DOE/NV/0000939-33

A Section 106 Evaluation of Building CP-1, Area 6, Nevada National Security Site, Nye County, Nevada

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Cultural Resource Technical Report No. 114
Division of Earth and Ecosystems Sciences
Desert Research Institute
Las Vegas, Nevada

November 2016

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Cover photo: Overview of CP-1, view north (photograph dated 2016 on file at Remote Sensing Laboratory)

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Prepared for

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The work upon which this report is based was supported by the U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office under Contract #DE-NA0000939.

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SUMMARY

The National Nuclear Security Administration Nevada Field Office has vacated Building CP-1 (Building 06-CP-1) on the Nevada National Security Site in Nye County, Nevada. An Area of Potential Effects of two acres was surveyed for architectural resources by the Desert Research Institute, resulting in the recording and evaluation of CP-1 (State Historic Preservation Office Resource Number B14490) and eight accessory resources (AR1-AR8). CP-1 is eligible for the National Register of Historic Places under Criteria A, C, and D at the national level of significance. Seven of the eight accessory resources are contributing resources to CP-1.

ACKNOWLEDGEMENTS

Jacob Huffines, Indirect Support, Facilities Program Manager with National Security Technologies, LLC (NSTec) administered the project for NNSA/NFO. The NSTec organization provided outstanding support for this project on site. Darwin "Kirby" Ward, Facilities Manager, provided access to the building and other logistical support. Dudley Russell gave a detailed tour of the building's mechanical spaces. Jeff Lewis provided detailed information about the building's usage and maintenance situation. Steve Okosisi provided further information about maintenance concerns. Troy Leonard provided engineering drawings for the building from the files at NNSS. James "JT" Treppicione provided superb assistance in lighting the building and other logistics. In this he was occasionally backed up by George Robinson.

Fieldwork and report preparation were mainly done by DRI cultural resources staff. Architectural descriptions and portions of this report specific to the architecture of CP-1 were completed by Ron Reno, Ph.D., RPA who meets Secretary of the Interior's Professional Qualifications Standards for Architectural Historian. Colleen M. Beck, Ph.D., served as project director. Historical background regarding the Control Point and the NNSS, particularly at the Nuclear Testing Archives in Las Vegas, was researched and developed by Harold Drollinger and Maureen King. Steven Carragher, National Security Technologies, LLC performed detailed high-quality digital photography. King logged the photographs. Beck and Drollinger performed supplementary digital photography of the building and its environs and conducted interviews with King's assistance. Levi Keach (DRI) located historical information about CP-1 we would not otherwise have found. Cheryl Collins drafted the maps, constructed the Architectural Resource Assessment (ARA) form, and managed the GIS files for this report and ARA form. Susanne Rowe assisted with report preparation.

Byron Ristvet, Chuck Costa, and Robert Brownlee shared detailed reminiscences of CP-1 during the Cold War.

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I. INTRODUCTION

On December 17, 2015, the National Nuclear Security Administration Nevada Field Office (NNSA/NFO) vacated Building CP-1 (Building 06-CP-1) on the Nevada National Security Site (NNSS) in Nye County, Nevada (Figure 1). Starting in 1951, nearly all nuclear tests during the Cold War were controlled from this building on the facility, known as the Nevada Test Site for most of its years of operation. The test site was renamed the NNSS in 2010.

CP-1 was the command and control center where decisions about NNSS activities were sought and made; where authorization for movements about the areas forward (north) of Mercury base camp were coordinated, granted or declined, and monitored; and where problems and emergencies in the forward areas were communicated and relayed to the appropriate agencies for solution. Some of the testing duties for the Control Point included the timing and firing of nuclear tests, air operations, security, communications, weather monitoring, and radiation safety. During tests, communications were maintained through various channels to receive and pass instructions or information to the numerous testing operations, to Washington, D.C., the national laboratories, and overhead aircraft monitoring the tests. At one time, the Security Control Center, a Class A Weather Station, and the Radiation Safety Headquarters were located in CP-1, which also contained a cafeteria, a dining area, and bunk rooms.

