

**Maryland Historical Trust  
State Historic Sites Inventory Form  
Maryland Inventory of Historic Properties**

Survey No. *HA-1961*  
Magi No.  
DOE \_\_\_yes \_\_\_no

**1. Name**

Historic Name *Ordnance Assembly Plant*

Common Name and Building Number *Building 525*

**2. Location**

Street and Number *Aberdeen Proving Ground - Aberdeen Area*

City, Town *Aberdeen*

Congressional District

State and Zip Code *MD 21005-5001*

County *Harford*

**3. Classification**

Category	Ownership	Status	Present use	
<input checked="" type="checkbox"/> District	<input checked="" type="checkbox"/> Public	<input checked="" type="checkbox"/> Occupied	<input type="checkbox"/> Agriculture	<input type="checkbox"/> Museum
<input type="checkbox"/> Building(s)	<input type="checkbox"/> Private	<input type="checkbox"/> Unoccupied	<input type="checkbox"/> Commercial	<input type="checkbox"/> Park
<input type="checkbox"/> Structure	<input type="checkbox"/> Both	<input type="checkbox"/> Work in Progress	<input type="checkbox"/> Educational	<input type="checkbox"/> Private Residence
<input type="checkbox"/> Site	Public Acquisition	Accessible	<input type="checkbox"/> Entertainment	<input type="checkbox"/> Religious
<input type="checkbox"/> Object	<input type="checkbox"/> In Process	<input type="checkbox"/> Yes: Restricted	<input type="checkbox"/> Government	<input type="checkbox"/> Scientific
	<input type="checkbox"/> Being Considered	<input type="checkbox"/> Yes: Unrestricted	<input type="checkbox"/> Industrial	<input type="checkbox"/> Transportation
	<input type="checkbox"/> Not Applicable	<input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Military	<input checked="" type="checkbox"/> Other: Storage

**4. Owner of Property**

Name *U.S. Army Aberdeen Proving Ground Support Activity (STEAHP-DIC)*

Street & Number *Building 310*

Telephone No.: *(410) 278-6755*

City, Town *Aberdeen Proving Ground*

State and Zip Code *MD 21005-5001*

**5. Location of Legal Description**

Courthouse, Registry of Deeds, etc.

Liber# \_\_\_\_\_ Folio# \_\_\_\_\_

Street & Number

City, Town

State and Zip Code

**6. Representation in Existing Historic Survey**

Yes  No

Title *Cultural Resource Management Plan - Aberdeen Proving Ground*

Date *July 1993*

Federal  State  County  Local

Depository for Survey Records

City, Town

State and Zip

## 7. Description

Survey No. *HA-1961*

Condition			
<input type="checkbox"/> Excellent	<input type="checkbox"/> Deteriorated	<input type="checkbox"/> Unaltered	<input checked="" type="checkbox"/> Original Site
<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Ruins	<input type="checkbox"/> Altered	<input type="checkbox"/> Moved
<input type="checkbox"/> Fair	<input type="checkbox"/> Unexposed		

### Overview

Building 525 is a large ordnance assembly plant constructed in 1942, during the massive World War II expansion at Aberdeen Proving Ground (APG). It is located on the eastern side of the northern portion of the APG site, south of the original Phillips Airfield. It is accessed by Mulberry Point Road, which runs from the Main Front District along past Building 525 to the Field Service Warehouse District and beyond.

### Architectural Description

The building is a large two-story structure, made of concrete and transite, with industrial sash windows. The roof, which is gabled, is of corrugated asbestos. The main facade faces east. It is symmetrically arranged around the central entrance, which rises to a two-story gabled monitor above the rest of the structure. This monitor is lined on the north and south with clerestory industrial sash. The gable end of this monitor that is flush with the main facade has no window apertures. Equidistant from this central entrance bay are large loading doors, flanked on either side by square industrial sash windows. The upper story of the building consists entirely of sash, running the length of the entire facade.

