



Department of Energy

Office of Science
Chicago Office
9800 South Cass Avenue
Argonne, Illinois 60439

September 30, 2010

Mr. Matthew Helm
105 W. St. Charles Rd., #208
Lombard, IL 60148

Dear Mr. Helm:

SUBJECT: U.S. DEPARTMENT OF ENERGY (DOE) OFFICE OF SCIENCE-CHICAGO OFFICE (SC-CH) FREEDOM OF INFORMATION ACT (FOIA) REQUEST #CH-2010-02132-F

I am the authorizing official responsible for making the determination required by Section 1004.5(b) of DOE regulations found at 10 CFR Part 1004, implementing the FOIA, 5 U.S.C. 552.

In your original subject FOIA request you were seeking a letter with an attachment as follows: "McKinley, J.H., 1956, letter from J.H. McKinley (Business Manager, Argonne National Laboratory, Argonne, Ill) to D. Saxe (Director, Development Contracts Division, Chicago Operations office, U.S. Atomic Energy Commission), April 2. Attached to the letter is an April 2, 1956, report entitled "Composite Radiation Safety Report on Site A as of February 01, 1956." In your e-mail to me today, you narrowed your FOIA request to exclude the letter, and you indicated that you will accept a copy of the letter attachment, i.e., the report, in full release of your FOIA request.

Be advised that we conducted a search of our office and located no responsive records. We also requested that UChicago Argonne, LLC (UCA), the DOE contractor that operates Argonne National Laboratory (ANL), conduct a search of ANL for responsive records, and they located the enclosed responsive report, which we are releasing to you in its entirety as our full release of records responsive to your request.

You are categorized as an "Other" requester, and as such related costs for search and duplication of records would normally be applicable under FOIA, with no charge for the first two hours of search time and the first 100 pages of duplication. However, fees do not meet the threshold of \$15.00 for charging fees under FOIA, so therefore, there are no fees associated with your request at this time.



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Mr. Matthew Helm

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September 30, 2010

If you have questions regarding this response, please contact me at (630) 252-2041 or via e-mail at miriam.legan@ch.doe.gov.

Sincerely,

A handwritten signature in black ink that reads "Miriam R. Legan". The signature is written in a cursive style with a large initial "M" and a distinct "L".

Miriam R. Legan
Freedom of Information Act Officer

Enclosure:
As Stated

RECEIVED

FEB 16 1993

H. AVCI

April 2, 1956

COMPOSITE RADIATION SAFETY REPORT ON SITE A AS OF FEBRUARY 1, 1956

The following buildings have been surveyed¹ and no activity was detected.²

<u>Building</u>	
"C"	Laboratory
"D"	Labs and Offices
"F"	Cafeteria
"G"	Dormitory
"H"	Treater House
"K"	This building presently contains Reclamation Section's equipment, none of which is contaminated
"L"	Laboratory
"M"	Fire House
"Q"	West Quonset
"R"	East Quonset
"T"	Garage. This building contains a pile rod coffin sitting in a base. All accessible surfaces of the coffin have been surveyed and no activity was detected
"X"	Dog Shelter
"Z" 1 thru "Z" 10	Storage Huts

¹ "Surveyed" as used in this report means that all floor areas, horizontal surfaces, and walls up to approximately seven feet have been checked by Radiation Safety Technicians with the instruments at their disposal.

² "No activity detected" as used in this report indicates no reading above background.

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All of "A" building has been surveyed and no activity was detected with the following exceptions:

Location	Description	Results
A-16	Floor area inside the concrete shell of CP-2	Alpha - NAD Beta-Gamma - Spots .5 - .7/1" R&S
A-16	Ductwork in upper southwest corner of room	Suspect loose alpha contamination
A-16	Beta, gamma survey on all vertical surfaces of the concrete shell of CP-2	General - 0.1 - 0.2/1" R&S
A-16	Alpha on concrete blocks which form the north wall of the CP-2 shell. (On all open and vertical and horizontal surfaces after sandblasting)	0.1 to 0.4 M
A-16	All vertical surfaces (walls) above approximately seven feet, rafters and superstructure of room	These areas were not surveyed. Suspect loose alpha contamination

"B" building has been surveyed and found to contain no activity with the following exceptions:

Location	Description	Results
B-1	Several spots on the floor of Room B-1 after sandblasting	0.1/1" R&S, No alpha activity was detected
B-1	The catwalk and crane girders were surveyed	No activity detected

The following buildings have not been surveyed.

