

Los Alamos

NATIONAL LABORATORY

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

Date: October 10, 1996
In Reply Refer To: ESH-18/WQ&H:96-0517
Mail Stop: K497
Telephone: (505) 665-1859

94
sta -
Teri D -

Marcy Leavitt, Bureau Chief
Ground Water Protection and Remediation Bureau
New Mexico Environment Department
1190 St. Francis Drive
Santa Fe, New Mexico 87502

Jim Piatt, Bureau Chief
Surface Water Quality Bureau
New Mexico Environment Department
1190 St. Francis Drive
Santa Fe, New Mexico 87502

SUBJECT: LOS ALAMOS NATIONAL LABORATORY, NOTICE OF INTENT TO DISCHARGE

Dear Ms. Leavitt and Mr. Piatt:

Enclosed is a Notice of Intent to Discharge which is being submitted to the New Mexico Environment Department (NMED) under Section 1201 of the New Mexico Water Quality Control Commission (NMWQCC) Regulations. This NOI covers the discharge of water for suppressing dust from demolition activities being performed at Technical Area 21, which is centered on DP mesa immediately southeast of the Los Alamos townsite. This activity is being conducted by the Laboratory's Environmental Restoration Project's Decommission Group and consists of the dismantlement and removal of concrete structures and soil of Buildings 3 and 4 North (see attached diagram).

The dust suppression discharge from four low flow hoses and misting nozzles will range from 200 to 2000 gallons per day. The discharge will be contained on-site. The discharges associated with the building footprints will be contained in soil-floor utility tunnels beneath the buildings. The dust suppression water used in this area may have a pH of 12 due to the lime in the concrete that is being demolished. The soil in the utility tunnels is radioactively contaminated. This soil will be excavated as part of the project and disposed of as low-level radioactive waste. Stormwater runoff associated with this project will be contained on site in a bermed retention pond. This retention pond will retain all surface water flows and there will be no surface water discharges to a watercourse. In addition, the runoff collected in this retention pond should have no contaminants. Further details regarding this activity are contained in the attached application and water containment plan.

Please call Mike Saladen at 665-6085 or Mike Alexander at 665-4752 of the Laboratory's Water Quality & Hydrology Group (ESH-18) if you need any additional information concerning the NOI.

Sincerely,



Steven R. Rae
ESH-18 Group Leader
Water Quality & Hydrology Group

TV



10264

Marcy Levitt, Jim Piatt
ESH-18/WQ&H:96-0517

- 2 -

October 10, 1996

SR:CJ/em

Enclosures: a/s

Cy: M. Saladen, ESH-18, w/enc., MS K497
M. Alexander, ESH-18, w/enc., MS K497
C. Jacquez, ESH-18, w/enc., MS K497
D. Stout, EM/ER, w/enc., MS M769
J. Jansen EM/ER, w/enc. MS M992
D. McInroy, EM/ER, w/enc., MS M992
M. Brown, JCI/JENV, w/enc., MS A199
P. Shanley, ESH-19, w/enc., MS K498
K. Zamora, DOE-LAAO, w/enc., MS A316
G. Saums, NMED/SWQB, w/enc., Santa Fe
H. Decker, NMED/AIP, w/enc., Santa Fe
B. Garcia, NMED/HRMB, w/enc., Santa Fe
CRM-4, w/enc., MS A150
WQ&H File, w/att., MS K497



NOTICE OF INTENT

1. Name and address of the facility making the discharge.

Dan Stout
Los Alamos National Laboratory
P.O. Box 1663, MS M773
Los Alamos, New Mexico 87545

2. Location of the discharge.

The discharge will occur at the TA-21 site, which is centered on DP mesa immediately southeast of the Los Alamos townsite. Discharges will occur on the footprints of Buildings 3 and 4 North, as the concrete flooring and foundations are removed and the dust is suppressed with water. A discharge will also occur to the north of the buildings, where a retention berm will collect all stormwater runoff associated with the project. Discharge collected in this retention pond is expected to evaporate or percolate into the ground. For locations of demolition and discharge, see attached diagram and map.

3. The means of discharge (to Lagoon, Flowing Stream, Water Course, Arroyo, Septic Tank, Other).

The discharge will be onto the ground and wholly contained on-site at TA-21. The discharges associated with the building footprints will be contained in soil-floor utility tunnels beneath the TA-21 buildings 3 and 4. Stormwater in the general area of the project will be discharged to the bermed retention pond.

4. The estimated concentration of contaminant in the discharge.

The dust suppression water that will be discharged to the TA-21 Building 3 and 4 tunnels may have a pH of 12 due to the lime in the concrete that is being demolished. The soil at the bottom of the utility tunnels is radioactively contaminated. This soil will be excavated as part of the project and disposed of as low-level radioactive waste. The stormwater draining to the retention pond should not have any contaminants.

5. The type of operation from which the discharge is derived.

The discharges are the result of the dismantlement and removal of the concrete structures and soil of Buildings 3 and 4 North. A fine water spray is used to reduce the dust emissions associated with concrete and soil excavation.

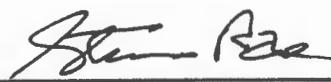
6. The estimated flow to be discharged per day.

The dust suppression discharge will range from 200 to 2000 gallons per day. Four low flow hoses and misting nozzles will discharge a maximum of a gallon per minute during the eight hour workday (approximately 1920 gallons total). Stormwater collected in the retention pond is estimated to be 16000 gallons (4 inches of rain in a 500 by 100 foot area) over the next three months.