This survey was prompted by recognition that closure of the building in place creates a situation where CP-1 is vulnerable to decay in its present and unused condition. Activities at CP-1 have been reduced gradually over time since the end of nuclear testing in 1992.

The Area of Potential Effects (APE) was determined by NNSA/NFO to be a two-acre area historically considered the space directly associated with CP-1 and available to CP-1 personnel for use. The APE is bounded on the south by an unnamed main paved road into the guarded Control Point area, on the west by the edge of the parking lot for adjacent Building CP-9, on the east by the edge of the bladed cut-and-fill terrace for CP-1, and on the north by a barbed wire security fence (Figure 2). All of this lot is either bladed or covered with asphalt. Contained within the lot are eight Accessary Resources (AR) which are much more closely aligned with CP-1 than with adjacent buildings. AR are defined by the Nevada State Historic Preservation Office (SHPO) (2013) as "…related but subordinate to the principal building. Accessory resources would not exist were it not for the principal resource." The Visual APE was determined by NNSA/NFO to be the same as the APE used for intensive survey because no exterior modifications to the resource are anticipated. The APE is located in Section 34 T11S R53E MDBM (projected) within the NNSS base called the Control Point in Area 6. It is on the 1986 Yucca Lake USGS 7.5 min. series topographic quadrangle.

The Desert Research Institute (DRI) surveyed the APE with the assistance of National Security Technologies, LLC (NSTec), resulting in recordation and evaluation of CP-1 (SHPO Resource Number B14490) and eight accessory resources (AR1-AR8). This recording of CP-1 was done in three sessions. Copies of the building form and report are on file at Nevada Cultural Resources Information System (NVCRIS), DRI, and with the NNSA/NFO, Las Vegas, Nevada.

Control Point refers to the support facilities of which Building CP-1, with its 126 rooms, is the most important part (Campbell et al. 1983:165). CP-1 refers to the entire building but it also is the designation for the first phase of construction, i.e. the original building. There were three major subsequent phases of additions to the building. The first two were called CP-1A (the east wing) and CP-1B (the west wing with the new War Room). A final phase filled in the hyphen between CP-1 and CP-1B with a Field Office. For convenience this last phase is called CP-1C in this report. Hence, CP-1 can refer either the entire building or to the first phase of the building exclusive of additions. The context makes clear which of the two meanings is intended in the various sections of this report. There were also two minor expansions consisting of a small battery room and a shelter for an emergency exit.

II. RESEARCH DESIGN

OBJECTIVES

The survey was undertaken to comply with requirements of Section 106 of the National Historic Preservation Act of 1966, as amended. Due to the decommissioning of CP-1 and its accessory resources, the purpose of the project was to formally record and evaluate CP-1 for its significance and make determinations of effect as applicable.

SURVEY METHODS

Methods used for this survey were designed to comply with *Nevada Architectural Survey and Inventory Guidelines* (SHPO 2013). In addition to this report, findings are summarized in the ARA Form, included in Appendix A. Detailed descriptions of the present condition of all 126 rooms, along with NSTec room photos, are in Appendix B.

The general history of the NNSS is familiar to DRI personnel from many years of research at the facility. Much of this is already in reports which were freely drawn upon for the present project. In addition, DRI maintains complete records of all cultural resources surveys and historic evaluations on the NNSS.

For the specific history of CP-1 and the Control Point, DRI obtained documents from various resources, drawings from the Engineering Records Library from the NNSS, Reynolds Electrical and Engineering Company (REECo) photographs from the Nuclear Testing Archive, and photographs and videos from the Remote Sensing Laboratory (RSL), all of which are operated by NSTec in Las Vegas for the NNSA/NFO. Approximately 1,500 of the available drawings for CP-1 and the Control Point were reviewed. From these, a selection was made of those with sufficient informational content to warrant detailed examination. Electronic copies were made of this subset. Those most useful for the following narrative are reproduced in this report. All drawings and other illustrations in this report are unclassified. Reminiscences about CP-1 during the Cold War by past employees are also utilized.