- | | |
|----------------------------------|----------------------|
| "E" Boiler House | "O" Cooling Tower |
| "P" Pump House | "S" Compressor House |
| "J" Well House | "V" Generator House |
| "N" Guard House at Main Entrance | "W" Water Tower |

(See the attached maps for approximate location of all building mentioned in this report)

No surveys were accomplished of the outside surfaces of any of the buildings or the grounds surrounding the buildings.

All Radiation Safety Hazard signs have been removed, any penciled markings of radiation levels in the buildings mentioned in this report, and dated prior to the date of this report, may be disregarded.

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I. WATER

TABLE I

Non-Volatile Radioactivity in Streams at Site A

Sampling Location ^a	April 14, 1954		May 31, 1955	
	alpha $\mu\text{c}/\text{l}$	beta $\mu\text{c}/\text{l}$	alpha $\mu\text{c}/\text{l}$	beta $\mu\text{c}/\text{l}$
1	0.1	8.1	2.1	35.
2	1.7	8.3	1.5	24.
3	1.9	7.0	2.8 ^b	27.
4	1.6	6.8	1.4	17.

^a Sampling locations as numbered on "Topographical Survey of Plot M Palos Park" PE-4-71

^b This sample contained the following concentrations of alpha emitting elements:

Uranium	2.4 $\mu\text{c}/\text{liter}$
Radium	0.2 $\mu\text{c}/\text{liter}$
Thorium plus Plutonium	0.2 $\mu\text{c}/\text{liter}$

The alpha activity in water collected in 1955 from locations 1, 2, and 4 was uniformly low, about 2 $\mu\text{c}/\text{liter}$, and is essentially the same as found in the water collected in 1954 from the same locations. The values are similar to those found in other streams in the Chicago area and are considered normal. Ambiguous results were obtained from total alpha activity measurements of the sample from location Number 3; however, analyses for the common alpha emitting elements (see "b" above) indicated that the concentrations of these elements were all low and normal for streams in the Chicago area.

The beta activity in the 1955 water samples, 17 to 35 $\mu\text{c}/\text{liter}$, was 2 to 4.5 times higher than that found in samples from the same location in 1954. However, this additional activity is almost certainly due to fallout since the rains in April and May, 1955, contained relatively large amounts of fallout activity, and the rate of beta decay, about 40% in 30 days following collection, was that expected from fallout activity.

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II. BOTTOM SILT

TABLE II

Non-Volatile Radioactivity in Bottom Silt at Site A

Sampling Location ^a	April 14, 1954		May 31, 1955	
	alpha $\mu\text{c/l}$	beta $\mu\text{c/l}$	alpha $\mu\text{c/l}$	beta $\mu\text{c/l}$
1	30	73	27	73
2	26	52	27	55
3	25	62	25	92
4	29	56	29	93

^a Sampling locations as numbered on "Topographical Survey of Plot M Palos Park" PE-A-97

The alpha activity in bottom silt samples collected in 1955 from all four locations was uniform and similar to that found in 1954 samples from Site A and other locations in the Chicago area.

The beta activity in samples collected in 1955 from locations 1 and 2 were normal and similar to values found in 1954. The samples from locations 3 and 4 contained approximately 93 μc , beta/gram, or about 30 μc /gram more than found in 1954. The beta activity in these samples decayed to almost normal values in 30 days after collection, and this additional activity must also be considered the result of recent fallout activity.

