, Aggregate X.

PRS Consolidation Worksheet

Site Type: MDA AB

Proposed PRS Number: 49-001(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
49-001(a)	HSWA	MDA AB - experimental shafts	Rad, Metals, HE, SVOCs, VOCs	North Ancho
49-001(b)	HSWA	MDA AB - experimental shafts	Rad, Metals, HE, SVOCs, VOCs	North Ancho
49-001(c)	HSWA	MDA AB - experimental shafts	Rad, Metals, HE, SVOCs, VOCs	North Ancho
49-001(d)	HSWA	MDA AB - experimental shafts	Rad, Metals, HE, SVOCs, VOCs	North Ancho
49-001(e)	HSWA	MDA AB - experimental shafts	Rad, Metals, HE, SVOCs, VOCs	South Ancho
49-001(f)	HSWA	MDA AB - experimental shafts	Rad, Metals, HE, SVOCs, VOCs	South Ancho
49-001(g)	HSWA	Surface Contamination - MDA AB	Rad, Metals, HE, SVOCs, VOCs	Lower Water/Indio

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored,or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Since the PRSs are in close proximity, have the same COPCs, undistinguishable source terms, identical transport mechanisms, and are part of one site (MDA AB), they are proposed for consolidation.

Description:

This consolidated PRS consists of inactive experimental shafts and related subsurface and surface contamination that are part of MDA AB at TA-49, (PRSs 49-001(a-g)). The Phase I RFI was performed on all of the PRSs at the same time and the entire area has subsequently been stabilized and capped as part of an Interim Measure implemented in 1998. Moisture monitoring data from the cap and beneath the cap is currently collected monthly and reported to NMED quarterly. The second phase of the RFI which will address all of the PRSs in this unit is planned for implementation in FY03.