7. The estimated depth to ground water (if available).

The depth to ground water is 750 feet (from the TA-21 RFI workplan).

Signed



Group Leader, ESH-18

Date

Oct. 11, 1996

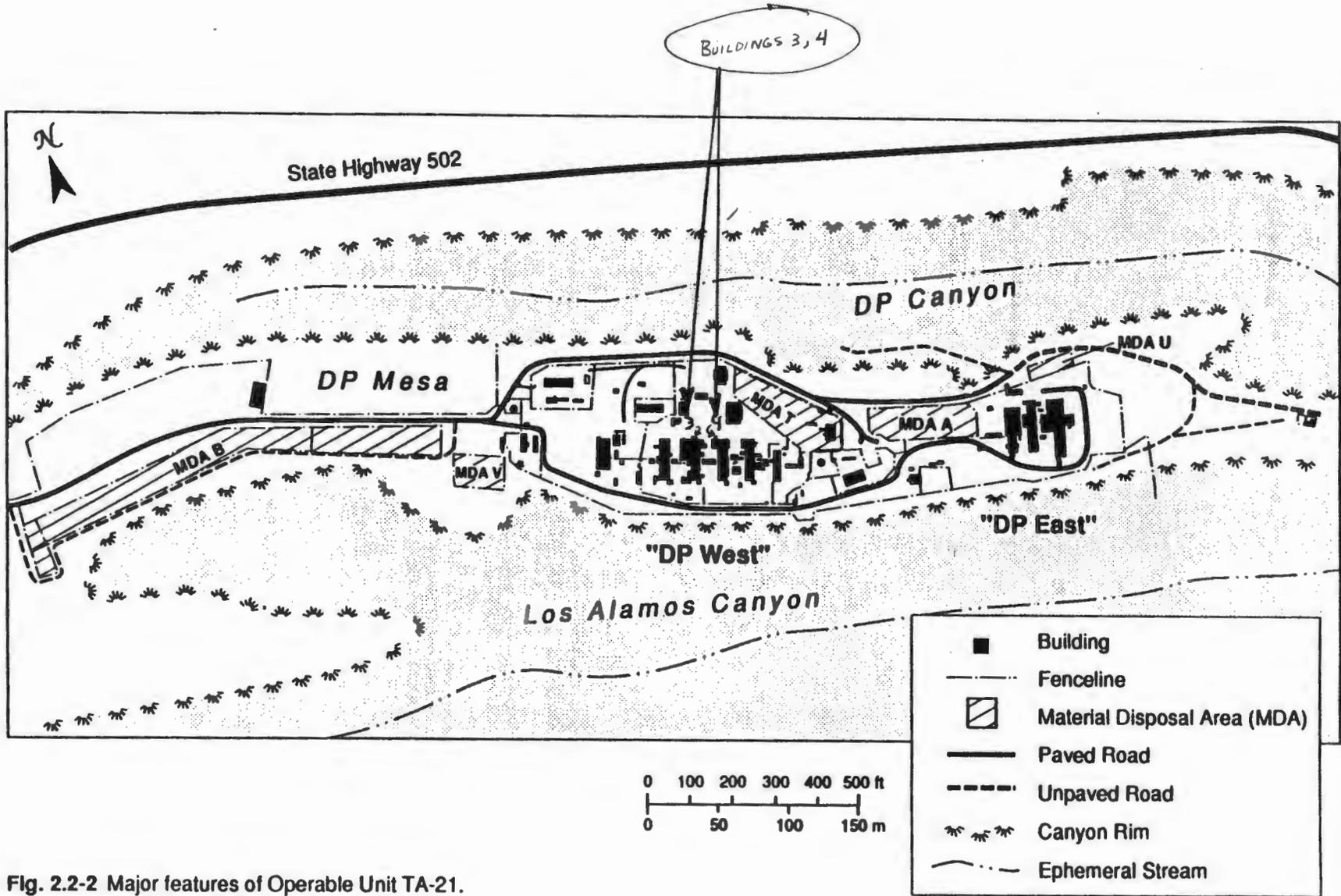
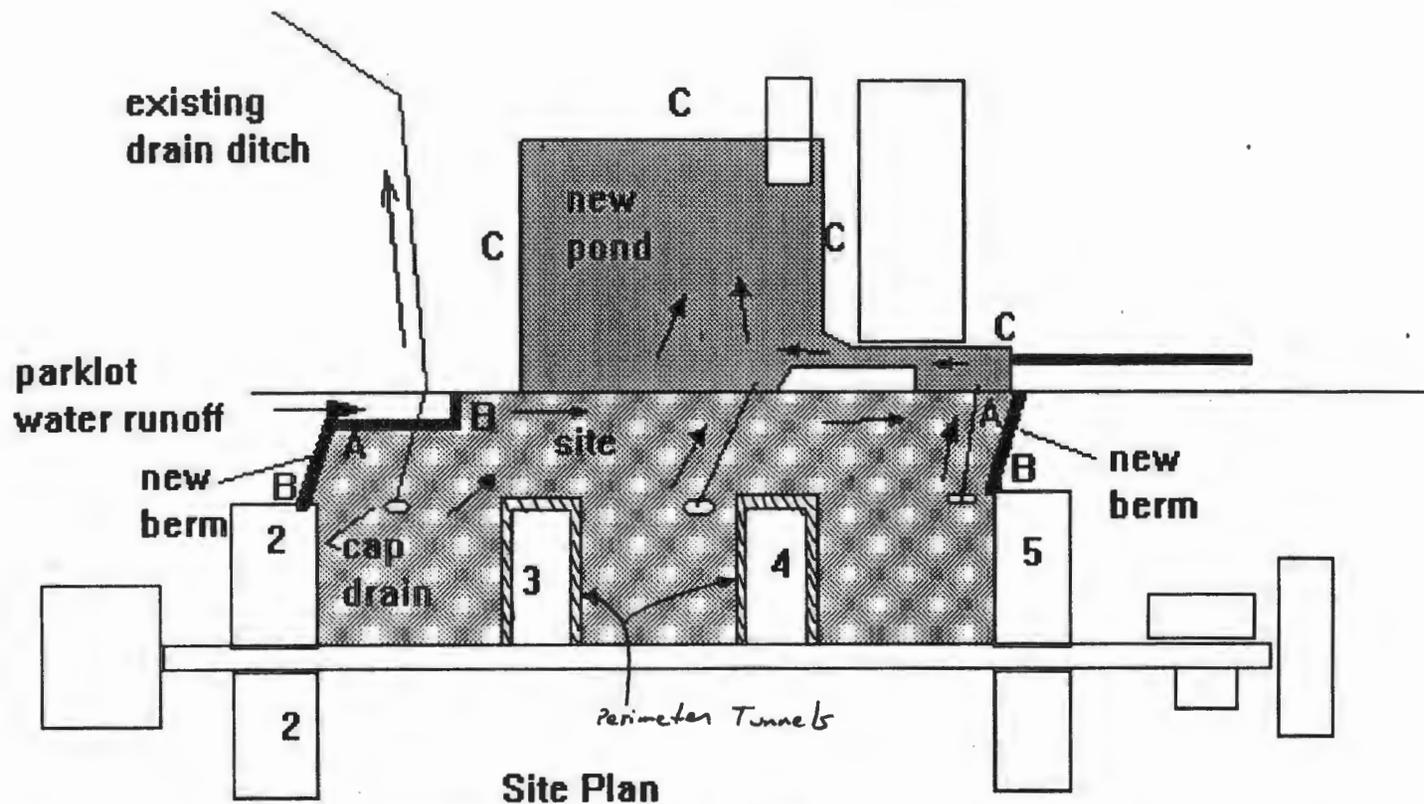
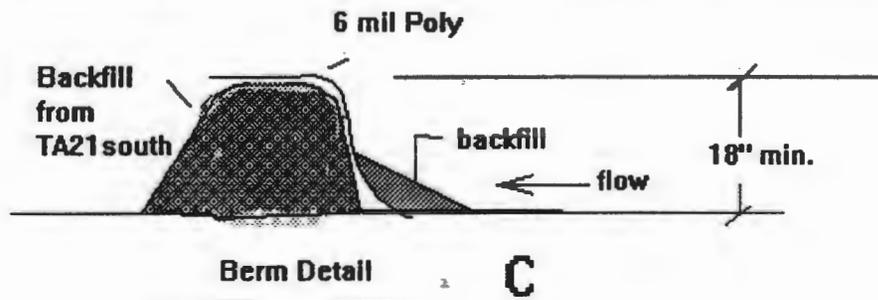
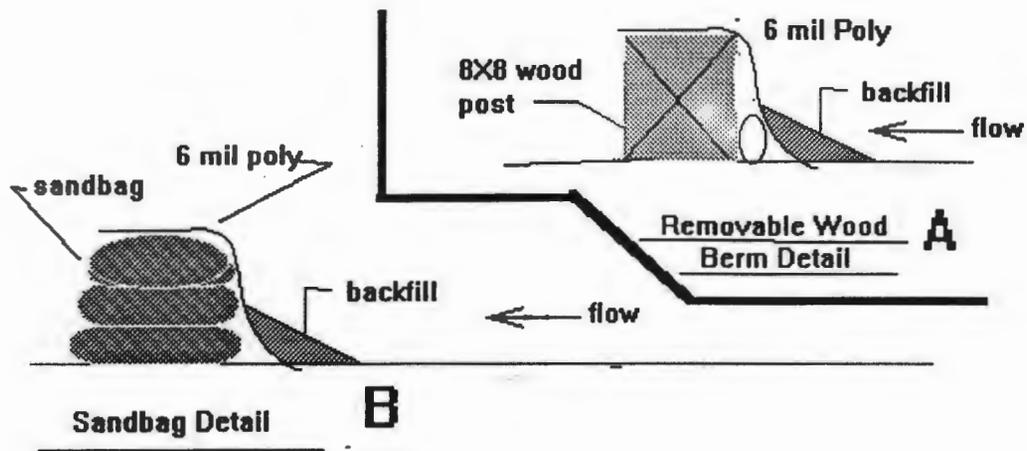