Facing Mulberry Point Road is the loading dock elevation, with the rail tracks running adjacent to the building. This facade is characterized by three large gabled monitors, each with clerestory bands of industrial sash running the east-west lengths of the gables; like the building's entrance gable, the actual gable ends facing north on Mulberry Point have no window apertures. On the first floor, the actual loading level, there is a loading door in the center of each of the three bays, flanked on either side by two large square casement windows. The loading platform itself, which runs the entire length of this facade, was modified in 1944.

According to Real Property Cards, this building has undergone a number of renovations and changes. In 1967, the building was rehabilitated, resulting in interior modification to the electrical system and other such changes, but no major changes that affected the exterior appearance of the building. Again, in 1986, the building underwent a million-dollar renovation.

**8. Significance**

Survey No. *HA-1961*

Period	Areas of Significance			
<input type="checkbox"/> Prehistoric	<input type="checkbox"/> Archeology-Prehistoric	<input type="checkbox"/> Community Planning	<input type="checkbox"/> Landscape Architecture	<input type="checkbox"/> Religion
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> Archeology-Historic	<input type="checkbox"/> Conservation	<input type="checkbox"/> Law	<input type="checkbox"/> Science
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> Agriculture	<input type="checkbox"/> Economics	<input type="checkbox"/> Literature	<input type="checkbox"/> Sculpture
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> Architecture	<input type="checkbox"/> Education	<input checked="" type="checkbox"/> Military	<input type="checkbox"/> Social/Humanit
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> Art	<input type="checkbox"/> Engineering	<input type="checkbox"/> Music	<input type="checkbox"/> Theater
<input type="checkbox"/> 1800-1899	<input type="checkbox"/> Commerce	<input type="checkbox"/> Exploration/Settlement	<input type="checkbox"/> Philosophy	<input type="checkbox"/> Transportation
<input checked="" type="checkbox"/> 1900-	<input type="checkbox"/> Communications	<input type="checkbox"/> Industry	<input type="checkbox"/> Politics/Government	<input type="checkbox"/> Other (specify)
		<input type="checkbox"/> Invention		

Specific Dates	Architect				Builder	Area
Applicable Criteria:	<input checked="" type="checkbox"/> A	<input type="checkbox"/> B	<input checked="" type="checkbox"/> C	<input type="checkbox"/> D		
Applicable Exception	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E	<input type="checkbox"/> F <input type="checkbox"/> G
Level of Significance	<input checked="" type="checkbox"/> National		<input type="checkbox"/> State	<input type="checkbox"/> Local		

SEE CONTINUATION SHEETS

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### Overview

Building 525 is a large ordnance assembly plant that was constructed in 1942, during the massive World War II expansion at Aberdeen Proving Ground.

### Aberdeen Proving Ground in World War II

In the Spring of 1940, France surrendered to the Axis powers as Hitler and his cohorts declared their artillery might to the world. Fearful of increased hostility abroad, President Franklin D. Roosevelt passed the Protective Mobilization Plan which authorized the immediate expansion of the United States Army. As a result of this act, the nation witnessed a substantial increase in the construction of new proving grounds throughout the country, as well as the expansion of existing testing sites. At Aberdeen Proving Ground, a major overhaul of existing structures, and the construction of new operation and support facilities, was quickly put underway. From 1940 to 1944, the Army invested nearly \$58,000,000.00 in construction at Aberdeen.<sup>1</sup>

With the United States' declaration of war in 1941, Aberdeen Proving Ground received a new focus as the nation's premier ordnance research and testing center. Acceptance testing of ordnance materiel was primarily assigned to the new proving grounds in Ohio, Indiana, and Arkansas, while Aberdeen focused on the research and evaluation of new equipment. In November of 1943, APG was renamed the Ordnance Research Center, with its express function defined as the research and testing of "ammunition, armor, aviation, armament, ballistics, rockets, and automotive engines."<sup>2</sup> At Aberdeen, testing ranged from plunging a M-4 tank at top speed through water to dropping a 2,000 pound bomb from a B-23 bomber flying at an altitude of 10,000 feet.<sup>3</sup> By the end of World War II, the soldiers and civilian personnel at APG had conducted such an extraordinary number of tests that almost 75% of the ordnance materiel used prior to 1940 had been replaced with updated equipment.<sup>4</sup> In order to carry out these tests, much of the equipment and artillery that arrived at Aberdeen Proving Ground needed to be assembled.

