**DEPARTMENT OF THE ARMY**
**INSTALLATION MANAGEMENT COMMAND**
**HEADQUARTERS, U.S. ARMY GARRISON FORT WAINWRIGHT**
**1060 GAFFNEY ROAD #6000**
**FORT WAINWRIGHT, ALASKA 99703-6000**

REPLY TO
ATTENTION OF:

OCT 21 2010

Directorate of Public Works

SUBJECT: Proposed Renovations to Building 3004, DES-FD001-0J, Fort Wainwright, Alaska.

Judith E. Bittner
State Historic Preservation Officer
Office of History and Archaeology
550 West Seventh Ave., Suite 1310
Anchorage, Alaska 99501-1365

Dear Ms. Bittner:

This is to request the State Historic Preservation Officer's concurrence with the U.S. Army Garrison, Fort Wainwright Alaska's (USAG-FWA) finding of **Historic Properties Adversely Affected** by the proposed renovations to Building 3004 (Figures 1 – 10). Building 3004 (FAI-01318) is a contributing element within Ladd Air Force Base Cold War Historic District (HD) (FAI-01288) and is located within the boundaries of the Ladd Field National Historic Landmark (NHL) (FAI-00236) as a noncontributing element.

**Description of Undertaking** (36 CFR 800.11 (e) (1))

This undertaking is the renovation of Building 3004 which includes the installation of a window, two doors, a sidewalk, a covered parking area, and an awning; the reconfiguration of current parking; replacement of the overhead doors; and interior changes. One of the doors and the window will be installed on the south elevation (Figures 9). The window will require a new opening in the building while the door will require that a current window opening be enlarged. A sidewalk will be constructed for ease of access to the south elevation personnel door being installed, and the parking along the south side of the building will be re-configured due to the expected loss of the current parking caused by the Aviation Stationing Project (Figure 10). Also included in the renovations will be a covered parking area measuring 27' x 31' along the northeast corner of the building (Figure 9). Along the north elevation renovations will also include the replacement of the overhead doors and an alteration to the 1992 addition; the installation of a door to the extinguisher shop. An awning over a personnel door on the west elevation will be constructed as well (Figure 9). This project includes interior renovations however; they will not affect any historic materials, as no original material or spacing exists.

The area of potential effect (APE) for this undertaking includes both the potential direct and indirect effects. The APE includes buildings 2998, 3000, 3004, and 3005 (Figures 1 - 10). This undertaking has the potential to affect the NHL and HD, therefore effects to both shall be considered in this review.

**Steps Taken to Identify Historic Properties** (36 CFR 800.11 (e) (2))

- Reviewed historic context reports and other relevant material
  - *Northern Defenders: Cold War Context of Ladd Air Force Base Fairbanks, AK 1947-196:* Kathy Price and Russell H. Sackett with the Center for the Environmental Management of Military Lands, January 2001
  - Draft of *The Coldest Front: Cold War Properties in Alaska*: United States Department of Defense *Legacy Resource Management Program* prepared in cooperation with the Alaska State Historic Preservation Officer, February 1996
  - *The Cold War Historic Context of Fort Wainwright and Ladd Air Force Base, 1946 – 1991*: Prepared for the US Army Alaska by CH2M HILL, Inc. and Northern Land Use Research, Inc. July 2007
- Reviewed building inventory forms
- Reviewed photographs, historic site maps, and other relevant documents
- Visited site on 01 September 2010

**Description of Affected Historic Properties** (36 CFR 800.11 (e) (3))

- Building 3004 (FAI-01318)

Building 3004 is a rectangular military vernacular building of concrete with a flat roof over the main structure, and shed and gable roof on two small additions (Figures 3-8). There are two main portions to the building, the one story administrative portion on the southern side, and the two story vehicle maintenance bay located in the center portion of the north section of the building where the fire engines are maintained. The north main elevation faces the airfield and has four large overhead doors, the roof extends above the doors to form an overhang supported by exposed wood beams. The east and west ends of the north elevation are set back from the main elevation. The eastern side has an entrance that is covered by a shed roof addition. The west elevation has three planes, each stepping out from the maintenance bay with one personnel door on each plane. There are four windows on the central plane and three on the southernmost. The southern elevation has fourteen windows spaced evenly along its length. The windows are of multiple types with single pane vinyl awning and casement windows being predominant with some older vinyl single hung sash windows. The east elevation is dominated by the gable roof addition. A personnel door is located near the south end of the elevation.

