

APPENDIX P

CONTROL AREA HISTORICAL PHOTO ANALYSIS



FORMER NIKE BATTERIES BU 34/35 CONTROL AREA– (FUDS ID: C02NY0077) HISTORICAL PHOTOGRAPHIC ANALYSIS



ERIE COUNTY, NEW YORK

Near Final



Near Final

U.S. Army Geospatial Center (AGC)
Warfighter Support Directorate
Hydrologic & Environmental Analysis Branch
Environmental Analysis Team
7701 Telegraph Road
Alexandria, Virginia 22315–3864

Aerial Photography Source: National Archives & Records Administration, Cartographic Records Branch, Record Group 373, NARA Can No. ON 004978, Cartographic Records Branch, College Park, Maryland.

FINAL REPORT
APRIL 2017

Prepared for the U.S. Army Corps of Engineers, New York and New England Districts



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NOTICE AND INTRODUCTION



Former Nike Batteries BU 34/35 Control Area Erie County, New York

By
U.S. Army Geospatial Center (AGC)
Warfighter Support Directorate
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NOTICE

The views, opinions, and conclusions in this report are those of the author and should not be construed as official Department of Army positions or policy unless so designated by other documentation.

Photographic items contained in this report may be restricted for use other than research. It is the responsibility of the party using photographs from this study to contact the U.S. Army Geospatial Center, Warfighter Support Directorate in order to ascertain clearance for use.

INTRODUCTION

This report of findings presents the results of a historical photographic analysis (HPA) of the Niagara-Buffalo Defense Area – Former Nike Batteries BU 34/35 Control Area, located in Erie County, New York. The Hydrologic and Environmental Analysis Branch of the Warfighter Support Directorate was tasked to search, collect, and analyze historical photographic records and historical map data relative to the project area as part of the Formerly Used Defense Sites (FUDS) program.

This report contains select findings covering the existence of Army activity within the Former Nike Batteries BU 34/35 Control Area.



METHODOLOGY



METHODOLOGY

The analysis presented in this report is primarily based upon interpretation of gray scale and color photography and satellite imagery over the project area spanning the years of 1951 to 2016. Stereo viewing was employed where overlapping aerial photographs permitted its use. Significant features, derived through photo analysis, are displayed on select photos in this study.

Research was conducted by AGC for historical aerial photography from the early 1950s to present day. Documents (in the form of text, tables, photos, and maps) regarding the use of potentially hazardous materials at the BU 34/35 Nike site Control Area property were also researched. This information supports the documentation of what types of chemicals were received and used at Nike Site BU 34/35 Control Area. AGC also conducted multiple searches for information regarding underground utilities such as storm and sewer lines, communication cables, and fuel storage tanks. The types of findings include design drawings (‘as-built’ as well as planned and/or approved development), General Service Administration Property Disposal Data¹, and various other reports.

The primary purpose of this historical photographic study is to locate and identify, from historical imagery, maps, and drawings, features associated with the former U.S. Army Nike Batteries BU 34/35 Control Area located in the Towns of Orchard Park and Elma within Erie County, New York. Building identification, road, and other site names and numbers are derived from historical maps, still photographs, and textual documents. The historical photographic analysis (HPA) provides insight into the ground conditions of the Nike site Control Area prior to property transfer in 1964, as well as identify any changes identified on available coverage of aerial photography and satellite imagery.

A GIS package (under separate cover) is also being produced by AGC for the U.S. Army Corps of Engineers New York and New England Districts.

1) National Archives & Records Administration; National Archives at Boston, Waltham, Massachusetts and the National Archives at College Park, 8601 Adelphi Road, College Park, Maryland.



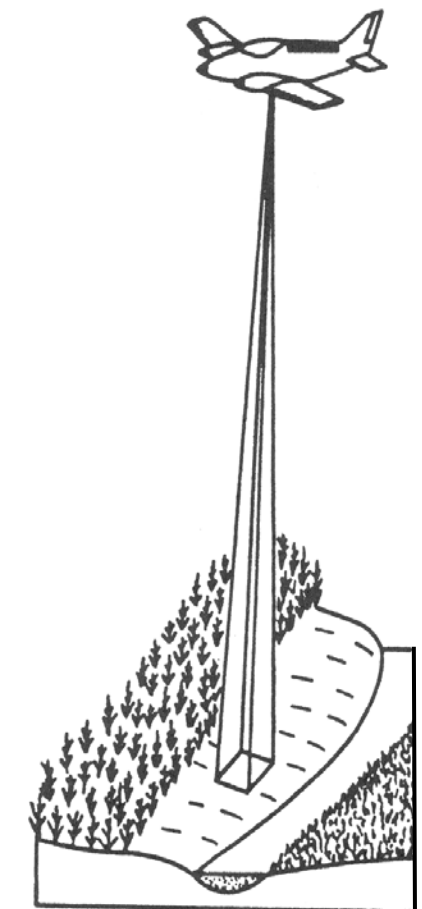
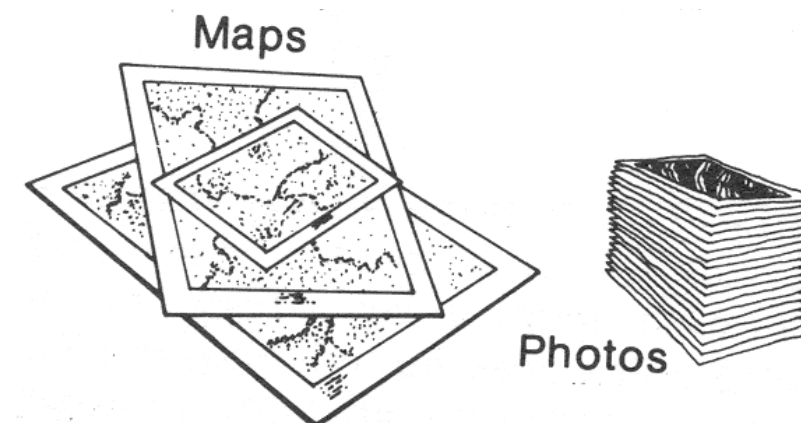
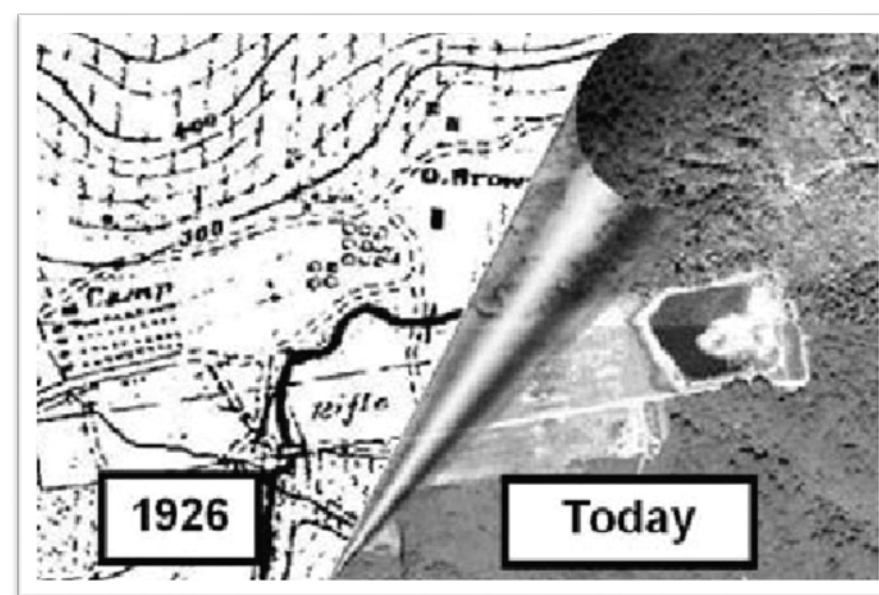
INTERPRETATION OF HISTORICAL AERIAL PHOTOGRAPHY



The Warfighter Support Directorate of the U.S. Army Geospatial Center (AGC) was tasked to conduct data collection and photo interpretation of historical aerial photography and satellite imagery covering the Former Nike Batteries BU 34/35 Control Area in support of the Formerly Used Defense Site (FUDS) Program.

Historical Aerial Photographic Study

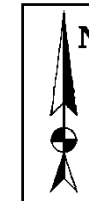
- ⊕ IDENTIFICATION OF FEATURES BY SCALE, SHAPE, TONE, PATTERN, ORIENTATION, SHADOW, AND TEXTURE
- ⊕ CHANGE DETECTION OF MAN-MADE OR NATURALLY-OCCURRING FEATURES
- ⊕ PLACING LOCATIONS OF HISTORICAL FEATURES ON THE CURRENT LANDSCAPE



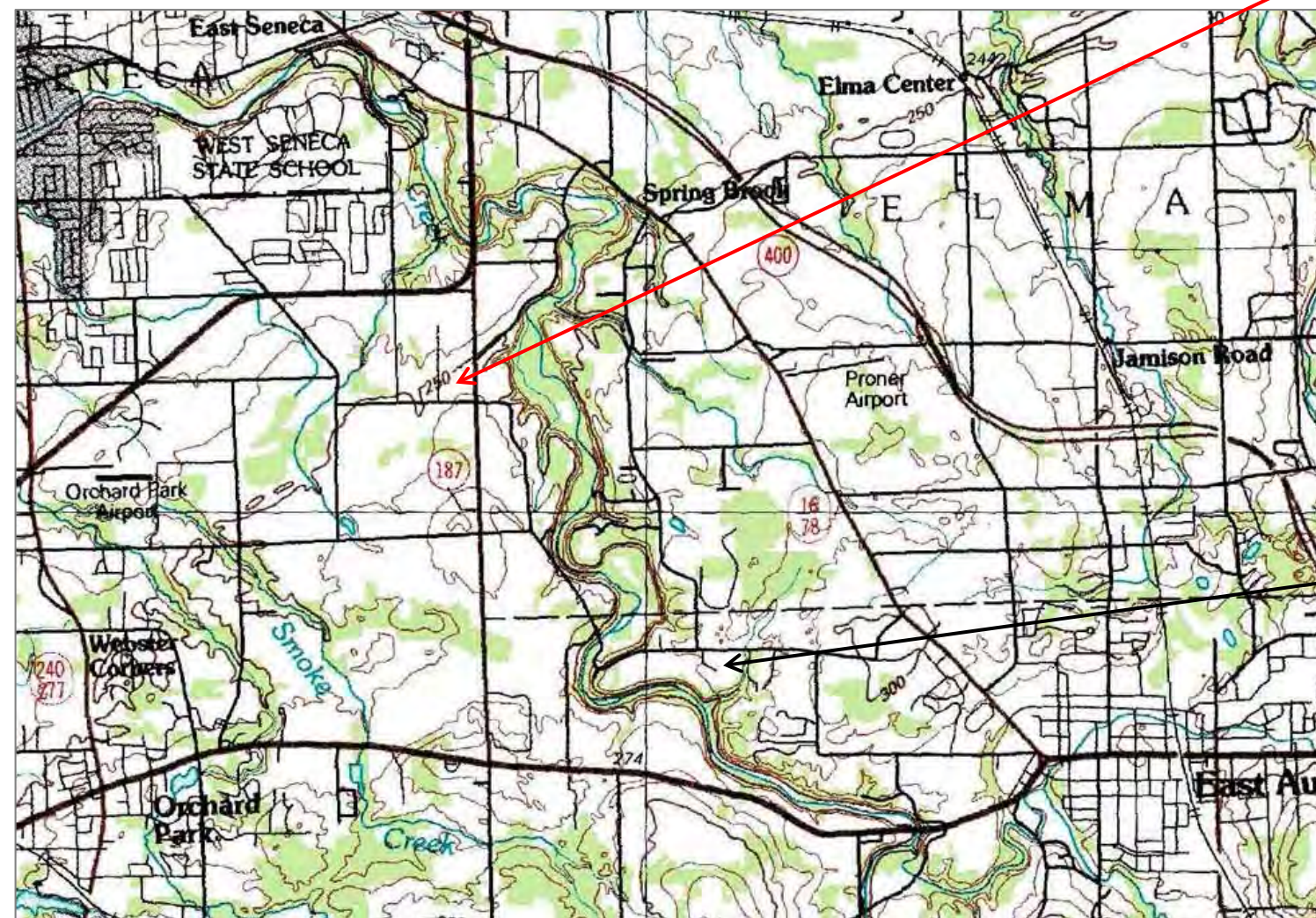


PROJECT AREA LOCATION

The Former Nike Batteries BU 34/35 Control Area is part of the Niagara-Buffalo Defense Area located in Erie County, New York. It is approximately 10 miles southeast of Buffalo, New York.



1958-dated vertical image of Nike Site BU 34/35 (Control Area shown upper left and Launch Area is observed lower right).



**BU 34/35
Control
Area**



Photo Source: U.S. Geological Survey, EarthExplorer.

**BU 34/35
Launch
Area**

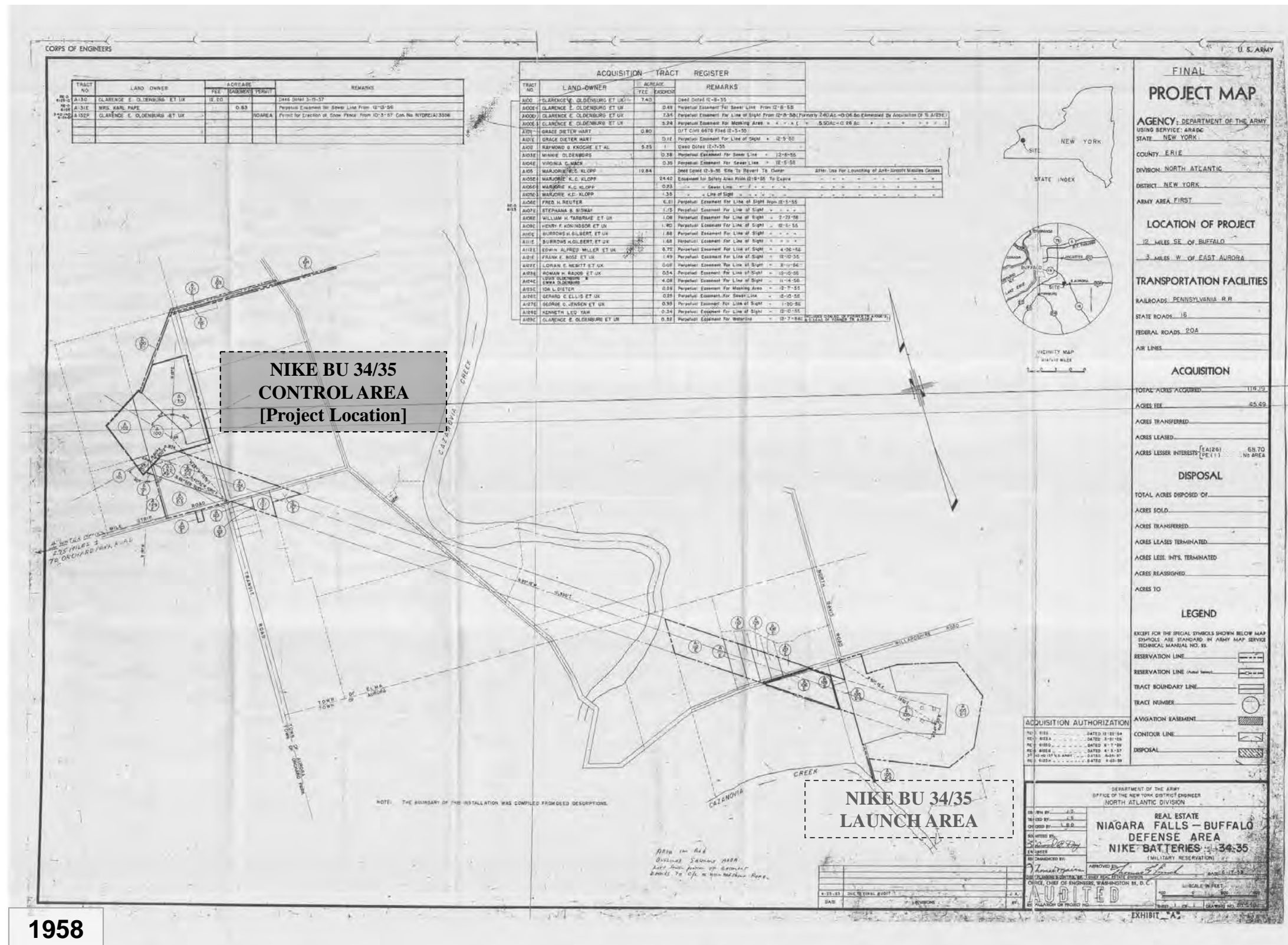
Map Source: U.S. Geological Survey, 30 x 60 Minute Quadrangle, 1984.



PROJECT AREA LOCATION – REAL ESTATE MAP

THE FORMER BU 34/35
NIKR SITE IN ERIE
COUNTY, NY,
CONSISTED OF:

- 1) CONTROL AREA
- 2) LAUNCH AREA





PROJECT OVERVIEW



PROJECT TASKS

The Hydrologic and Environmental Analysis Branch of the Warfighter Support Directorate, Army Geospatial Center (AGC), was tasked by the U.S. Army Corps of Engineers (USACE) New York and New England Districts to complete a Historical Photographic Analysis project for the Former Nike Batteries BU 34/35 Control Area, located in Erie County, New York. AGC was asked to complete three tasks:

Task 1: Archival Research – AGC researched the use of oil and hazardous materials at the property and any information regarding utilities in the Control Area of the Niagara Falls - Buffalo Defense Nike Battery BU 34-35 during the Government's use of the property from approximately 1955 to 1964. Previous archival research of Control sites have identified materials requisition sheets, which list specific oil and hazardous materials used at the site. This type of information is needed to document what types of chemicals have been received and used at the Control Area and where to target future sampling efforts. AGC did not locate any U.S. Army acquisition sheets during the archive search. In addition, the AGC research focused on information regarding utility lines and discharge points at the control and launch area in order for NAN to evaluate potential off-site migration. In particular, NAN indicated an interest in obtaining any information and/or plans regarding storm and sewer lines or septic systems at the Control Area [priority] and Launch Area potential discharge points. This type of research includes searching for materials of construction of the systems and/or design drawing or descriptions. AGC searched selected textual, cartographic, and still photography records from pre-development (before 1955) to post property transfer (after 1964), with specific emphasis on the time period 1955 to 1964. AGC conducted research at National Capital Area and Buffalo Area repositories. This task supports the completion of the historical photographic analysis performed in Task 3.

Task 2: Imagery Acquisition, Inspection, and Rectification – AGC collected and geo-rectified historical aerial photos, commercial imagery, and maps for the study area for the time period 1955 to 2016. The raw image files and the final geo-rectified files will be delivered at the completion of the project. All raster raw/unrectified data will be delivered in .tif or .img or .jpg format.

Task 3: Historical Photo Analysis – As part of a Final Report, AGC will complete an HPA for the former Nike Ajax site Control Area. The purpose of this task is to define the ground conditions of the Control Area prior to the property transfer in 1964, as well as identify any changes made to utility lines or discharge points between 1955 and 2016. The results of the HPA will be delivered via PDF report and a GIS data package. All vector data will be contained in a geodatabase and attributed based on NAN and AGC's specifications.



PROJECT OVERVIEW



DESCRIPTION SUMMARY¹

The Former Nike Batteries 34/35 Control Area was part of the Niagara Falls-Buffalo Defense Area installation in Erie County, New York. The former Control Area, consisting of 25.65 acres in fee and 22.46 acres in easements was located in the Towns of Orchard Park and Elma of Erie County, New York. The former Launch Area of Nike Batteries 34/35 was located approximately 2 miles from the Control Area in the Town of East Aurora.

The Nike Batteries 34/35 installation, as a whole, was established in 1956 to be used for the assembly and launching and control of guided missiles for defense against high flying aircraft. The Nike Batteries 34/35 installation, during its full operating period, was a Nike Ajax missile battery type. Originally staffed by the regular U.S. Army, operational control was transferred to the Army National Guard in August of 1960 through October of 1962.

The Control Area had been improved with approximately twelve buildings and miscellaneous structures, utilities and supporting facilities of permanent type construction.

SUMMARY OF FINDINGS

Aerial photography, ground photos, and satellite imagery were researched and collected spanning a time period of 1951 through 2016. Both government and non-government sources were contacted for information. Historical records show the site existed as a Nike Ajax missile site from 1956 – 1963. The commander of the site, Major Earl Close, U.S. Army, relinquished his post in November of 1962 for further Nike training at Fort Bliss, Texas.²

The Control Area property was conveyed to Health Research, Inc. in August 1964.

- 1) Report of Excess of Real Property, Niagara Falls – Buffalo Area Defense Area, NIKE Batteries 34 – 35, Correspondence and an Appraisal Of Real Estate by Robert W. Hopkins, M.A.I., Buffalo, NY, General Services Administration (GSA), 01 July 1963, National Archives and Records Administration, Archives II, Textual Records Branch, College Park, MD, Record Group 291, Entry 1 (UD-WW), Box 213.
- 2) Letter to Ed Thelen from Earl Close, 18 August 2004; ed-thelen.org.



HISTORICAL REVIEW

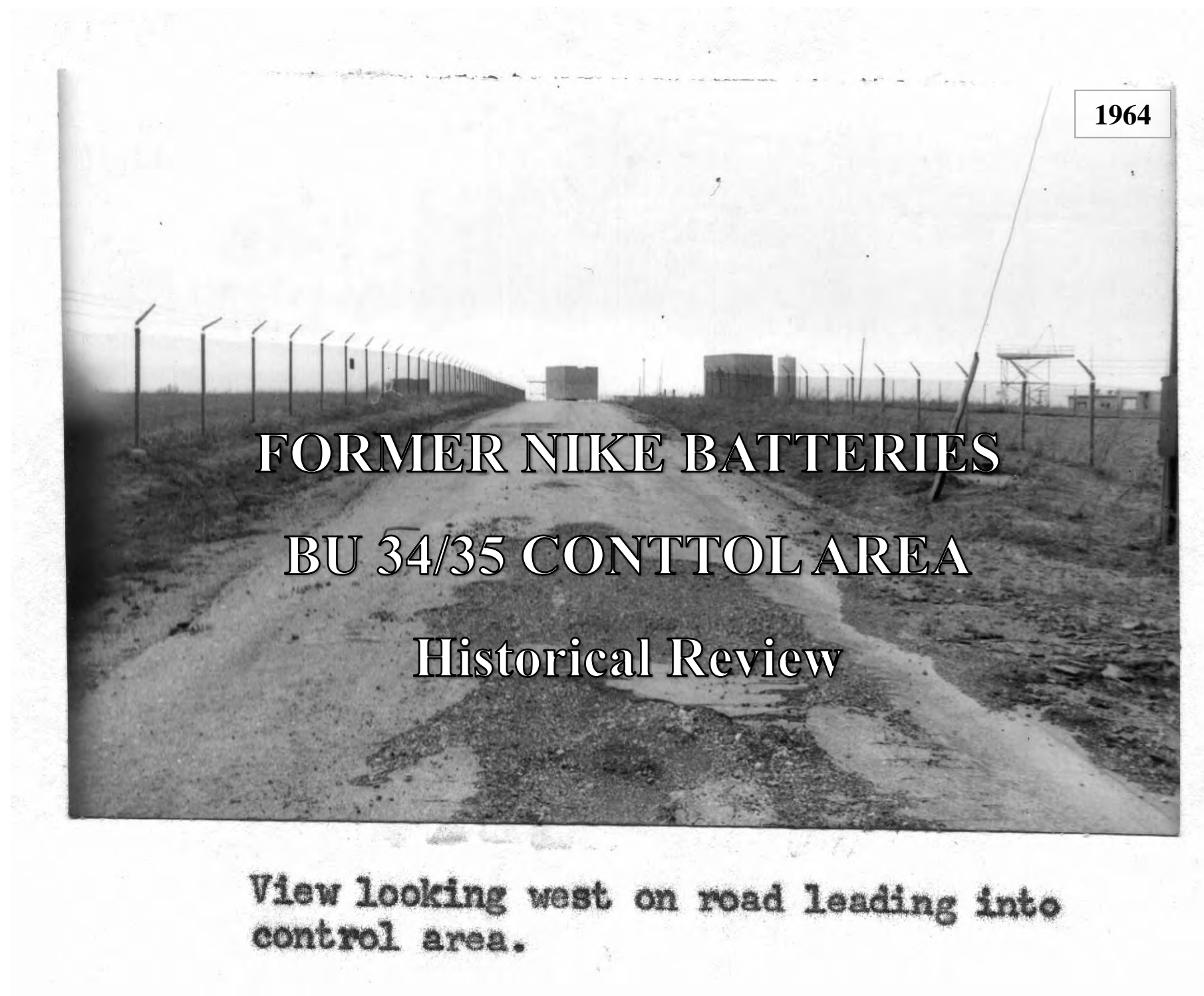


Photo Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213.