The architectural and engineering firms that designed CP-1 were investigated in a variety of repository holdings, including newspaper archives, internet searches, and American Institute of Architects (AIA) directories.

A preliminary walk-through of the building and grounds was done by Colleen Beck, Harold Drollinger, Ron Reno, and Steven Carragher on December 8, 2015. This visit was used to develop a survey methodology for this complex resource. Beck and Drollinger were given the opportunity to review some historic documents and identified a set of materials that could provide additional documentation of CP-1 (Figure 3). These were later transferred to DRI. At that time there was still water and power in the building. The full crew (Ron Reno, Maureen King, Steven Carragher, and James Treppicione worked in the building April 18-21 and May 2-5, 2016.

Reno made detailed field notes regarding the building exterior, each interior room and mechanical spaces, accessory resources, and present condition (Figure 4). This work also included making the necessary notes for creating a new plan for the building since the most current ones available have many inaccuracies. In the course of this work it was soon found that some rooms lack numbers, while numbering for others is inconsistent on recent plans. Therefore, the most consistent and logical number was selected in case of numbering conflicts. If a new number was required, the existing number of a nearby room was used as a prefix followed by a letter. No attempt was made to create a concordance of room numbers as they changed through time, although older room numbers are mentioned in text, when appropriate.

In addition to the two field sessions mentioned above, additional data acquisition and external photography including Accessory Resources were completed on May 24, 2016 by Steven Carragher, Maureen King, and Colleen Beck. Moderate resolution digital images were taken by DRI with hand-held cameras during every phase of field recording. This photography was aimed principally at details, such as building condition, and to document the work of field recording itself. It also served to portray the building using lenses which complemented those used by NSTec. In general, many NSTec photos provide wide-angle images at the expense of varying amounts of distortion, while the DRI images are narrower with minimal distortion. The two sets of photographs are used to illustrate this report, along with an extensive series of photographs excerpted from a video of the building made in 1988 by Edgerton, Germeshausen and Grier (EG&G) and a few older historic photos. The quality of the 1988 images is poor, but showing the interior while it was still actively in use during the period of nuclear testing makes them an invaluable resource for documenting CP-1.

NSTec Imaging Procedures by Steven Carragher

A Nikon D810 digital camera body was used, which is the highest resolution (36.3 effective megapixels) model Nikon sells at this time. All of the images were captured in the Nikon proprietary raw format, Nikon Electronic Format (nef files), converted to Adobe's open source format, Digital Negative (dng files), then processed using both Adobe Lightroom version 5 and Adobe Photoshop version CC 2014. The International Standards Organization (ISO) (sensor sensitivity) of the images varied depending on the specific lighting situation from 100 ISO to 3200 ISO. Each full size image

when opened into Photoshop as a 16-bit file measures 7360 pixels x 4912 pixels for a file size of 206.9 megabytes, opening an 8-bit file still measures 7360 x 4912 pixels and has a file size of 103.4 megabytes. Processing included minimal cropping on some images and adjusting the color and density of most of the images. However, there was no retouching in order to maintain the original pixel data. These images were resized to 1024 pixels on the widest side and compressed into JPEG format at maximum quality and are about 2 megabytes each when opened up into any image viewing software.

Most of the images were acquired using a tripod and remote trigger to reduce blurriness caused by camera shake (Figure 5). Most of the interior photographs utilized one or two Nikon SB 910 strobes in addition to the Husky LED work lights provided by the site. These lights were powered by a diesel generator and had to be moved constantly to provide adequate lighting since the power was turned off in the building during field recording (Figure 6).

The following Nikon brand lenses (Nikor) were used for the image acquisition:

Nikor 14-24 mm f/2.8
Nikor 24-70 mm f/2.8
Nikor 70-200 mm f/2.8
Nikor 28-300 mm f/3.5-5.6

Currently the original nef and dng files are backed up on two different hard drives at NSTec, along with the compressed JPEG files.