Building 3004 has undergone previous rehabilitations including one in 1970, where a new roof was installed with a tapered polystyrene insulation board to provide positive drainage. In 1992, a new addition was added on the east side of the building to house a

CO2 tank system. The addition was 432 square feet and was constructed of concrete block and a metal gable roof (Figure 3). Building 3004's character-defining features include the overall size, mass, fenestration, and sparse decorative elements including the exposed wooden beams.

Built in 1952, Building 3004 is a contributing element of the HD and a noncontributing element within the NHL. It is located on Montgomery Road just south of the airfield. It originally served and continues to serve as a fire station and was built in conjunction with the Fighter Intercept Squadrons based at Ladd Air Force Base during the Cold War (Figures 1-2).

- NHL and HD History

Envisioned by General H. H. Arnold, Ladd Field was authorized in 1935 as a small Cold Weather testing station. Construction began in 1939, and by 1940, Ladd Field was operational. Cold weather testing at Ladd Field helped to improve aircraft and equipment used by front-line aircrews. The Cold Weather Test Detachment's experimental tests contributed to the development of aircraft design, ground procedures, and personnel equipment with stateside research agencies and manufacturers. After the start of World War II, Ladd Field also served as the transfer point for the Alaska Siberia (ALSIB) Lend-Lease route to aid the Soviet Union. From 1942 to the end of the war in 1945, Ladd Field saw 7,926 aircraft and associated cargo change hands. Though it was controversial, the Lend-Lease aid to the Soviet Union played a part in the eventual defeat of Nazi Germany. Ladd Field also served as an air depot for the repair and supply of aircraft under the Air Transport Command, processing thousands of passengers in addition to tons of cargo and mail.

In 1984, Ladd Field was listed on the National Register of Historic Places. Ladd Field was listed as significant under three main themes; cold weather testing, aircraft repair/supply depot and air transfer hub, and as a transfer point for aircraft and cargo transiting the ALSIB route to the Soviet Union.

In 1947, the Air Force became a separate service and Ladd Field became known as Ladd Air Force Base (AFB). Missions flown out of Ladd AFB played a significant role in the early years of the Cold War confrontation with the Soviet Union. Early in the Cold War, military planners decided on a heartland concept for Alaskan defense, concentrating on bases near Anchorage and Fairbanks as the strategic anchor points. Ladd AFB became the Northern Sector Headquarters for the Alaskan Air Command, and its foremost missions during the Cold War were air defense, strategic reconnaissance, and arctic research.

Ladd AFB's air defense mission was part of a plan to deter the Soviet Union from taking Alaskan territory and using it as a base from which to threaten the continental United States. Ladd AFB hosted tactical fighter intercept squadrons and combat alert cells. An Air Defense Command Center located on Ladd AFB was responsible for directing air battles in Alaska's northern sector. It also provided support to segments of

the Distant Early Warning line. In the earliest years of the Cold War, Ladd AFB hosted some of the first long range strategic aerial reconnaissance units.

Ladd AFB was also the scene of significant Cold War Arctic research. The cold weather equipment testing, begun during World War II, continued through the Cold War, and expanded to include the Arctic Aero medical Laboratory (AAL). The AAL studied human adaptation to Arctic and Sub-Arctic climates with an eye toward military applications.

In 1960, Ladd AFB was transferred to the Army and was renamed Fort Jonathan M. Wainwright on January 1, 1961. In Alaska, Cold War missions were predominately under the command of the Air Force with the Army providing ground force defense, and logistical supply. The Army also carried out cold-weather training tactics and cold-weather equipment testing. The onset of the Vietnam War and its high costs drained the Army's resources; troops at Fort Wainwright, Alaska (FWA) were reassigned or deployed causing a significant decrease in the Post's population. In 1986, the mission of the Post changed again with the assignment of the 6th Light Infantry Division to FWA. Since 1986, FWA's mission has been to support worldwide deployment.