III. SOIL

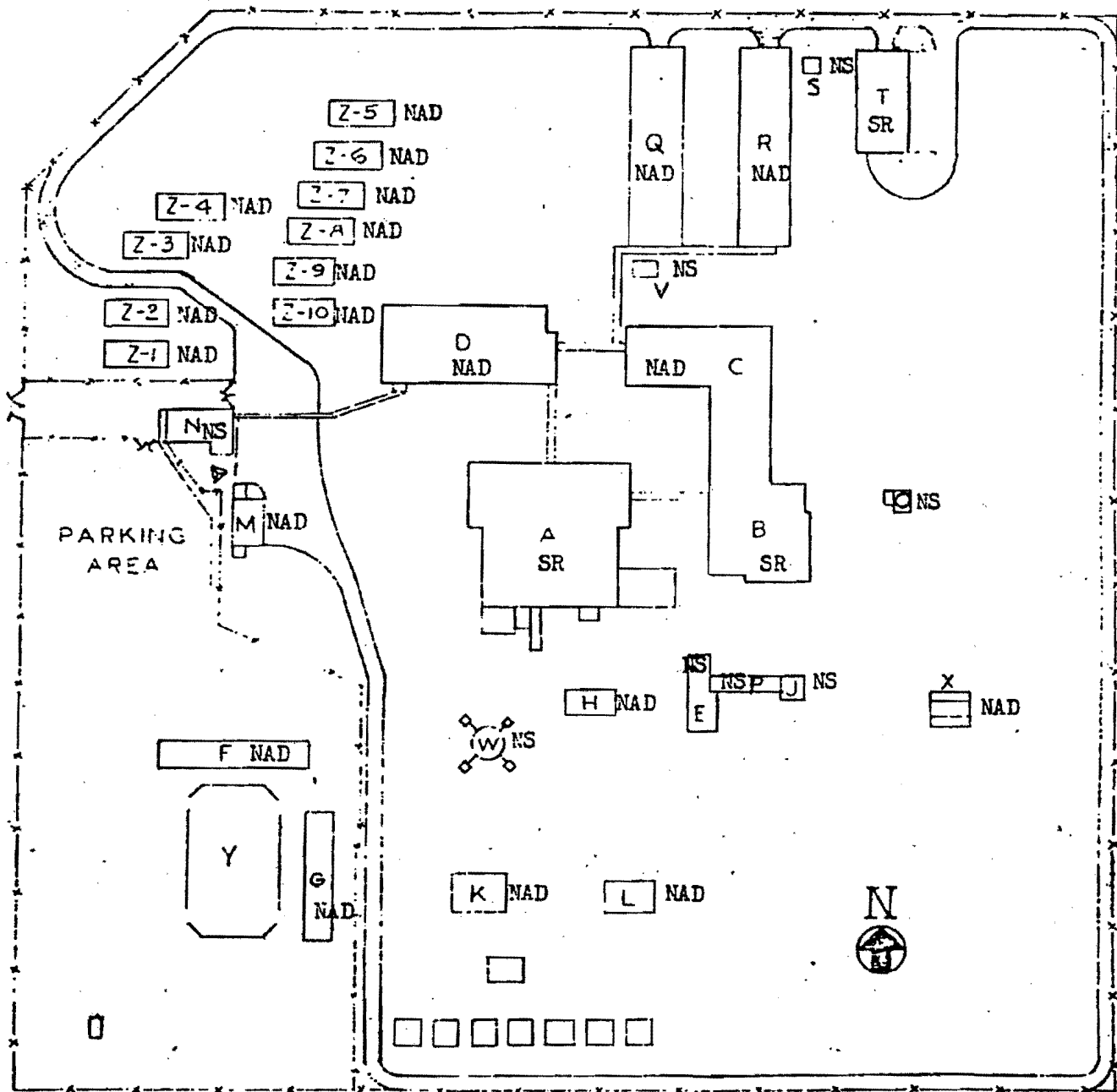
TABLE III

Non-Volatile Radioactivity in Soil Borings Near Plot Y

Depth (ft)	June 3, 1954		May 27, 1955	
	alpha $\mu\text{c}/\text{gram}$	beta $\mu\text{c}/\text{gram}$	alpha $\mu\text{c}/\text{gram}$	beta $\mu\text{c}/\text{gram}$
0 - 1	30	83	43	116
1.5 - 2.0	-	-	34	82
2.5 - 3.0	31	85	-	-
4.5	-	-	23	85
5.5 - 6.0	31	86	-	-
7	-	-	26	79
8.5 - 9.0	22	65	-	-
9.5	-	-	22	63

The 1955 soil borings were taken one foot from the 1954 sampling location designated as M-8 (Drawing PE-A-57), located eleven (11) feet northwest of Plot M.