### Weapons Assembly

During 1942, Building 525 was constructed to enable soldiers and civilian personnel to put together various guns, cannons, and artillery pieces. Prior to World War II, the United States completely lacked facilities in which large quantities of heavy ammunition could be assembled and stored. Thus,

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<sup>1</sup>R. Christopher Goodwin & Associates, *Aberdeen Proving Ground, Cultural Resource Management Plan*, p. 146-147.

<sup>2</sup>Goodwin & Associates, *APG, Cultural Resource Management Plan*, p. 146.

<sup>3</sup>"Behind the Guns," *Colliers*, pp. 14-15.

<sup>4</sup>Goodwin & Associates, *APG, Cultural Resource Management Plan*, p. 146.

as part of the war mobilization effort, the U.S. Army constructed its own assembly centers, in which weapon parts that were manufactured commercially were turned into finished artillery products. In these plants, located across the country and typically government-owned and contractor-operated (GOCO), workers were primarily responsible for turning explosives and metal parts into finished ammunition units. Employees would load the explosives into metal shells, assemble and install the fuzes, and paint the final equipment with specific labels. During World War II, the Ordnance Department produced "20 sizes of 270 different types of artillery and 70 different types of bombs."<sup>5</sup> This included ammunition for howitzers, tank guns, anti-aircraft missiles, and anti-tank defense systems.

These ordnance plants constructed across the country produced massive quantities of ammunition for the war effort. At Aberdeen, the emphasis was on critical research and development testing of weapons, not on pure supply of military might to the front. Building 525, thus, differed from other large-scale assembly plants built during this time. It served a secondary function to the essential activities at Aberdeen, that of testing and developing new weapons.

#### The Design Influence of Albert Kahn

These giant assembly plants being built across the United States had as their model the industrial architecture of Albert Kahn. Building 525, constructed during 1942, at the height of mobilization, was undoubtedly somewhat affected by the process of Kahn's design. By the 1940s, Kahn's work had received extensive coverage from the American architectural press. In August 1938, *Architectural Forum* devoted an entire issue to "Industrial Buildings, Albert Kahn, Inc." Active throughout the entire first half of the century, Kahn made his biggest mark in his manufacturing plants designed to facilitate the creation of Franklin Delano Roosevelt's "arsenal of democracy." In particular, the aeronautic plant in Baltimore that Kahn completed in 81 days, from design to construction completion, for the Glenn L. Martin Company became a "benchmark for the war industry."<sup>6</sup> By 1942, when the Bomb Assembly Plant was being erected at Aberdeen Proving Ground, Kahn's creed, reinforced by the speed with which his buildings were erected, would have been a key underpinning of the U.S. government's mobilization plan.

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<sup>5</sup>Goodwin & Associates, "Ordnance Plants," *AMC Context Report*, p. 125.

<sup>6</sup>Federico Bucci, *Albert Kahn: Architect of Ford*, p. 105.

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**9. Major Bibliographical References**

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Survey No. *HA-1961*

SEE CONTINUATION SHEETS

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**10. Geographical Data**

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## Verbal Boundary Description

Building 525 and its surrounding elements, such as the railroad tracks and the parking in front of entrance doors, would be encompassed by a boundary drawn some 100 feet from the edge of the building on all sides. To the north, where the railroad tracks are, this line should run along Mulberry Point Road.

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**11. Form Prepared by**

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Name/Title Heather Ewing and Judith Robinson, Architectural Historians

Organization Robinson &amp; Associates, Inc.