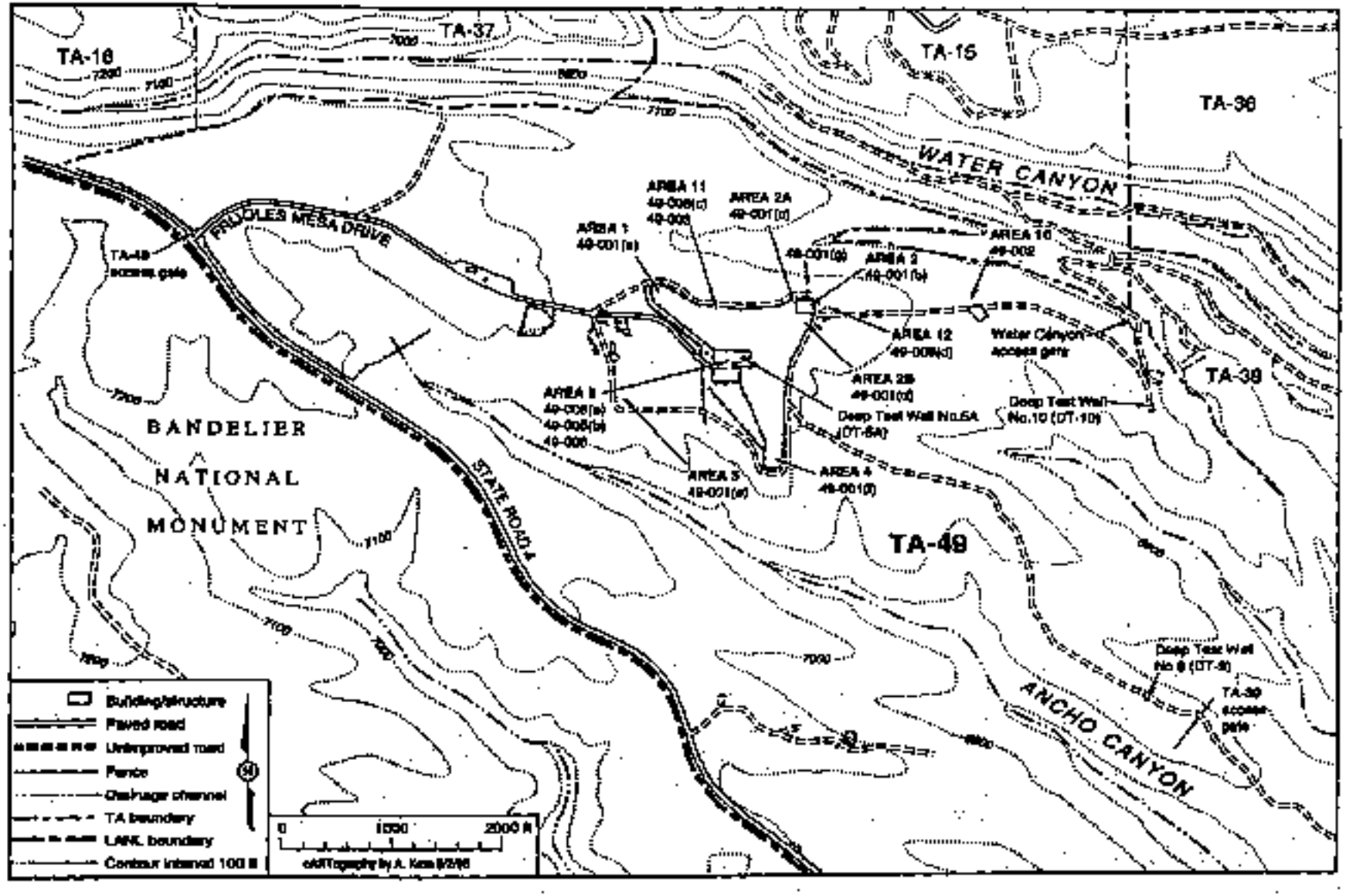


Figure 1-1. Map of TA-49.

PRS Consolidation Worksheet

Site Type: RLWTF Tanks - TA-50

Proposed PRS Number: 50-002(b)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
50-002(b)	HSWA	Acid Waste Underground Tank - (active)	Rad, Metals, VOCs, SVOCs, PCBs, pH	Middle Mortandad/Ten-Site
50-002(c)	HSWA	Caustic Waste Underground Tank - (active)	Rad, Metals, VOCs, SVOCs, PCBs, pH	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

	Yes	No
1. Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?	☑	☐
2. Is the contamination origin non-discernable?	☑	☐
3. Are the PRSs in the same geographic proximity?	☑	☐
4. Are the transport mechanisms and pathways similar?	☑	☐
5. Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?	☑	☐

Consolidation Rationale:

Since the PRSs are in close proximity, have the same COPCs, undistinguishable source terms, identical transport mechanisms, and are part of one system, they are proposed for consolidation.

Description:

This consolidated PRS consists of two active waste tanks, TA-50-67 and TA-50-68, contained in an underground concrete vault. The tanks and vault were constructed exclusively to handle radioactive acid and caustic waste from TA-55, because the transuranic wastes are processed separately from other wastes. Inlet and outlet drain lines associated with the tanks are included in the consolidated unit. The tanks, vault and drain lines are considered an active nuclear facility by TA-50.