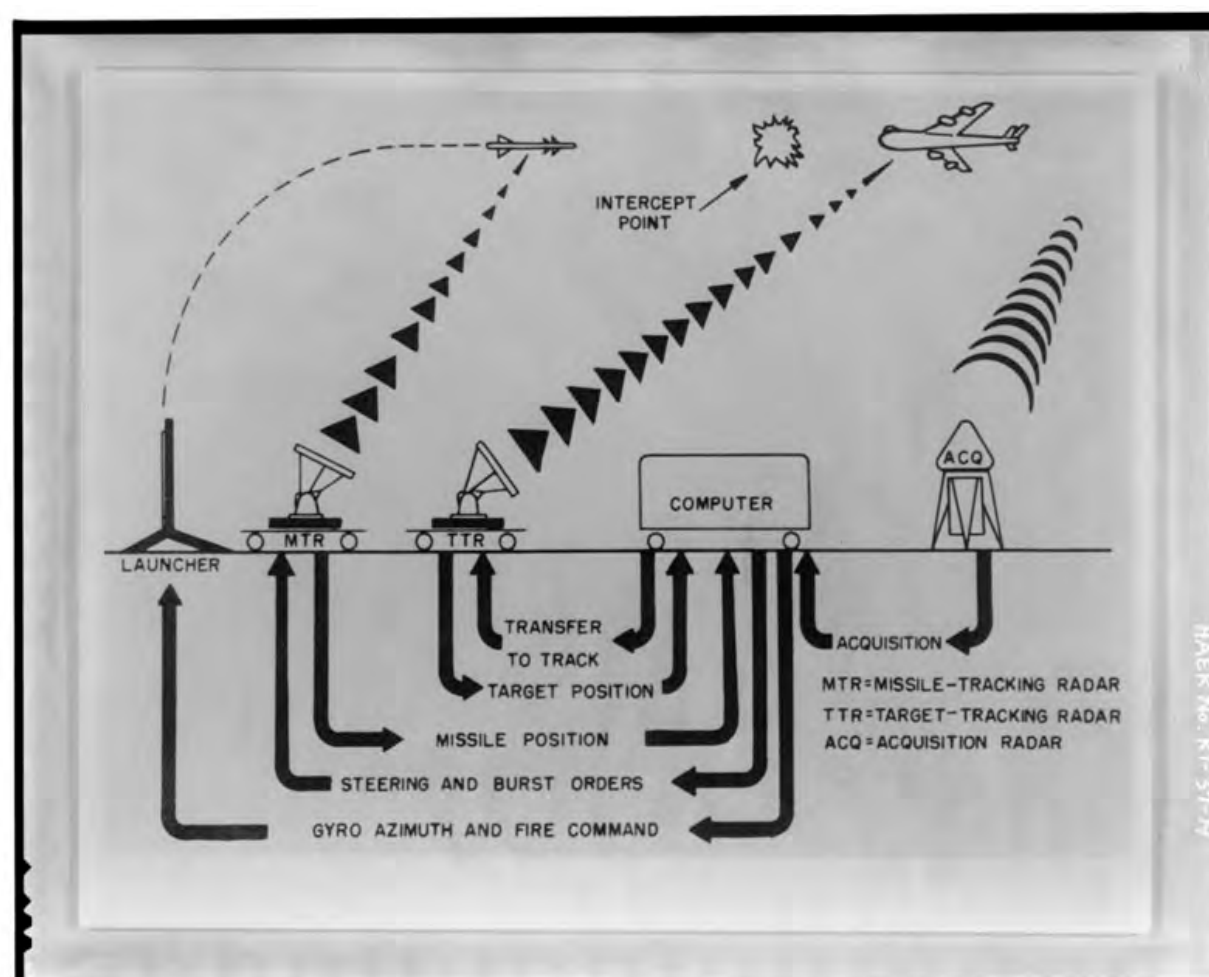


HISTORICAL REVIEW – POST WORLD WAR II

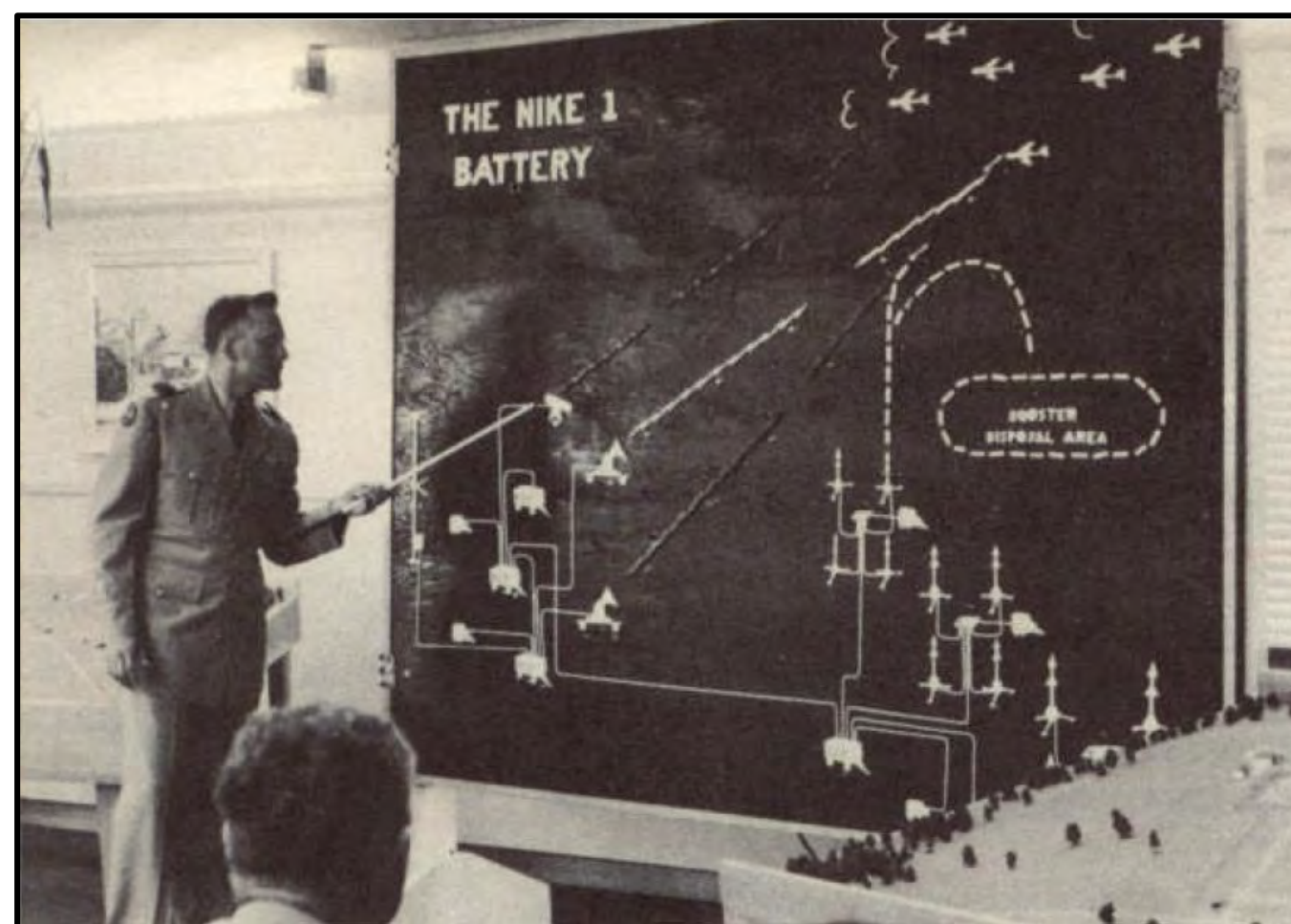


The end of World War II was marked by a renewed focus to defend American metropolitan areas as a result of escalating tensions between the Soviet Union and the United States. At the time however, traditional anti-aircraft artillery weaponry had become obsolete. The technological advances of rocketry and aircraft observed throughout World War II forced American defense planners to modernize traditional weaponry and defense approaches. These anxieties and technological advancements energized the development of the guided missile program.

Throughout much of the 1950s, the primary focus of the guided missile program was the Nike Ajax system. Early technology for the Nike Ajax missile project was introduced around 1950 through the U.S. Army and subcontractors such as Bell Laboratories, Western Electric, and Douglas Aircraft. By the mid 1950s, defense plans were underway to defend American metropolitan areas with surface to air missile batteries.



A depiction of how the Nike Ajax system functioned.



Nike Operations are studied and reviewed regularly.

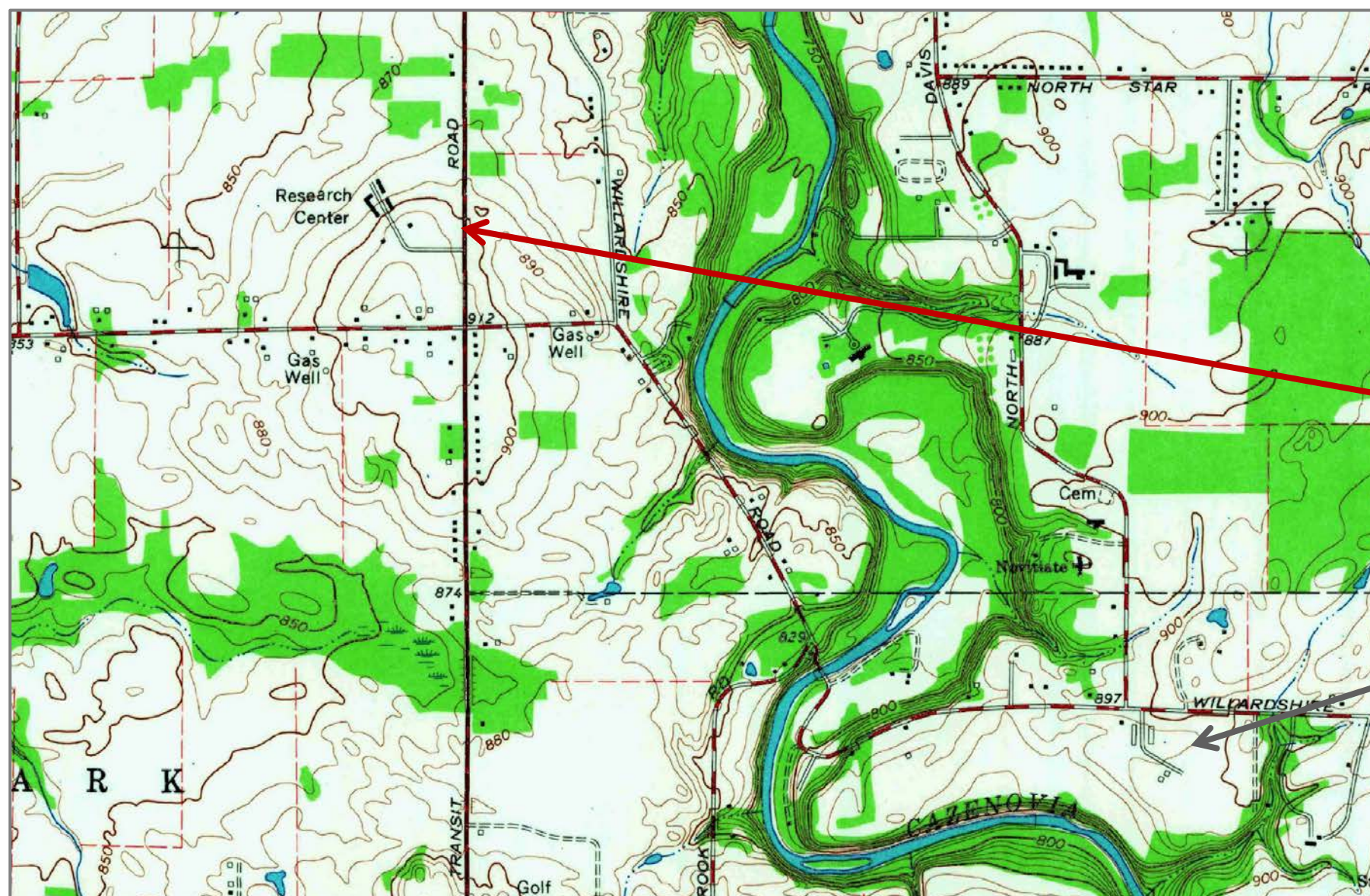
Sources: Library of Congress and Nike, the U.S. Army's Guided Missile System, Western Electric Company, undated.



HISTORICAL REVIEW – POST WORLD WAR II



The Former Nike Batteries 34/35 Control Area, in Erie County, New York, was a part of the guided missile network built in the mid 1950s. Its primary purpose was to help provide air defense for the Niagara Falls and Buffalo metropolitan region of New York State. Like many Nike Ajax Batteries of that period, Nike Batteries BU 34/35 offered onsite barracks at both the Control Area and Launch Area locations. The former Control Area ,located on Transit Road, is the focus of this report.



Map Source: USGS, EarthExplorer.

General locations of the former Control and Launcher Areas depicted on a 1965 Geological Survey Topographic Map

**BU 34/35
Control
Area**

**BU 34/35
Launch
Area**

REVISION	DATE	DESCRIPTION	BY
JOSEPH R. GANGEMI ARCHITECT - ENGINEER NEW YORK, NEW YORK		U. S. ARMY ENGINEER DISTRICT, NEW YORK CORPS OF ENGINEERS NEW YORK 3, NEW YORK	
DRAWN BY: P. F.		NIAGARA - BUFFALO DEFENSE (SAM) INSTALLATIONS BASIC INFORMATION MAPS GENERAL SITE & BUILDING USE PLAN SITE NO. BU-34-DC (ORCHARD PARK)	
DESIGNED BY:		ORCHARD PK., ERIE CO. NEW YORK	
SUBMITTED:		REVIEWED:	
REVIEWED:		RECOMMENDED:	
APPROVED:		SCALE AS SHOWN	
DATE 25 JUNE 1957		DRAWING NUMBER 18-02-01 SHEET 1 OF 1	
Schedule D		FILE NO. 7657-161	

Source: U.S. Army Corps of Engineers,
New England District.

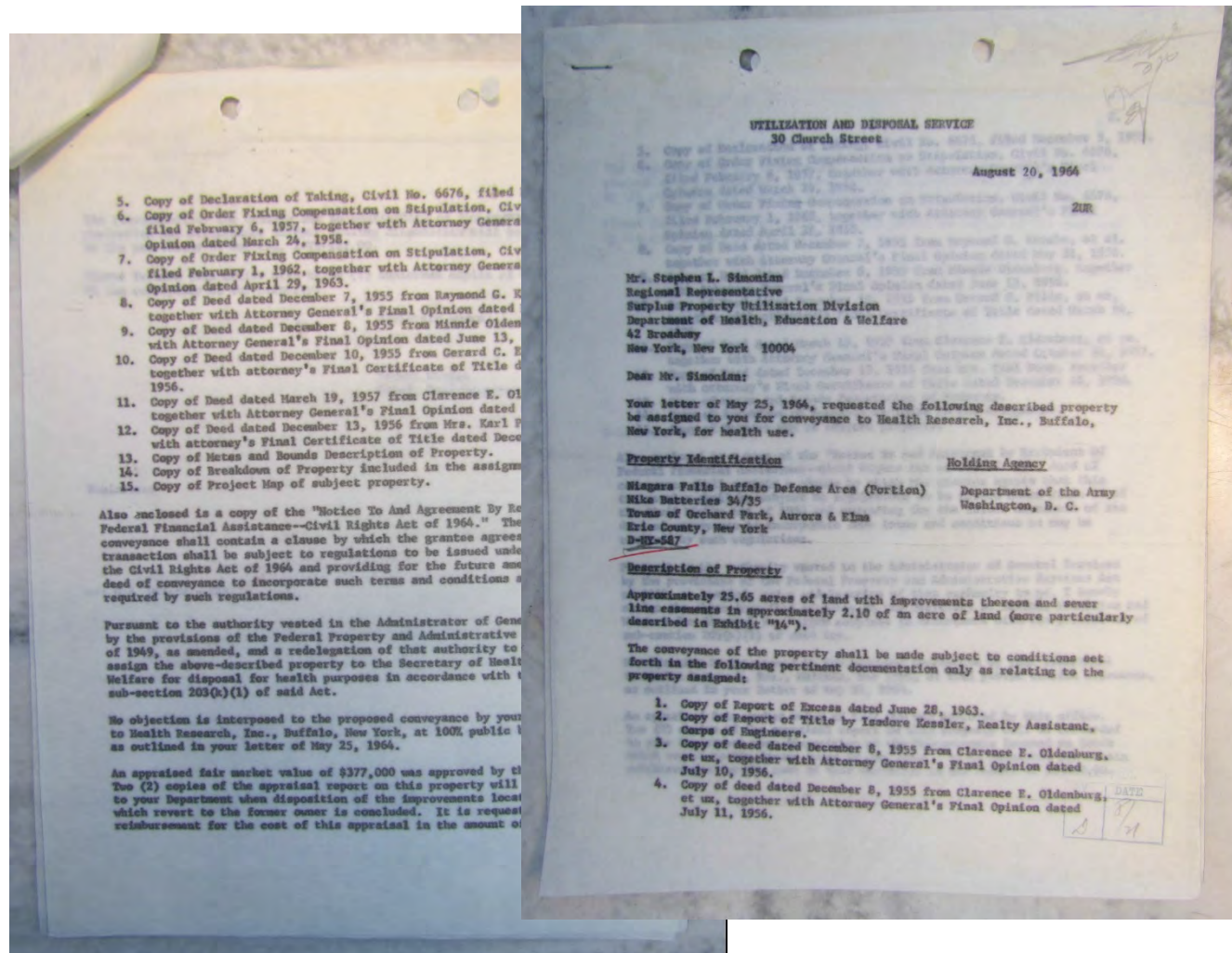
Real estate data from June 1957



HISTORICAL REVIEW 1955 & 1956



Historical records indicate that the federal government began to acquire property for Nike Batteries BU 34/35 in 1955. Further historical documentation shows that deliveries of equipment and movement of personnel occurred in late 1956.



UTILIZATION AND DISPOSAL SERVICE – 30 Church Street
 “3. Copy of deed dated December 8, 1955 from Clarence E. Oldenburg.” “10. Copy of Deed dated December 10, 1955 from Gerard C. Ellis, et ux.” - 20 August, 1964, Memo to Surplus Property Utilization Division, Dept. of Health, Education & Welfare, 42 Broadway, New York, NY 10004. Collected from the National Archives & Records Administration, Archives II, College Park, MD, Textual Records Branch, RG291, Entry 1 (UD-WW), Box 213.



Textual Source: Niagara Falls Gazette, Friday, November 23, 1956, Page 15.

Troops Ready to Leave Fort, Take Positions at East Aurora Nike Site
 “Ft. Niagara – The second body of anti-aircraft troops will move from their temporary quarters at Ft. Niagara to the nearly completed Nike guided missile site in East Aurora...”
 “Lt. Col. William F. LaHatte, commanding officer of the 465th AAA Nike Bn., announced that a convey of 17 trucks carrying radar antennae and control equipment used in guiding the supersonic missiles will reach the East Aurora site Tuesday afternoon. The convoy will transport 85 technicians and radar operators trained at Ft. Bliss, Tex., the Army’s guided missile school, and teams of launcher crewmen.” - 23 November, 1956, Niagara Falls Gazette.



HISTORICAL REVIEW 1956 –1960



By November of 1956, the 465st Missile Battalion was being established at the Nike Batteries BU 34/35. They would later be redesignated as Battery C, 2nd Missile Battalion, 62nd Artillery in September of 1958 and remained stationed until August 1960.

Table I. Niagara – Buffalo Army Air Defense Nike Missile Batteries

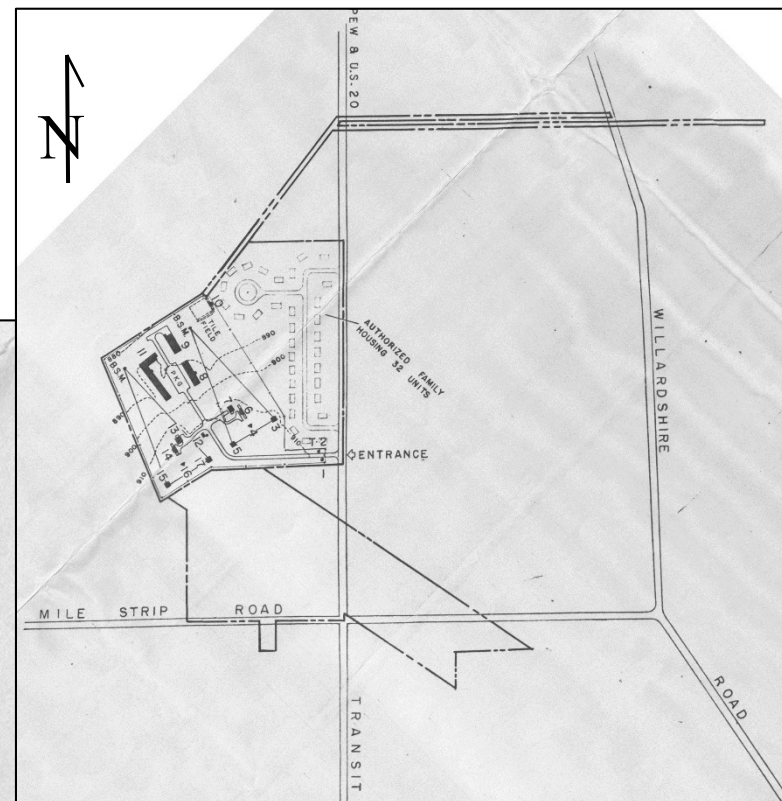
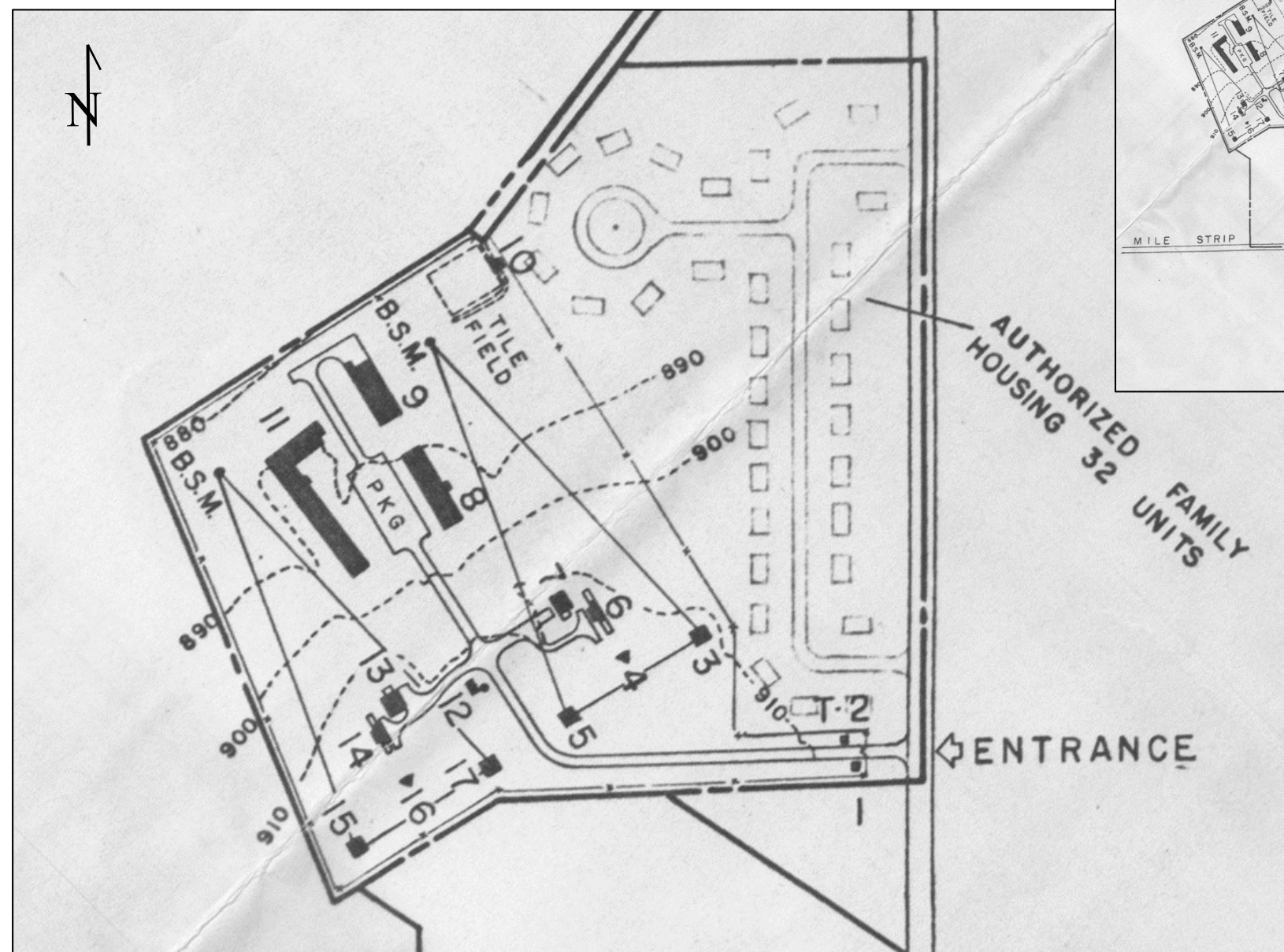
Site	Location	Units Assigned	Years
Fort Niagara	Youngstown	HQ 2 nd AAA Group & Manual AADCP	3/53 - 3/58
		HQ 2 nd Artillery Group (Air Defense) & AADCP	3/58 - 8/61
NF-03/05	Model City (Dual Site)	44 th AAA Missile Battalion, "A" Battery	3/55 - 9/58
		redesignated to: 1 st Missile Battalion, 4 th Artillery, "A" Battery	9/58 - 8/60
		2 nd Missile Battalion, 106 th Artillery, Btys "B"&"C", NYARNG	8/60 - 3/63
NF-16	Cambria (Dual Site)	44 th AAA Missile Battalion, "B" Battery	6/55 – 9/58
		redesignated to 1 st Missile Battalion, 4 th Artillery	9/58 - 3/70
NF-41 (Formerly NF-74/75)	Grand Island (Dual Site)	44 th AAA Missile Battalion, Batteries "C"&"D"	3/55 - 9/58
		redesignated to: 1 st Missile Battalion, 4 th Artillery	9/58 - 4/63
		2 nd Missile Battalion, (Nike) 209 th Artillery, NYARNG	4/63 - 3/70
NF-17	Lockport AFS Shawnee	AADCP (Initially Missile Master, became BIRDIE 9/63	8/61 - 3/70
		HQ 2 nd AAA Group (Air Defense)	8/61 – 10/61
		31 st Artillery Brigade (Air Defense)	10/61-
		Redesignated to 101 st Artillery Group (Air Defense)	3/66 – 11/68
		18 th Artillery Group (Air Defense)	11/68-3/70
BU-09	Millersport	465 th Missile Battalion (Nike), Battery "A"	6/56 - 9/58
		redesignated to 2 nd Missile Battalion, 62 nd Artillery	9/58 -12/61
BU-18	Lancaster	465 th Missile Battalion (Nike), Battery "B"	6/56 - 9/58
		Redesignated to 2 nd Missile Battalion, 62 nd Artillery	9/58 - 12/61
		1 st Missile Battalion, 4 th Artillery	12/61 - 4/63
		2 nd Missile Battalion, 209 th Artillery, NYARNG	4/63 - 3/70
BU-34/35	Orchard Park (Dual Site)	465 th Missile Battalion (Nike), Battery "C"	11/56 - 9/58
		redesignated to Bty C, 2 nd Missile Battalion, 62 nd Artillery	9/58 - 8/60
		2 nd Missile Battalion, 106 th Artillery, Btys "A" & "D", NYARNG	8/60 - 3/63
BU-52	Hamburg (Dual Site)	465 th Missile Battalion (Nike), Battery "D"	1/56 - 9/58
		redesignated to 2 nd Missile Battalion, 62 nd Artillery	9/58 – 12/61

Table I notes:
1. Data compiled from multiple sources²²
2. Redesignation of these units was an Army-wide directive under the Combat Arms Regimental System in January of 1959.
3. The Niagara-Buffero Nike Sites were supported by the Combined Field Maintenance Shop (CFMS) at the Niagara Falls, N.Y. U.S. Army Support Center. ²³
4. 2nd Missile Battalion, 106th Artillery, NYARNG was redesignated 2nd Missile Battalion, 209th Artillery (NYARNG) 1 May 1962.

Textual Source: Fort Niagara and the Cold War Army Defense of Western New York, Part 2 – The “Nike Missile” Era, by Paul Robitaille, 25 March 2015, Table 1, Page 3.



HISTORICAL REVIEW – 1957 INSTALLATION LAYOUT OF BU 34/35 CONTROL AREA



BUILDINGS LIST – CONTROL AREA

1. Sentry Booth
2. Gas Meter House (Building T-2)
3. Missile Tracking Radar Tower
4. Acquisition Radar Tower
5. Target Tracking Radar Tower
6. Interconnecting Corridor & Control Vans
7. Engine Generator & Frequency Changer Buildings
8. Administration, Recreation, & Storage Building
9. Mess Hall
10. Chlorinator House
11. Enlisted Men's Barracks & Bachelor Officers' Quarters
12. Pump House & Water Tank (20,000 gallon)
13. Engine Generator & Frequency Changer Buildings
14. Interconnecting Corridor & Control Vans
15. Target Tracking Radar Tower
16. Acquisition Radar Tower
17. Missile Tracking Radar Tower

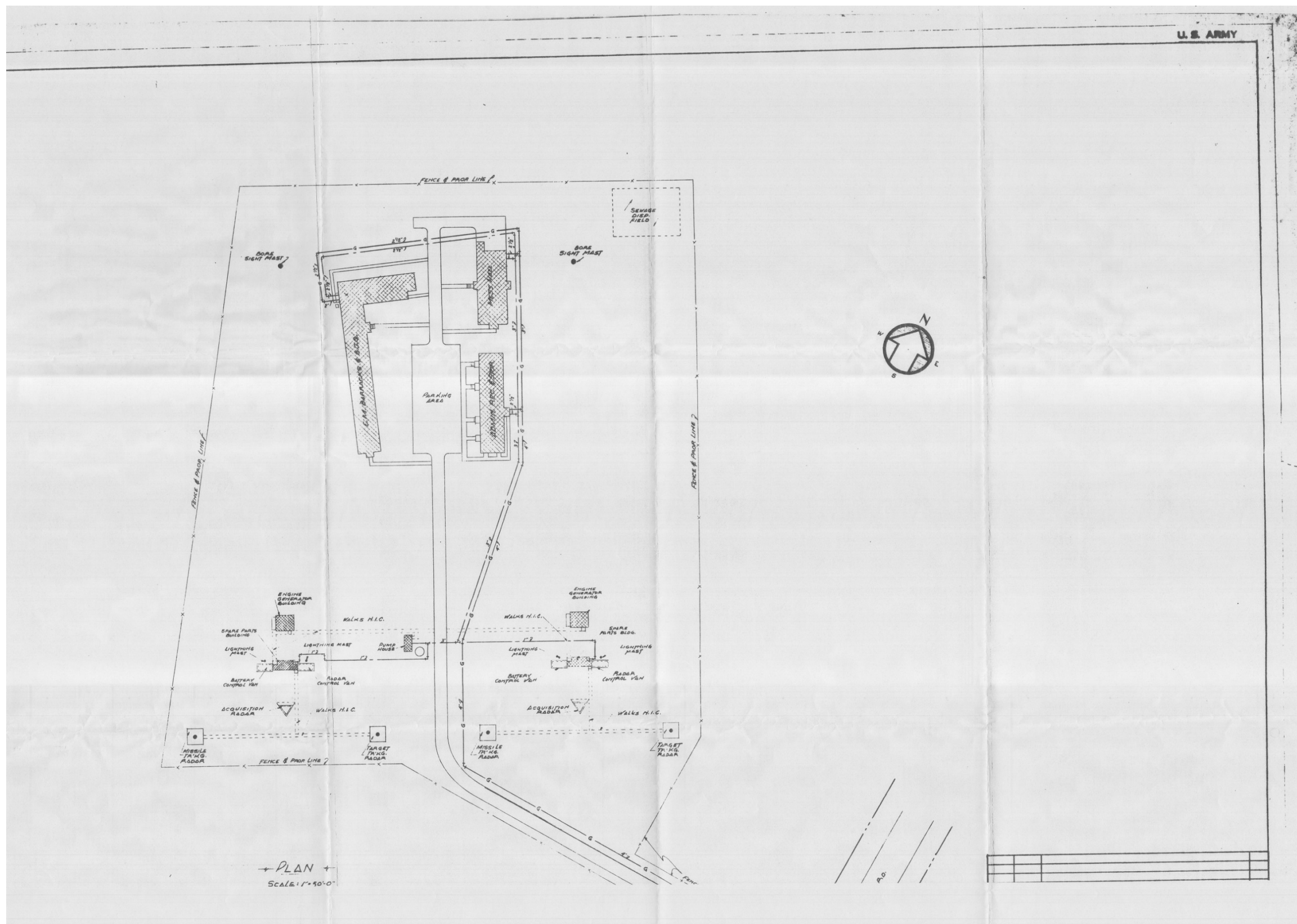
REVISION	DATE	DESCRIPTION	BY
JOSEPH R. GANGEMI ARCHITECT - ENGINEER NEW YORK, NEW YORK		U.S. ARMY ENGINEER DISTRICT, NEW YORK CORPS OF ENGINEERS NEW YORK 3, NEW YORK	
DRAWN BY: P. F.		NIAGARA - BUFFALO DEFENSE (SAM) INSTALLATIONS BASIC INFORMATION MAPS GENERAL SITE & BUILDING USE PLAN SITE NO. BU-34-DC (ORCHARD PARK)	
DESIGNED BY: -		ORCHARD PK., ERIE CO. NEW YORK	
SUBMITTED: J. R. Gangemi ARCHITECT - ENGINEER		REVIEWED: S. S. Haendel CH. MIL. PL. & RPTS. BR. ASSISTANT CHIEF, ENGINEERING DIVISION	
APPROVED: T. S. Rogers COLONEL C. E., DISTRICT ENGINEER		RECOMMENDED: C. A. Paine CHIEF, ENGINEERING DIVISION	
DATE 25 JUNE 1957		SCALE AS SHOWN DRAWING NUMBER 18-02-01 SHEET 1 OF 1	
Schedule D		FILE NO. 7657-161	

Source: U.S. Army Corps of Engineers, New England District, Concord, MA.