Date March 20, 1996

Street &amp; Number 1909 Q Street, NW

Telephone (202) 234-2333

City or Town Washington

State DC 20009

Concurrence of State Preservation Officer

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The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

Return to: Maryland Historical Trust  
DHCP/DHCD  
100 Community Place  
Crownsville, Maryland 21032-2023  
(410) 514-7600

Bibliography

Albrecht, Donald, ed. *World War II and the American Dream: How Wartime Building Changed a Nation*. Cambridge, MA: MIT Press, 1995.

"Ordnance Says." *Business Week*. August 15, 1942, pp. 66-67.

Crowell, Benedict. *How America Went To War* (six vols.): *The Giant Hand*; *The Road to France* (2 vols.); *The Armies of Industry* (2 vols.); *Demobilization*. New Haven: Yale University Press, 1921.

Dreher, Carl. "America's Artillery Might." *Popular Science*, No. 141, July 1942, pp. 54-61.

Fine, Lenore, Jesse A. Remington. *The Corps of Engineers: Construction in the United States*. Part of the series, "The United States Army in World War II: The Technical Services." Washington, D.C.: Center of Military History, United States Army, 1989.

Ford, Major Arthur W. "Instruments for Making Ballistic Determinations and Some Results Obtained at Aberdeen Proving Ground," *Army Ordnance*, Vol. VII, No. 38, September-October 1926, pp. 113-124. Reprinted in Grandine, DARCOM Historic-Building Inventory, 1982.

Goodwin, R. Christopher & Associates. "Support and Utility Structures and Facilities (1917-1946): Overview, Inventory, and Treatment Plan," Draft, March 1995.

Goodwin, R. Christopher & Associates. "Aberdeen Proving Ground Cultural Resource Management Plan." Draft, U.S. Army Corps of Engineers, Baltimore District, 1994.

Goodwin, R. Christopher & Associates. "Architectural Survey and Assessment of Five Buildings, Aberdeen Proving Ground (APG), Aberdeen, Maryland." Draft, Department of the Navy, Atlantic Division, December 1993.

Goodwin, R. Christopher & Associates. "Historic Context for the Army Materiel Command's World War II Facilities." Draft, U.S. Army Corps of Engineers, Baltimore District, December 1994.

Goodwin, R. Christopher & Associates. "National Historic Context for Department of Defense Installations, 1790-1940." Draft, U.S. Army Corps of Engineers, Baltimore District, November 1993.

Goodwin, R. Christopher & Associates. "Historic Context for Department of Defense Facilities, World War II Permanent Construction." Draft, U.S. Army Corps of Engineers, Baltimore District, June 1994.

Grandine, Katherine, Irene Jackson Henry, and William R. Henry, Jr. "DARCOM Historic-Building Inventory: Aberdeen Proving Ground, Maryland." National Park Service, Historic American Buildings Survey, 1982.

Kirk, John; Robert Young, Jr. *Great Weapons of World War II*. New York: Walker & Co., 1961.

Mariani & Associates Architects, with Robinson & Associates, Inc. (dba Tracerics). "Department of Army: Study/Survey of Historically Significant Army Family Housing Quarters," September 1988.

McKenney, Janice. "More Bang for the Buck in the Interwar Army: The 105-mm. Howitzer." *Military Affairs*, Vol. XLII, No. 2, April 1978.

National Archives and Records Administration. Records of the Office of the Chief of Engineers. Record Group 77: Completion Reports, Aberdeen Proving Ground and Edgewood Arsenal, 1917-1943.

National Archives and Records Administration. Records of the Chief of Ordnance. Record Group 156, Entries 646, 646A, and 903.

*National Register Bulletin 16A*. U.S. Department of the Interior, National Park Service, Interagency Resources Division, National Register Branch, 1991.

Real Property Cards, Directorate of Public Works, Aberdeen Proving Ground.