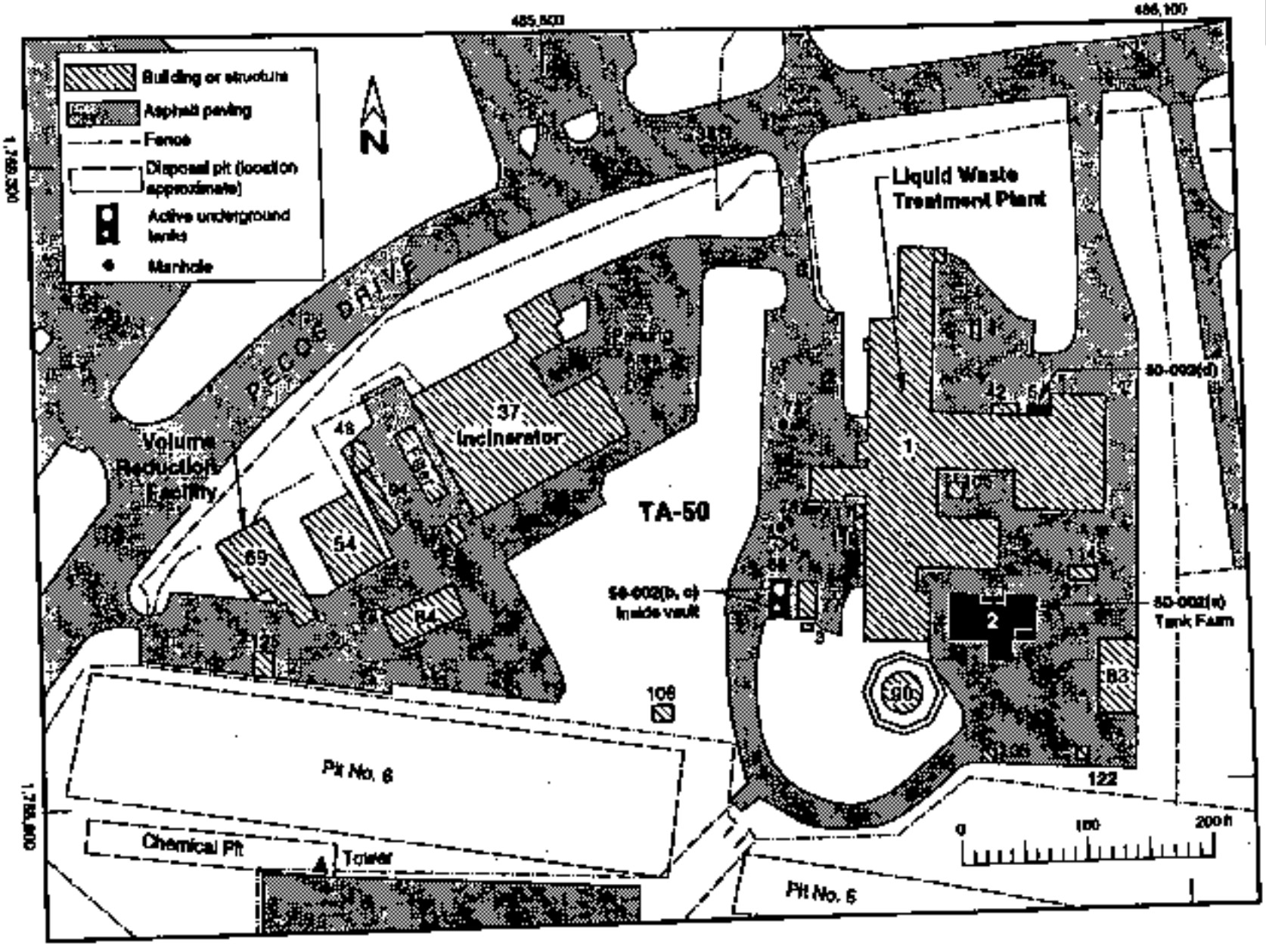


Figure 2-5 Location of active storage tanks at TA-50.

PRS Consolidation Worksheet

Site Type: Former Structures - RLWTF

Proposed PRS Number: 50-004(a)-00

PRS Number	Regulatory Driver	PRS Description	COPCs	Watershed Aggregate
50-004(a)	HSWA	Former Waste lines - (inactive)	Rad, Metals, SVOCs	Middle Mortandad/Ten-Site
50-004(b)	HSWA	Former rad waste tanks (removed)	Rad, Metals, SVOCs	Middle Mortandad/Ten-Site
50-004(c)	HSWA	Rad waste lines (removed)	Rad, Metals, SVOCs	Middle Mortandad/Ten-Site

Consolidation Checklist Criteria:

	Yes	No
1. *Are the PRSs part of or related to a process or system that treated, stored, or released hazardous constituents to the environment?*	☑	☐
2. *Is the contamination origin non-discernable?*	☑	☐
3. *Are the PRSs in the same geographic proximity?*	☑	☐
4. *Are the transport mechanisms and pathways similar?*	☑	☐
5. *Do risk calculations need to be performed on all of the PRSs to determine a cumulative effect in order to make further recommendations?*	☑	☐

Consolidation Rationale:

Based on the operational history, identical waste streams, geographical proximity, subsurface transport mechanisms and the investigation needed to assess potential contamination, it is proposed that these PRSs be consolidated.

Description:

This consolidated PRS consists of the former components of the TA-50 Radioactive Liquid Waste Treatment Facility. PRS 50-004(a) is identified as the former influent drain lines to TA-50, which were removed in 1975. The underground vault, (TA-50-3) that contained three stainless steel-lined concrete tanks is designated as PRS 50-004(b), which used to store waste from the Omega Reactor and other sources. Drain lines and manholes to the collection tank structure included drain line 49 from TA-35 and drain line 50 from the treatment plant itself. Drain line 49, the vault and tanks were all removed in 1989. PRS 50-004(c) consists of 16 drain lines and associated manholes that discharged to TA-50-3 that were removed between 1981 and 1989. The PRSs will be investigated simultaneously.