The activity within one foot of the surface is not considered significant since contamination leached from Plot M would be expected at greater depths. Below one foot the alpha and beta activities in the 1955 sample are normal for the Chicago area and are essentially unchanged from those found in 1954.



PALOS PARK PLOT PLAN
SCALE 1"=120'

NAD: No Activity Detected
NS : Not Surveyed
SR : See Report

LEGEND

- A - BLDG. "A" (LAB.)
- B - BLDG. "B" (LAB.)
- C - BLDG. "C" (LAB.)
- D - BLDG. "D" (LAB.)
- E - BOILER HOUSE
- F - MESS HALL
- G - DORMITORY
- H - TREATER HOUSE

- J - WELL HOUSE
- K - BLDG. "K" (LAB.)
- L - BLDG. "L" (LAB.)
- M - FIRE STATION
- N - GUARD HOUSE
- O - COOLING TOWER
- P - PUMP HOUSE
- Q - WEST QUONSET (LAB.)

- R - EAST QUONSET (LAB.)
- S - COMPRESSOR HOUSE
- T - GARAGE
- V - GENERATOR HOUSE
- W - WATER TOWER
- X - DOG SHELTER
- Y - TENNIS COURT
- Z1, Z2 STORAGE HUTS

SUPERINTENDENT

GUIDE PLANS
PALOS PARK

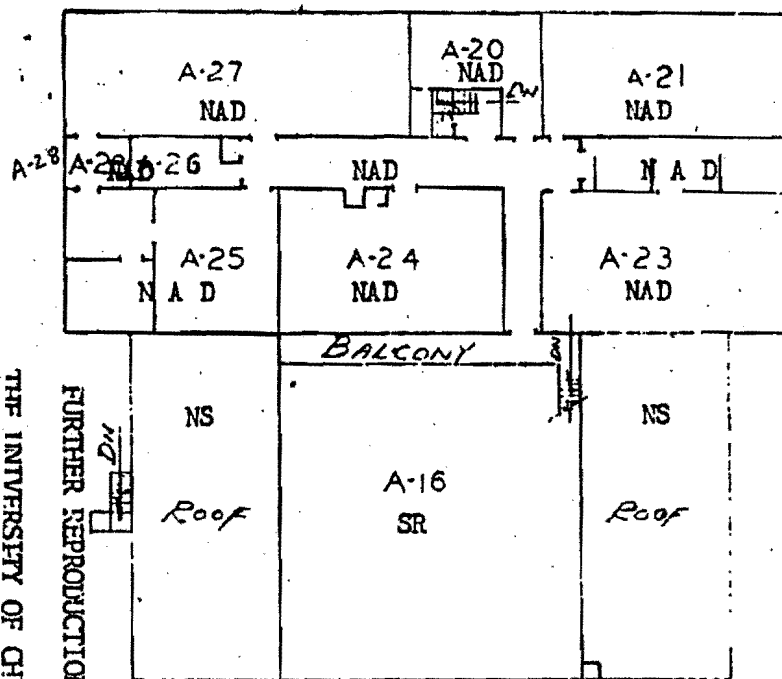
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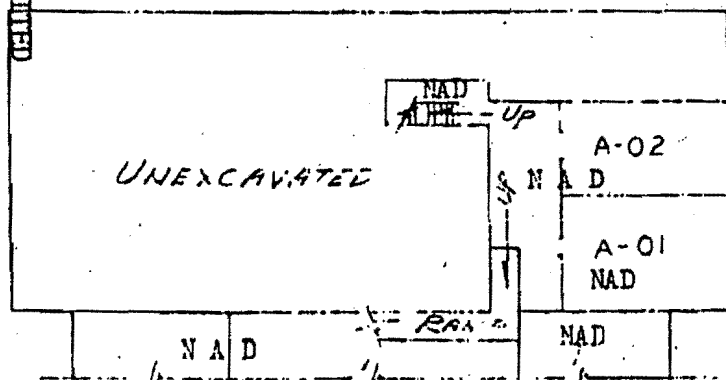
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SECOND FLOOR