Robinson & Associates, Inc. "Aberdeen Proving Ground Inventory Management Forms," August 1995.

Robinson & Associates, Inc. "Classification and Development of Historic Contexts for Standing Buildings of Historic Significance on Real Property Inventories of the Army Materiel Command," Draft, March 1990.

Robinson & Associates, Inc. "Nine Non-Commissioned Officer's Quarters, Edgewood Area, Aberdeen Proving Ground, Maryland." Maryland Inventory of Historic Properties Form. October 12, 1995.

Scaggs, George W. "History of Eastern Chemical Warfare Depot." Edgewood Arsenal, Maryland, June 30, 1945.

*Sketches of the Ordnance Research and Development Center in World War II*, Aberdeen Proving Ground, 1945.

Slator, Capt. W.J. "Historical Data: Aberdeen Proving Ground, 1917 to 1939." Unpublished manuscript, Historical Section, Aberdeen Proving Ground, 1942.

Smart, Jeffrey K. "U.S. Army Chemical and Biological Defense Command: Historical Highlights," Aberdeen Proving Ground, Maryland: U.S. Army Chemical and Biological Defense Command, Special Study No. 1, June 1994.

Sterling, Keir. "Aberdeen Proving Ground: The Early Years." *Harford Historical Bulletin*. No. 49, Summer 1991, pp. 55-75.

Vertical Files, Office of the Edgewood Historian.