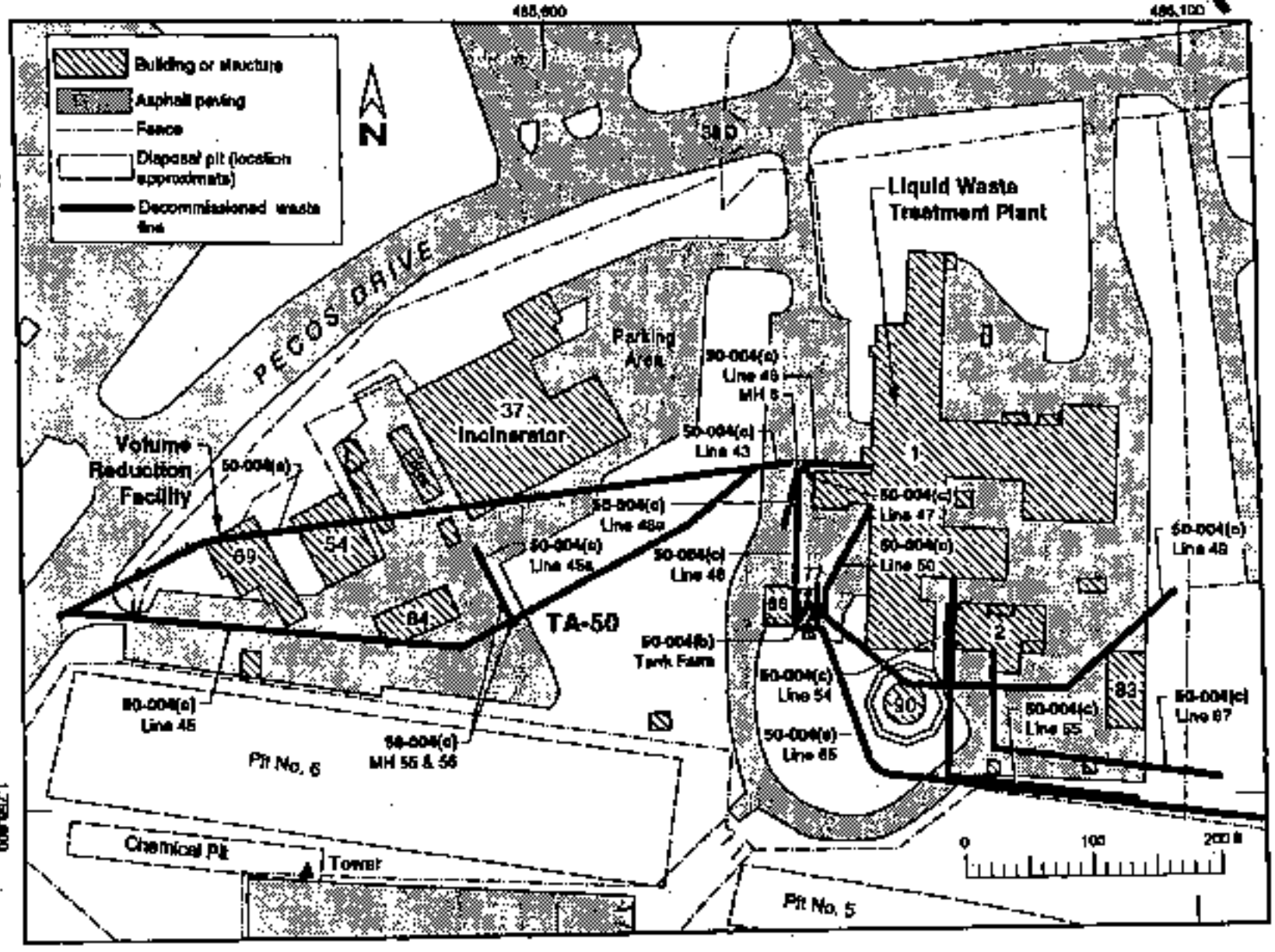


Figure 2-7 Location of decommissioned waste lines, manholes, and tanks at TA-50.