B.S.M. = Bore Site Mast (for calibrating radar)
PKG = Parking Area



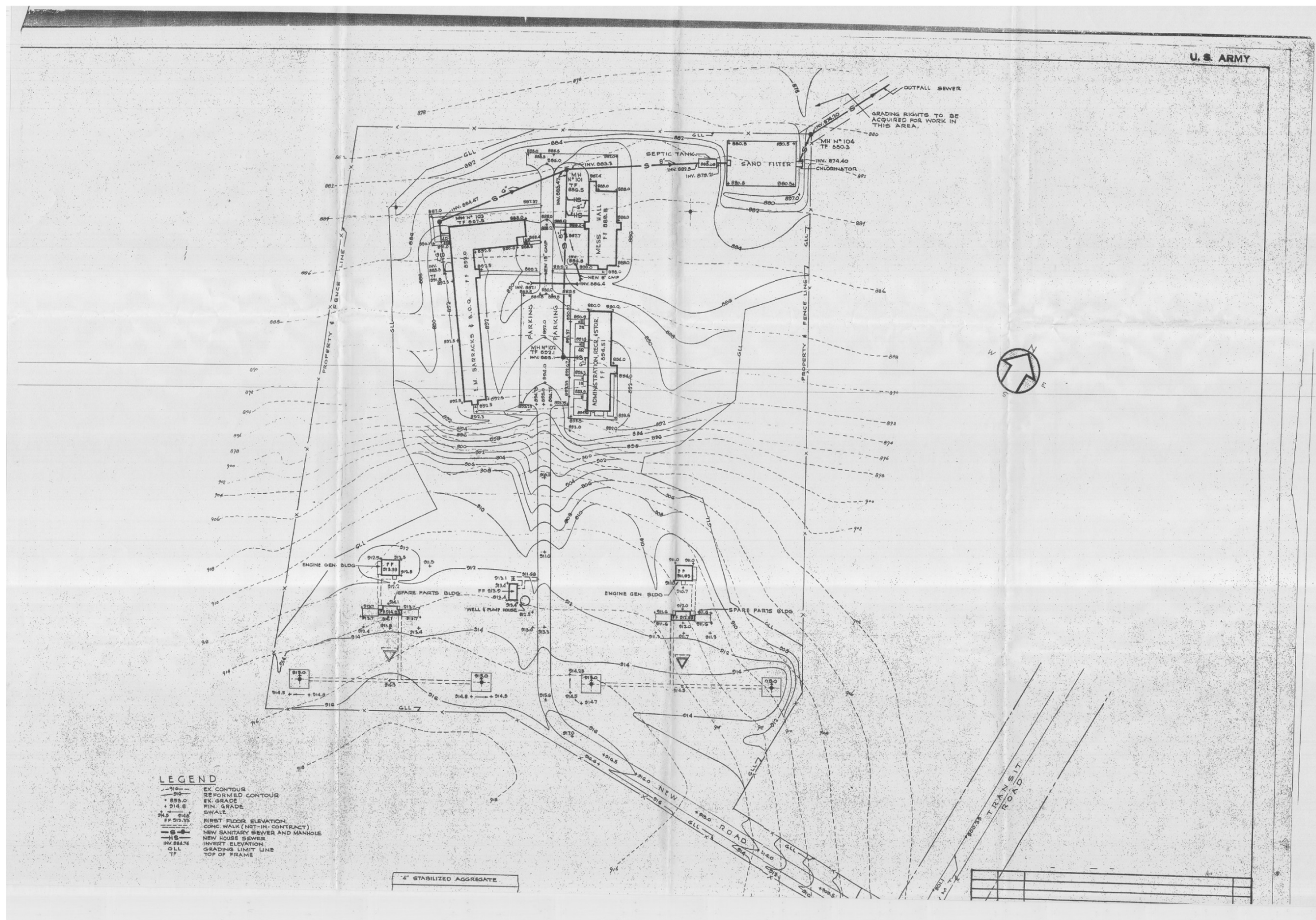
HISTORICAL REVIEW – BASIC INSTALLATION LAYOUT OF BU 34/35 CONTROL AREA (UNDATED)



Source: U.S. Army Corps of Engineers, New England District, Concord, MA.



HISTORICAL REVIEW – DETAILED INSTALLATION LAYOUT OF BU 34/35 CONTROL AREA (UNDATED)



Under Task #1 (refer to Page 8 of this report):
“In addition, the AGC research will focus on information regarding utility lines and discharge points at the control and launch area in order for NAN to evaluate potential off-site migration.”

Indicated on this layout plan is a 6 inch buried sewer line which begins at Building 11 (Barracks) and Building 8 (Admin/Rec/Storage), then proceeds toward Building 9 (Mess Hall) and continues on to the Septic Tank and then the Sand Filter. A buried sewer line is directed away from the main Control Area installation in a northeast direction (via sewer easement).

It is noted that the Barracks (Building S-11) and the Mess Hall (Building S-8) are not indicative of buildings that would have been sources of hazardous materials that would have been stored or handled.

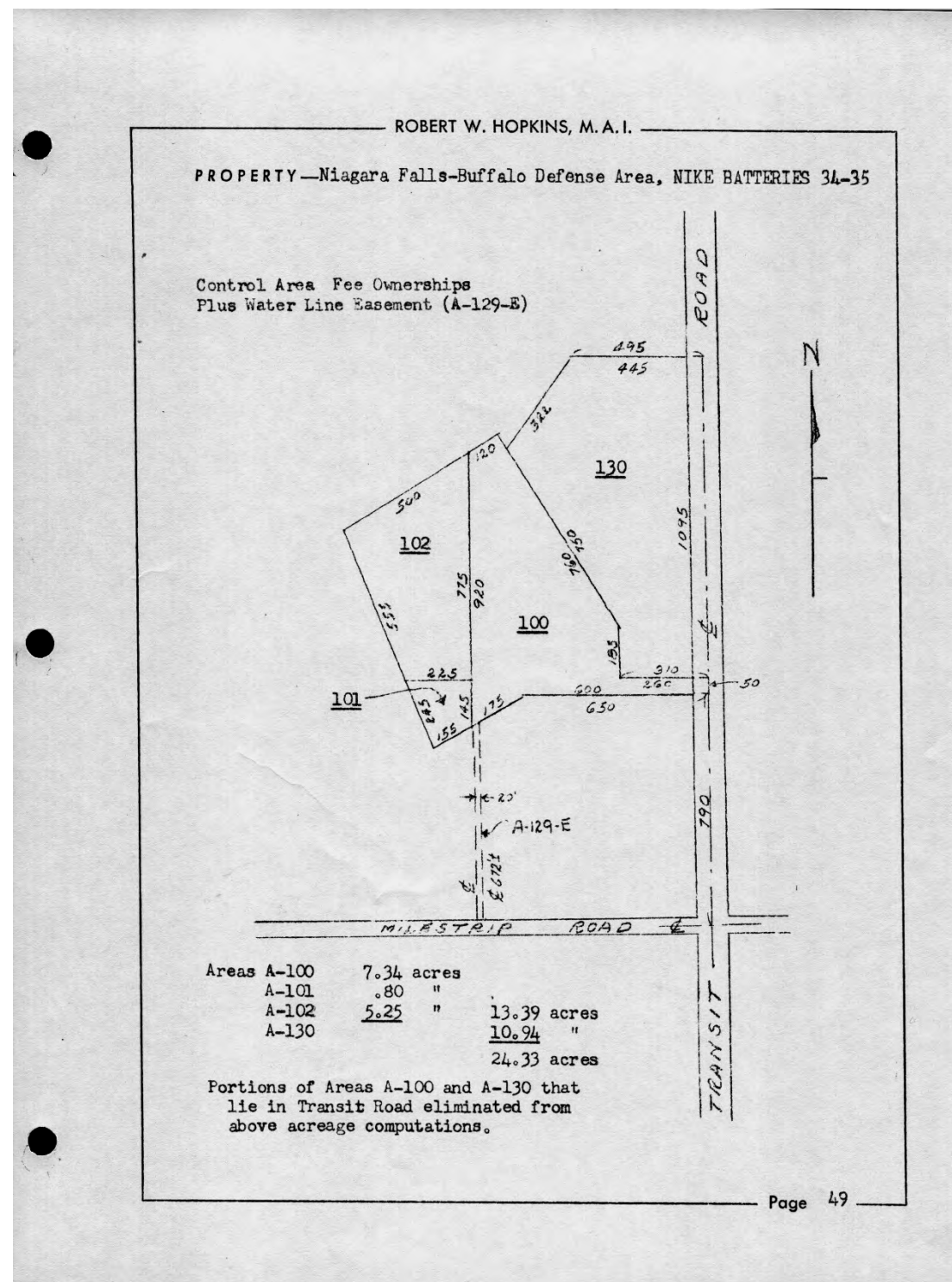
Source: U.S. Army Corps of Engineers, New England District, Concord, MA .



HISTORICAL REVIEW – BU 34/35 CONTROL AREA PLATES FROM 1964 REAL ESTATE APPRAISAL REPORT



Report of 1) Fee Ownerships Plus Water Line, and 2) Sewer Easements



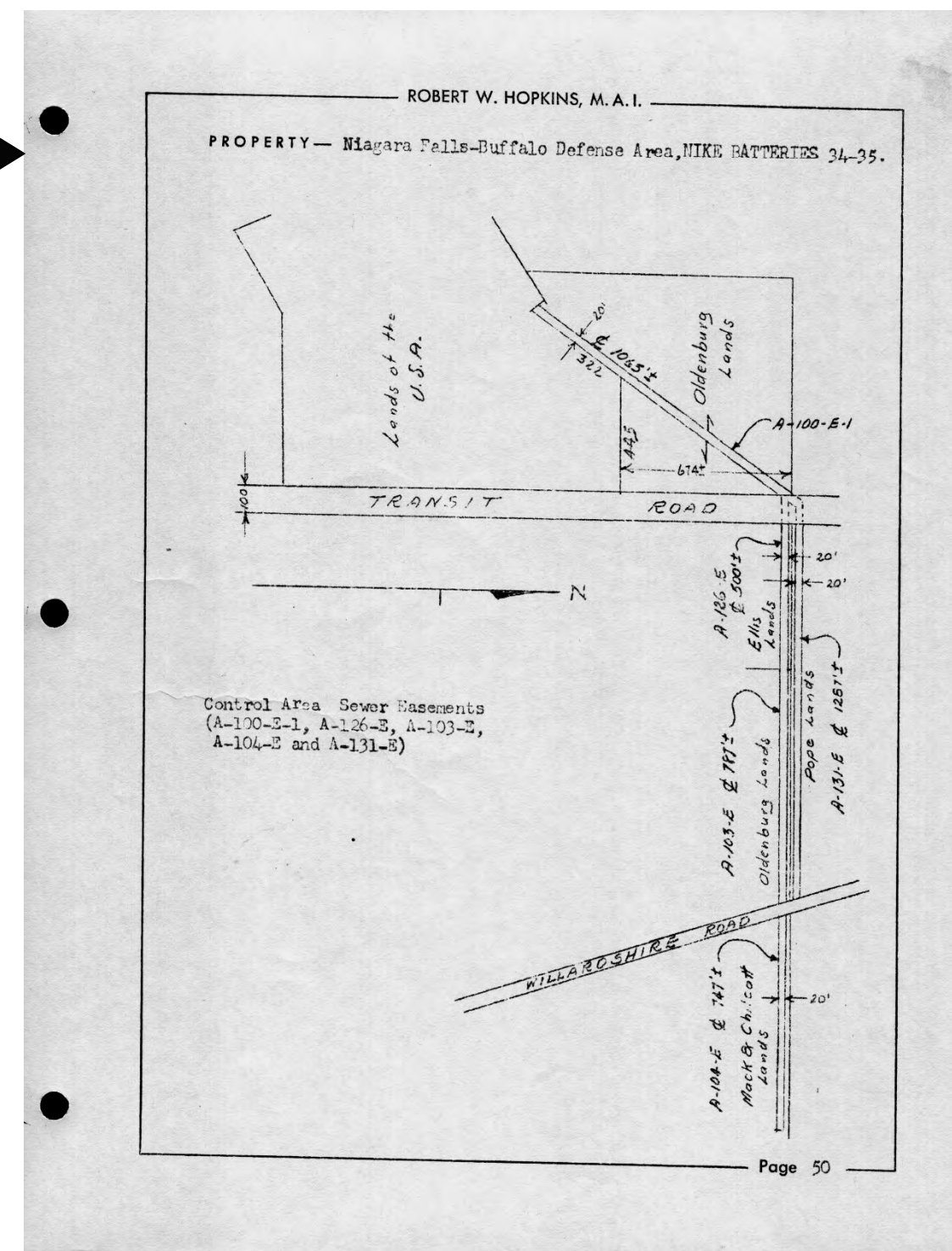
Sewer easements are depicted for the sanitary sewer line which leaves the BU 34/35 Control Area.

The sewer line is described on Page 55 of the Appraisal Report as "3,750 lineal feet...(Includes manholes, etc.)".

Note easement A-129-E which was established for the potable water line.

This water service line approaches the BU 34/35 Control Area property from Milestrip Road.

The water service line is described on Page 56 of the Appraisal Report as "2,500 lineal feet of 4" transite pipe".



Source: Appraisal of Real Estate, Robert W. Hopkins, M.A.I, May 1, 1964; located at NARA, Archives II, College Park, Maryland, Textual Records Branch, Record Group 291.



HISTORICAL REVIEW 1960 –1963

From August 1960 to March 1963, the 2nd Missile Battalion, 106th Artillery, Batteries “A” and “D” of the New York Army National Guard was assigned at the Nike Batteries BU 34/35. It should be noted that according to an Appraisal Report dated 01 July 1963, the battalion was disbanded from its assignment at this installation in September 1962 (cited by an earlier reference in this report – GSA Property Disposal data).

Table I. Niagara – Buffalo Army Air Defense Nike Missile Batteries

Site	Location	Units Assigned	Years
Fort Niagara	Youngstown	HQ 2 nd AAA Group & Manual AADCP	3/53 - 3/58
		HQ 2 nd Artillery Group (Air Defense) & AADCP	3/58 - 8/61
NF-03/05	Model City (Dual Site)	44 th AAA Missile Battalion, “A” Battery	3/55 - 9/58
		redesignated to: 1 st Missile Battalion, 4 th Artillery, “A” Battery	9/58 - 8/60
		2 nd Missile Battalion, 106 th Artillery, Btys “B”&“C”, NYARNG	8/60 - 3/63
NF-16	Cambria (Dual Site)	44 th AAA Missile Battalion, “B” Battery	6/55 – 9/58
		redesignated to 1 st Missile Battalion, 4 th Artillery	9/58 - 3/70
NF-41 (Formerly NF-74/75)	Grand Island (Dual Site)	44 th AAA Missile Battalion, Batteries “C”&“D”	3/55 - 9/58
		redesignated to: 1 st Missile Battalion, 4 th Artillery	9/58 - 4/63
		2 nd Missile Battalion, (Nike) 209 th Artillery, NYARNG	4/63 - 3/70
NF-17	Lockport AFS Shawnee	AADCP (Initially Missile Master, became BIRDIE 9/63	8/61 - 3/70
		HQ 2 nd AAA Group (Air Defense)	8/61 – 10/61
		31 st Artillery Brigade (Air Defense)	10/61-
		Redesignated to 101 st Artillery Group (Air Defense)	3/66 – 11/68
		18 th Artillery Group (Air Defense)	11/68-3/70
BU-09	Millersport	465 th Missile Battalion (Nike), Battery “A”	6/56 - 9/58
		redesignated to 2 nd Missile Battalion, 62 nd Artillery	9/58 -12/61
BU-18	Lancaster	465 th Missile Battalion (Nike), Battery “B”	6/56 - 9/58
		Redesignated to 2 nd Missile Battalion, 62 nd Artillery	9/58 - 12/61
		1 st Missile Battalion, 4 th Artillery	12/61 - 4/63
		2 nd Missile Battalion, 209 th Artillery, NYARNG	4/63 - 3/70
BU-34/35	Orchard Park (Dual Site)	465 th Missile Battalion (Nike), Battery “C”	11/56 - 9/58
		redesignated to Bty C, 2 nd Missile Battalion, 62 nd Artillery	9/58 - 8/60
		2 nd Missile Battalion, 106 th Artillery, Btys “A”& “D”, NYARNG	8/60 - 3/63
BU-52	Hamburg (Dual Site)	465 th Missile Battalion (Nike), Battery “D”	1/56 - 9/58
		redesignated to 2 nd Missile Battalion, 62 nd Artillery	9/58 – 12/61

- Table I notes:
- 1. Data compiled from multiple sources²²
 - 2. Redesignation of these units was an Army-wide directive under the Combat Arms Regimental System in January of 1959.
 - 3. The Niagara-Buffer Nike Sites were supported by the Combined Field Maintenance Shop (CFMS) at the Niagara Falls, N.Y. U.S. Army Support Center. ²³
 - 4. 2nd Missile Battalion, 106th Artillery, NYARNG was redesignated 2nd Missile Battalion, 209th Artillery (NYARNG) 1 May 1962.

Textual Source: Fort Niagara and the Cold War Army Defense of Western New York, Part 2 – The “Nike Missile” Era, by Paul Robitaille, 25 March 2015, Table 1, Page 3.



HISTORICAL REVIEW – 1963 EXCESS OF REAL PROPERTY



DECEMBER 1953
PRESCRIBED BY GENERAL
SERVICES ADMINISTRATION
REGULATION 2-IV-201.00
110-102

**REPORT OF EXCESS
REAL PROPERTY**

1. HOLDING AGENCY NO. N-120 DATE RECEIVED (GSA use only) JUL 1 - 1963
2. DATE OF REPORT JUN 28 1963 GSA CONTROL NO. (GSA use only) 10-NY-587

3. TO (Furnish address of GSA regional office)
General Services Administration
Utilization and Disposal Service
30 Church Street, New York, N.Y.

4. FROM (Name and address of holding agency)
Department of the Army
Washington 25, D.C.

5. NAME AND ADDRESS OF REPRESENTATIVE TO BE CONTACTED
Maurice Lustig
Chief, Real Estate Division
U.S. Army Engineer District, New York
111 East 16th Street, New York 3, N.Y.

6. NAME AND ADDRESS OF CUSTODIAN
Commanding General
First United States Army
Governor's Island, New York 4, N.Y.

7. PROPERTY IDENTIFICATION
Niagara Falls - Buffalo Defense Area,
NIKE Batteries 34 - 35

8. PROPERTY ADDRESS (Give full location)
Towns of Orchard Park, Aurora and
Elma, Erie County, New York

9. SPACE DATA

USE	NUMBER OF BUILDINGS (1)	FLOOR AREA (Sq. ft.) (2)	NUMBER OF FLOORS (3)	FLOOR LOAD CAPACITY (4)	CLEAR HEADROOM (5)	LAND (From SF 118b) (6)	ACRE OR SQUARE FEET (7)
A. OFFICE	1	4,639				A. FEE	25.65
B. STORAGE	9	22,646				B. LEASED	
C. OTHER (See 9 F)	19	34,617				C. OTHER	42.70
D. TOTAL (From SF 118a)	29	61,902				D. TOTAL	68.35
E. GOV'T INTEREST: (1) OWNER (2) TENANT						F. SPECIFY "OTHER" USE ENTERED IN C ABOVE	

11. COST TO GOVERNMENT

ITEM	SCHEDULE	COST
A. BUILDINGS, STRUCTURES, UTILITIES, AND MISCELLANEOUS FACILITIES	A (Col. d)	\$ 2,314,600
B. LAND	B (Col. f)	32,973
C. RELATED PERSONAL PROPERTY	C (Col. h)	2,347,573
D. TOTAL (Sum of 11A, 11B, and 11C)		\$
E. ANNUAL PROTECTION AND MAINTENANCE COST (Government-owned or leased) \$4,000.00 (Approx.)		

12. LEASEHOLD(S) DATA (Use separate sheet if necessary)

A. TOTAL ANNUAL RENTAL	B. ANNUAL RENT PER SQ. FT. OR ACRE	C. DATE LEASE EXPIRES	D. NOTICE REQUIRED FOR RENEWAL	E. TERMINAL DATE OF RENEWAL RIGHTS	F. ANNUAL RENEWAL RENT PER SQ. FT. OR ACRE	G. TERMINATION RIGHTS (in days)
\$	\$				\$	

13. DISPOSITION OF PROCEEDS

14. TYPE OF CONSTRUCTION

15. HOLDING AGENCY USE
Support of the Nike Missile Battery, a complex of the Niagara Falls - Buffalo Defense Area (USARADCOM)

16. RANGE OF POSSIBLE USES

17. NAMES AND ADDRESSES OF INTERESTED FEDERAL AGENCIES AND OTHER INTERESTED PARTIES
Mr. James P. Kavanaugh, Commissioner, Department of Urban Renewal, 312 City Hall, Buffalo, New York
Clarence Henning, Supervisor, Town of Orchard Park, New York

18. REMARKS
Niagara Falls - Buffalo Defense Area, Nike Batteries 34 -35 is located 12 miles southeast of the City of Buffalo and 3 miles west of East Aurora, Erie County, New York. The installation is comprised of two separate areas of land approximately (Cont'd)

19. REPORT AUTHORIZED BY DEPARTMENT OF THE ARMY

NAME	SIGNATURE
MAURICE LUSTIG	<i>Maurice Lustig</i>
TITLE <u>Chief, Real Estate Division</u>	

U. S. GOVERNMENT PRINTING OFFICE 16-60840-3

On the 28th of June 1963, the New York office of the General Services Administration identified Nike Batteries BU 34/35 as excess property.

The current custodian of the property is: Commanding General, First United States Army, Governor's Island, New York, NY. The holding agency use is: support of the Nike Missile Battery, a complex of the Niagara Falls – Buffalo Defense Area (USARADCOM).

Textual Source: National Archives & Records Administration, Archives II, College Park, MD, Textual Records Branch, RG291, Entry 1 (UD-WW), Box 213.



HISTORICAL REVIEW – 1963 EXCESS OF REAL PROPERTY – CONT'D

EXCESS OF STRUCTURES, UTILITIES, AND FACILITIES OF THE NIKE BU 34/35 CONTROL AREA – PART 1 OF 2



<u>C O N T R O L A R E A</u> <u>B U I L D I N G S</u>		
<u>NO.</u>	<u>DESCRIPTION</u>	<u>FLOOR AREA(Sq. Ft.)</u>
S-6	Interconnecting Corr. & FUIF Room	615
S-14	" " " "	615
S-111	Paint & Oil Storage Shed, concrete	54
S-8	Battalion Hq. Building, concrete	4,639
S-11	Enlisted Men's Barracks & Officers' Quarters, concrete	10,272
S-9	Enlisted Men's Mess Building, concrete	4,500
S-7	Generator Building w/Latrine, concrete	844
S-13	Generator Building w/Latrine, concrete	844
T-2	Gas Meter House, wood siding	23
S-10	Chlorinator House, concrete	39
S-12	Water Pump House, concrete	242
S-1	Sentry Station, concrete	58
TOTAL.....		22,745

Textual Source: National Archives & Records Administration, Archives II, College Park, MD, Textual Records Branch, RG291, Entry 1 (UD-WW), Box 213, GSA Region 2, Utilization and Disposal Service, Real Property Division, 30 Church St., New York, NY, letter to Federal Agencies, Notice of Availability of Excess Property, July 22, 1963.

FUIF = Fire Unit Integration Facility



HISTORICAL REVIEW – 1963 EXCESS OF REAL PROPERTY – CONT'D

EXCESS OF STRUCTURES, UTILITIES, AND FACILITIES OF THE NIKE BU 34/35 CONTROL AREA – PART 2 OF 2



<u>NO.</u>	<u>DESCRIPTION</u>
P-3	Missile Tracking Radar Tower
P-17	" " " "
P-5	Target Tracking Radar Tower
P-15	" " " "
P-4	Acquisition Radar Tower
P-16	Acquisition Radar Tower
D-2	Flagpole, Wood, 50' high
D-28	Concrete Peds (96 square yards)
D-29	Electric Distribution Lines (4,280 Lineal Feet)
D-30	Transformers (10)
D-12	Gas Pipe Lines (1,570 Lineal Feet)
D-4	Sewage Treatment Plant (15 TG)
D-5	Raw Sewage Pumping Station
D-8	Sewage Treat. Diversion Chamber
D-9	" " Junction "
D-13	Septic Tank Drug Field
D-15	Sanitary Sewer Lines (3,750 Lineal Feet)
D-21	Storm Sewers (4,390 Lineal Feet)
D-16	Water Pipe Line Potable (16,140 Lineal Feet)
D-23	Ground Fencing, Chain Link, 6 feet high (3,497 Lineal Feet)
D-17	Roads (4509) Square Yards)
D-19	Walks (577 Square Yards)
D-18	Vehicle Parking Area (2,659 Square Yards)
D-20	" " " (4,530 Square Yards)

There is no personal property.

Textual Source: National Archives & Records Administration, Archives II, College Park, MD, Textual Records Branch, RG291, Entry 1 (UD-WW), Box 213, GSA Region 2, Utilization and Disposal Service, Real Property Division, 30 Church St., New York, NY, letter to Federal Agencies, Notice of Availability of Excess Property, July 22, 1963.



HISTORICAL REVIEW 1964 - 1965



Nike Batteries BU 34/35 Control Area

On 15 December of 1964, the Control Area of BU 34/35 along Transit Road, was conveyed by the Department of Health, Education, and Welfare to Health Research, Inc. for health use. The area consisted of 25.65 acres of land with improvements that included sewer line easements of approximately 2.10 acres of land. Two buildings, a water pump house with outside water tank, and underground potable water pipe lines (located on lands which revert to the former owner) were sold to the revertee on April 8, 1965. Other improvements at the Control Area were offered for sale in two separate lots: 1) Lot 1, consisting of a heating system, power stage switchboard, various other facilities installed in two buildings, and other salvageable miscellaneous improvements: and 2) Lot 2, consisting of approximately 4,600 linear feet of chain link fencing.^{1,2}

- 1) General Services Administration, Region 2, New York, NY, Memorandum from Acting Chief, Real Property Division to the Assistant Commissioner for Real Property, Washington, D.C. dated July 23, 1965. National Archives & Records Administration, Archives II, College Park, MD, Textual Records Branch, RG291, Entry 1 (UD-WW), Box 213.
- 2) General Services Administration, Region 2, New York, NY, Memorandum from Acting Chief, Real Property Division to the Director, Eastern Division, Office of Real Property, Washington, D.C. dated February 2, 1966. National Archives & Records Administration, Archives II, College Park, MD, Textual Records Branch, RG291, Entry 1 (UD-WW), Box 213.