Fig. 2.2-2 Major features of Operable Unit TA-21.



Site Plan
Water Containment Plan





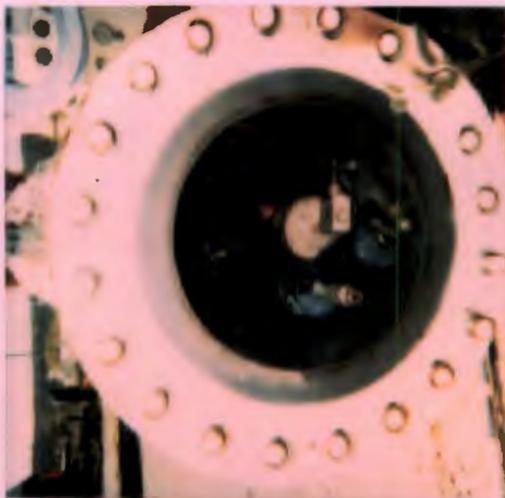
Hot cell demolition, 20 Sep 96
demo8.drw

TA-21

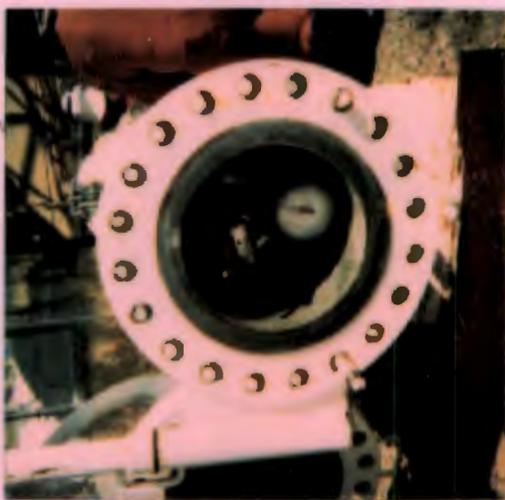
10/2/96

TA-21 Unknowns

- ① Released pressure on overpack, & allowed to bleed off
- ② Removed flange bolts on both ends
- ③ Opened both flanges
- ④ Monitored using TMX-40 & Microtip; no readings noted
- ⑤ Removed containers from overpack and placed in the blue storage unit (shown @ right in bottom photo)