In 2001, Ladd AFB Cold War Historic District was determined eligible for the National Register of Historic Places. It was determined to be significant for its role in the early Cold War missions of the 46th/72nd Air Reconnaissance unit and for the Fighter Intercept Squadrons stationed here.

**Description of Undertaking's Effect on Historic Properties** (36 CFR 800.11 (e) (4))

Three aspects of this undertaking have the potential to affect significant historic properties (Figures 3-10). The first is the potential visual effect to the NHL, the HD, and the contributing elements within the APE. The second aspect is the effect to Building 3004 itself; a contributing element of the HD. The third is the potential to affect archaeological resources due to ground disturbance associated with the construction of the covered parking area.

Regarding the potential affects to the NHL and the HD the renovation of Building 3004 including the installation of a window, two doors, a sidewalk, a covered parking area, and an awning; the reconfiguration of current parking; replacement of the overhead doors; and interior changes were evaluated. It is not expected that these renovations will be visible to other buildings within the APE, expect potentially from Building 3000 which is a noncontributing resource within both the historic districts (Figure 2). Additionally, Building 3004 is located adjacent to the Aviation Stationing Project; construction on this has already begun. Within the next three years, when construction is complete, the buildings surrounding Building 3004 will act as a visual barrier against the rest of the NHL and HD resources, and Building 3004 will no longer be within the viewshed of the majority of the NHL and HD (Figure 10).

The second aspect is the effect to Building 3004 itself, a contributing element of the HD. The replacement of the overhead bay doors on the north elevation will be in

keeping with the existing doors and design of the building. The overhead doors were previously replaced in 1972, and no alterations will be made to the height or shape of the door openings. Adjacent to the overhead doors is the extinguisher shop which is located in a 1992 addition to the building. The extinguisher shop will have a new door installed, which will also be in keeping with the other personnel doors on the building and will not affect any historic material. The addition of an awning along the west elevation will be difficult to see as it is not on a primary elevation and is screened from the NHL and HD by a row of trees. These changes will not adversely affect aspects of Building 3004's integrity and will not have an adverse effect on either of the districts.

The integrity of Building 3004 has the potential to be affected by loss of historic design, materials, and workmanship. The construction of the door, installation of a new window, and covered parking on the east elevation of the building will affect historic material and design. Recognizing there is an adverse effect; USAG-FWA hopes that through consultation these alterations can be designed to be in keeping with the existing architecture of the building to minimize the effect.

The FWA cantonment is an area that has undergone extensive disturbance in the years since military occupation. There is no longer the potential to affect archaeological resources.

**Explanation of Application of the Criteria of Adverse Affects** (36 CFR 800.11 (e) (5))

After examining the undertaking and reviewing the historic context, photographs, and site maps, USAG FWA has found **Historic Properties Adversely Affected** by the proposed renovation of Building 3004.

This finding was reached due to the effect to Building 3004 in relation to loss of its original design, material, and workmanship as a result of the construction of the door, the installation of a new window, and covered parking on the east elevation. In addition, this undertaking will not adversely affect the NHL or the HD. USAG FWA proposes that these effects be addressed by creating internal trainings for USAG FWA Directorate of Public Works architects and engineers on how to properly manage and maintain historic buildings.

Copies of this determination will also be furnished to our consulting parties; Tanana Yukon Historical Society and the Fairbanks North Star Borough Historic Preservation Commission. If you have questions concerning this submittal, please contact Natalie Thomas, Architectural Historian at (907) 361-9685.