AERIAL PHOTO & SATELLITE IMAGERY COVERAGE



Researched Aerial Photography and Satellite Coverage – Part 1 of 2

Date	Scale	Remarks
1951	-	Erie County Public Works Department, New York historical aerial photography. Pre-development Nike site vertical aerial coverage over Erie County, New York.
1957	-	Oblique aerial photo annotated by Maj. Earl Close (retired); ed-thelen.org download.
1958, Jun 03	1:60,000	U.S. Air Force mission; USGS EarthExplorer download.
1958, Oct	1:20,000	U.S. Department of Agriculture, Farm Service Agency, awaiting reception of ordered scans.
1960, Apr 29	-	Appraisal of Real Estate, Robert W. Hopkins, M.A.I, May 1, 1964; located at NARA, Archives II, College Park, Maryland, Textual Records Branch, Record Group 291.
1962, May 09	1:25,000	U.S. Air Force mission; NARA, Archives II, College Park, Maryland, Cartographic Records Branch, Record Group 373.
1963, Apr 25	1:20,000	U.S. Geological Survey; EarthExplorer download.
1964, Mar 16	1:44,000	U.S. Air Force mission, NARA, Archives II, College Park, Maryland, Cartographic Records Branch, Record Group 373.
1966, Jul	1:20,000	U.S. Department of Agriculture, Farm Service Agency; awaiting reception of ordered scans.
1972, May	1:24,000	McIntosh and McIntosh, P.C. – Professional Services, Lockport, New York.

M.A.I. = Member, Appraisal Institute
NARA = National Archives & Records
Administration
P.C. = Professional Corporation



AERIAL PHOTO & SATELLITE IMAGERY COVERAGE



Researched Aerial Photography and Satellite Coverage – Part 2 of 2

Date	Scale	Remarks
1972	1:28,000	Buffalo & Erie County Public Library, Buffalo, New York; Erie Co. Public Works retired data. Scanned images downloaded.
1974, Apr 17	1:24,000	U.S. Geological Survey, EarthExplorer download.
1978, May 03	1:24,000	McIntosh and McIntosh, P.C. – Professional Services, Lockport, New York.
1981, Aug 20	1:24,000	McIntosh and McIntosh, P.C. – Professional Services, Lockport, New York.
1990	1:40,000	U.S. Department of Agriculture, Farm Service Agency; awaiting reception of ordered scans.
2006, Aug	-	U.S. Geological Survey, EarthExplorer download, NAIP ortho-rectified data in 3 bands (RGB). Satellite imagery. Pixel resolution is 3 feet.
2016, Sept	-	Digital Globe, Inc. Ortho-rectified satellite imagery in 3 bands (RGB). Pixel resolution is 1 foot.

NAIP = National Agriculture Imagery Program
P.C. = Professional Corporation
RGB = Red, Green, Blue



PHOTOGRAPHIC INTERPRETATION OF AERIAL PHOTOGRAPHY: 1951 TO 1962



Photographic Source: National Archives & Records Administration, Archives II, College Park, MD.



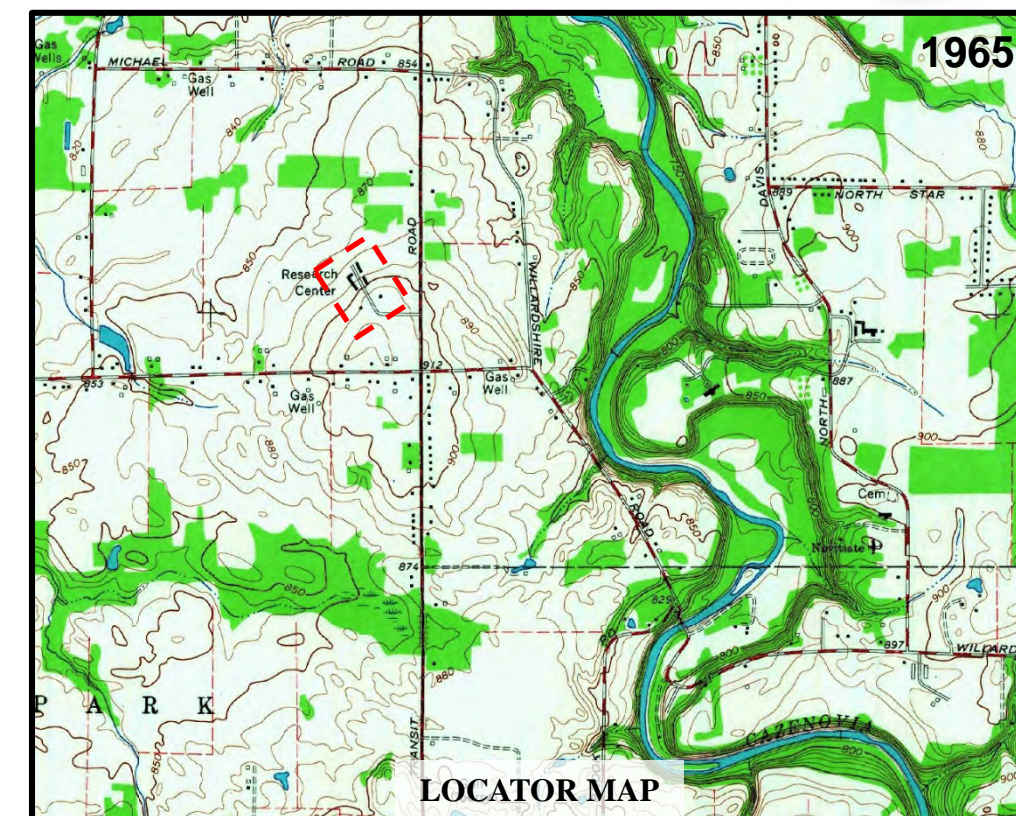
PHOTOGRAPHIC ANALYSIS: PRE-CONSTRUCTION, 1951



Aerial photography dated 14 October 1951 displays agricultural use in the location of the future BU 34/35 Control Area.



Photographic Source: Erie County Public Works office, Buffalo, New York.



Map Source: U.S. Geological Survey, EarthExplorer.



General map location of former Nike Control Area BU 34/35

Location of the future BU 34/35 Control Area on 1951 aerial photography (buildings & perimeter fence).

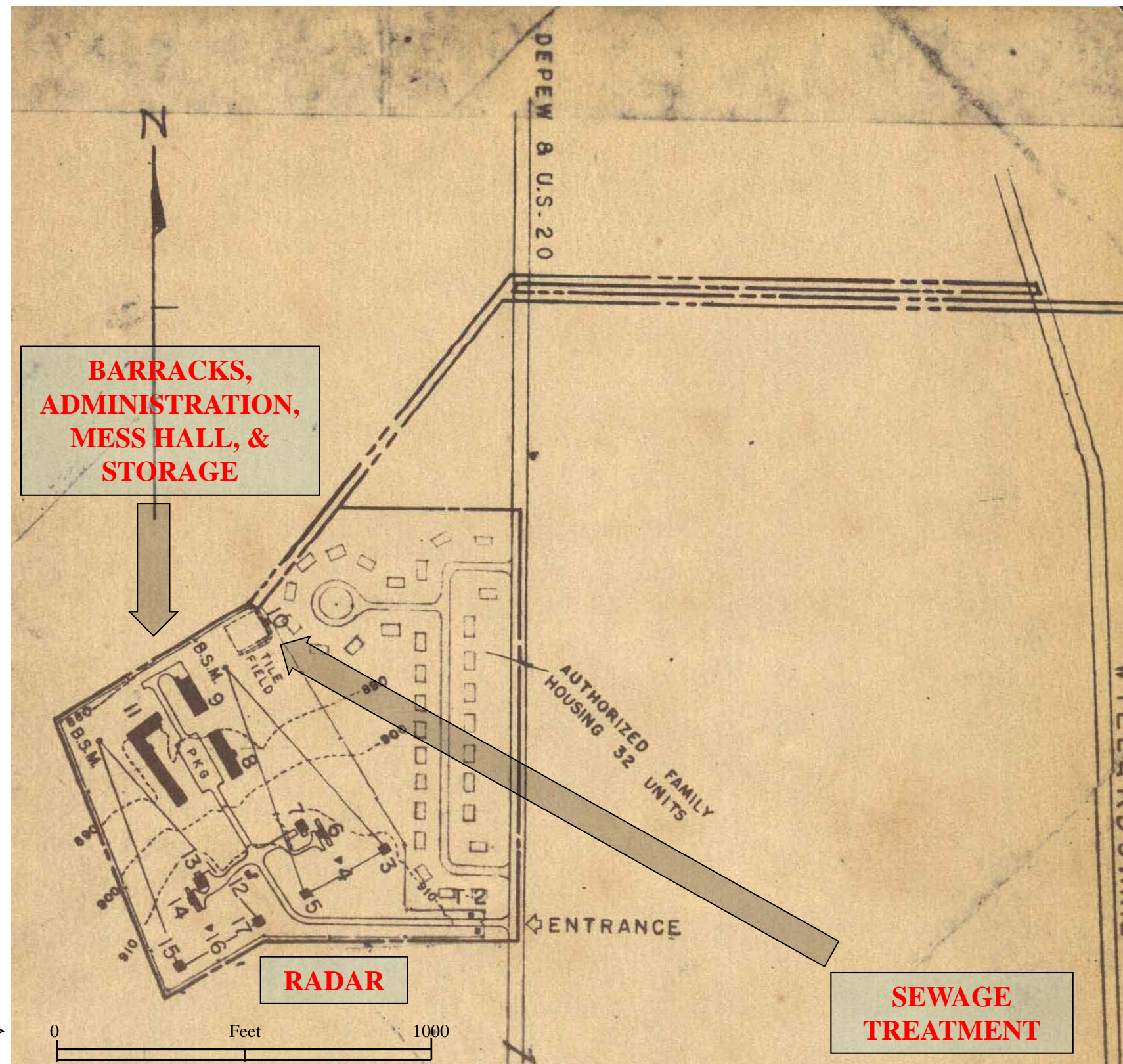


PHOTOGRAPHIC ANALYSIS – AREAS OF INTEREST



Historical photographic analysis in this report is divided into spatial areas of interest. Henceforth, the Control Area is divided into three areas of interest:

- 1: Barracks, Administration, Mess Hall, & Storage
- 2: Radar – Towers & Buildings
- 3: Sewage Treatment



Map Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213.

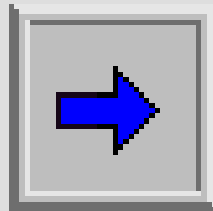


PHOTOGRAPHIC ANALYSIS – OPERATIONAL YEARS



BU 34/35 Control Area

Photo Interpretation Of Aerial And Ground Photography



1958 -1962 Aerial Data
1964 Ground Photos (post-closure)

Area Of Interest #1:
Barracks, Administration,
Mess Hall, and Storage



Findings from available historical data.



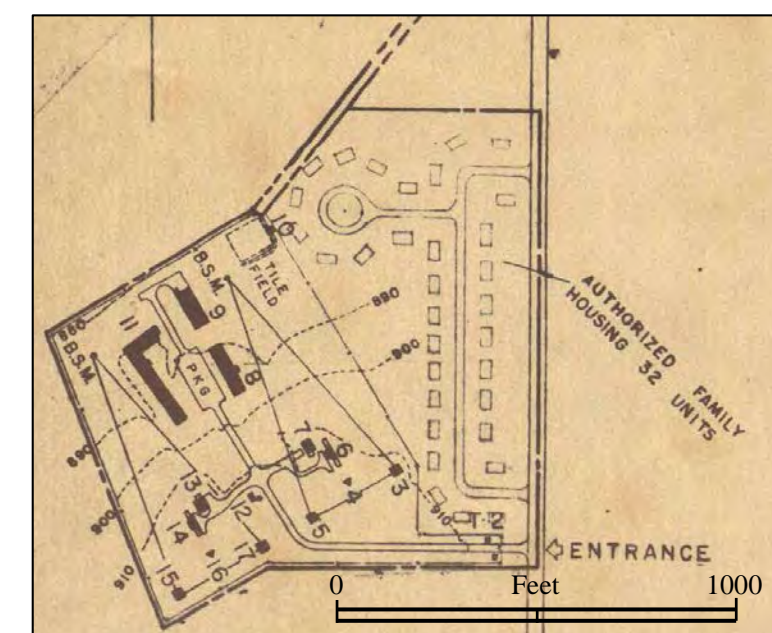
PHOTOGRAPHIC ANALYSIS – 1958

BARRACKS, ADMINISTRATION, MESS HALL, AND STORAGE



Photographic Source: U.S. Geological Survey, EarthExplorer.

LOCATION DIAGRAM

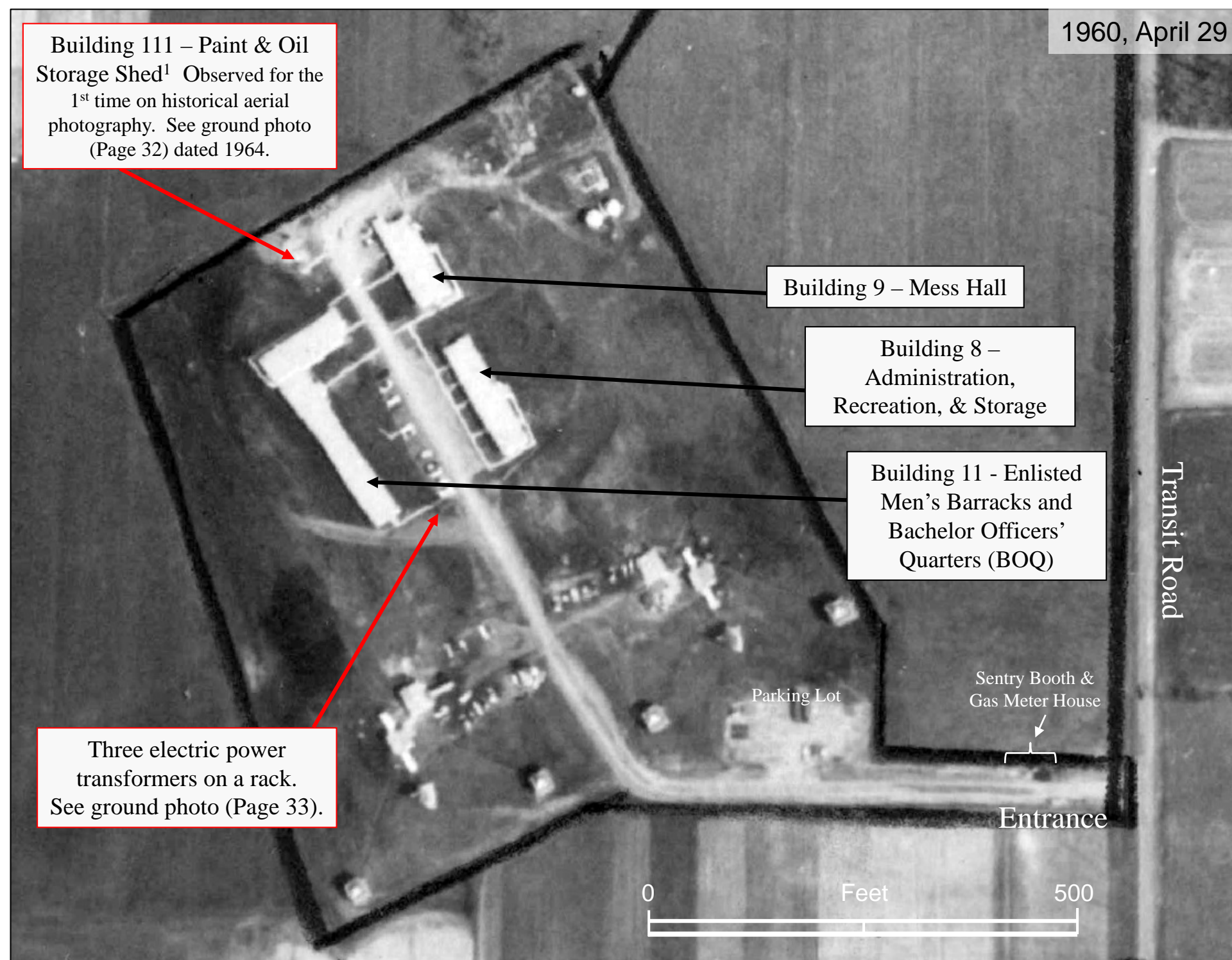


Map Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213.



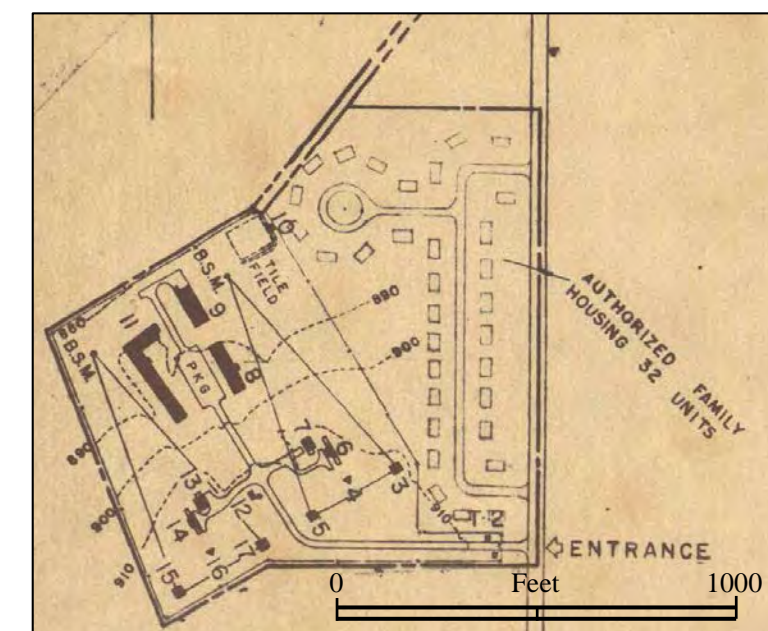
PHOTOGRAPHIC ANALYSIS – 1960

BARRACKS, ADMINISTRATION, MESS HALL, AND STORAGE



Aerial Photographic Source: National Archives & Records Administration, Archives II, College Park, MD.

LOCATION DIAGRAM



Map Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213.

1) Textual Source: National Archives & Records Administration, Archives II, College Park, MD, Textual Records Branch, RG291, Entry 1 (UD-WW), Box 213, GSA Region 2, Utilization and Disposal Service, Real Property Division, 30 Church St., New York, NY, letter to Federal Agencies, Notice of Availability of Excess Property, July 22, 1963.



GROUND PHOTOGRAPHS

BARRACKS, ADMINISTRATION, MESS HALL, & STORAGE



Selected ground photos of buildings and other structures associated with the Barracks, Administration, Mess Hall, and Storage Area in the Control Area of BU 34/35 – Part 1 of 2.

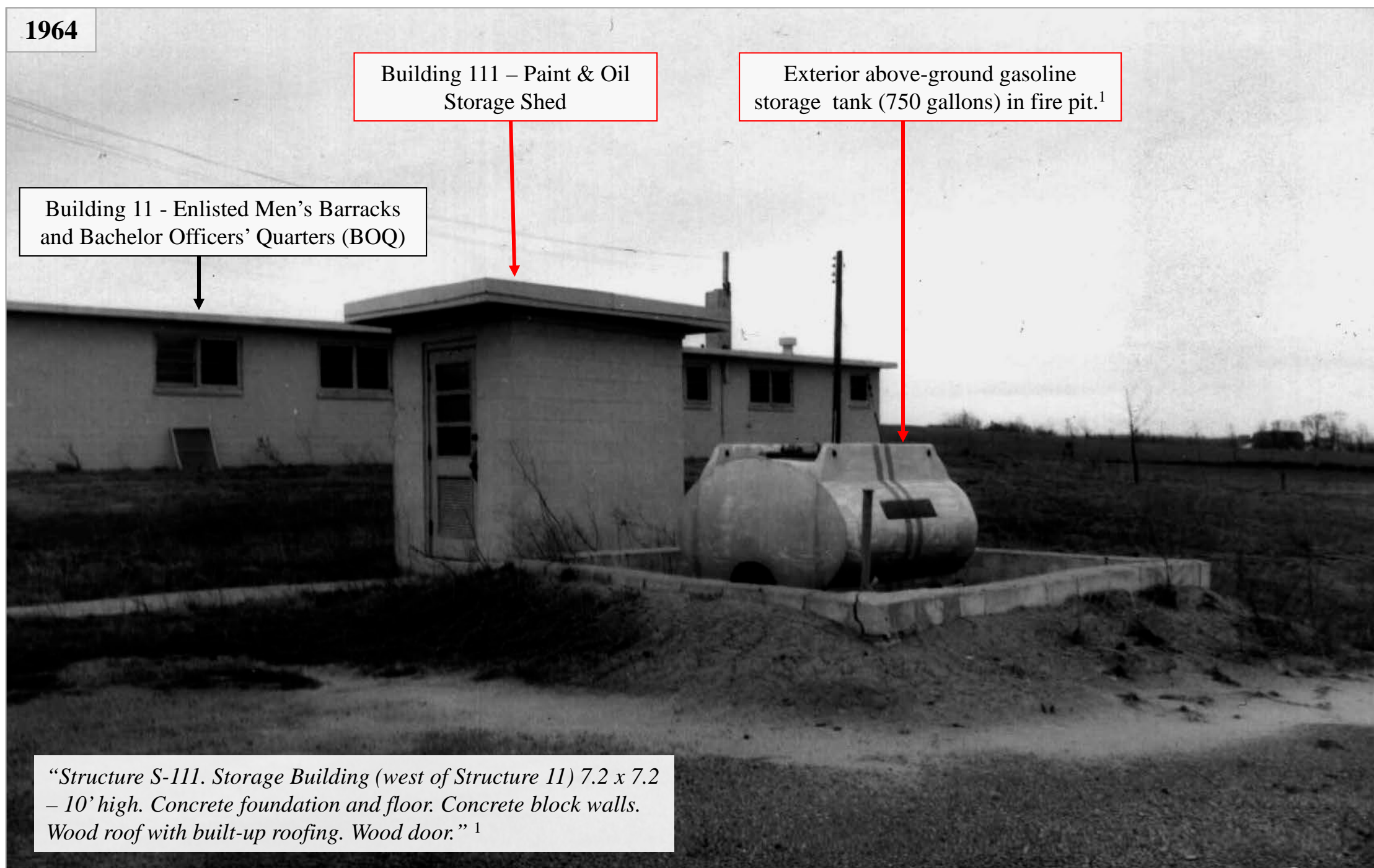
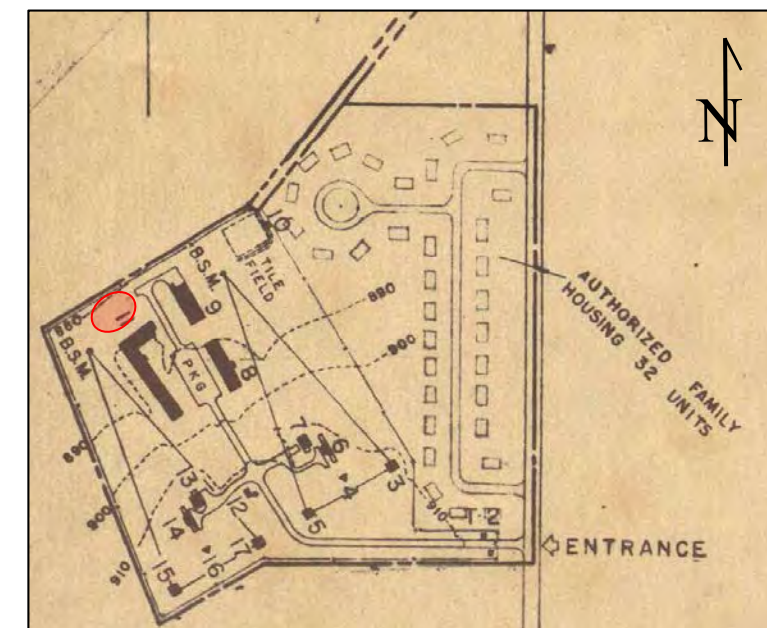


Photo Source: NARA, Archives II, Textual Records Branch, College Park, MD, Record Group 291, Entry 1 (UD-WW), Box 213.

LOCATION DIAGRAM



Map Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213.

Building S-111 Information Sources:

- 1) National Archives & Records Administration, Archives II, College Park, Maryland, Textual Records Branch, Record Group 291.
- 2) National Archives at Boston, 380 Trapelo Road, Waltham, MA, data courtesy U.S. Army Corps of Engineers, New England District.
- 3) Personal archives of Earl Close, ed-thelen.org.

1) Source: Appraisal of Real Estate, Robert W. Hopkins, M.A.I., May 1, 1964; located at NARA, Archives II, College Park, Maryland, Textual Records Branch, Record Group 291.



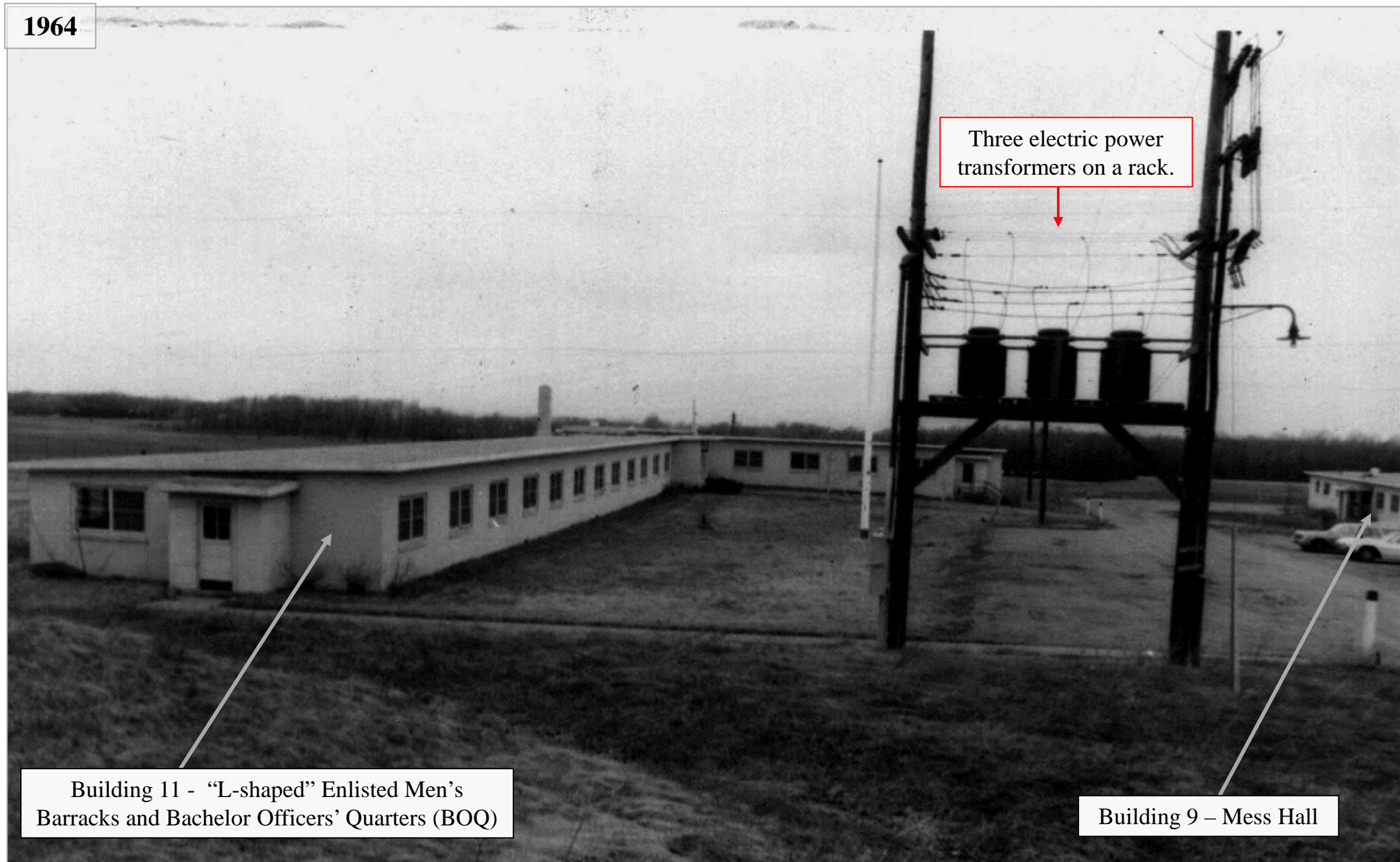
GROUND PHOTOGRAPHS

BARRACKS, ADMINISTRATION, MESS HALL, & STORAGE



Selected ground photos of buildings and other structures associated with the Barracks, Administration, Mess Hall, and Storage Area in the Control Area of BU 34/35 – Part 2 of 2.