TA-21 Unknowns
10/2/96

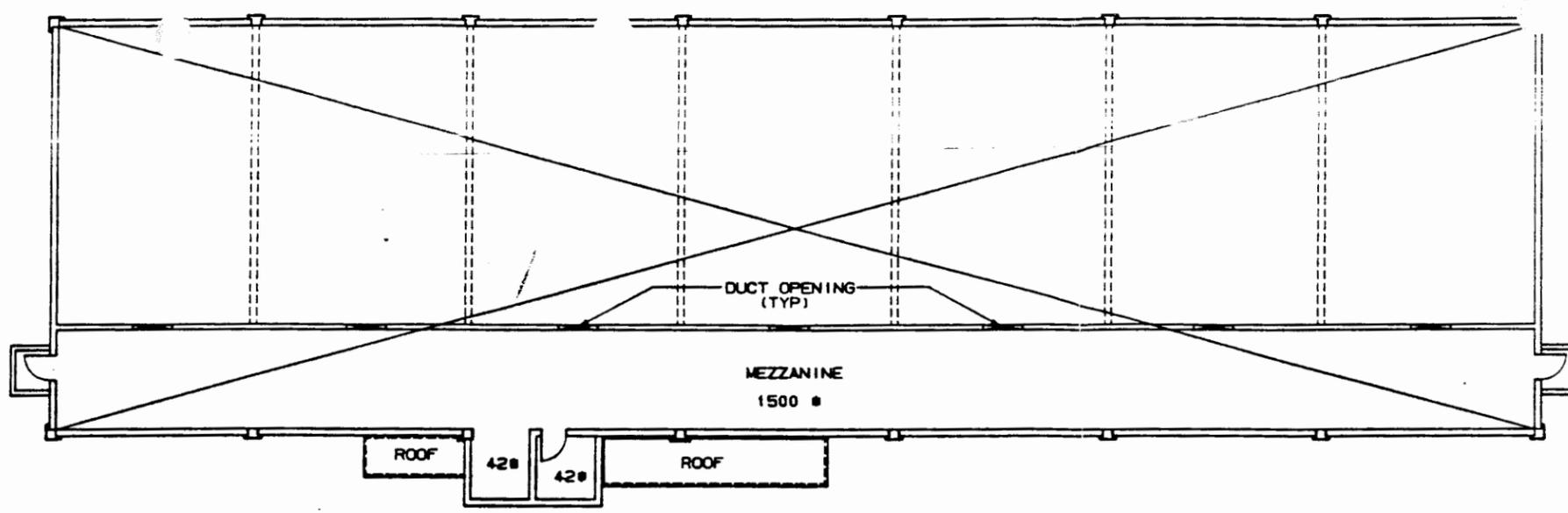


TA-21 Unknowns
10/2/96

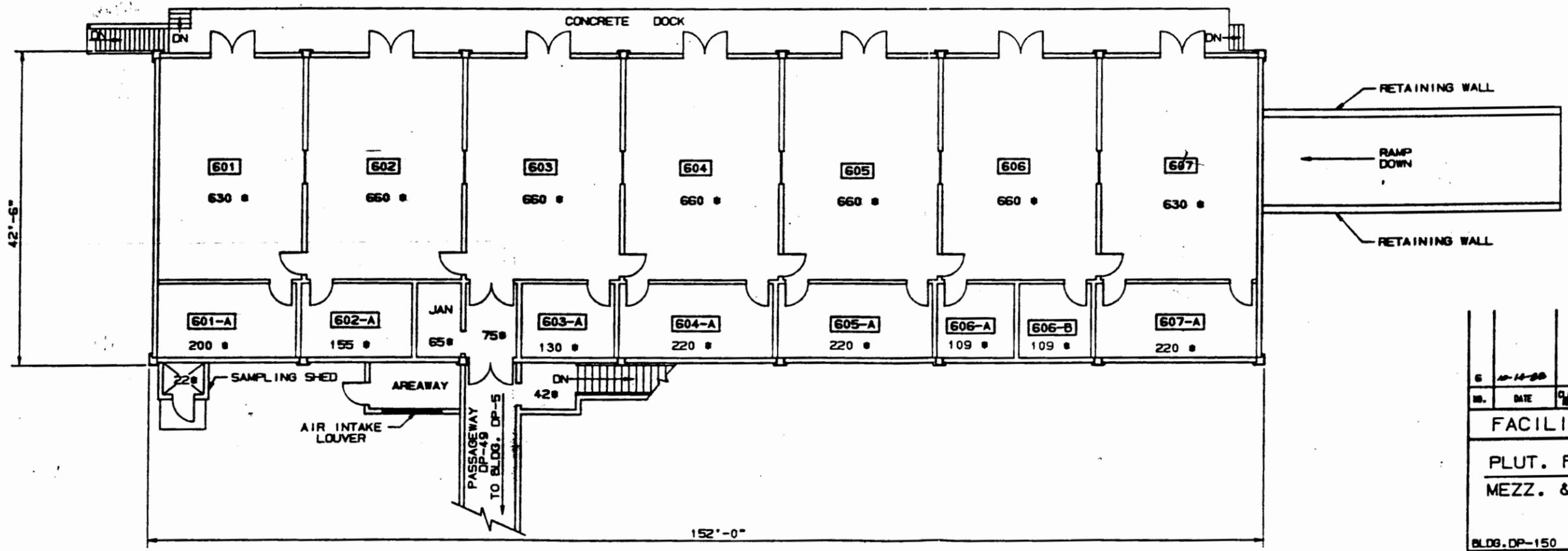


TA-21 Unknowns
10/2/96





MEZZANINE PLAN

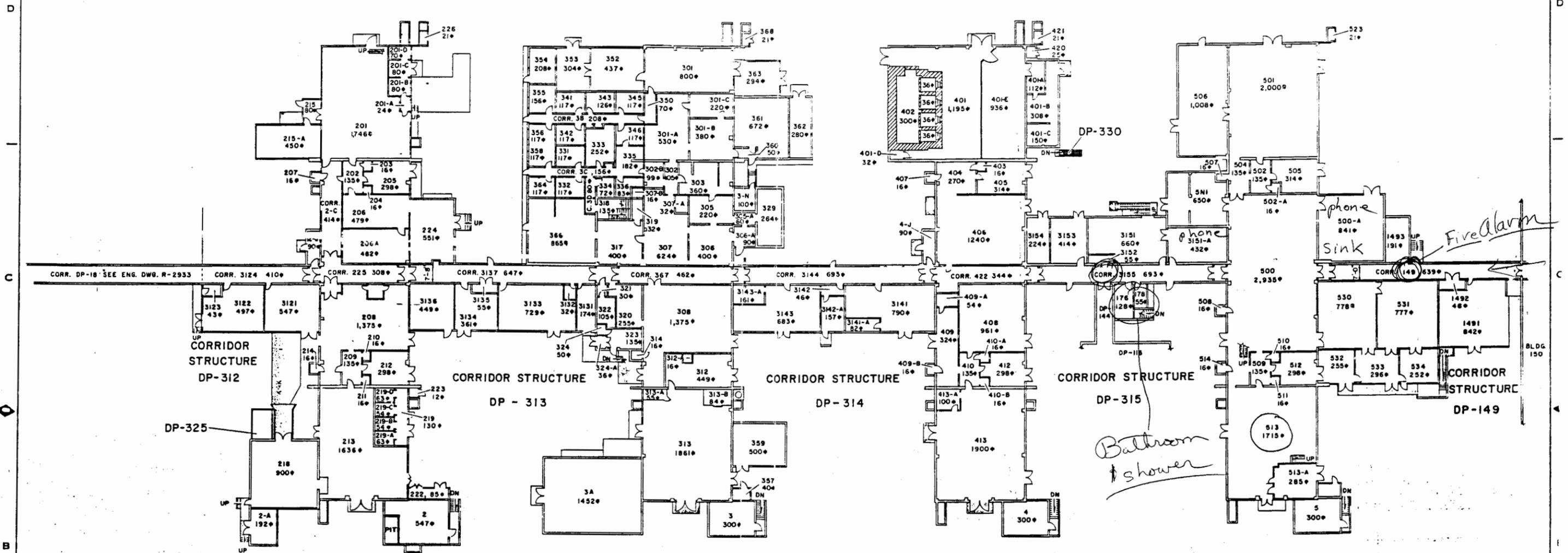


FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"
 0 2 4 6 8 10 14 20
 GRAPHIC SCALE

BASEMENT FLOOR TOTAL SQ. FT. = 6399
 FIRST FLOOR TOTAL SQ. FT. = 6127
 MEZZANINE FLOOR TOTAL SQ. FT. = 1584
 TOTAL SQ. FT. = 14110