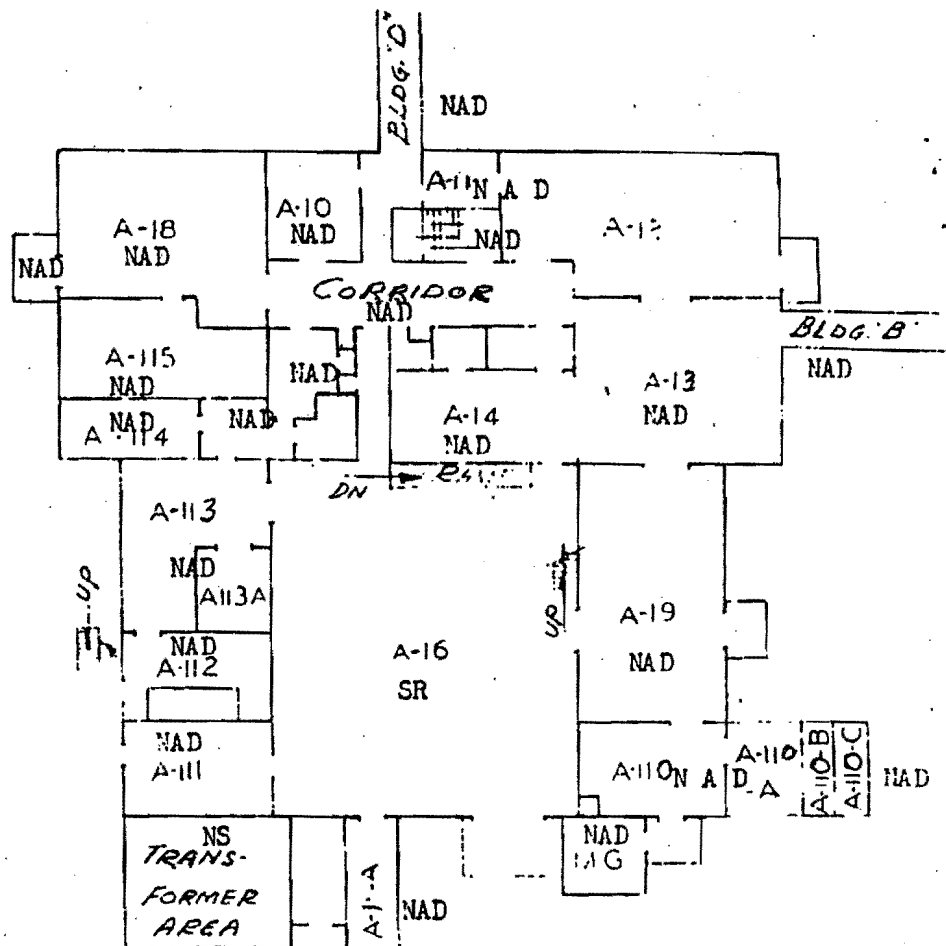


BASEMENT



NAD: No Activity Detected
NS : Not Surveyed
SR : See Report