1964



Building 11 - “L-shaped” Enlisted Men’s Barracks and Bachelor Officers’ Quarters (BOQ)

Building 9 – Mess Hall

Photo Source: NARA, Archives II, Textual Records Branch, College Park, MD, Record Group 291, Entry 1 (UD-WW), Box 213.

LOCATION DIAGRAM



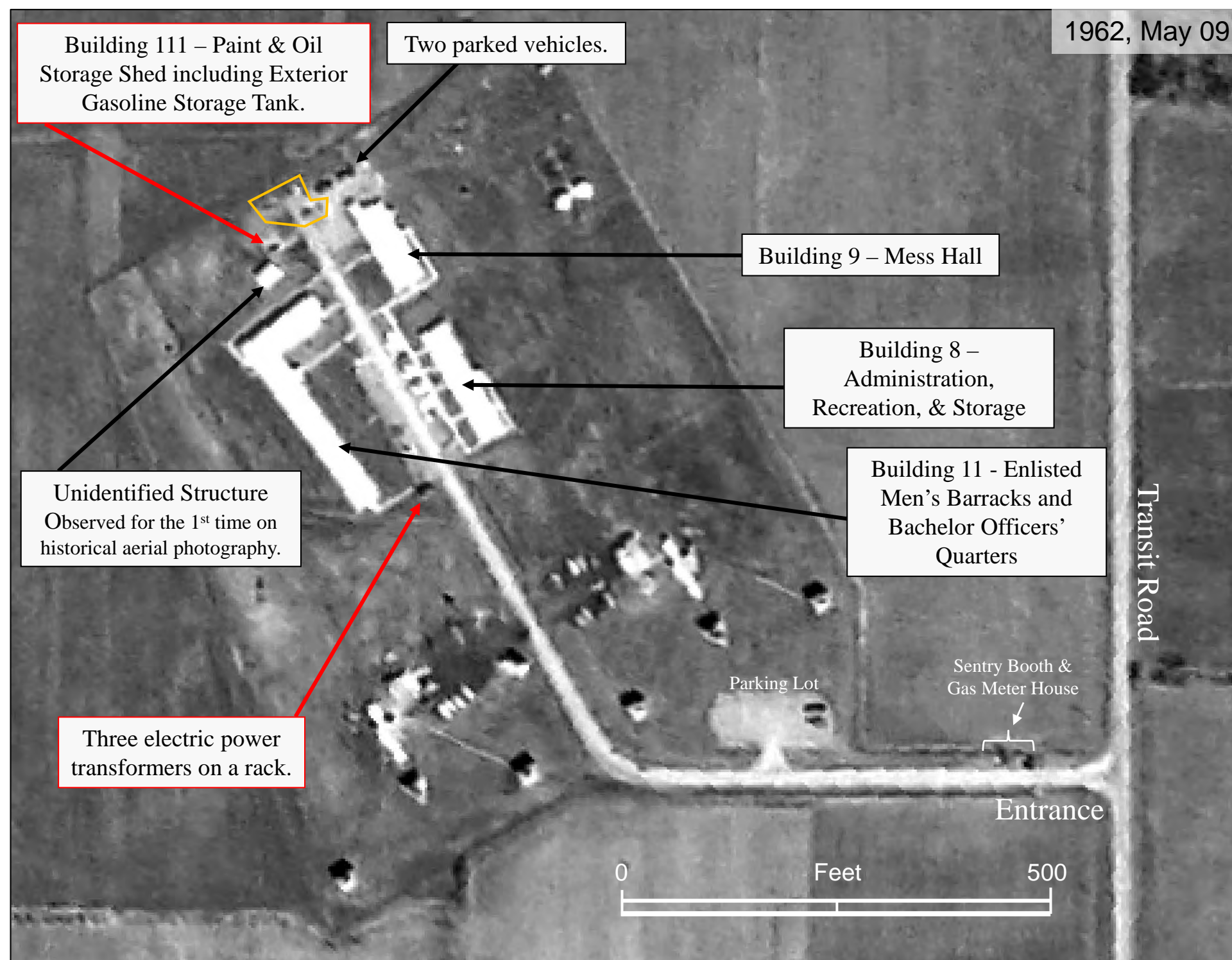
Map Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213.

1) Source: Appraisal of Real Estate, Robert W. Hopkins, M.A.I., May 1, 1964; located at NARA, Archives II, College Park, Maryland, Textual Records Branch, Record Group 291.



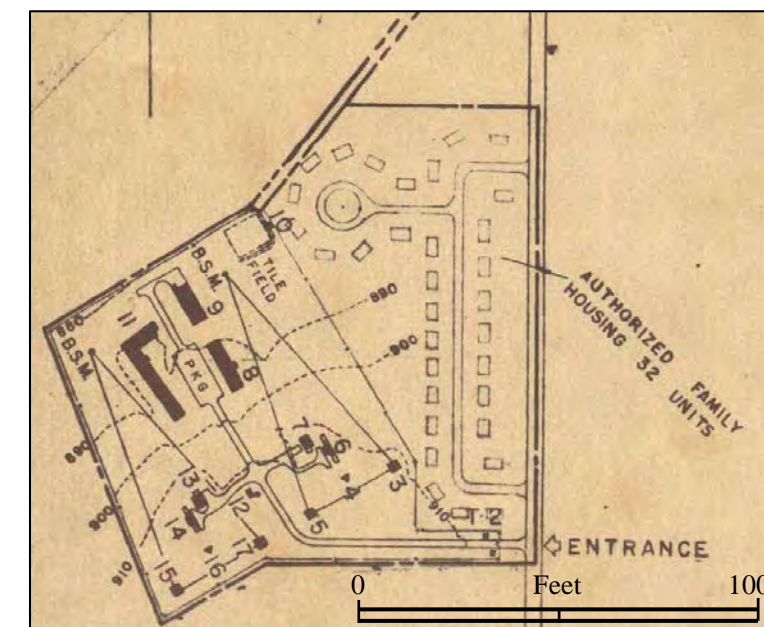
PHOTOGRAPHIC ANALYSIS – 1962

BARRACKS, ADMINISTRATION, MESS HALL, AND STORAGE



Aerial Photographic Source: National Archives & Records Administration, Archives II, College Park, MD.

LOCATION DIAGRAM



Map Source: NARA, Archives II, Textual Records Branch,
Record Group 291, Entry 1 (UD-WW), Box 213.

— Possible Open Storage Area

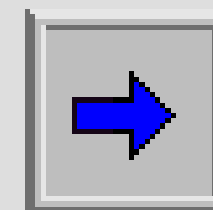


PHOTOGRAPHIC ANALYSIS – OPERATIONAL YEARS



BU 34/35 Control Area

Photo Interpretation Of Aerial And Ground Photography



1958 -1963 Aerial Data
1964 Ground Photos (post-closure)

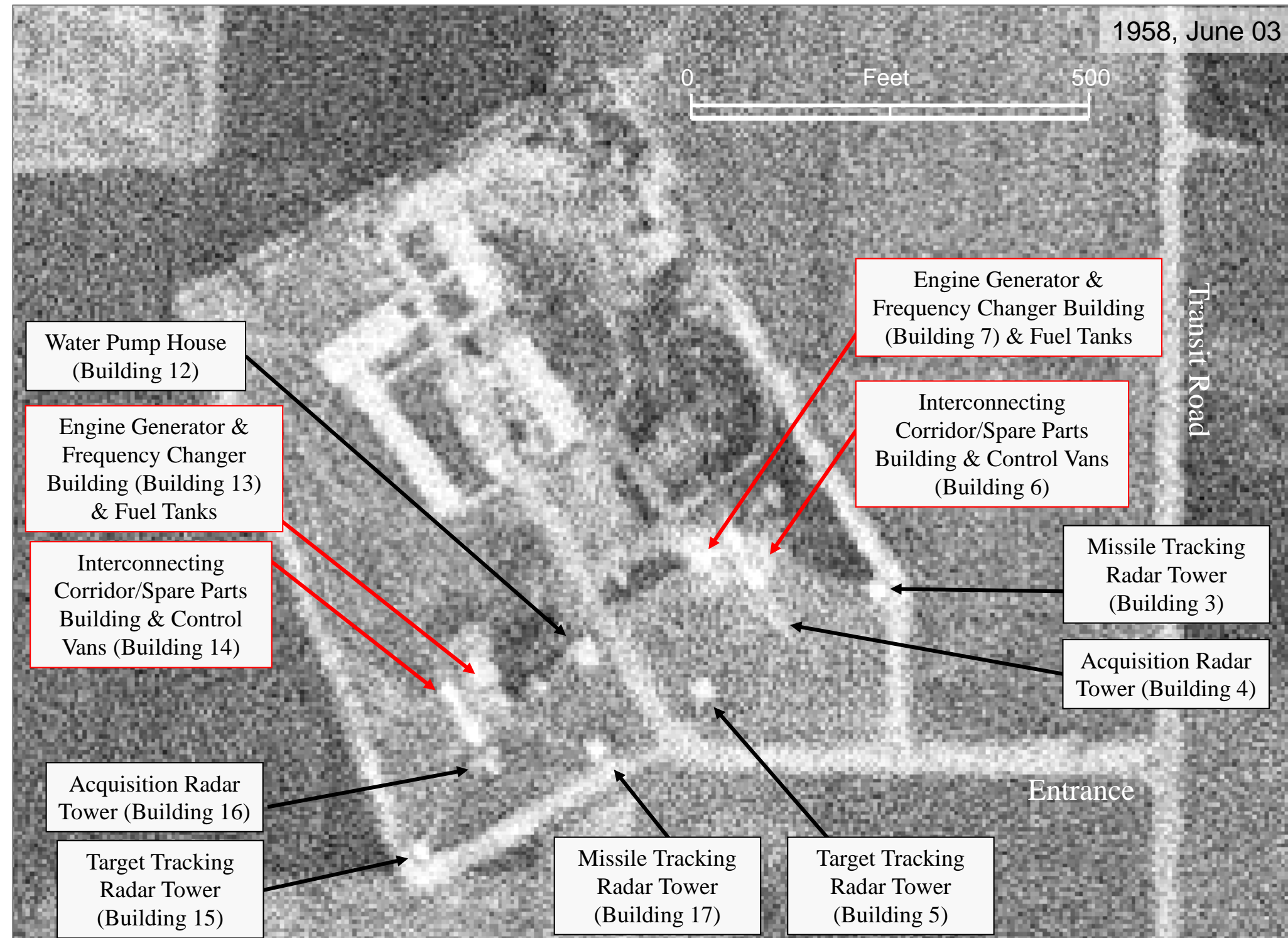
Area Of Interest #2:
Radar – Towers and Buildings



Findings from available historical data.

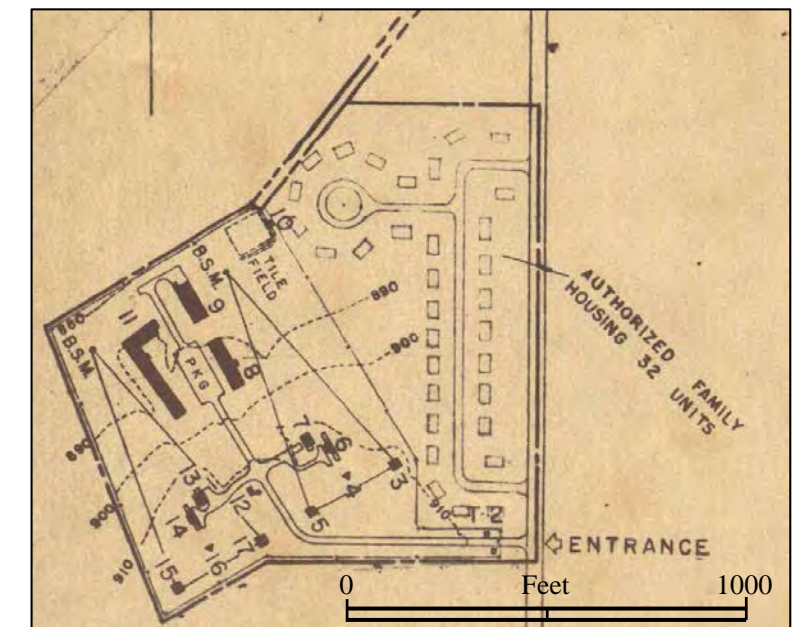


PHOTOGRAPHIC ANALYSIS – 1958 RADAR – TOWERS AND BUILDINGS



Photographic Source: U.S. Geological Survey, EarthExplorer.

LOCATION DIAGRAM



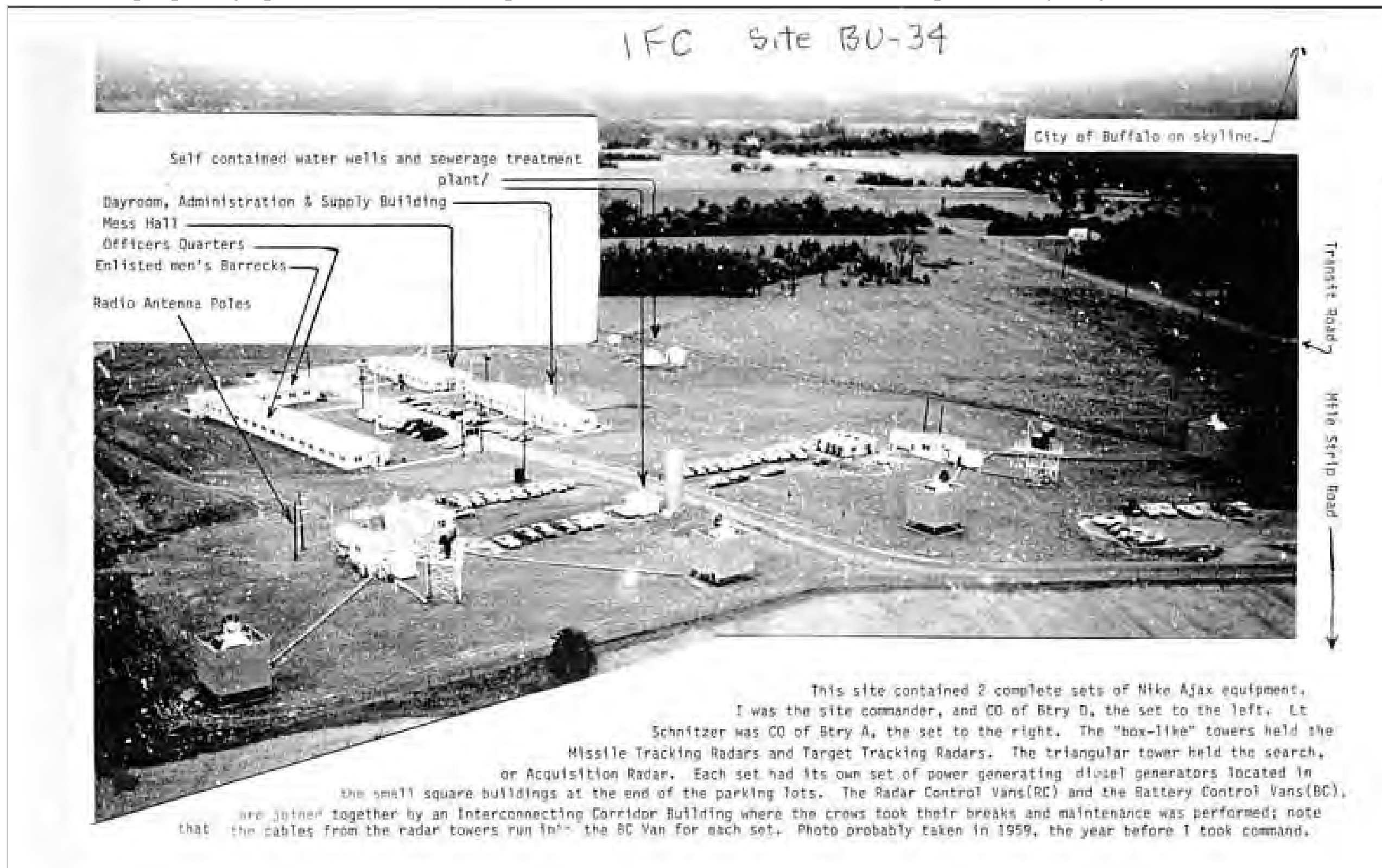
Map Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213.



AERIAL OBLIQUE PHOTOGRAPH

RADAR –BUILDINGS, TOWERS, & OTHER STRUCTURES - CIRCA 1959

Aerial oblique photograph of the Control Area portion of BU 34/35. Textual references provided by Major Earl Close (retired).



See the following pages for ground photos of selected buildings & towers of the radar area, taken in 1964

Most of these features are observed for the first time on 1959 oblique aerial photography (left).

Source: ed-thelen.org.



GROUND PHOTOGRAPHS

RADAR –BUILDINGS, TOWERS, & OTHER STRUCTURES



Selected ground photos of buildings and other structures associated with radar in the Control Area of BU 34/35 – Building 7 (Part 1 of 4).

See Building 13 with similar fuel storage tanks (next page).

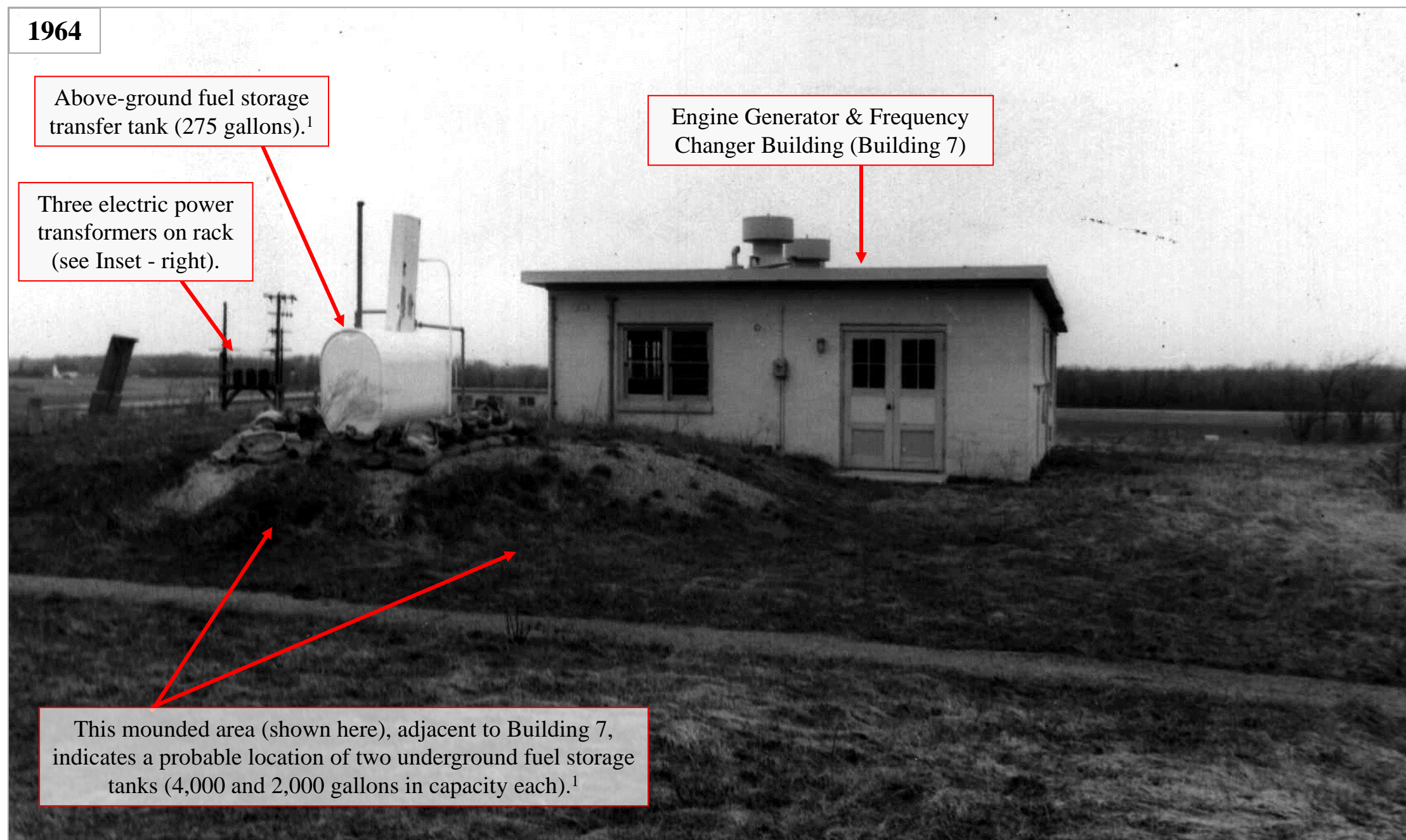
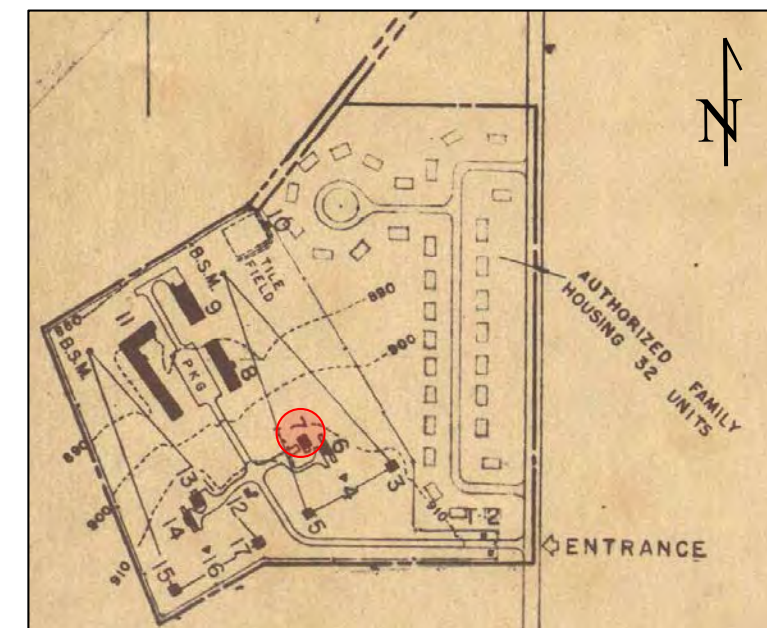


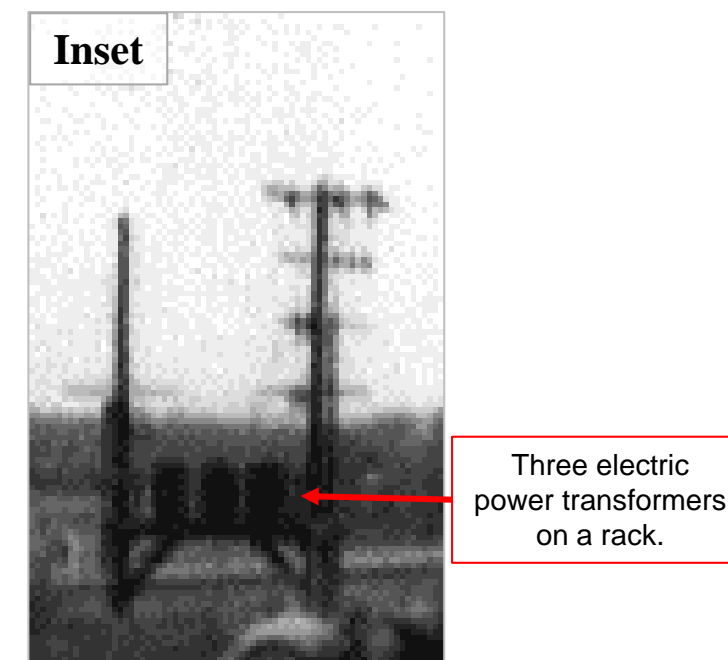
Photo Source: NARA, Archives II, Textual Records Branch, College Park, MD, Record Group 291, Entry 1 (UD-WW), Box 213.

LOCATION DIAGRAM



Map Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213.

Inset



1) Source: Appraisal of Real Estate, Robert W. Hopkins, M.A.I., May 1, 1964; located at NARA, Archives II, College Park, Maryland, Textual Records Branch, Record Group 291.



GROUND PHOTOGRAPHS

RADAR –BUILDINGS, TOWERS, & OTHER STRUCTURES



Selected ground photos of buildings and other structures associated with radar in the Control Area of BU 34/35 – Building 13 (Part 2 of 4).

See Building 7 with similar fuel storage tanks (previous page).

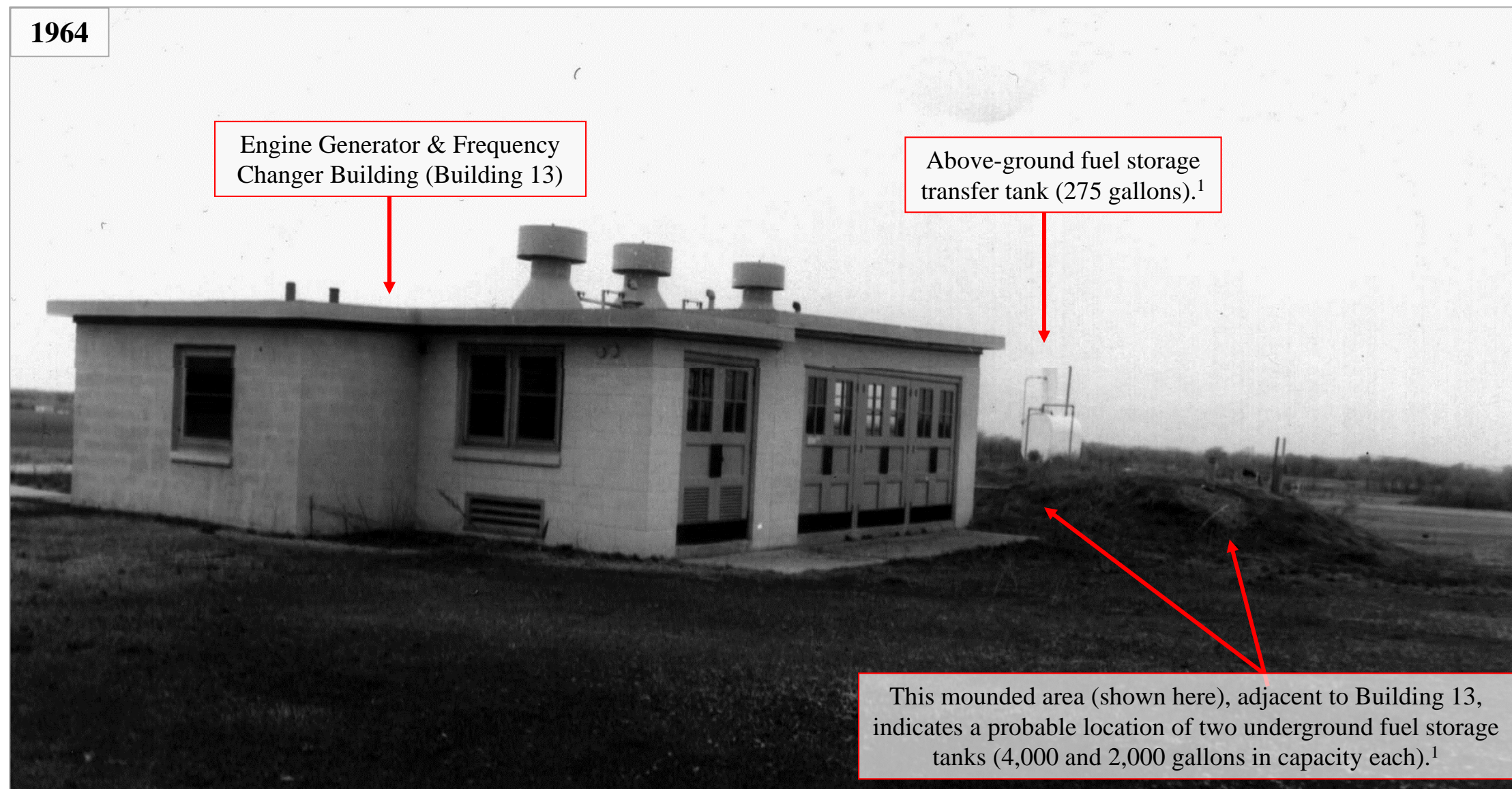
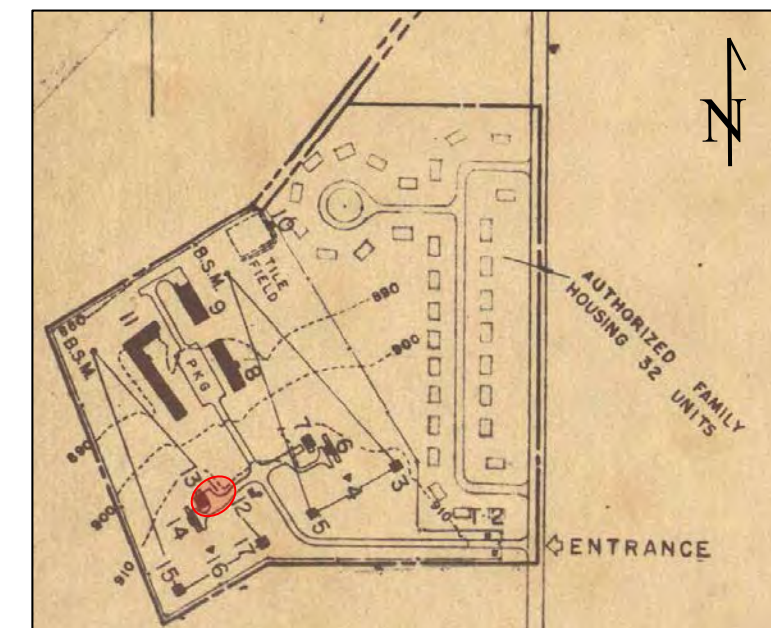


Photo Source: NARA, Archives II, Textual Records Branch, College Park, MD, Record Group 291, Entry 1 (UD-WW), Box 213.