Sincerely,

Michael T. Meeks
Director, Directorate of Public Work

**Figure 1: Overview of Undertaking**

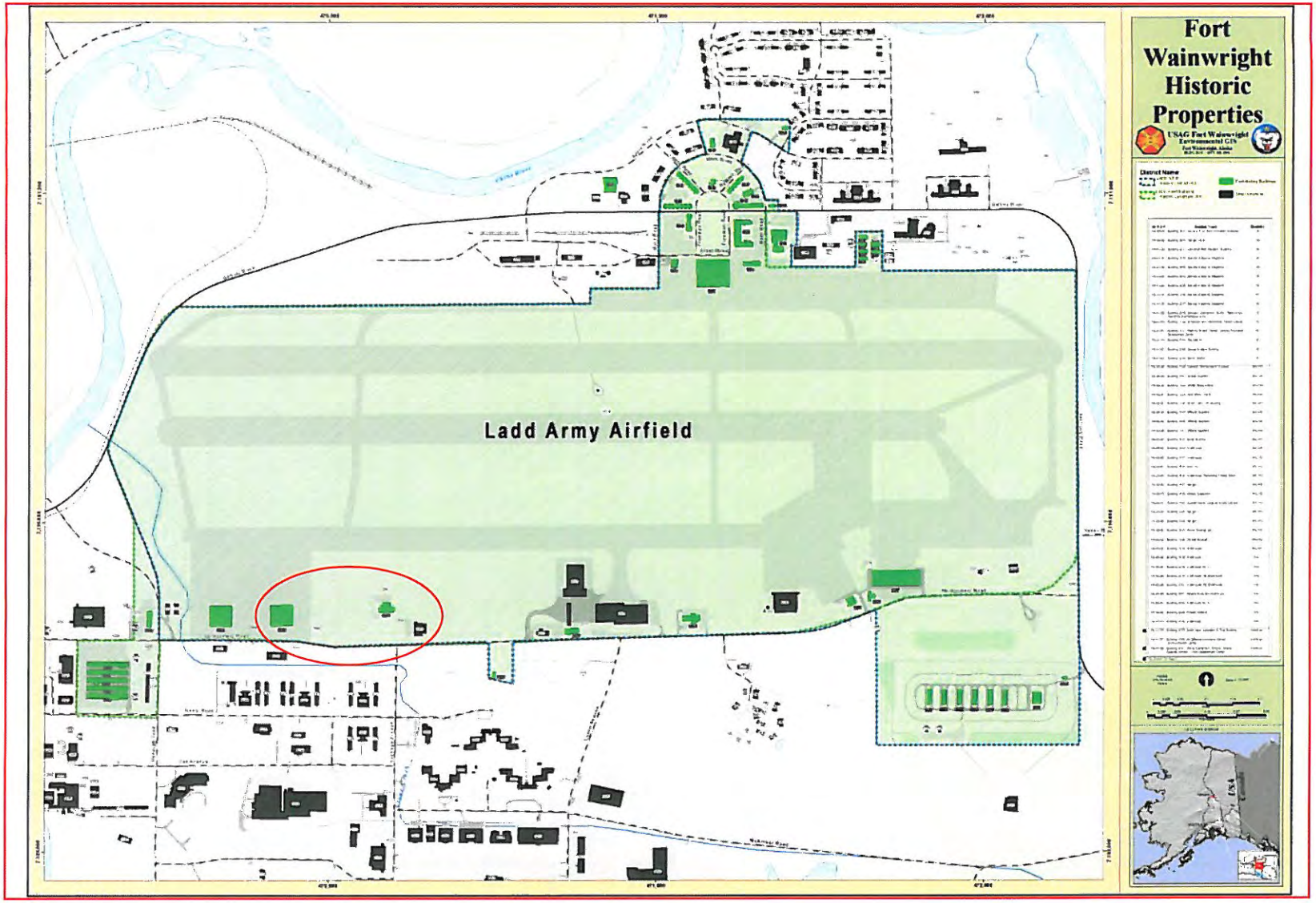


**Figure 2: APE**

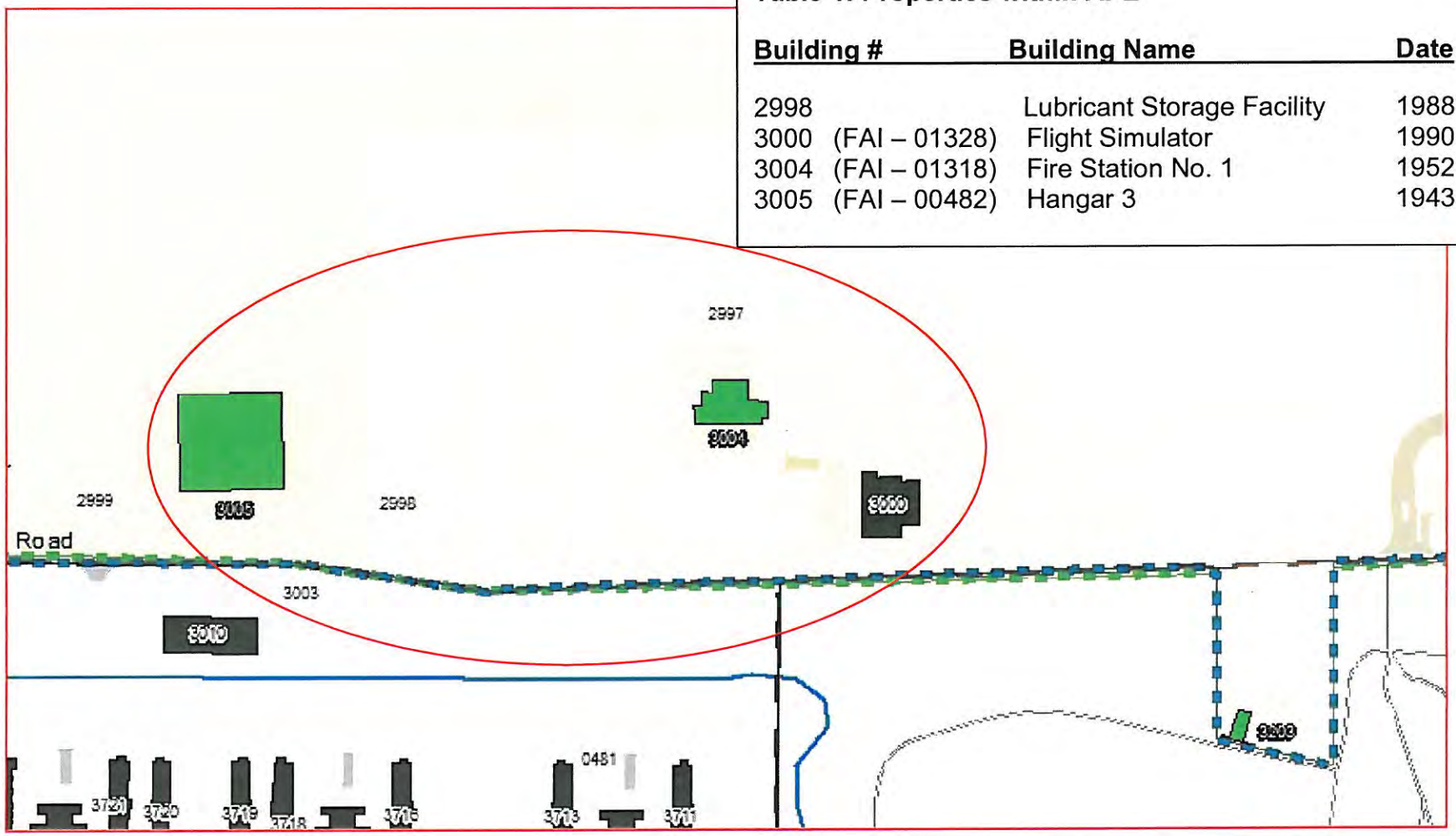



**Table 1: Properties within APE**

| Building # | | Building Name | Date |
|---|---|---|---|
| 2998 | | Lubricant Storage Facility | 1988 |
| 3000 | (FAI – 01328) | Flight Simulator | 1990 |
| 3004 | (FAI – 01318) | Fire Station No. 1 | 1952 |
| 3005 | (FAI – 00482) | Hangar 3 | 1943 |