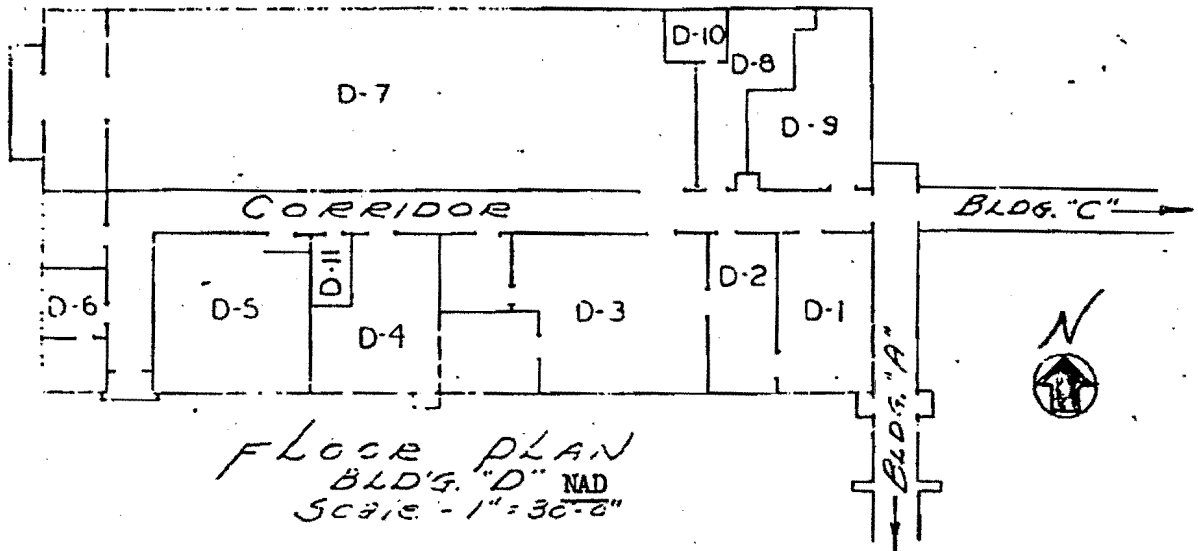
BUILDING A



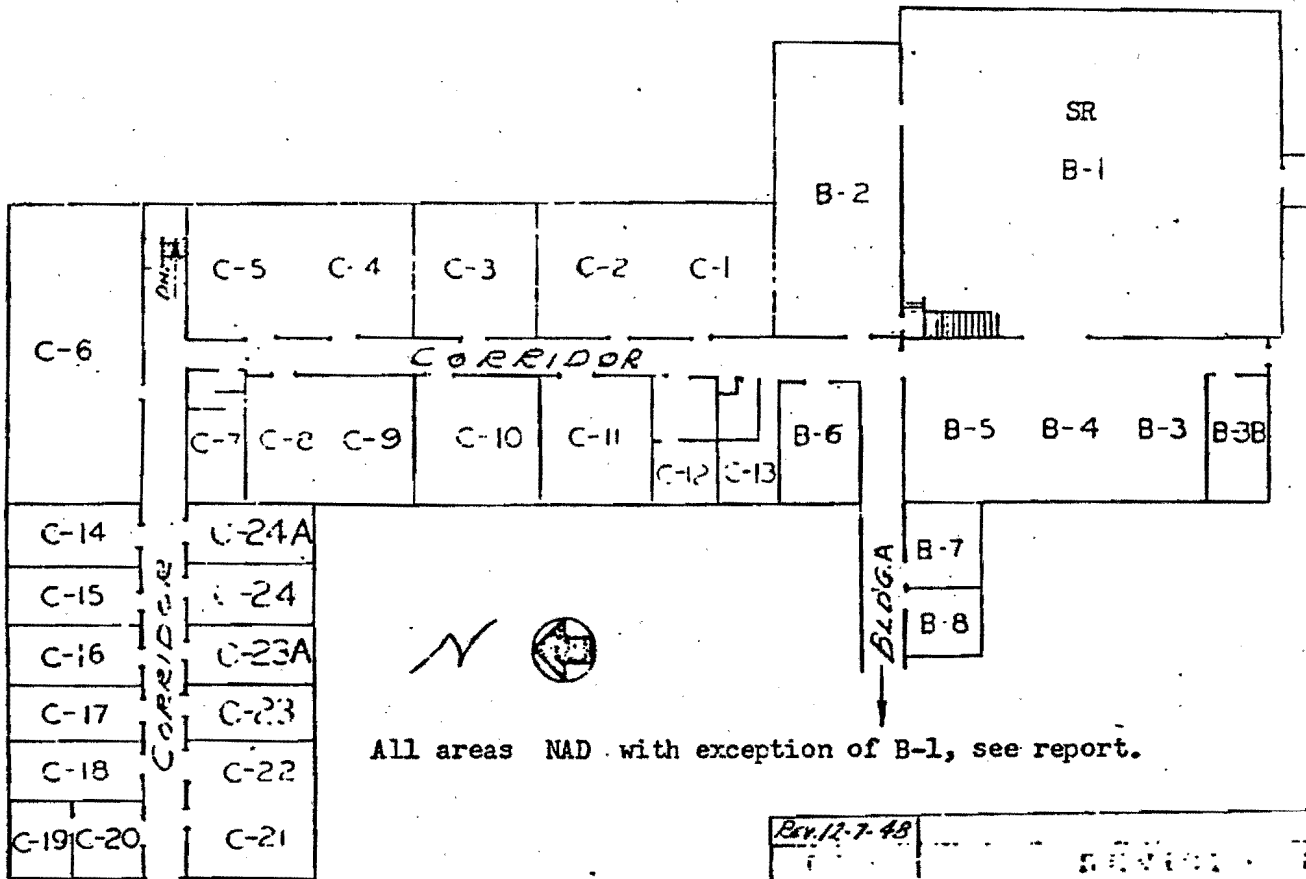
FIRST FLOOR
SCALE 3/8"=1'