EXPECTATIONS

Since this survey was aimed at a single resource within a well-defined parcel, it was possible to anticipate in advance of work the exact number of resources and the appropriate boundaries for the APE prior to fieldwork activity. The survey area corresponds to the APE boundaries shown in Figures 1 and 2. It was anticipated that a wealth of drawings, historic photographs, and other information would be available for this building. This proved to be the case. Also, during initial planning for this project, it was thought that utilities would be on during the recording process. However, the situation changed and no electricity was available during the fieldwork, so alternate portable lighting had to be used which added considerably to the time taken for recording and photography.

INTEGRATION WITH PLANNING PROCESS

This survey will augment the existing body of formally recorded and evaluated architectural or landscape-related resources on the NNSS. Historic properties recorded on the NNSS with an association to nuclear testing are located mostly in and around Yucca Flat and Frenchman Flat. Some are in areas south and west of Frenchman Flat. In Yucca Flat are: the Japanese Village site for simulating radiation exposure rates of houses in Hiroshima and Nagasaki during World War II (Johnson and Edwards 1996); the Environmental Protection Agency (EPA) farm for researching air-borne radionuclides in the soil-forage-cow-milk food chain (Goldenberg et al. 1994; Johnson and Goldenberg 1998); the Apple-2 atmospheric test area and historic district (Johnson and Edwards 2000); structures and features in the Yucca Lake Historic District (Jones et al. 2005); buildings in the Area 6 Control Point area (Drollinger et al. 2003); the Smoky atmospheric test area and historic district (Jones et al. 2014); and the Shasta atmospheric test area and historic district (King 2015). At the north and northwest edges of Yucca Flat are historic districts for: the U12b Tunnel (Jones et al. 2006); the U12e Tunnel (Drollinger et al. 2007); the U12t Tunnel (Drollinger et al. 2009); the U12n Tunnel (Drollinger et al. 2011); the U16a Tunnel (Jones et al. 2012); and the U15 Complex (Drollinger et al. 2014). The tunnels and complex were used for underground nuclear testing. Sedan Crater, a result of a Plowshare nuclear crater experiment in 1962 at the north end of Yucca Flat, is listed on the NRHP. In both Yucca Flat and Frenchman Flat are concrete bunkers used in atmospheric nuclear tests (Edwards and Johnson 1995; Johnson 2002; Jones 2003, 2004) and wood benches for viewing of the atmospheric nuclear tests (Jones 2005). The historic district on the dry lake bed of Frenchman Flat primarily includes effects structures subjected to atmospheric nuclear tests (Goldenberg and Beck 1991a; Johnson et al. 2000).

In Area 27 in the southern part of the NNSS, the Super Kukla nuclear reactor facility was used to prepare the nuclear devices in the tests (Drollinger and Goldenberg 2004; Drollinger, Goldenberg, and Beck 2000a). In Area 25, west of Frenchman Flat, was the Nuclear Rocket Development Station for testing nuclear reactors and engines for powering space rockets (Beck et al. 1995, 1996, 2000, 2001; Drollinger 1999, 2003, 2012; Drollinger et al. 1997; Drollinger, Beck, and Goldenberg 2000a, 2000b; Drollinger, Goldenberg, and Beck 2000b, 2000c; Jones and Drollinger 2010; Goldenberg et. al. 1995, 1996). In Area 26 was the Pluto facility for the development of a nuclear-powered ballistic missile (Drollinger et al. 2005; Drollinger, Beck, and Goldenberg 2000c; Drollinger, Goldenberg, and Beck 2000d; Drollinger and Vanderslice 2011; Jones et al. 1996). The tall tower for the Bare Reactor Experiment, Nevada (BREN) was originally used in the Japanese Village experiment in Yucca Flat and subsequently relocated to Area 25 for the High Energy Neutron Reactions Experiment (Edwards and Goldenberg 2007, 2012; Goldenberg and Beck 1991b). South of Mercury and near the main gate was Camp Desert Rock, a military encampment in the 1950s for housing ground troops and other military personnel participating in the nuclear tests (Edwards 1997; Fehner and Gosling 2006:70; Winslow 1999).