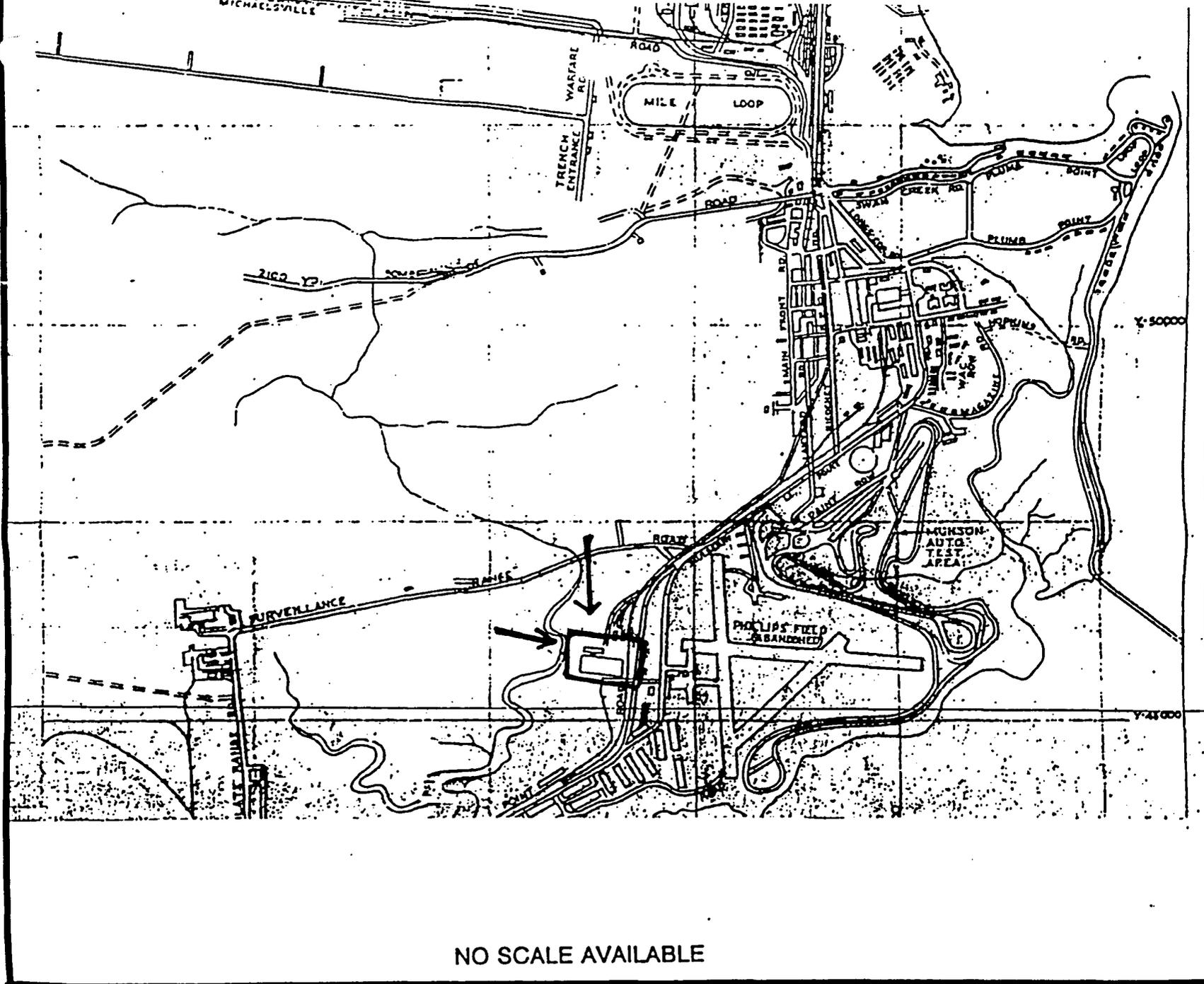
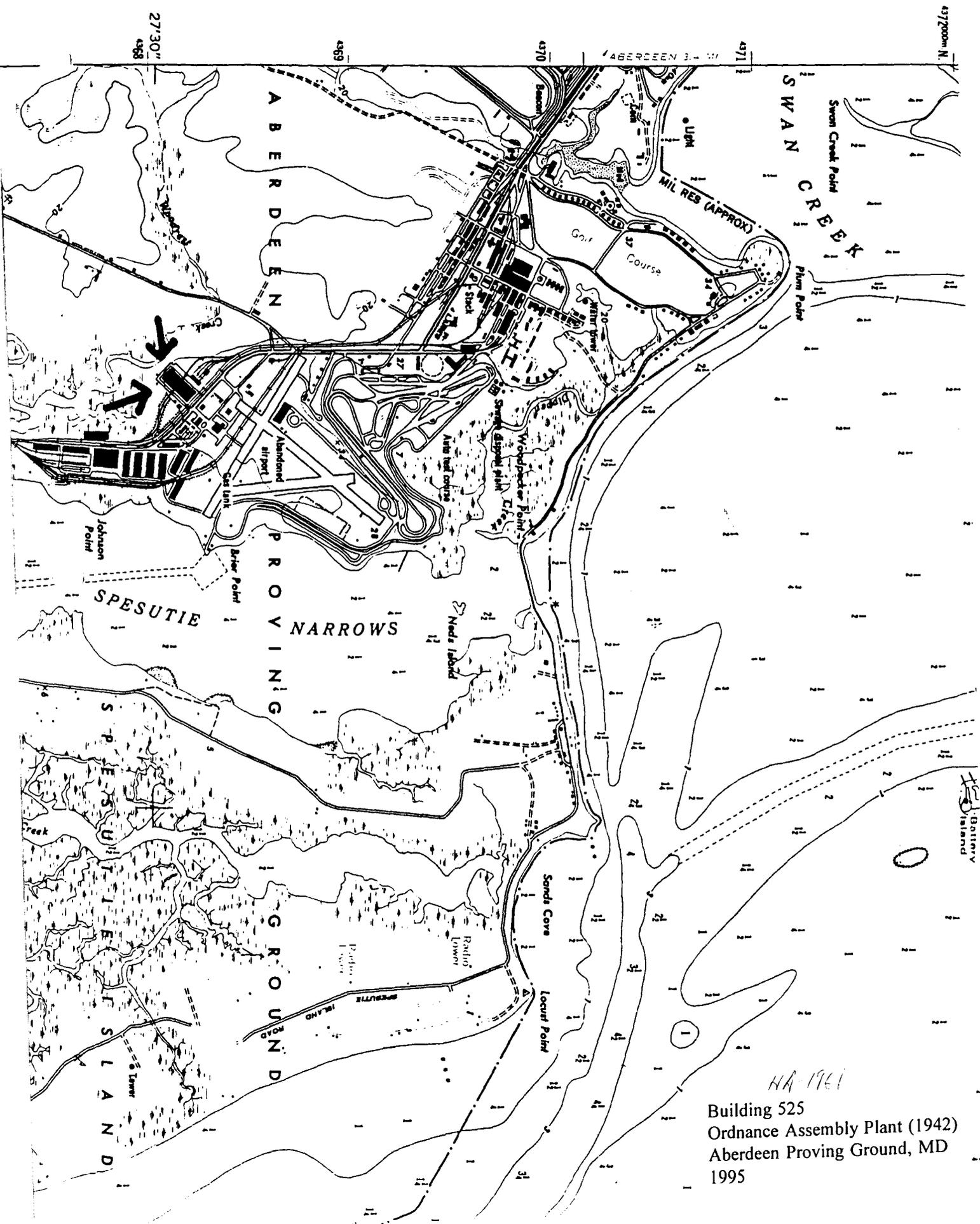