REF: 7-19

GUIDE PLANS
PALOS PARK



FLOOR PLAN
BLDG. "D" NAD
SCALE - 1" = 30'-0"



All areas NAD with exception of B-1, see report.

FLOOR PLAN
BLDG. "B" & "C"
SCALE 1" = 30'-0"

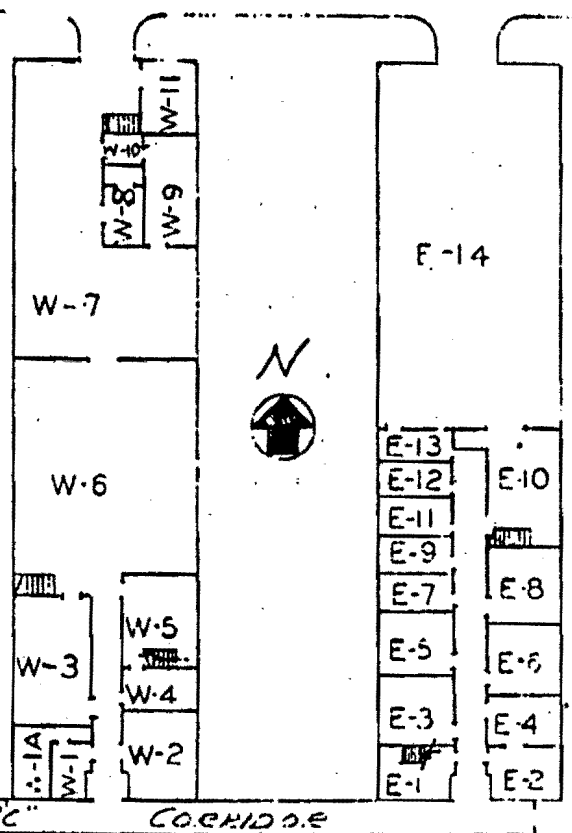
Rev. 12-7-48

GUIDE PLANS
PALOS PARK

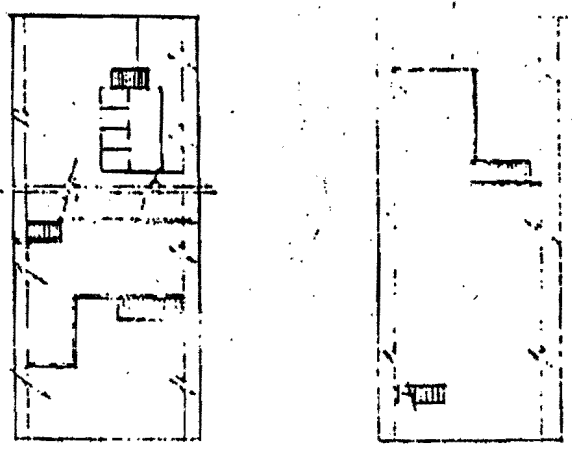
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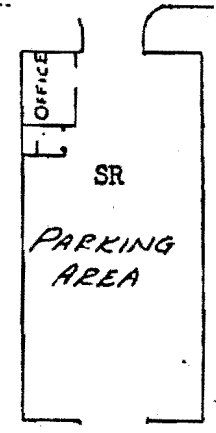
PERIMETER ROAD



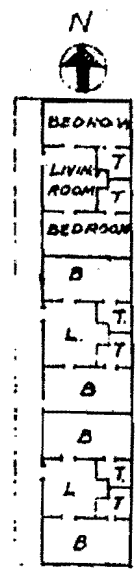
E. & W. QUONSETS NAD