6	10-14-88	REDRAWN ON CAD	KE						
NO.	DATE	CLASS. REV.	REVISIONS	DRP	DES	REL	REV. DRP	REV. DES	REV. REC
FACILITIES ENGINEERING DIVISION									
PLUT. FUEL SERVICE BLDG. MEZZ. & FIRST FLOOR PLAN									
BLDG. DP-150								TA-21	
SUBMITTED			RECORDED			APPROVED <i>HO Shute</i>			
Los Alamos Los Alamos National Laboratory Los Alamos, New Mexico 87545								SHEET 2 of 2	
CLASSIFICATION <i>U</i> REVIEWER <i>HO Shute</i> DATE 10/14/88									
REQUESTING DIVISION			LAB JOB NO.			DRAWING NO.			REV
REQUESTING GROUP						ENG-R2954			

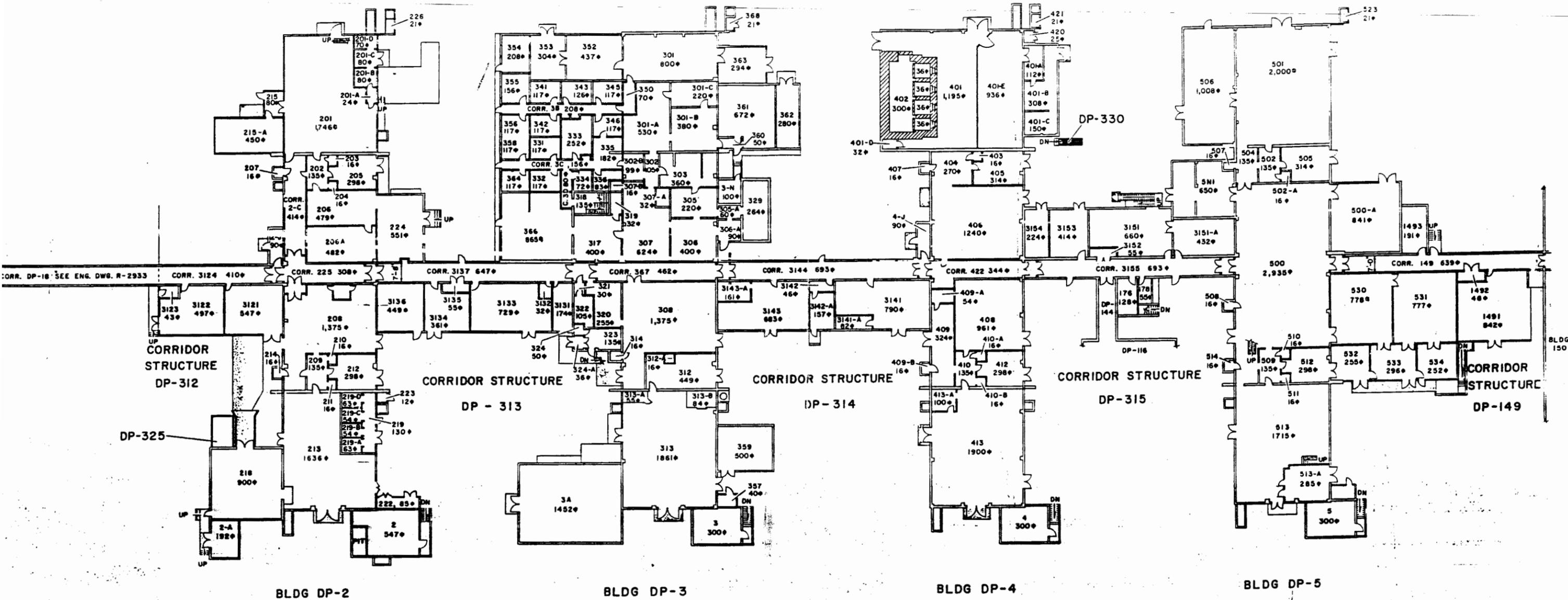


NOTE: THIS DWG R 3892 SUPERCEDES DWGS R 1994, R 2919, R 2920, R 2921, R 2922, R 2930, R 2931, R 2932, R 2934, R 3283



FIRST FLOOR CORRIDOR STRUCTURE DP - 312	SQ. FT.	1,497
FIRST FLOOR BLDG DP - 2	SQ. FT.	10,948
FIRST FLOOR CORRIDOR STRUCTURE DP - 313	SQ. FT.	2,447
FIRST FLOOR BLDG DP - 3	SQ. FT.	17,657
FIRST FLOOR CORRIDOR STRUCTURE DP - 314	SQ. FT.	2,612
FIRST FLOOR BLDG DP - 4	SQ. FT.	9,633
FIRST FLOOR CORRIDOR STRUCTURE DP - 315	SQ. FT.	2,661
FIRST FLOOR BLDG DP - 5	SQ. FT.	13,256
FIRST FLOOR CORRIDOR STRUCTURE DP - 149	SQ. FT.	1,720

3	6-21-84	REVISED TO STATUS OF 6-21-84	HM	1
REV.	DATE	REVISION	BY	CHK APP
UNIVERSITY OF CALIFORNIA Los Alamos Los Alamos National Laboratory Los Alamos, New Mexico 87545				
FACILITIES ENGINEERING DIVISION				
FIRST FLOOR PLAN				SEC. CLASSIFICATION
CORR. STRS. DP-312, 313, 314, 315 & 149				CLASS. <i>U</i>
BLDGs. DP-2, 3, 4, & 5				REVIEWER <i>J. ...</i>
TA-21				DATE <i>3-25-71</i>
SUBMITTED	RECOMMENDED	APPROVED		
<i>F. ...</i>	<i>D. ...</i>	<i>[Signature]</i>		
DRAWN D A DAVIS	DATE 3-25-71	SHEET NO. 2 OF 4	DRAWING NO. ENG-R3892	
CHECKED <i>[Signature]</i>				