**Figure 3: East Elevation**

**Figure 4: Northwest Oblique**

**Figure 5: South Elevation**

**Figure 6: Showing line of evergreen trees on the western elevation**

**Figure 7: Detail of elevation view from 1953 As-built**

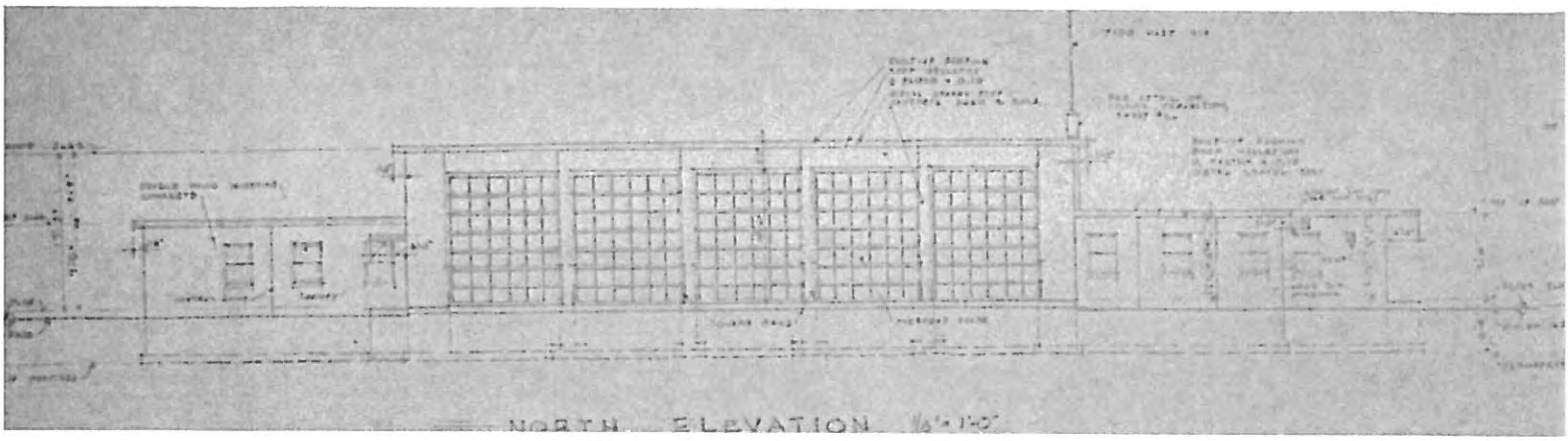
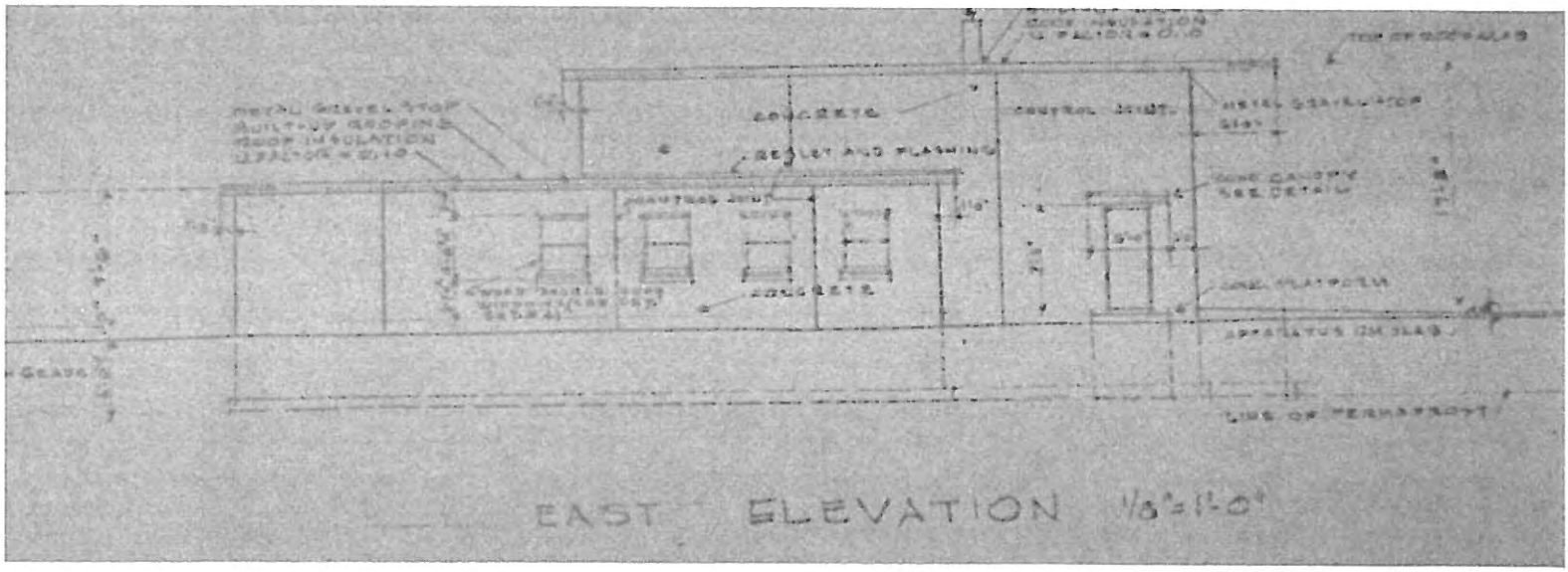