SCALE 1" = 40'-0"



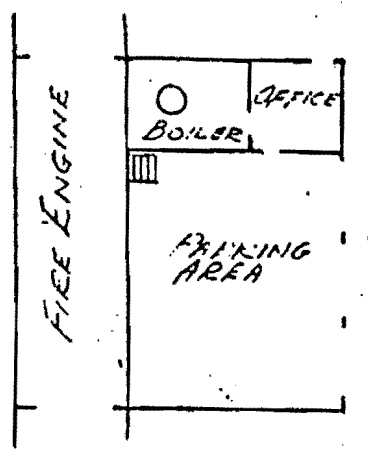
BOILER HOUSES NS
SCALE 1" = 30'-0"



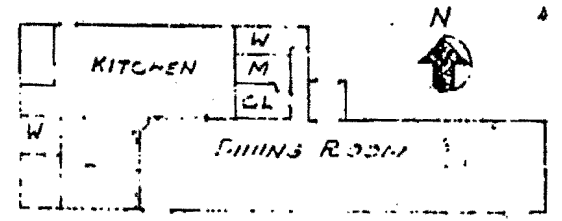
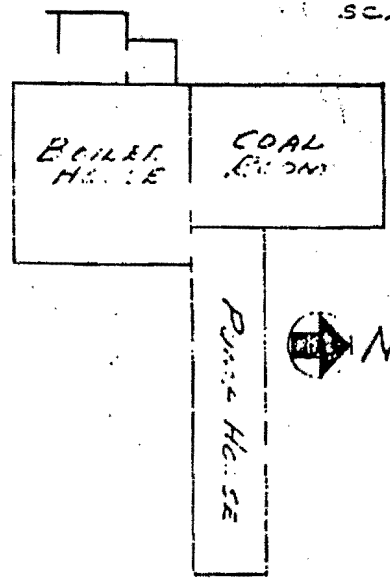
GARAGE



DORMITORY NAD
SCALE 1" = 40'-0"



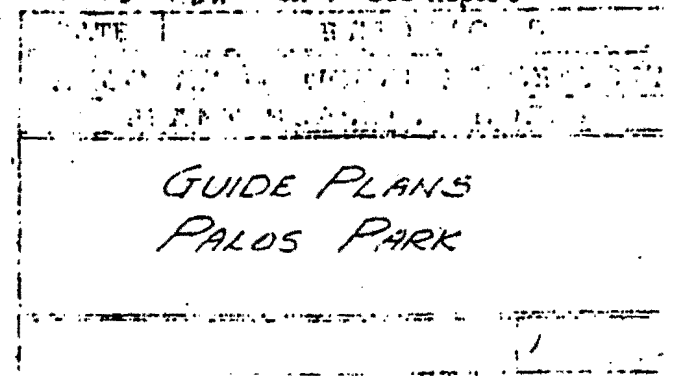
FIRE STATION NAD
SCALE 1" = 20'-0"



CAFETERIA NAD
SCALE 1" = 40'-0"

NAD: No Activity Detected
 NS : Not Surveyed
 SR : See Report

1-1-49 REV



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