LOCATION DIAGRAM



Map Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213.

1) Source: Appraisal of Real Estate, Robert W. Hopkins, M.A.I., May 1, 1964; located at NARA, Archives II, College Park, Maryland, Textual Records Branch, Record Group 291.



GROUND PHOTOGRAPHS

RADAR –BUILDINGS, TOWERS, & OTHER STRUCTURES

Selected ground photos of buildings and other structures associated with radar in the Control Area of BU 34/35 – Building 4 – Tower (Part 3 of 4).

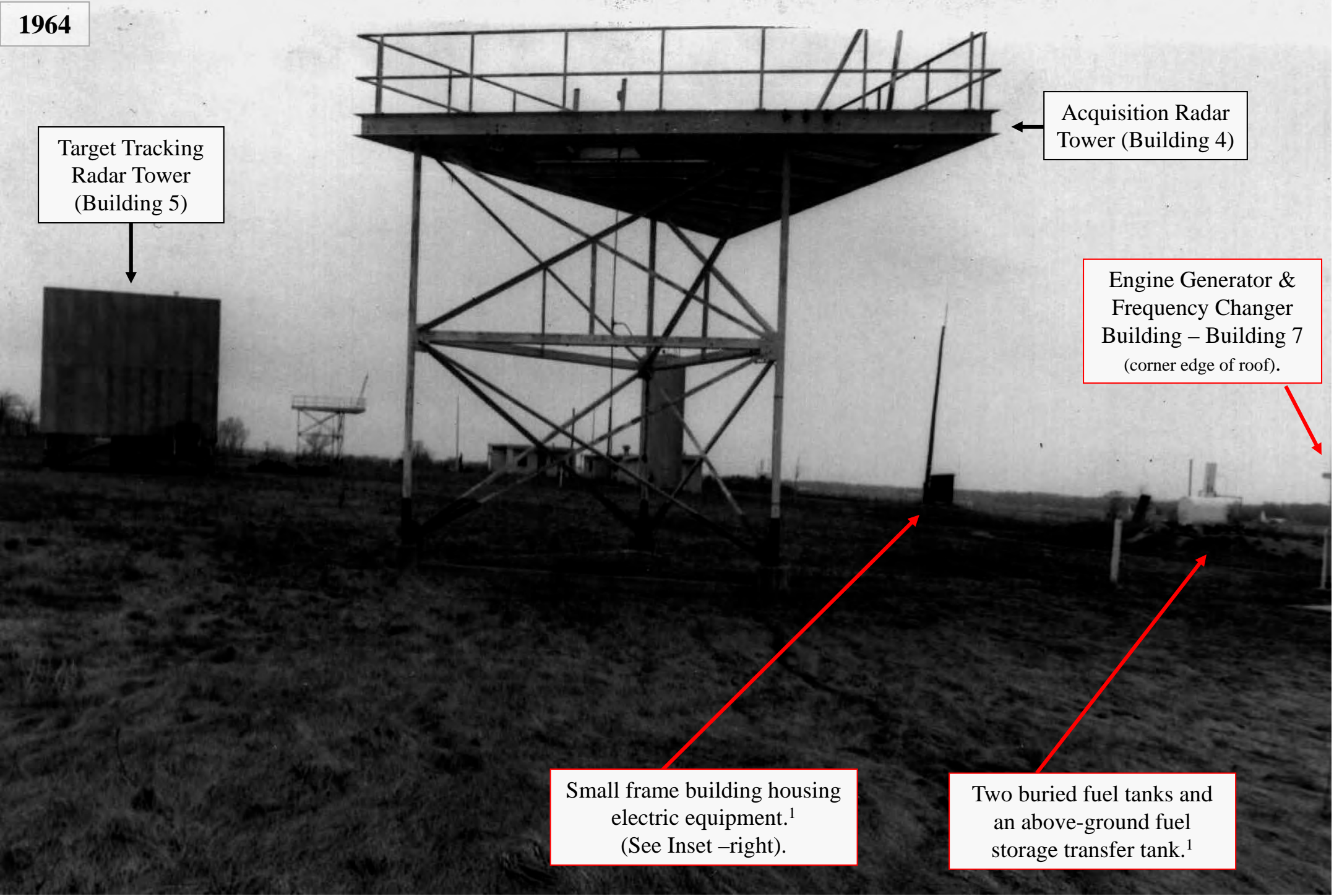
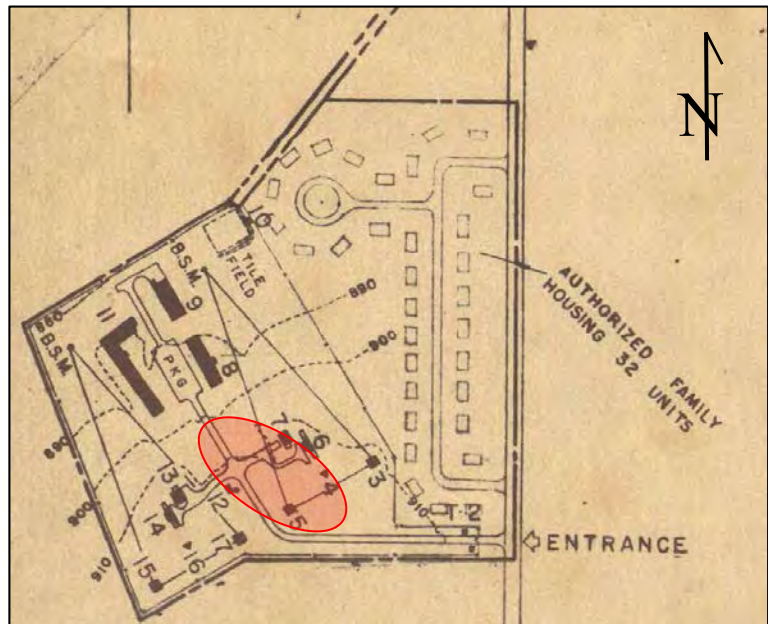


Photo Source: NARA, Archives II, Textual Records Branch, College Park, MD, Record Group 291, Entry 1 (UD-WW), Box 213.

LOCATION DIAGRAM



Map Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213.



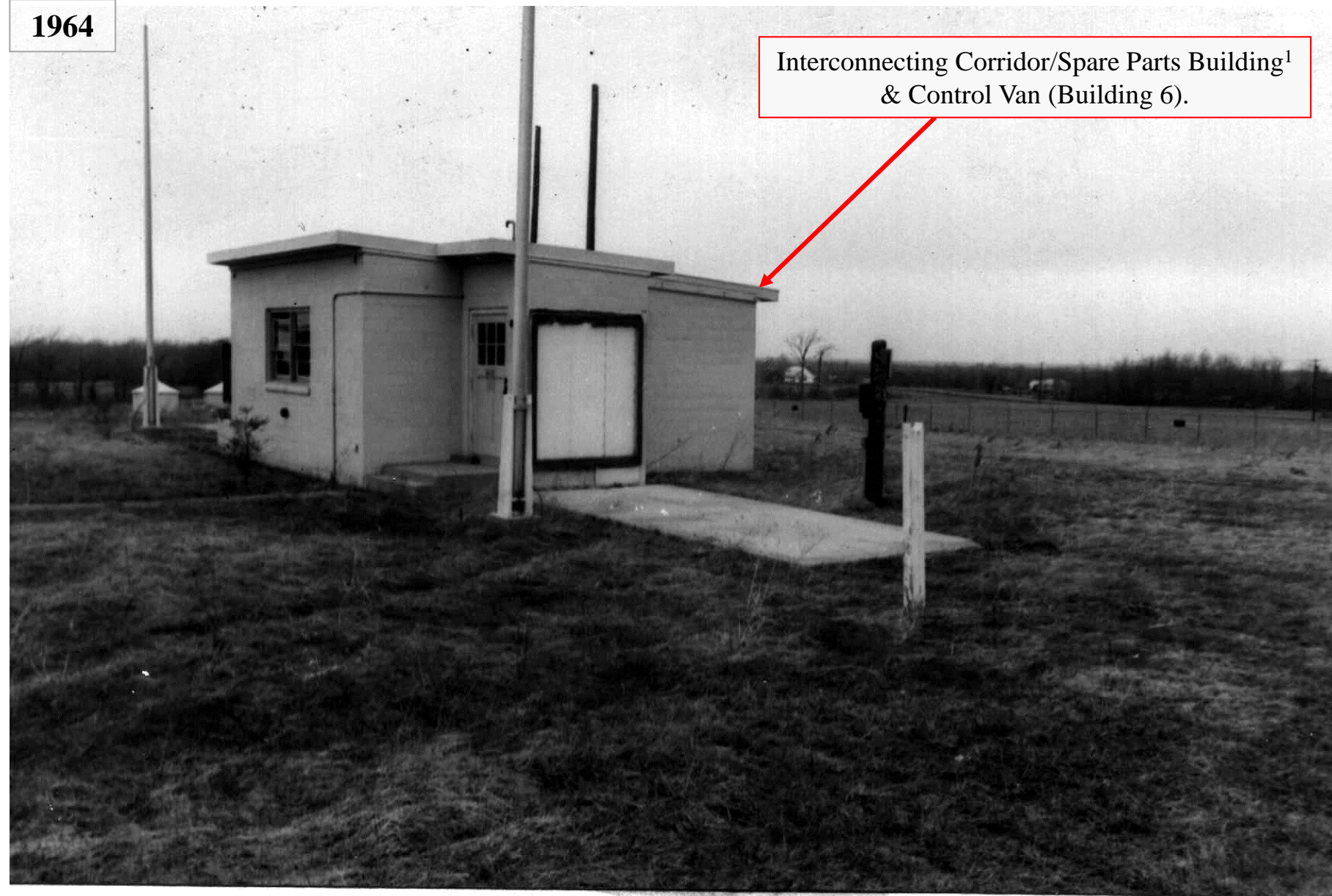
1) Source: Appraisal of Real Estate, Robert W. Hopkins, M.A.I., May 1, 1964; located at NARA, Archives II, College Park, Maryland, Textual Records Branch, Record Group 291.



GROUND PHOTOGRAPHS RADAR –BUILDINGS, TOWERS, & OTHER STRUCTURES



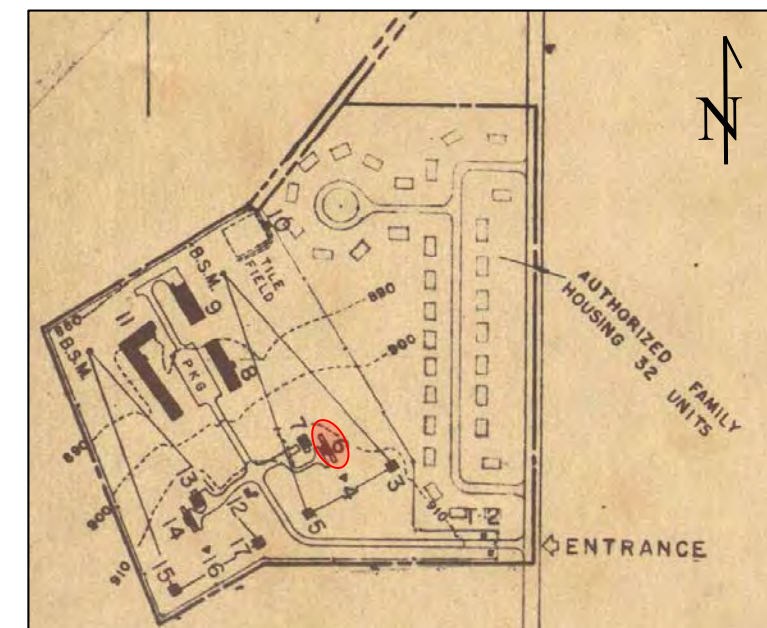
Selected ground photos of buildings and other structures associated with radar in the Control Area of BU 34/35 – Building 6 (Part 4 of 4).



**Structure S-6 interconnecting
corridor and control van.**

Photo Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213.

LOCATION DIAGRAM

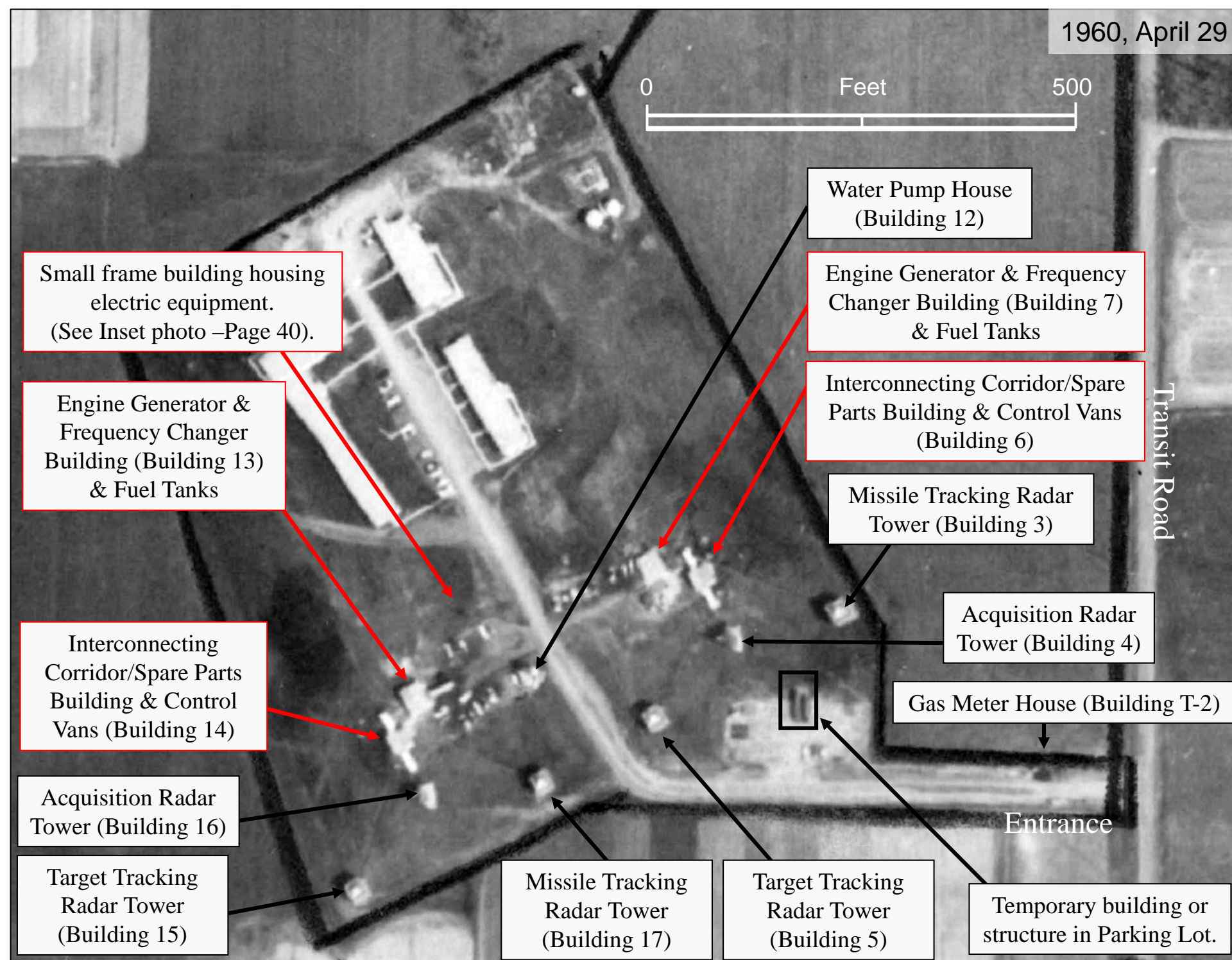


Map Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213.

1) Source: Detailed Layout Plan of BU 34/35 Control Area (undated), courtesy U.S. Army Corps of Engineers, New England District, Concord, MA

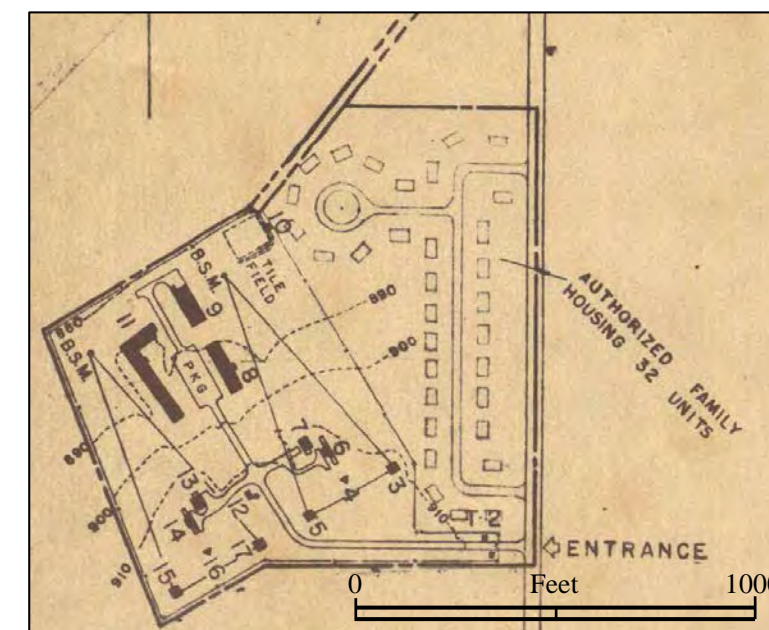
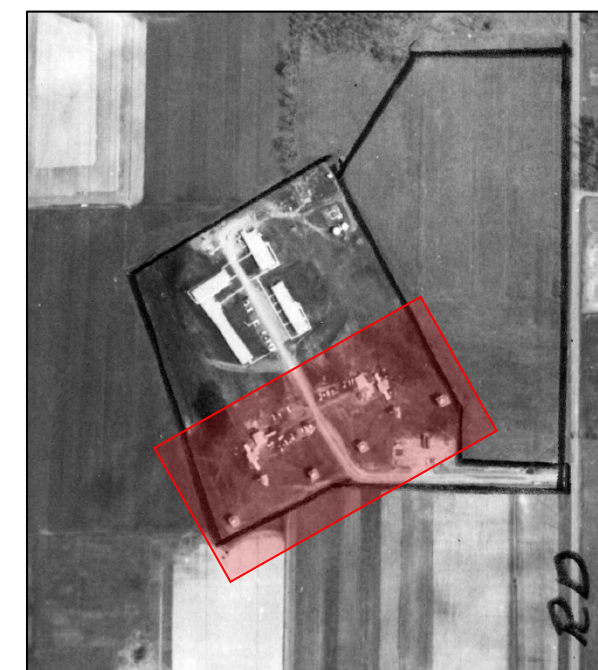


PHOTOGRAPHIC ANALYSIS – 1960 RADAR – TOWERS AND BUILDINGS



Aerial Photographic Source: NARA, Archives II, Textual Records Branch, College Park, MD, Record Group 291, Entry 1 (UD-WW), Box 213.

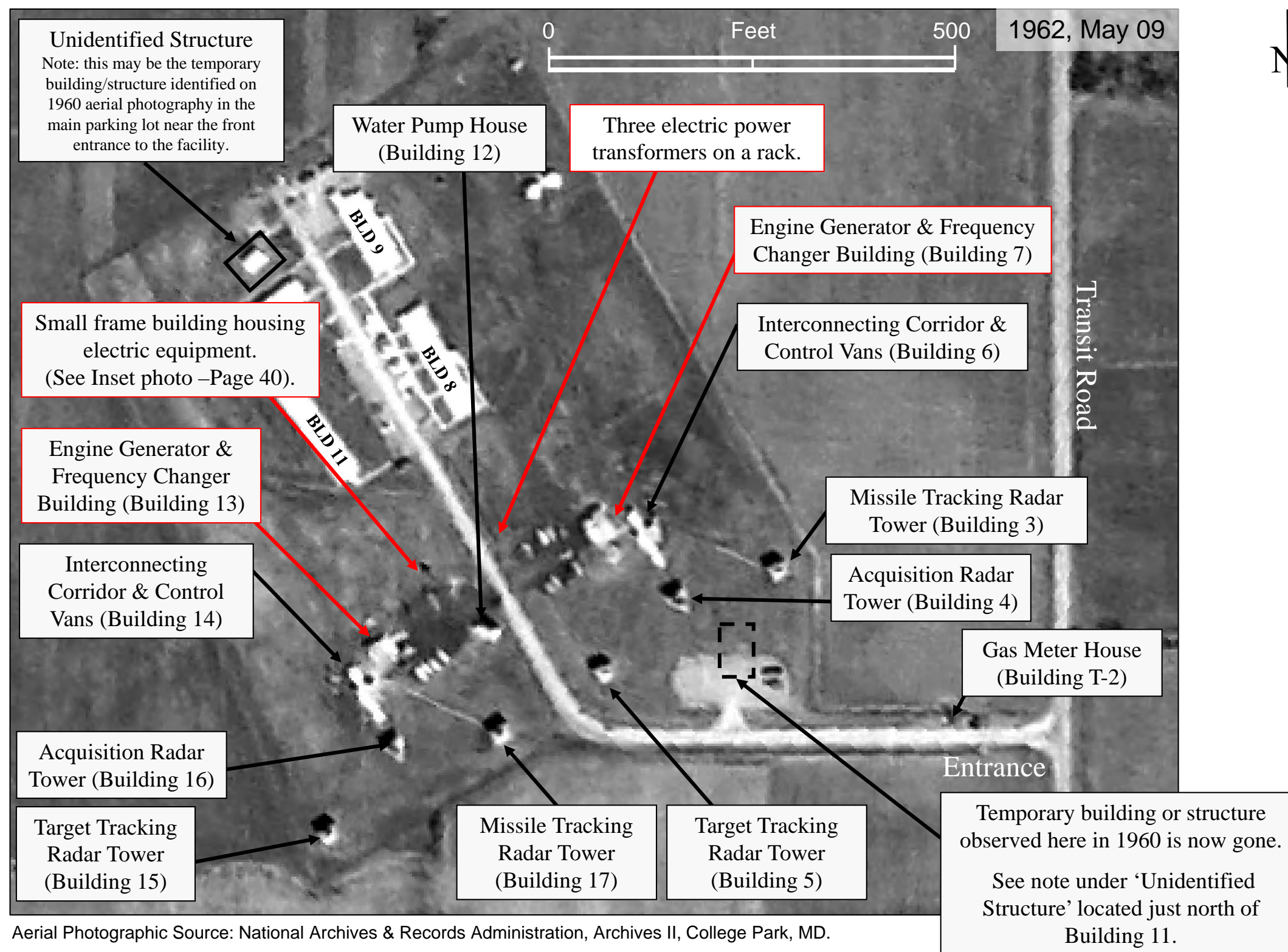
LOCATION DIAGRAM



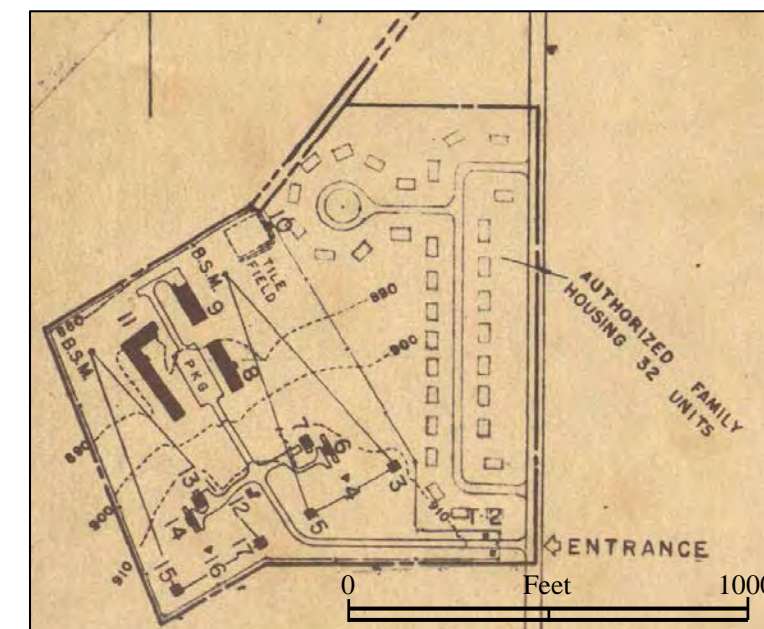
Map Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213.



PHOTOGRAPHIC ANALYSIS – 1962 RADAR – TOWERS AND BUILDINGS



LOCATION DIAGRAM



Map Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213.

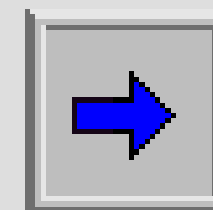


PHOTOGRAPHIC ANALYSIS – OPERATIONAL YEARS



BU 34/35 Control Area

Photo
Interpretation
Of Aerial And
Ground
Photography



Layout Plans
1958 -1963 Aerial Data
1964 Ground Photos (post-closure)

Area Of Interest #3:
Sewage Treatment



Findings from available historical data.