III. HISTORIC CONTEXT

SETTING

The NNSS, approximately 105 kilometers (65 miles) northwest of Las Vegas, lies within the Basin and Range Province distinguished by high mountain ranges interspersed by valleys and bolsons (Dohrenwend 1987). In the northern portion of the NNSS is the Great Basin Desert, and in the southern portion is the Mojave Desert (Ostler et al. 2000; Wills and Ostler 2001). The main entrance to the NNSS and the base camp of Mercury are located toward the southeast corner of the NNSS.

The Control Point is centrally located in the eastern half of the NNSS and about 34 kilometers (21 miles) directly north of Mercury. It is reached by way of Mercury Highway, a paved two-lane road that passes through Frenchman Flat and to and over a saddle known as Yucca Pass between CP Hills to the west and CP Hogback to the east. Further northward is Yucca Flat. The Control Point, located on Yucca Pass, overlooks both Yucca Flat to the north and Frenchman Flat to the south. It is mostly on hillsides which have been bladed to form cut and fill terraces. All original vegetation has been removed and asphalt streets and parking areas have been constructed (Figure 7). Generally only a sparse growth of weeds has reoccupied the unpaved bladed areas although the surrounding hillsides support a sparse Joshua tree forest. The Control Point extends northeast all the way to the Yucca Lake playa, where a landing strip was constructed.

As shown on Figure 8 and Figure 9, CP-1 is one of the Cold War era buildings and structures that were inter-related in their roles not only as a command and control center but for various kinds of logistical support for testing. As Figure 10 and Figure 11 show, the built-up portion of Area 6 known as the Control Point ranges from the landing strip on the dry bed of Yucca Lake, along the lake shore, crosses the Mercury Highway, and extends uphill beyond CP-1 to include scattered communications and photographic facilities on the mountain above it.

On Figure 9 and Figure 10 at CP-1 there are three areas of development surrounded by a scatter of other widely spaced buildings and structures. The most heavily built-up area is in the saddle and hillside around CP-1. Buildings within and near the fenced security area around CP-1 include a security gatehouse (Gate 270), communications building, radiological sciences and technical services buildings, a fire and first-aid station, maintenance and warehouse buildings and structures, and buildings for the laboratories. Several of these buildings exhibit the same kind of unadorned concrete architecture seen in CP-1. Presently this area is quite open, but at the height of testing the intervening areas were crowded with temporary metal buildings, trailers, and vehicles. Usually when referring to the Control Point, this was the specific area people had in mind.

A little to the north are warehouses on both sides of the Mercury Highway. Finally, there is the cluster of buildings and landscape features comprising the Area 6 Equipment Yard on the shore of the Yucca Lake playa. This yard is on the lower slopes of CP Hogback.

THE COLD WAR AND NUCLEAR TESTING IN NEVADA

The Cold War was a struggle between the United States and its allies and the communist block of nations that lasted from shortly after the end of World War II in 1945 until the dissolution of the Soviet Union in 1991 (Anders 1978:4; Blohm 2003; Loeber 2002:80; Ogle 1985:20). Various events of this period have been used to mark both the beginning and end of the Cold War so there are no universally agreed-upon starting and ending dates for the conflict.

Soviet military forces occupied Central and Eastern Europe during the closing months of World War II and, using its military and political power, Soviet communism swiftly expanded into Eastern Europe and established governments favorable to the Soviet Union (Leffler 2007:32; Perkins 1991:8; Shreffler and Bennett 1970:1). After the eastern block was secured, the Soviets turned their attention westward and elsewhere. The spread of Soviet communism became increasingly of concern to the United States. Following the Truman Doctrine proposed in 1947 and the National Security Council Paper NSC-68 of 1950, the United States began rebuilding Western Europe through the Marshall Plan of 1948 and, with its allies, established the North Atlantic Treaty Organization in 1949, the Southeast Asia Treaty Organization in 1954, and the Middle East Central Treaty Organization in 1955 to contain communist expansion efforts (Leffler 2007:65; Perkins 1991:8; Powaski 2000:4). In particular, the North Atlantic Treaty Organization alliance, commonly known as NATO and the only organization currently active, served as a guarantee of American military support, including the use of nuclear weapons (Pifer 2011). The Soviet Union and its eastern European allies formed the Warsaw Pact, a similar type of agreement, in 1955 (Perkins 1991:9; Walker 1993:104).