NOTE: THIS DWG R 3892 SUPERCEDES DWGS R 1994, R 2919, R 2920, R 2921, R 2922, R 2930, R 2931, R 2932, R 2934, R 3283



FIRST FLOOR CORRIDOR STRUCTURE DP - 312	SQ. FT.	1,497
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FIRST FLOOR CORRIDOR STRUCTURE DP - 149	SQ. FT.	1,720

3	6-21-84	REVISED TO STATUS OF 6-21-84	MN	1	22
REV.	DATE	REVISION	BY	CHK	APP
UNIVERSITY OF CALIFORNIA Los Alamos Los Alamos National Laboratory Los Alamos, New Mexico 87545					
FACILITIES ENGINEERING DIVISION					
FIRST FLOOR PLAN					
CORR. STRS. DP-312, 313, 314, 315 & 149					
BLDGs. DP-2, 3, 4, & 5					
TA-21					
SUBMITTED		RECOMMENDED		APPROVED	

TA-21

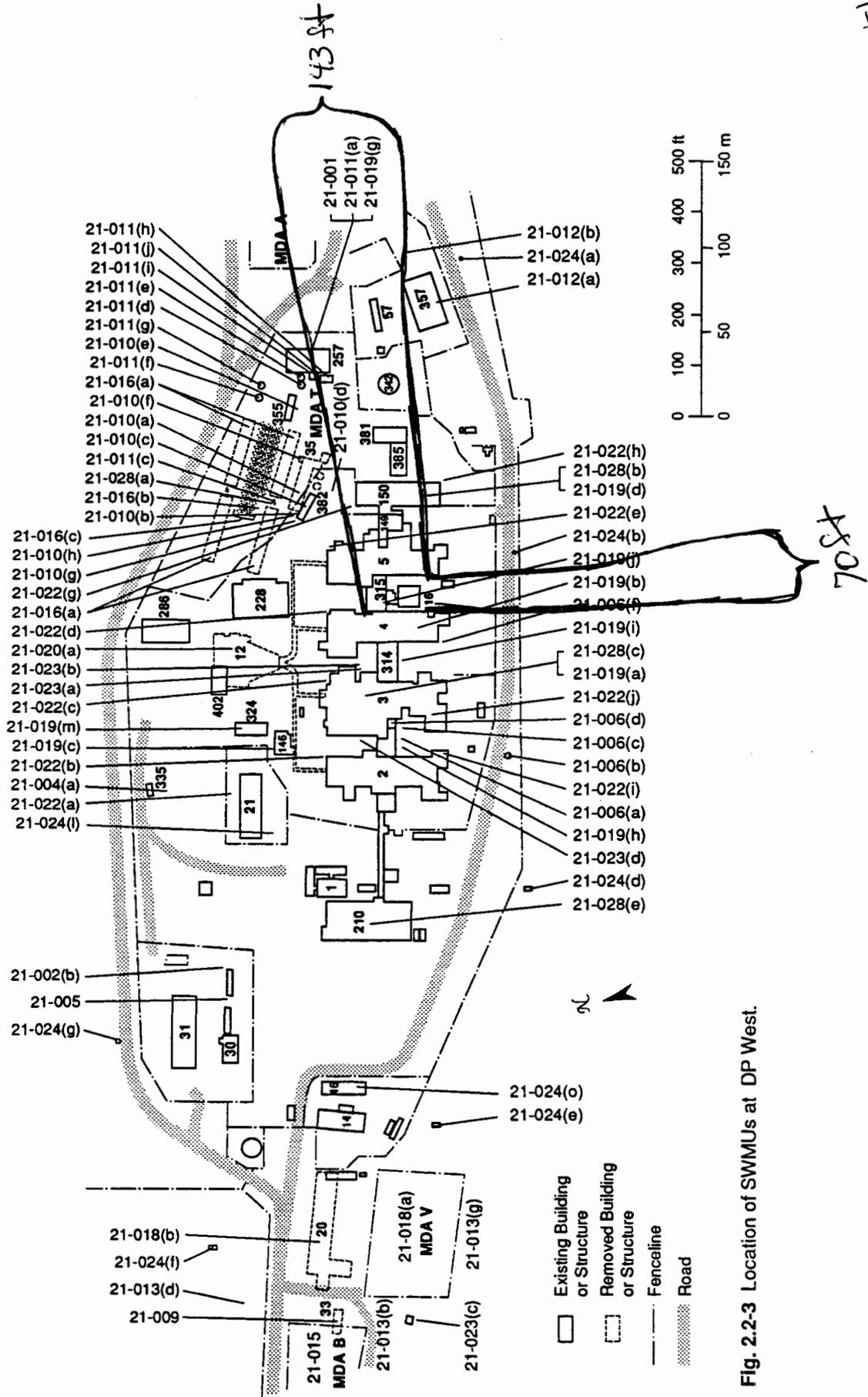


Fig. 2.2-3 Location of SWMUs at DP West.