**Figure 8: Detail of elevation view from 1953 As-built**



## Figure 9: Building 3004 Proposed Floorplan

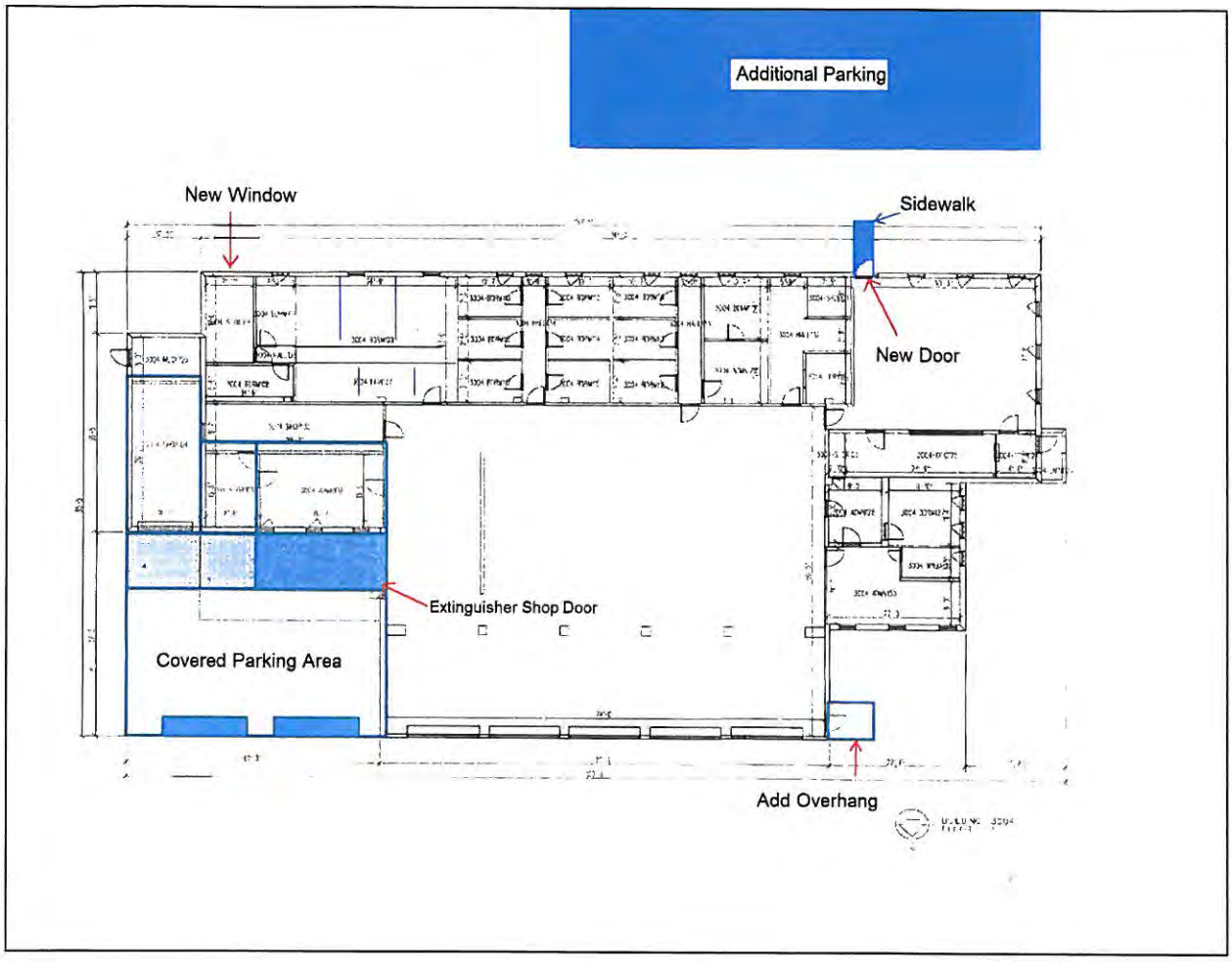
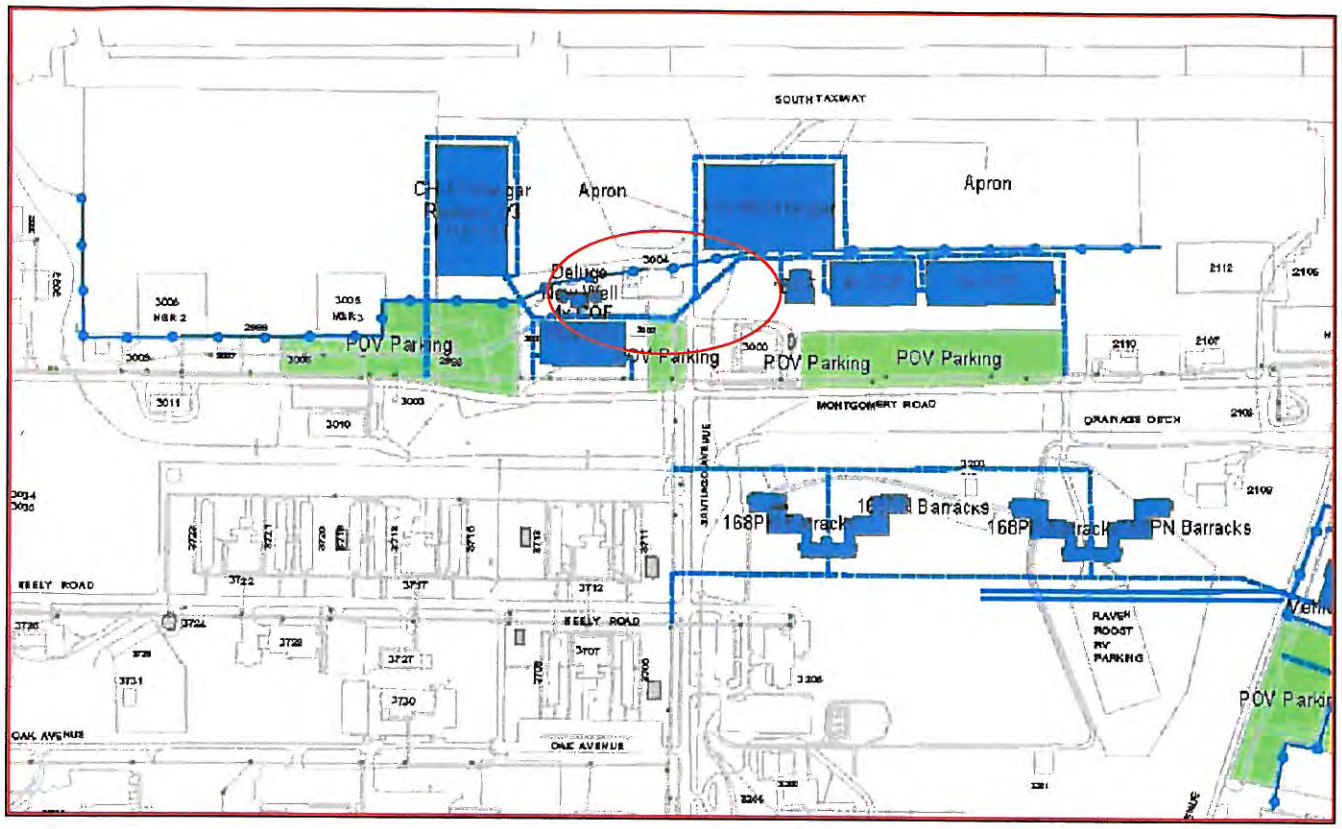



**Figure 10: Aviation Stationing Project Plan**