Atomic Energy Commission

Shortly after World War II, the Atomic Energy Commission (AEC) was established by the Atomic Energy Act of 1946 following the use of nuclear weapons to end World War II. The purpose of the act was to address government control of fissionable material, nuclear experiments for military applications, and regulations pertaining to the release of scientific and related data. The aim of the AEC, headquartered in Washington, D.C., was to maintain civilian government control of the research, development, and production of nuclear energy, including nuclear weapons (Anders 1978:2; Buck 1983:1; Fehner and Gosling 2006:29). The AEC took over the research and production facilities built by the Manhattan Engineer District during World War II and set about refurbishing them. These facilities in New Mexico became the Los Alamos Scientific Laboratory, later named the Los Alamos National Laboratory (LANL), (Loeber 2002:154). Development and production of the weapons took place at Sandia Laboratory, now called Sandia National Laboratory (SNL), in Albuquerque, New Mexico; the Y-12 Plant in Oak Ridge, Tennessee; at Hanford, Washington; and the Rock Island Arsenal in Illinois (Anders 1978:3; Brady et al. 1989:18-19; Buck 1983:2; Stapp 1997).

Containment Strategy

The containment strategy proposed by President Harry Truman in 1947 provided the rationale for a nuclear arms buildup by the United States and was essentially followed throughout the entire Cold War. These weapons were thought to represent the most effective means for deterring Soviet expansion by confronting them with the prospect that aggression on their part could result in an escalation to strategic levels and total destruction. After World War II, the United States accelerated its nuclear weapons program and increased its weapons stockpile. American officials, from the President to members of Congress and military advisors, encouraged the further development of the weapons that ended World War II, with the military leading the offensive, and nuclear weapons being deployed in key global locations, especially in Western Europe (Powaski 2000:5).

Department of Defense

The National Security Act of 1947 established the Department of Defense (DOD) by consolidating the War Department, the Navy Department, and the newly created Department of the Air Force. The Armed Forces Special Weapons Project was formed in 1947 as the principal agency for nuclear weaponry within the DOD. The agency, with its Field Command located at Sandia Base in Albuquerque, New Mexico, had a continuing role in the testing of nuclear weapons at the Pacific Proving Grounds and later at the NNSS (DTRA 2002).

Early Days of Nuclear Testing

As some scientists predicted (Langmuir 1946; Seitz and Bethe 1946; Urey 1946), after the use of the first atomic weapons to end World War II, a nuclear arms race began in 1949 when the Soviet Union detonated an atomic device (Bundy 1988:199; Friesen 1995:4; Reed and Stillman 2009:33). After that date the Soviet Union built up its own nuclear warfare capability as rapidly as possible. Following the first nuclear detonation by the Soviet Union, increased efforts for research and production were implemented in the United States (Anders 1978:4; Ogle 1985:20). In 1952 the United States detonated a thermonuclear device (Blohm 2003:40; EG&G 1954; Fehner and Gosling 2006:84; Herken 2002:257; Miller 1991:116). The Soviet Union followed suit. Tensions mounted, and the arms race between the two superpowers began.

National Laboratories, Facilities, and Federal Agencies

The Lawrence Livermore National Laboratory (LLNL) was created in 1952 as a branch of the University of California Radiation Laboratory at Livermore, California to conduct nuclear research, broadly similar in scope to the LANL activities (Brady et al. 1989:18; Friesen 1995:5). Both became national laboratories in 1979 (Loeber 2002:154). Other facilities added to the nuclear weapons complex included manufacturing plants at Rocky Flats near Golden, Colorado; the Kansas City Plant in Missouri; the Burlington Army Ordnance Plant in Iowa; the Pinellas Plant in Largo, Florida; Mound Laboratory in Miamsburg, Ohio; Savannah River in South Carolina; and the Pantex Plant near Amarillo, Texas (Anders 1978:4; DOE 1997:27; Loeber 2002). Research facilities were also established at the Argonne National Laboratory in Illinois for reactor development, at the Oak

Ridge National Laboratory in Tennessee for radioisotopes, and at the Brookhaven National Laboratory in New York for reactor physics, high-energy accelerators, and the biomedical sciences (Buck 1983:2).