EOC Log

Name GENE DARLING Position INCIDENT COMMAND

Time	Action
1056	BRIEF. DAVE VOIZ & SCOTT BRYAN will be FIRST ENTRY TEAM IN LEVEL A SUITS. FIRST BUSINESS IS TO CHECK AIR IN ROOM & THEN REMOVE PIPING & VALVES ON THE CYLINDERS SO EQUIPED & CHECK FOR HIGH LEAKS. LAURA BRIESTMEISTER WILL BE SAFETY FOR FIRST ENTRY.
1131	FIRST TEAM ENTRY, will start on NON-FLAMMABLE BOTTLES FIRST FOR VALVE & PIPE REMOVAL.
1148	TWO BOTTLES OUT
1154	Four bottles out
1204	FIRST TEAM OUT, ALL BUT ONE CYLINDER COMPLETED. THE ONLY ONE THAT LEAKED VERY BRIEFLY WAS CHLORINE TRI-CHLORIDE.
1330	MEETING HELD TO DETERMINE HOW TO INVENTORY & SEPERATE REMAINING KNOWN DOT CYLINDERS WITH CAPS OR PLUGS IN PLACE.

Signature Gene Darling Date 8/23/96 Pg 1 of 2

5-0223

EOC Log

Name GENE DARLING Position INCIDENT COMMAND

Time	Action
CONT. 1330	ALL CYLINDERS WILL BE SNIFFED AGAIN FOR LEAKS & THEN EACH WILL BE PUT IN A PAIL OR BUCKET ACCORDING TO HAZARD & CLASS. TAGS WILL BE ATTACHED TO EACH FOR EASY ID WHEN PICKED UP BY AREA L PERSONNEL. GLOVES WILL BE WORN BY ALL PERSONNEL HANDLING CONTAINERS.
1340	RECEIVED PERMISSION FROM ESH-19 & NMEID TO BURN "ETHER" IN BURN BOX.
1415	HAZMAT CLEAR OF SCENE, PREPARING TO SEND ROBOT AFTER ETHER, FIRE DEPT. ON SCENE.
1532	ETHER IN BOMB TRAILER.
1540	MOVING TO EAST END OF TA-21 MESA.
1548	PREPARING BURN BOX
1607	POP SET OF BURN BOX, VERY LITTLE IF ANY FLAME.
1616	EM-3 CLEAR OF SCENE.

Signature Gene Darling Date 8/23/96 Pg 2 of 2

Interview With Scott Kincaid On 10/23/97

QUESTION: What is your current position?

Answer: Staff Scientist. Chemist in DX-2 research.

Question: Is this current position same as what you held in TA-21?

Answer: No.

Question: What were your activities in TA-21?

Answer: Actinid and Flourine Chemistry - research in support of Plutonium facility. Processing and recovery, variety of applications.

Question: From when to when?

Answer: 1984 to January 1994

Question: Where did you work in TA-21?

Answer: Building 3&4 North

Question: Did you supervise people?

Answer: Yes, 2-5 people was the lead researcher in this part of facility. J.F. came in the late 80's.

Question: Did you share the facility?

Answer: Yes, usually 2 others. Did basically the same work.

Question: What hazardous wastes were generated by your activity?

Answer: Transuranic wastes only he believes. Did not use solvents in 4 but did in 3. Had a SAP located on outside between 3&4.

Question: Did you receive training on hazardous waste management?

Answer: Yes, late '80s. Does not think he received any further training.

Question: How often did you turn in waste?

Answer: Turned in 1 to 2 times per year from SAP.

Question: When did you leave that portion of the lab? When did you move?

Answer: Between '92 and '94

Question: Did you turn in waste at that time?

Answer: No, was out of 3N did not generate any other solvent waste in 4.

Question: Why did gas cylinders get left in your area?

Answer: When he moved to 48, was asked to build a new facility.
Took leave of absence in July 1995.
Bldg. 4N was evacuated. Not all cylinders were his, does not know who took responsibility of gas cylinder after he moved out.
J.F. moved out at this same time. Was J.F. super. and tesh owned then all at the time they left.

Question: Why didn't you ^{Environmental Safety & Health?} turn in the cylinders?

Answer: Many of the cylinders were not replaceable.

Question: Were you directed to turn them in by anyone?

Answer: No

Question: Were you responsible for wastes generated in your area by your activities?

Answer: Does not know who that person was.?

Question: Do you have anything to add to any of your answers or do you have any questions?

Answer: No.

HRMB INSPECTION
PERSONAL INTERVIEW STATEMENT

Facility Name

11/25/97

Date and Time

Los Alamos National Laboratory

Place of Interview

I, Scott Kinkead of _____

Complete Home Address

Telephone (____) _____ Soc. Sec. No. ____/____/____ Age _____

(X) am () was employed by Los Alamos National Laboratory, whose address is

Complete Name of Employer

P.O. Box 1663, MS C920, Los Alamos National Laboratory, Los Alamos, NM 87545

Complete Address of Employer

from April 1984 to July, 1995, and July 1997 to Present _____

My occupation is Staff Scientist (Chemist) in High Explosive Science & Technology Dept.

Statement:

I was a staff scientist a Technical Area 21 (D.P. West) from April 1984 until January, 1994. During that time, I was involved in experimentation with, and was responsible for keeping some of the gas cylinders at the site. In January, 1994, I transferred from Group CST-10, located at TA-21 to CST-7, located at TA-48. I took a leave of absence to work in California in July, 1995 before the gas cylinders could be transferred to the appropriate facility at TA-48. I do not know who assumed responsibility the gas cylinders after my departure, or of their fate after that time.