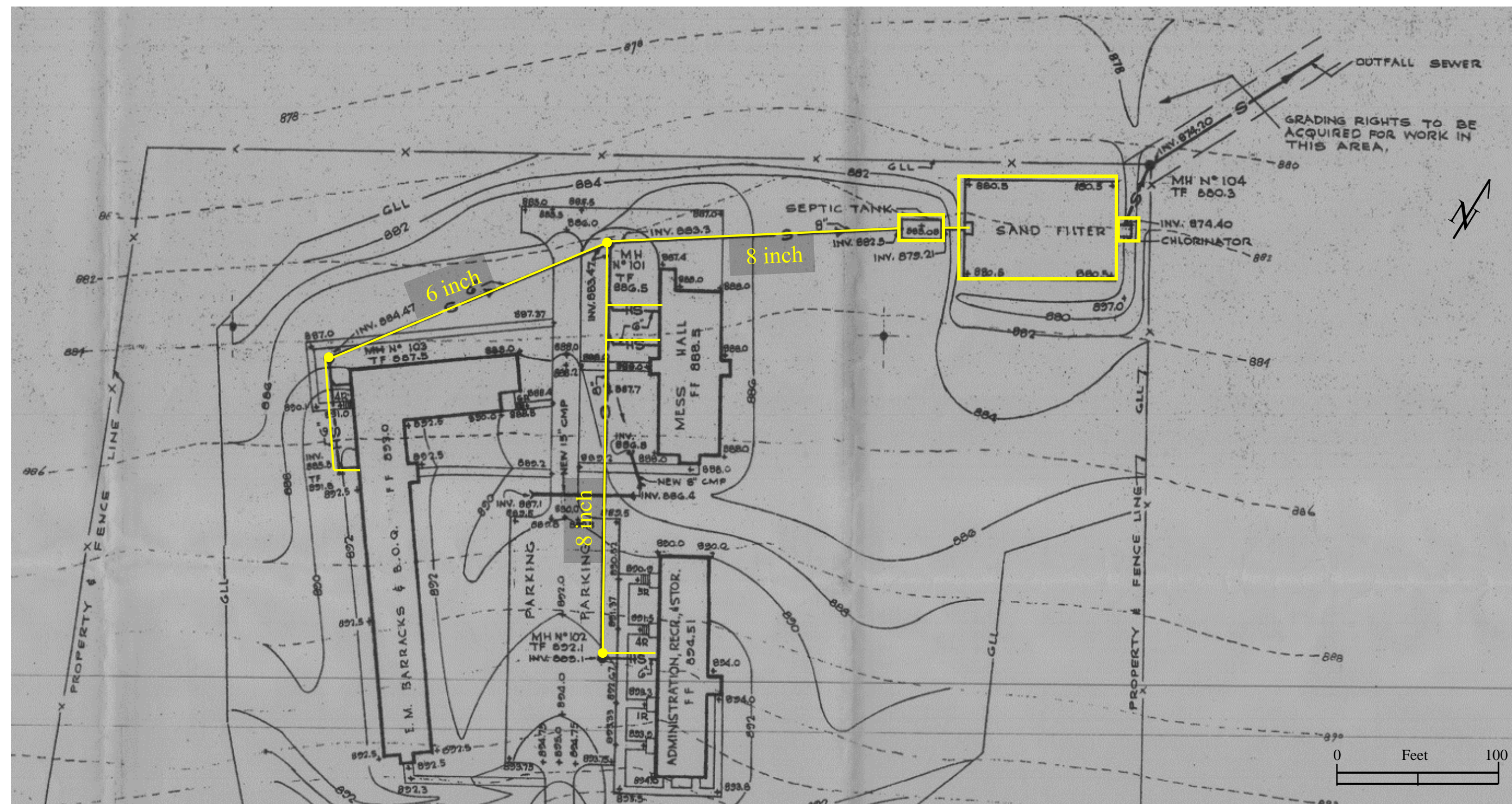


INSTALLATION LAYOUT OF BU 34/35 CONTROL AREA (UNDATED)

SEWER LINES AND FACILITIES



Subset area of the original layout plan. Note alignment of the sewer line data (highlighted in yellow) beginning from Building 11 (Barracks) and Building 8 (Admin/Rec/Storage), then proceeding toward Building 9 (Mess Hall), and continuing on to the Septic Tank and then the Sand Filter.



Source: Undated Layout Plan of BU 34/35 Control Area, courtesy of the U.S. Army Corps of Engineers, New England District, Concord, MA

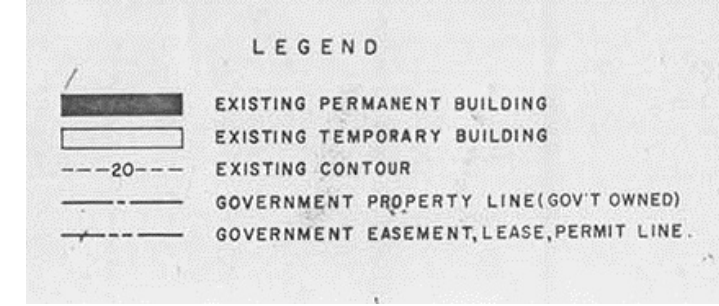
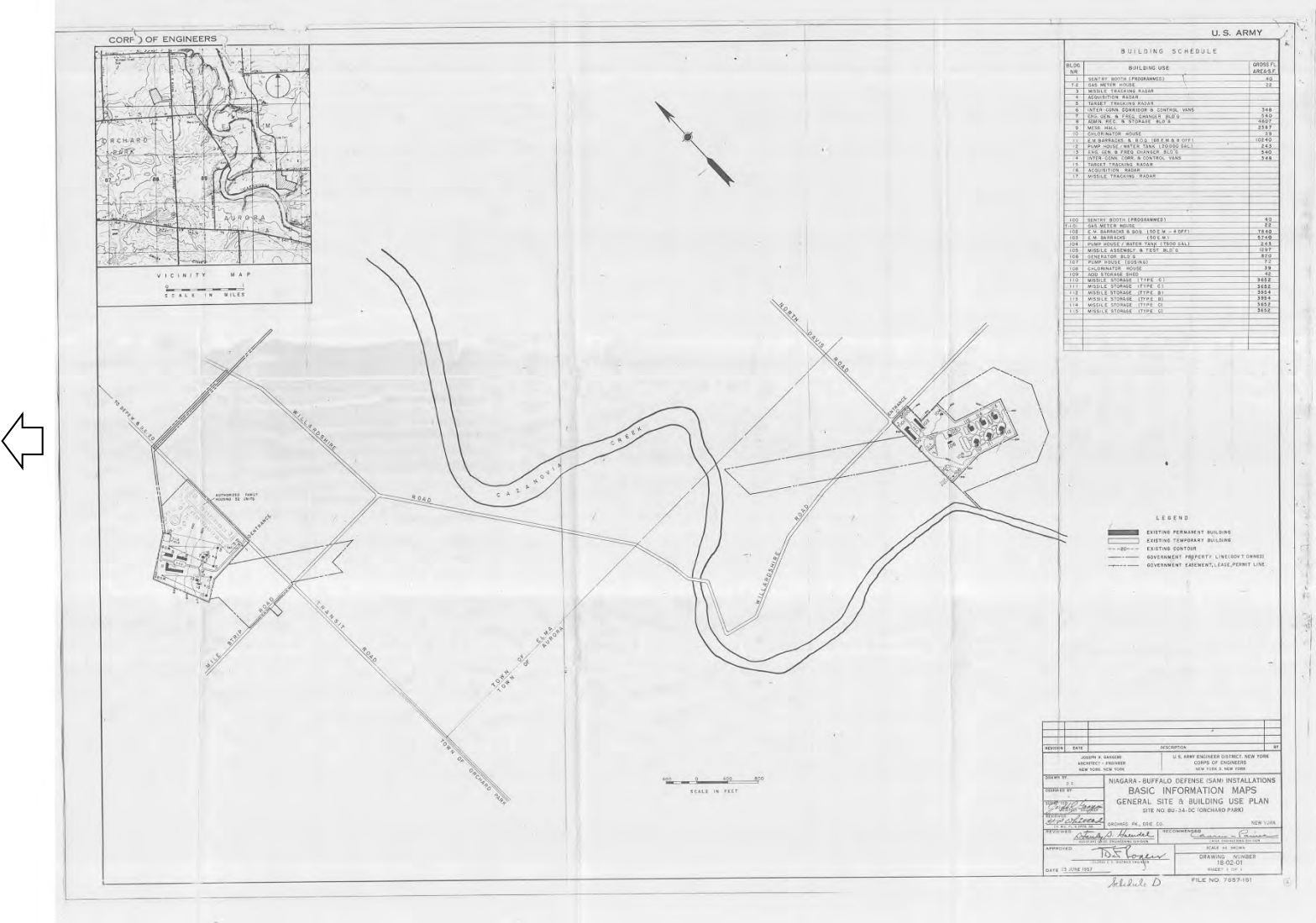
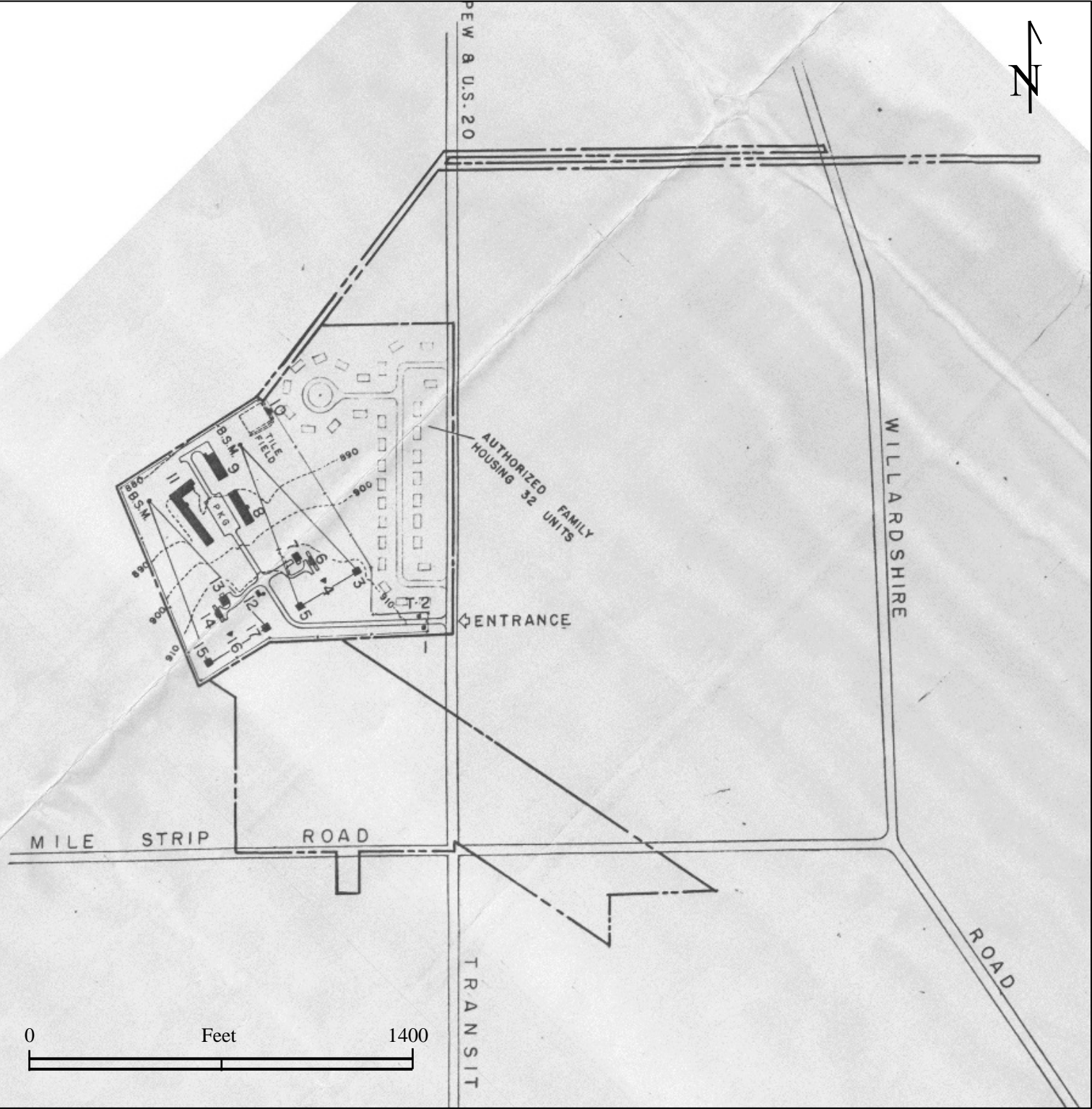


1957 INSTALLATION LAYOUT OF BU 34/35 CONTROL & LAUNCH AREAS

MAIN SEWER LINE EXITING CONTROL AREA



The BU 34/35 Control Area and sewer line exiting the tile field to the north and east.



JOSEPH R. GANGEMI ARCHITECT - ENGINEER NEW YORK, NEW YORK		U.S. ARMY ENGINEER DISTRICT, NEW YORK CORPS OF ENGINEERS NEW YORK 3, NEW YORK	
DRAWN BY: P.F.		NIAGARA - BUFFALO DEFENSE (SAM) INSTALLATIONS BASIC INFORMATION MAPS GENERAL SITE & BUILDING USE PLAN SITE NO. BU-34-DC (ORCHARD PARK)	
DESIGNED BY: J. R. Gangemi		ORCHARD PK., ERIE CO. NEW YORK	
SUBMITTED: J. R. Gangemi		REVIEWED: J. R. Gangemi	
REVIEWED: J. R. Gangemi		RECOMMENDED: J. R. Gangemi	
APPROVED: J. R. Gangemi		SCALE AS SHOWN	
DATE 25 JUNE 1957		DRAWING NUMBER 18-02-01 SHEET 1 OF 1	
Schedule D		FILE NO. 7657-161	

Source: U.S. Army Corps of Engineers, New England District, Concord, MA.

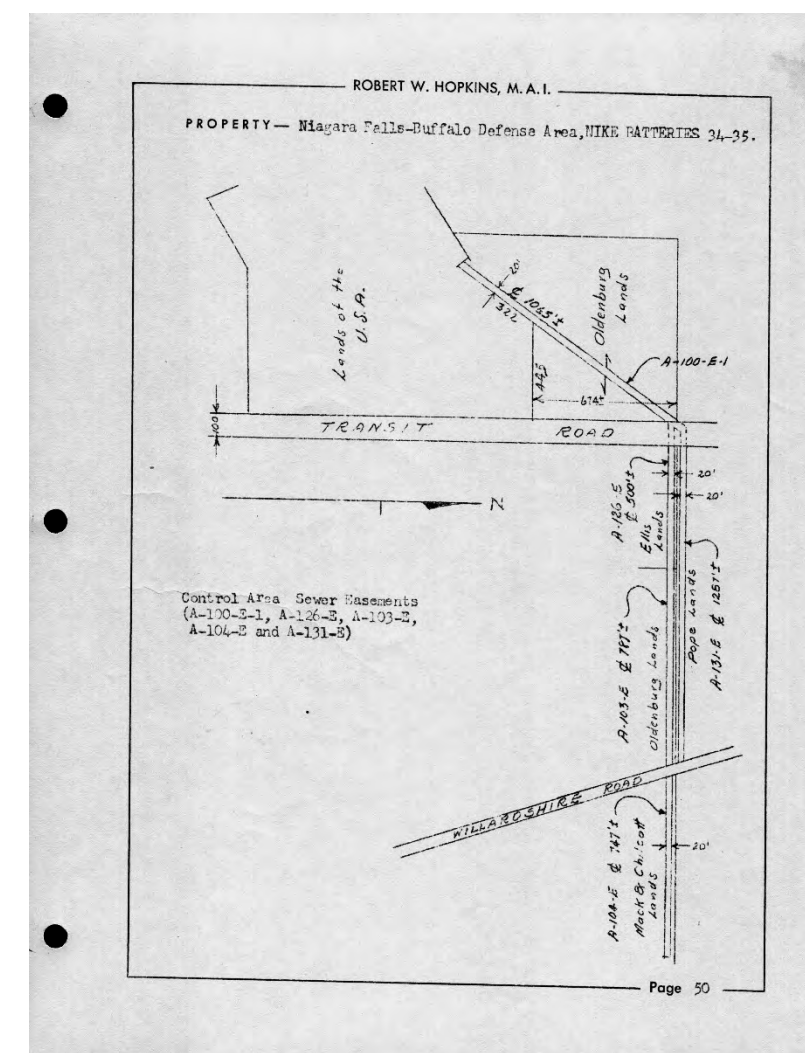
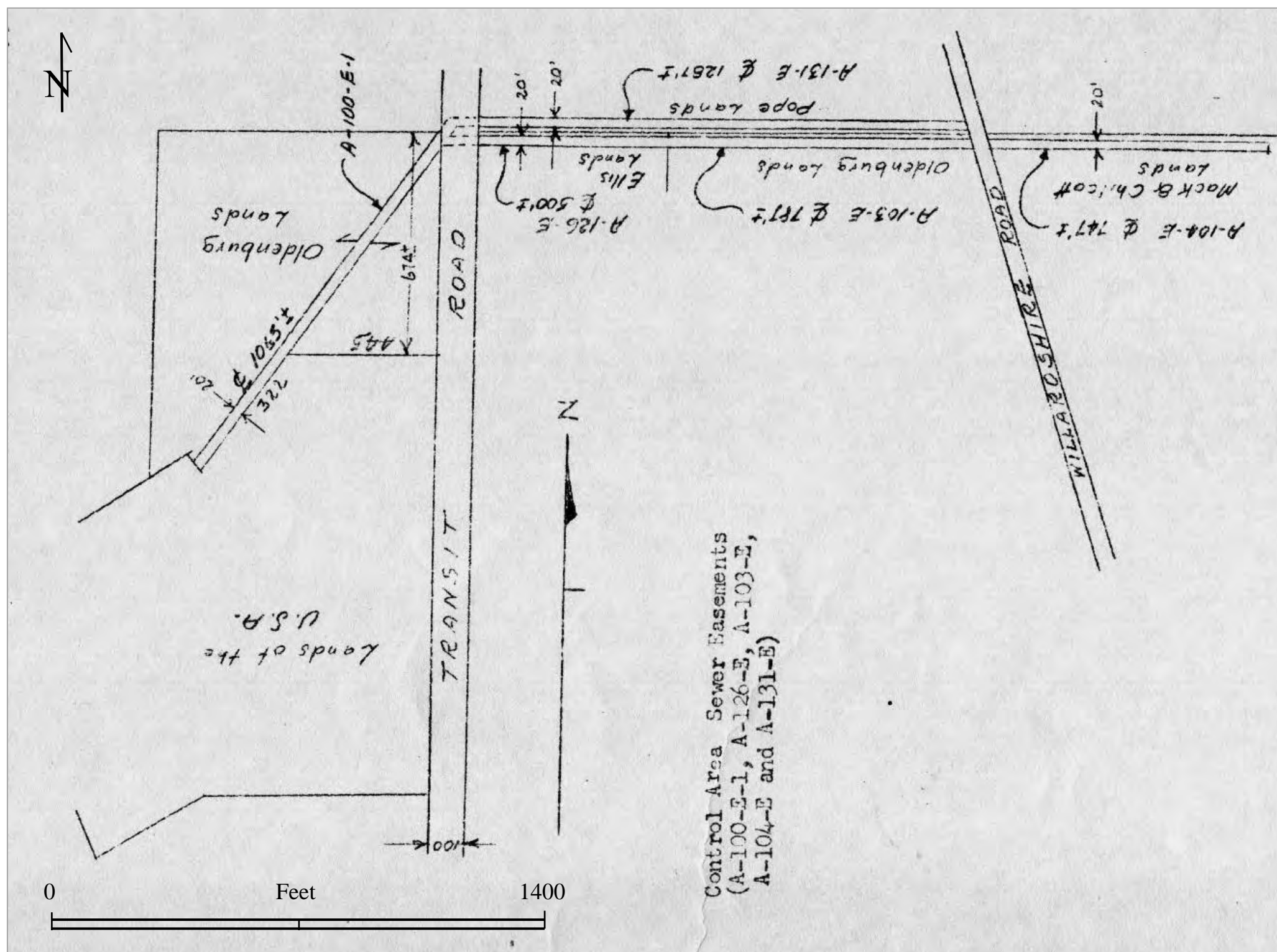


HISTORICAL REVIEW – BU 34/35 CONTROL AREA PLATE FROM 1964

REAL ESTATE APPRAISAL REPORT



Report of Sewer Easements

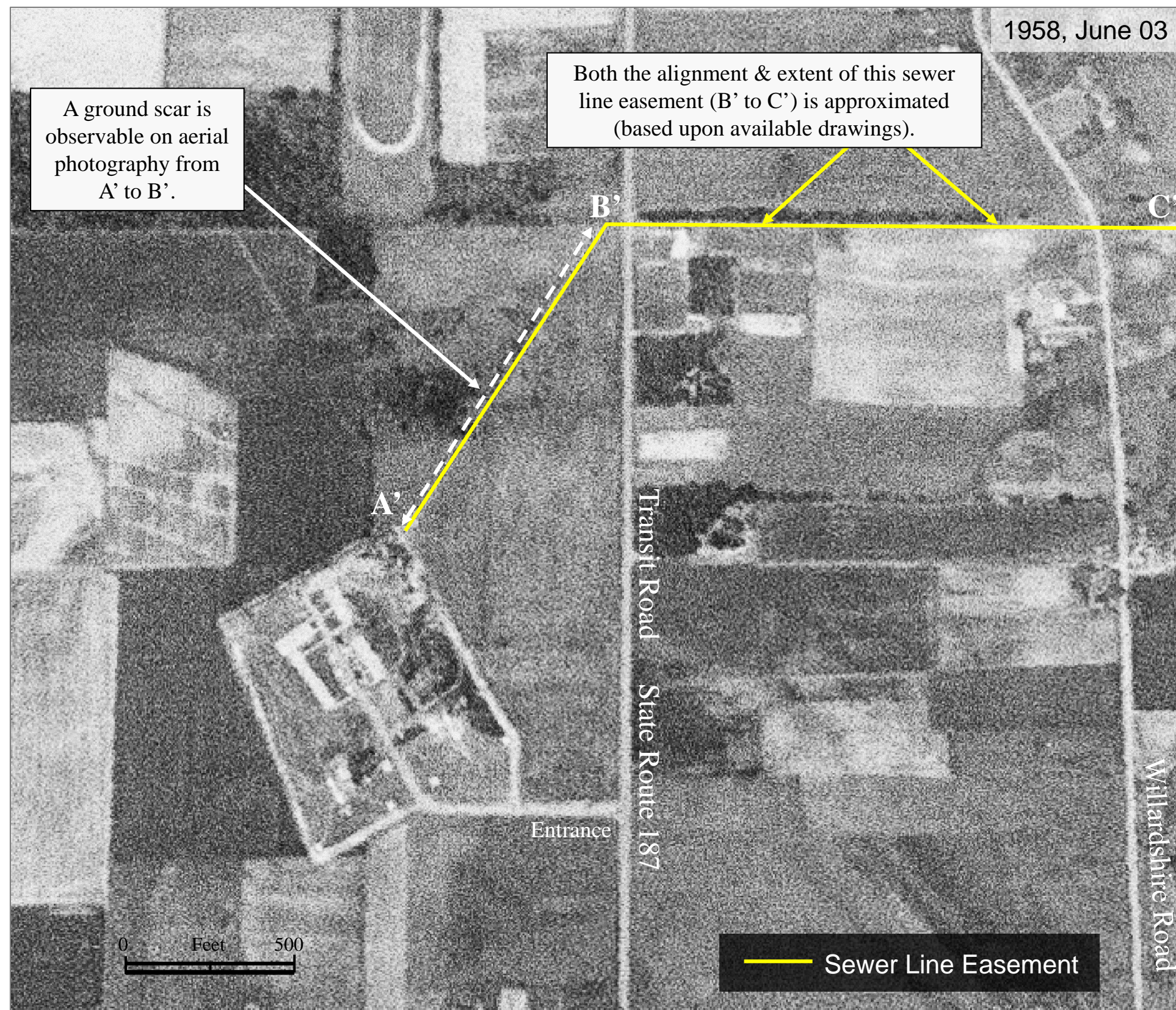


Map Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213 (Original page document).

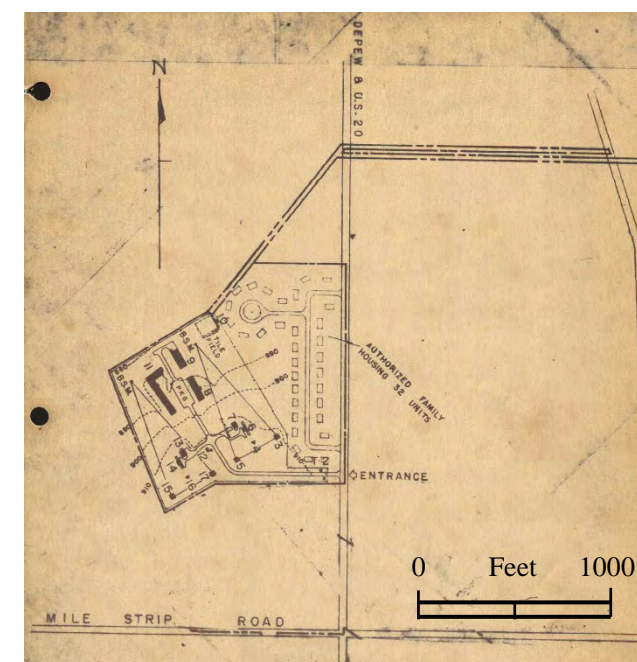
Source: Appraisal of Real Estate, Robert W. Hopkins, M.A.I., May 1, 1964; located at NARA, Archives II, College Park, Maryland, Textual Records Branch, Record Group 291.



PHOTOGRAPHIC ANALYSIS – 1958 SEWAGE TREATMENT



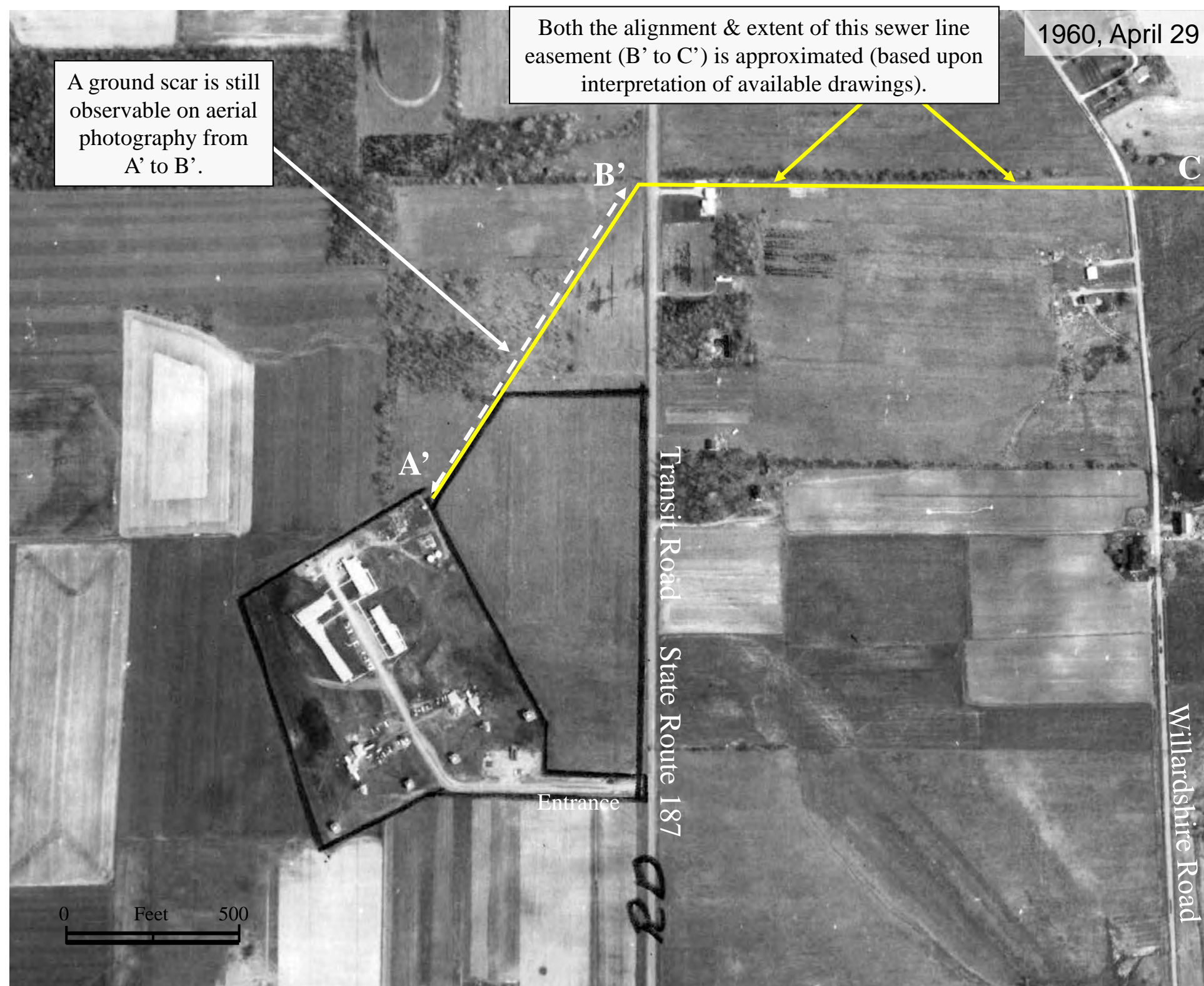
LOCATION DIAGRAM



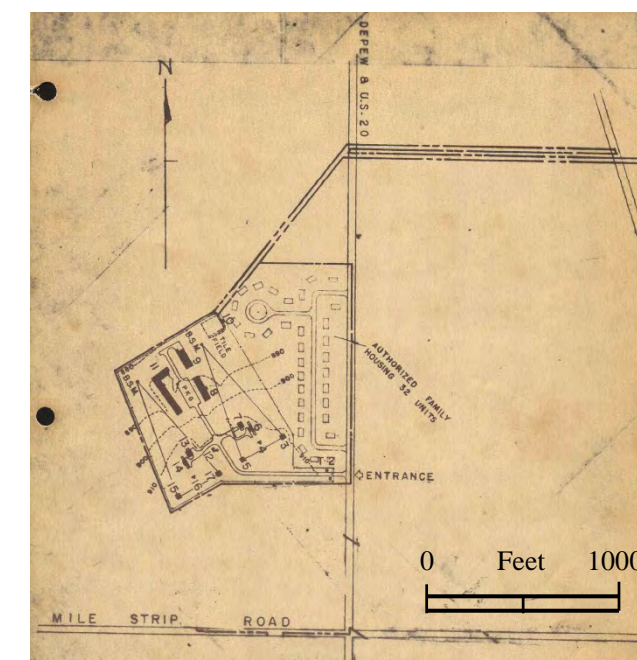
Map Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213.