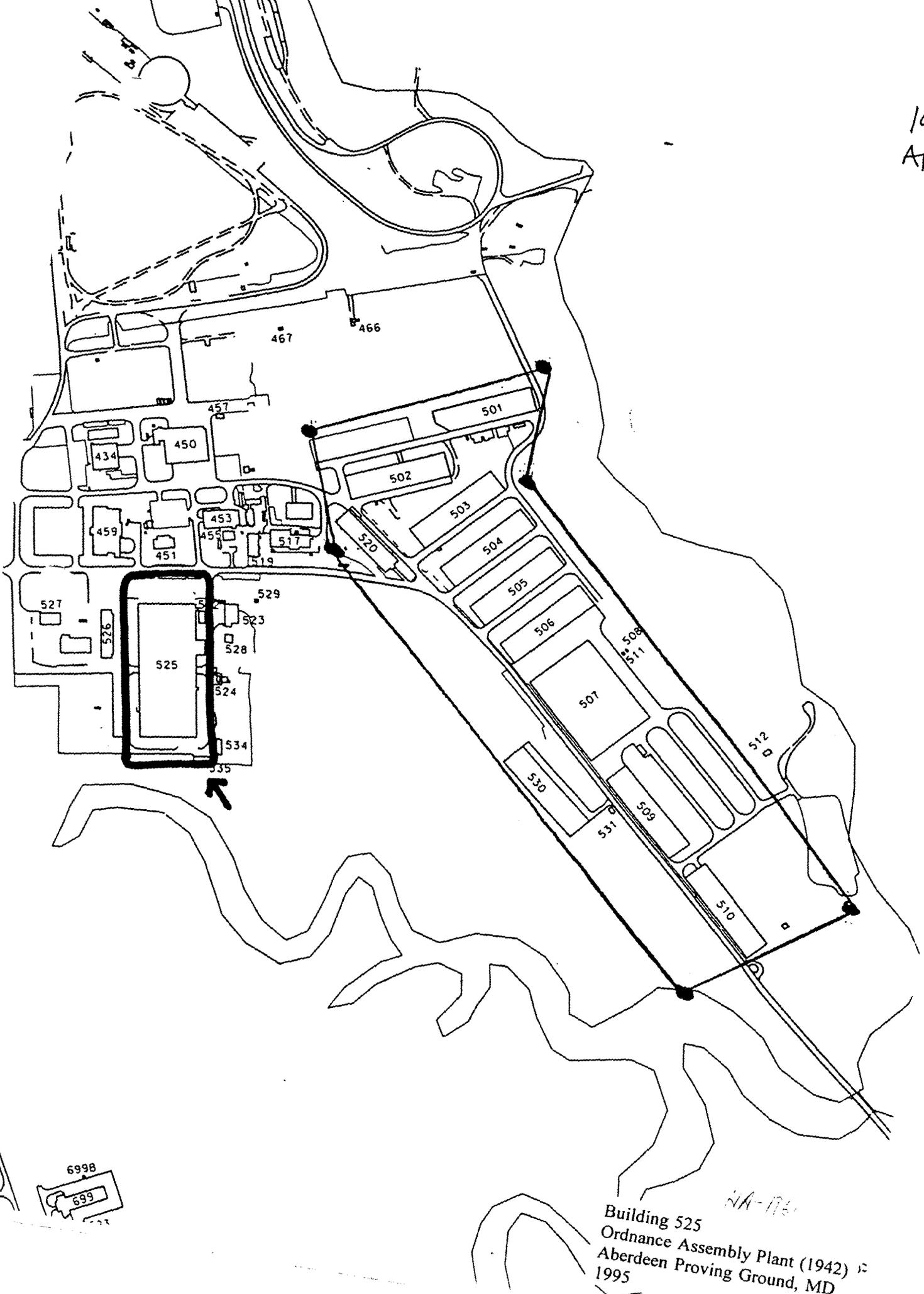
Figure 12. Engineers Department Map of the Northern Portion of Aberdeen Proving Ground (1944).

44-1961  
 Building 525  
 Ordnance Assembly Plant (1942)  
 Aberdeen Proving Ground, MD  
 Plan, 1944



NA 1961  
 Building 525  
 Ordnance Assembly Plant (1942)  
 Aberdeen Proving Ground, MD  
 1995

1995  
APG



NA-176  
Building 525  
Ordnance Assembly Plant (1942) at  
Aberdeen Proving Ground, MD  
1995

6998  
699

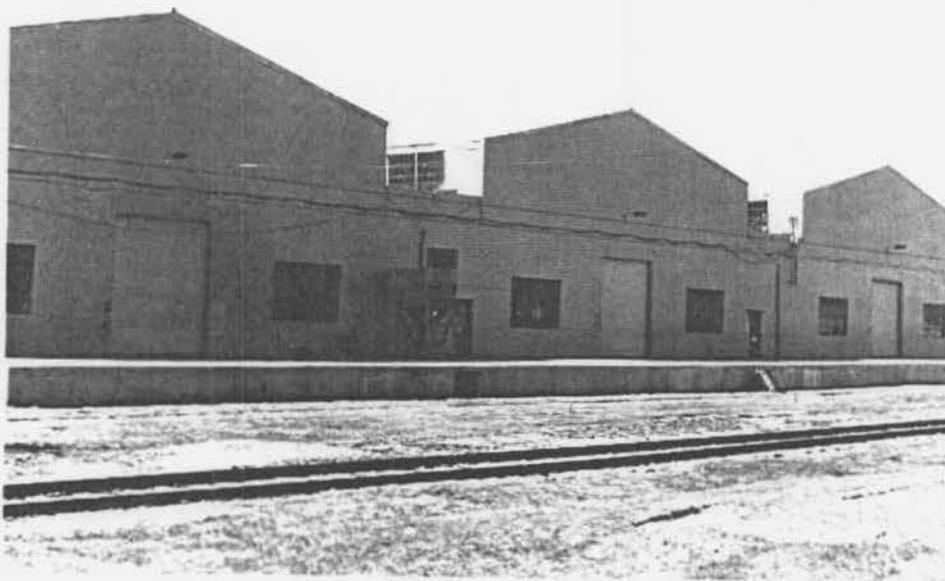
HA-1961

MHT Inventory Form  
Aberdeen Proving Ground, MD  
Robinson & Associates, Inc.

Building 525,  
Front facade



Building 525,  
Loading Dock Elevation



Building 525  
Ordnance Assembly Plant (1942)  
Aberdeen Proving Ground, MD  
April 1995