PHOTOGRAPHIC ANALYSIS – 1960 SEWAGE TREATMENT – PART 1 OF 2



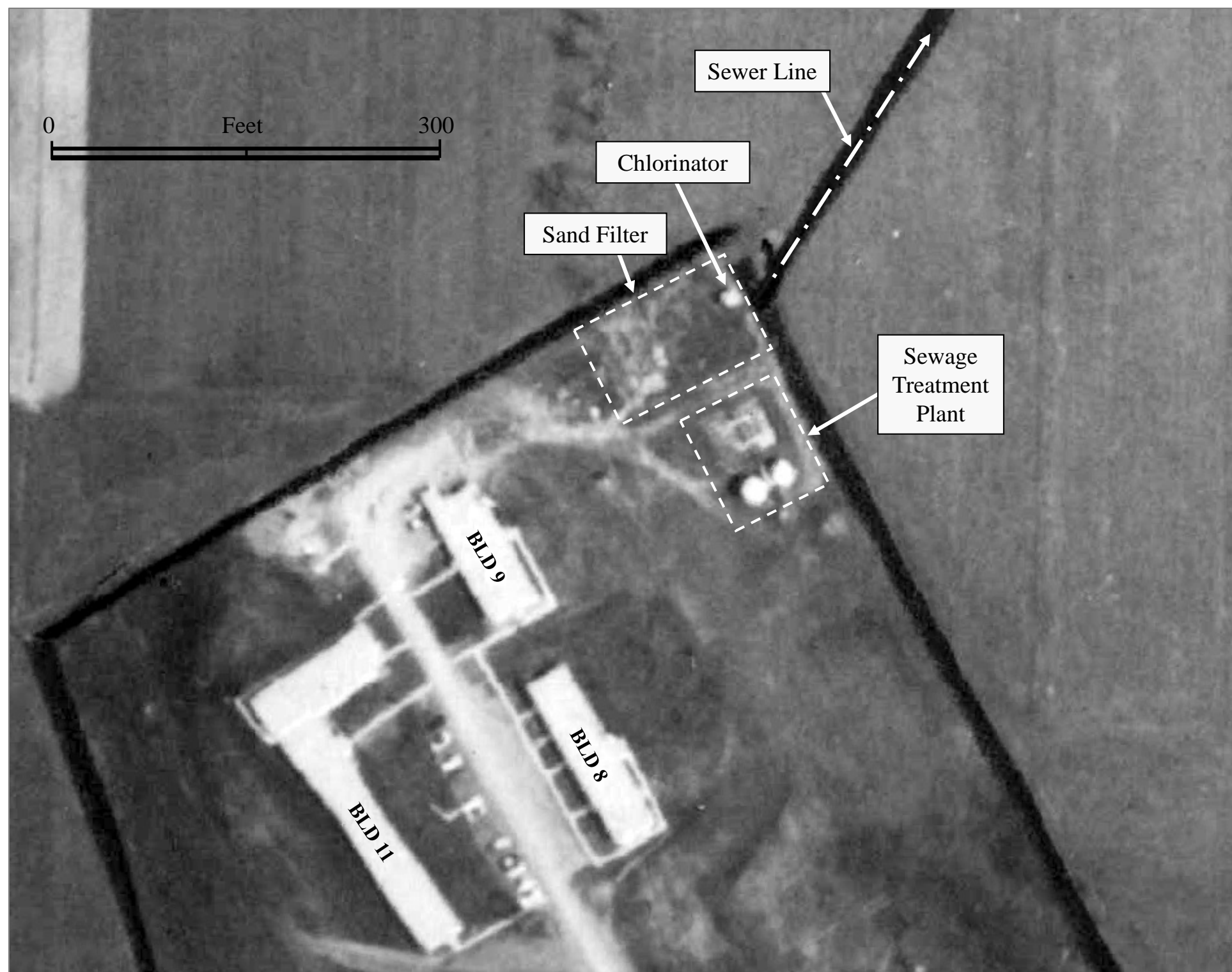
LOCATION DIAGRAM



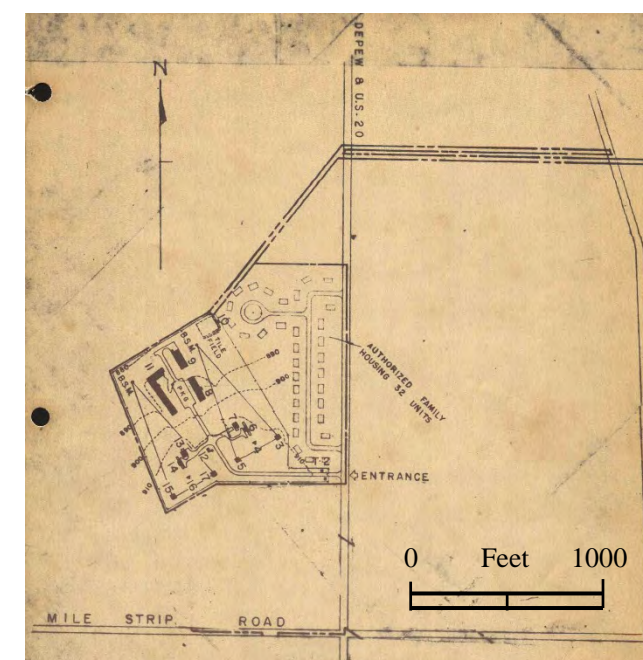
Map Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213.



PHOTOGRAPHIC ANALYSIS – 1960 SEWAGE TREATMENT – PART 2 OF 2



LOCATION DIAGRAM



Map Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213.

Source: Appraisal of Real Estate, Robert W. Hopkins, M.A.I, May 1, 1964; located at NARA, Archives II, College Park, Maryland, Textual Records Branch, Record Group 291.



GROUND PHOTOGRAPHS SEWAGE TREATMENT – CONTROL AREA



Structures D-4, Sewage Treatment Plant.



Structure S-10 Chlorinator House.

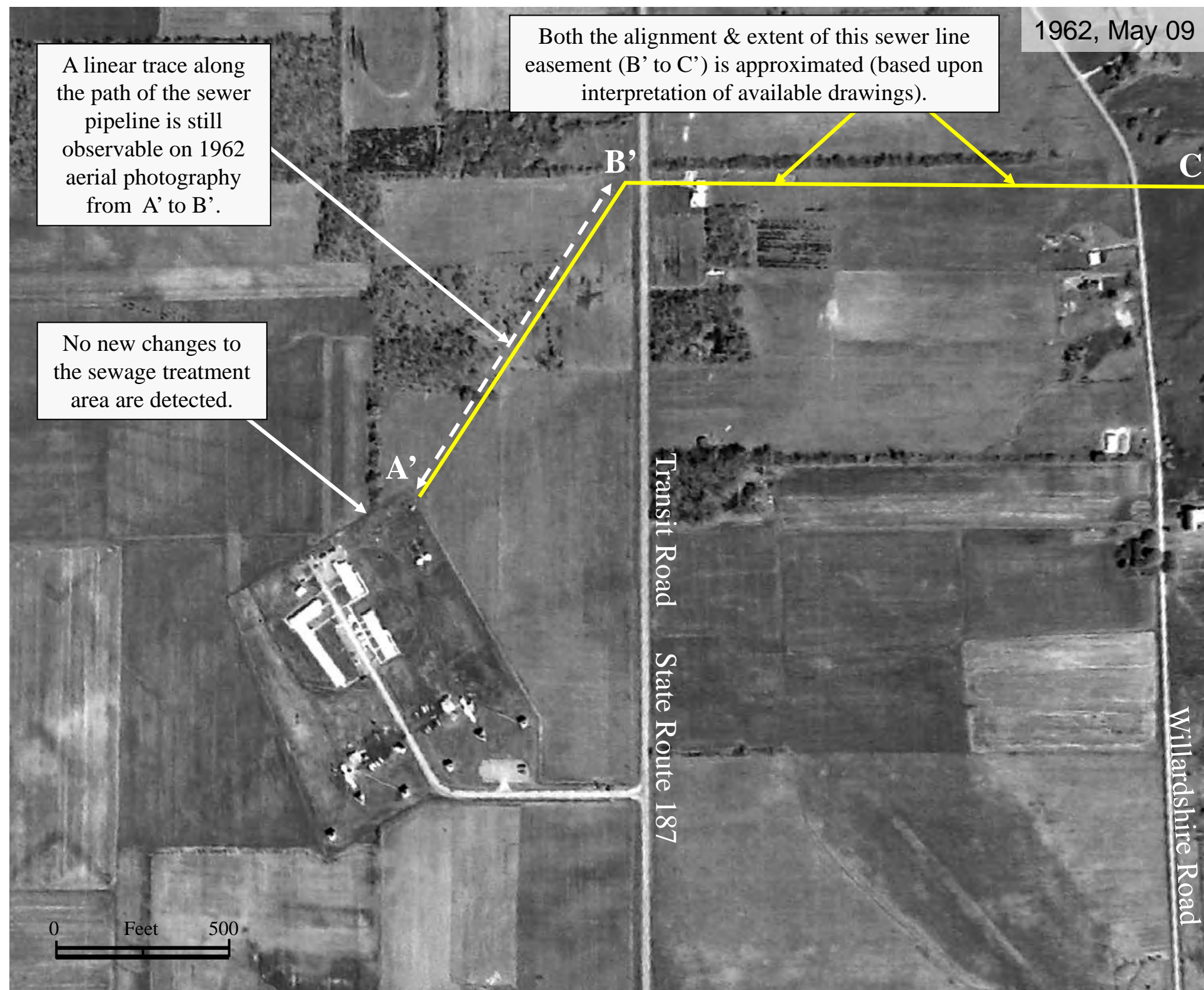


View looking southwest along sewer
easement taken from Transit Road.

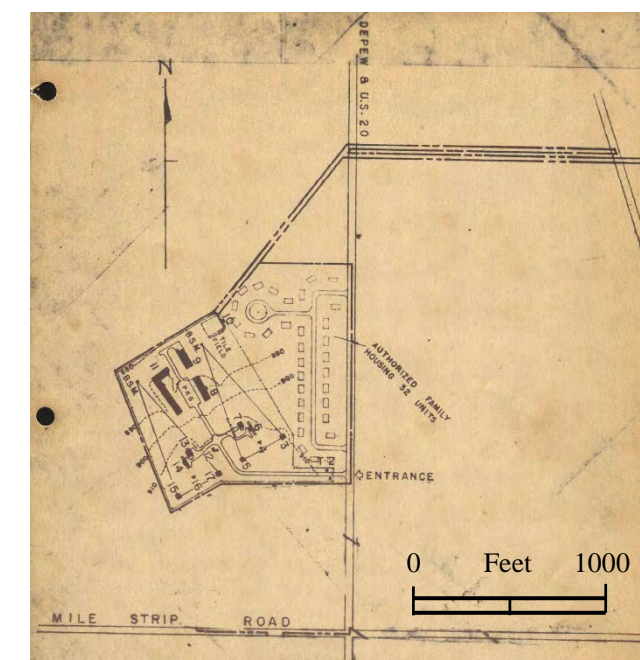
Source: Appraisal of Real Estate, Robert W. Hopkins, M.A.I, May 1, 1964; located at NARA, Archives II, College Park, Maryland, Textual Records Branch, Record Group 291.



PHOTOGRAPHIC ANALYSIS – 1962 SEWAGE TREATMENT



LOCATION DIAGRAM



Aerial Photographic Source: National Archives & Records Administration, Archives II, College Park, MD.

Map Source: NARA, Archives II, Textual Records Branch, Record Group 291, Entry 1 (UD-WW), Box 213.

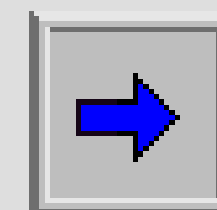


AERIAL PHOTOGRAPHIC REVIEW: POST-OPERATIONAL YEARS



BU 34/35 Control Area

Aerial Photography &
Satellite Imagery
Summarized Review
of Post-operational
Years



Selected Aerial Data
from 1963 to Present



Changes to Buildings and Property of the former Control Area.



POST-OPERATIONAL YEARS: FORMER BU 34/35 CONTROL AREA

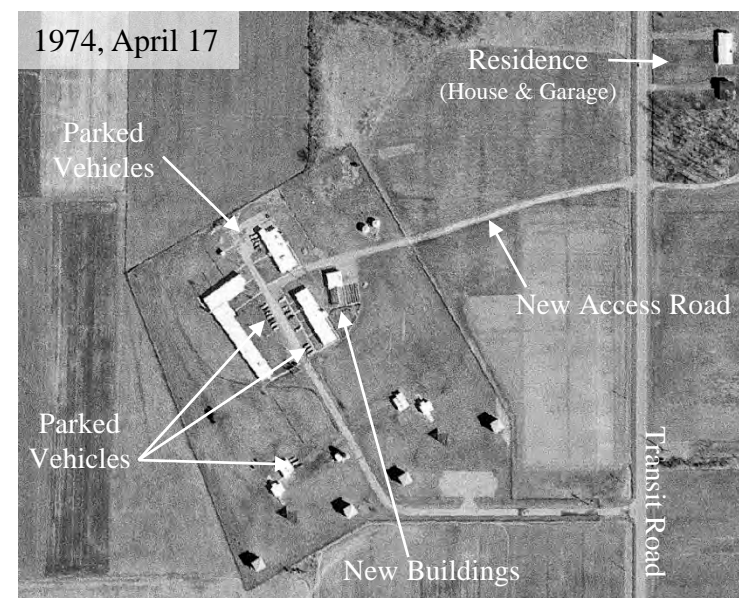


1963



The US Army National Guard has previously vacated the post. No observable changes to buildings or land area since last observed on 09 May 1962 (when the Control Area was active). No parked motor vehicles on the former Control Area property. This aerial photo was taken Thursday, the 25th of April 1963.

1974



Health Research, Inc. now occupies the former Control Area property. Two buildings and an access road have been added to the property since last observed on 25 April 1963. A new residence appears along Transit Road to the northeast.

1978



No observable changes to buildings or land area since last observed on 17 April 1974. No parked motor vehicles on the Health Research, Inc. property. This photograph was taken Wednesday, the 3rd of May 1978.



1983



No observable changes to buildings or land area since last observed on 03 May 1978. There are no parked motor vehicles on the Health Research, Inc. property. This aerial photo was taken Thursday, the 17th of March 1983 (St. Patrick's Day).

2006



All buildings and other structures appear to have been removed from the Health Research, Inc. property. New vegetation is apparent on the 2006 satellite imagery.

2016



New areas of low-lying vegetation continue to grow within the property owned by Health Research, Inc.





APPENDIX A



Topographic Maps



ORCHARD PARK, NY-ERIE COUNTY QUADRANGLE, U.S. GEOLOGICAL SURVEY TOPO MAP, 1950



Orchard Park Quadrangle,
New York – Erie County,
1950, 7.5 Minute Series
(Topographic).

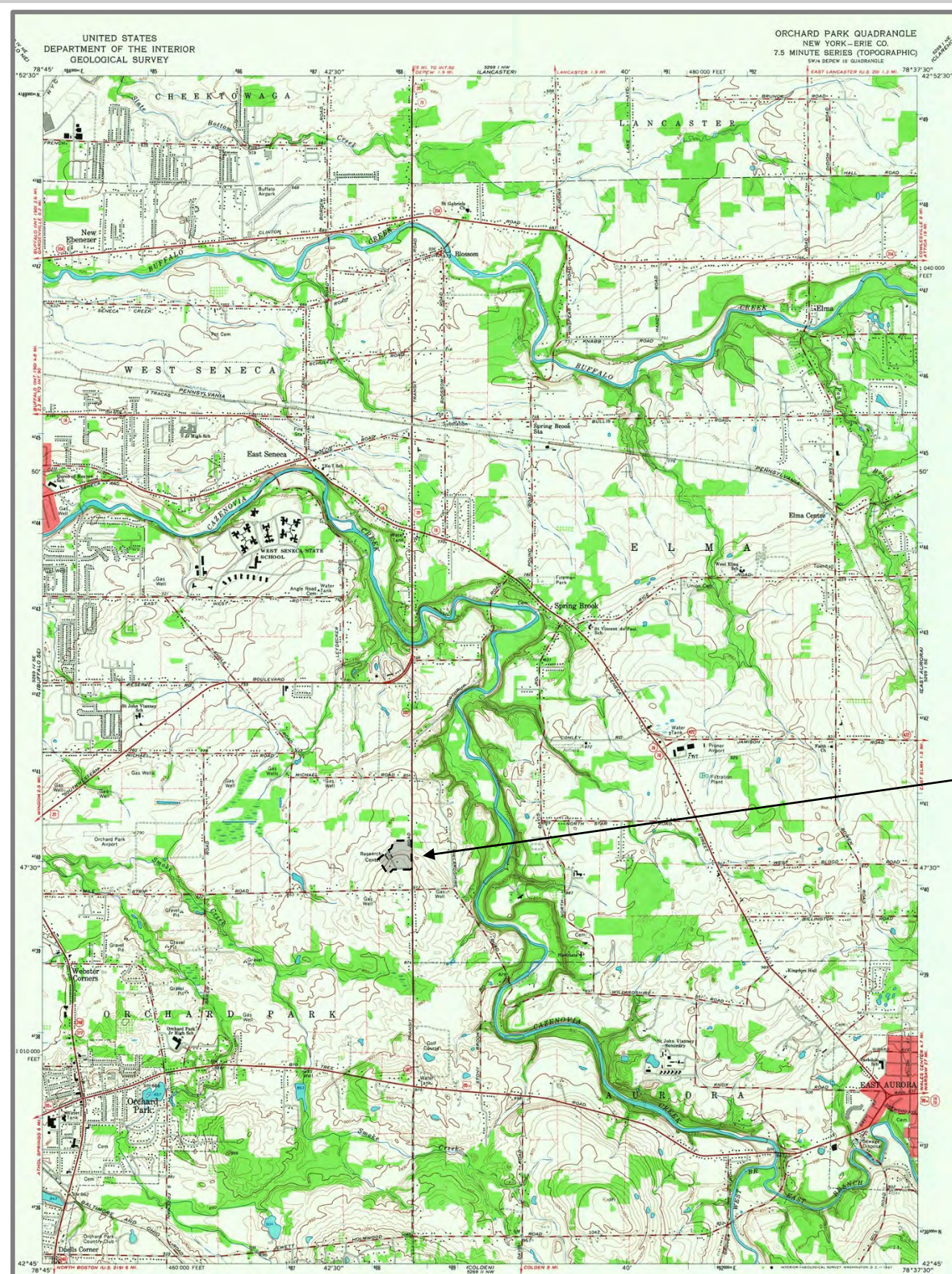
Predevelopment period for
establishment of Nike Missile
Batteries BU 34/35.

Future Nike BU 34/35 Control Area
(Government Easement, Lease, Permit Line)

Map Source: United States Geological Survey (USGS).



ORCHARD PARK, NY-ERIE COUNTY QUADRANGLE, U.S. GEOLOGICAL SURVEY TOPO MAP, 1965



Orchard Park Quadrangle,
New York – Erie County,
1965, 7.5 Minute Series
(Topographic).

Nike Missile Batteries BU
34/35 closed in 1962. Health
Research, Inc. assumed
ownership of the former
Control Area property on 15
December 1964.¹

Former Nike BU 34/35 Control Area
(Government Easement, Lease, Permit Line)

- 1) General Services Administration, Region 2, New York, NY, Memorandum from Acting Chief, Real Property Division to the Assistant Commissioner for Real Property, Washington, D.C. dated July 23, 1965. National Archives & Records Administration, Archives II, College Park, MD, Textual Records Branch, RG291, Entry 1 (UD-WW), Box 213.

Map Source: United States Geological Survey (USGS).



APPENDIX B



Building Schedule of Nike Batteries BU 34/35 Control Area



BU 34/35 BUILDING SCHEDULE – CONTROL AREA

Report of Buildings, Structures, Utilities, and Miscellaneous Facilities – Part 1 of 2

STANDARD FORM 118-A
DECEMBER 1953
PRESCRIBED BY GENERAL
SERVICES ADMINISTRATION
REGULATION 2-IV-201.00

BUILDINGS, STRUCTURES, UTILITIES, AND
MISCELLANEOUS FACILITIES

118-202

SCHEDULE A—SUPPLEMENT TO REPORT OF EXCESS REAL PROPERTY

1. HOLDING AGENCY NO.
NYD-120

2. PAGE 1 OF 1 PAGES
OF THIS SCHEDULE
GSA CONTROL NO. (GSA use
only) 6-104-587

3. ANNUAL RENTAL

LINE NO. (a)	HOLDING AGENCY BUILDING NO. (b)	DESCRIPTION (c)	COST (d)	OUTSIDE DIMENSIONS (e)	FLOOR AREA (Sq. ft.) (f)*	NO. OF FLOORS (g)*	CLEAR HEAD-ROOM (h)*	FLOOR LOAD RANGE (i)*	RESTRICTIONS ON USE OR TRANSFER OF GOVERNMENT INTEREST (j)
1		CONTROL AREA							
2		BUILDINGS							
3	S-6	Interconnecting Corr & FUIF Room	\$ 30,300		615	(c)			
4	S-11	Interconnecting Corr & FUIF Room	30,200		615	(c)			
5	S-111	Paint & Oil Storage Shed conc.	1,800		54	(b)			
6	S-8	Battalion Hq. Bldg. Conc.	70,300		4,639	(a)			
7	S-11	E.M. Bks & Off. Qtrs, Conc.	130,400		10,272	(c)			
8	S-9	E.M. Mess Bldg Conc.	80,500		4,500	(c)			
9	S-7	Generator Bldg w/Latrine Conc.	29,300		844	(c)			
10	S-13	Generator Bldg. w/Latrine Conc.	29,200		844	(c)			
11	T-2	Gas Meter House, Wood Siding	200		23	(c)			
12	S-10	Chlorinator House Conc.	1,500		39	(c)			
13	S-12	Water Pump House Conc.	3,100		242	(c)			
14	S-1	Sentry Station Conc.	1,800		58	(c)			
15		Sub-Total Buildings	\$408,600		22,745				
16									
17		STRUCTURES, UTILITIES & FACILITIES							
18	P-3	Missile Tracking Radar Tower	\$ 8,100		--				
19	P-17	Missile Tracking Radar Tower	8,000		--				
20	P-5	Target Tracking Radah Tower	8,100		--				
21	P-15	Target Tracking Radar Tower	8,100		--				
22	P-4	Acquisition Radar Tower	9,000		--				
23	P-16	Acquisition Radar Tower	9,000		--				
24	D-2	Flagpole, Wood, 50' high	1,300		--				
25	D-28	Concrete Pads	1,000		--	96 sq yds			
26	D-29	Electric Distribution Lines	53,500		--	4,280 lin ft			
27	D-30	Transformers (10)	4,100		--				
28	D-12	Gas Pipe Lines	3,200		--	1,570 lin ft			
29	D-4	Sewage Treatment Plant	43,900		--	15 TG			
30	D-5	Raw Sewage Pumping Station	12,600		--				
31	D-8	Sewage Treat. Diversion Chamber	2,200		--				
32	D-9	Sewage Treat. Junction Chamber	2,200		--				
TOTAL									

EXHIBIT B

*Prefix figures with symbols to denote type of space, as follows: (a) for office; (b) for storage; (c) for other.

16-09841-2 U. S. GOVERNMENT PRINTING OFFICE

General Services
Administration

REPORT OF EXCESS
REAL PROPERTY
Dated 28 June 1963.

Source: Tidewater, Inc.,
Powell, Ohio 43065



BU 34/35 BUILDING SCHEDULE – CONTROL AREA

Report of Buildings, Structures, Utilities, and Miscellaneous Facilities – Part 2 of 2

STANDARD FORM 118-A
DECEMBER 1953
PRESCRIBED BY GENERAL
SERVICES ADMINISTRATION
REGULATION 2-IV-201.00

BUILDINGS, STRUCTURES, UTILITIES, AND
MISCELLANEOUS FACILITIES
118-202

SCHEDULE A—SUPPLEMENT TO REPORT OF EXCESS REAL PROPERTY

1. HOLDING AGENCY NO.
NYD-120

2. PAGE 2 OF 4 PAGES
OF THIS SCHEDULE
GSA CONTROL NO. (GSA use
only) D-24-587

3. ANNUAL RENTAL

LINE NO. (a)	HOLDING AGENCY BUILDING NO. (b)	DESCRIPTION (c)	COST (d)	OUTSIDE DIMENSIONS (e)	FLOOR AREA (Sq. ft.) (f)*	NO. OF FLOORS (g)*	CLEAR HEAD-ROOM (h)*	FLOOR LOAD RANGE (i)*	RESTRICTIONS ON USE OR TRANSFER OF GOVERNMENT INTEREST (j)
1	D-13	Septic Tank Drug Field	\$ 30,000		--				
2	D-15	Sanitary Sewer Lines	72,500		--	3,750	lin. ft.		
3	D-21	Storm Sewers	24,200		--	4,390	lin. ft.		
4	D-16	Water Pipe Line Potable	98,500		--	16,140	lin. ft.		
5	D-23	Ground Fencing, Chain Link, 6' high	12,800		--	3,497	lin. ft.		
6	D-17	Roads	2,600		--	509	sq. yds.		
7	D-19	Walks	6,800		--	577	sq. yds.		
8	D-18	Vehicle Parking Area	8,600		--	2,659	sq. yds.		
9	D-20	Vehicle Parking Area	37,200		--	4,530	sq. yds.		
10		Sub-Total-Struct, Util, & Fac.	467,500		--				
11									
12		TOTAL CONTROL AREA	\$876,100		22,745				
13									
14									
15									
16									
17									
18									
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29									
30									
31									
32									
TOTAL									

*Prefix figures with symbols to denote type of space, as follows: (a) for office; (b) for storage; (c) for other.

16-09941-2 U. S. GOVERNMENT PRINTING OFFICE

General Services
Administration

REPORT OF EXCESS
REAL PROPERTY

Dated 28 June 1963.

Source: Tidewater, Inc.,
Powell, Ohio 43065



SOURCES OF INFORMATION

Buffalo and Erie County Public Library, Grosvenor Room, Rare Books & Maps, 1 Lafayette Square, Buffalo, New York 14203. 1972 aerial photography of the former BU 34/35 Control Area property.

Digital Globe, Inc. Commercial satellite imagery.

Erie County (New York) – Department of Public Works - Highways, 95 Franklin Street, Buffalo, New York 14202. 1951 aerial photography of former BU 34/35 Control Area property.

Internet Web: various government, educational, and private sites - relate to both general Nike Site historical background information and historical data directly related to BU 34/35 including, for example, topographic mapping of the area (produced by the U.S. Geological Survey) and the Project Information and Retrieval System for FUDS, U.S. Army Corps of Engineers.

McIntosh and McIntosh, Inc., P.O. Box 490 – 429 Pine Street, Lockport, New York 14095. 1972, 1978, and 1981 aerial photography over the former BU 34/35 Control Area property.

National Archives and Records Administration (NARA), Cartographic and Textual Records Branches, College Park, MD. 1962 military-flown aerial photography over the BU 34/35 Control Area. 1964 military-flown aerial photography over the former BU 34/35 Control Area property.

New York State – Department of Transportation, Regional DOT Office, 100 Seneca Street, Buffalo, New York 14203. Quitclaim Deed and accepted conveyance of the former Control Area property to Health Research, Inc. dated December, 1964 – L7071-P300.

Tidewater, Inc., 3761 Attucks Drive, Powell, Ohio 43065. Building schedule for Nike Missile Batteries BU 34/35.

U.S. Army Corps of Engineers, New England District (CENAE), 696 Virginia Road, Concord, Massachusetts. Historical layout plans of the former Control Area, building schedule, and textual data relating to the BU 34/35 Control Area.

U.S. Army Corps of Engineers, New York District (CENAN), 26 Federal Plaza, New York, NY 10278. CAD property survey of the former BU 34/35 Control Area.