The Armed Forces Special Weapons Project evolved over the years through reorganization and mission change into the Defense Atomic Support Agency, the Defense Nuclear Agency (DNA), the Defense Special Weapons Agency, and since 1998, as the Defense Threat Reduction Agency (DTRA). This agency's first mission when initially formed was to train military personnel in the assembly, storage, and firing of the atomic weapon, tasks previously conducted by civilian scientists. Soon, the agency was assigned the tasks of studying radiological warfare and the effects of nuclear weapons on targets underwater, underground, and in the atmosphere (DTRA 2002:71-72). More tasks soon followed as the nuclear weapons industry became more adept. The agency began to provide specialized training and technical support, coordinated storage and oversight of the nuclear weapons stockpile, and became more involved in the planning and operation of the weapons tests (DTRA 2002:80, 104). Most importantly, representing the DOD, the agency participated in the development of nuclear weapons and associated systems and served as an integral information source in Cold War strategy for the United States. In the late 1970s and early 1980s, during the buildup of the military and national defense of the United States, the objective for the agency was survivability from a nuclear weapons attack (DTRA 2002:259). Efforts were made to improve and harden communication systems, airplanes and their components, missiles and their components, and underground bunkers. Today, a primary focus for this agency is combating weapons of mass destruction, including biological, chemical, and nuclear.

In 1974 the AEC was divided into the Nuclear Regulatory Commission for regulating the nuclear power industry and the Energy Research and Development Administration to manage programs for nuclear weapons, naval reactors, and energy development (Buck 1983:8). In 1977 the Federal Energy Administration, the Energy Research and Development Administration, the Federal Power Commission, and programs of various other agencies were combined to form the U.S. Department of Energy (DOE). The role of the newly created department was to manage the nuclear infrastructure and administer energy policy. The NNSA, a subagency within DOE, was created in 2000 by the United States Congress and its primary missions are to maintain the safety and security of the nuclear weapons stockpile, promote nuclear nonproliferation, participate in counter proliferation and counterterrorism, safeguard against domestic and international radiological threats, and supply naval reactors for the U.S. Navy. The NNSA currently oversees the Nevada Field Office and the NNSS.

United States Nuclear Testing

Nuclear weapon tests for civil and military effects and for scientific means to improve the weapon were conducted worldwide in the atmosphere, underwater, underground, and in outer space (NNSA/NFO 2015; Norris and Arkin 1996). As the weapons were improved to be stronger, they were also delivered faster and more accurately (Hoffman 2009:15). At the outset, it took hours to

deliver a nuclear bomb to its target by aircraft and by the end of the Cold War a missile could deliver a bomb within minutes.

The United States has conducted 1,026 nuclear tests and another 28 with Great Britain, totaling 1,054 tests (Bergkvist and Ferm 2000; NNSA/NFO 2015). Of these, 210 were atmospheric tests, 839 were underground tests, and five tests were conducted underwater. Tests were conducted at the Pacific Proving Grounds (n=106), at the NNSS (n=928), in the south Atlantic (n=3), and at various places within the United States (n=17). Most tests by the United States were weapons related or for weapons effects (n=990). Other tests were for safety experiments (n=88), the Plowshare program (n=36), and the Vela Uniform program (n=7).

Nuclear Testing at the Nevada National Security Site

With the decision to accelerate the development of nuclear weapons in the late 1940s, it became apparent that testing within the boundaries of the continental United States would significantly decrease the time and effort needed to conduct the tests and reduce the cost (Campbell et al. 1983:171; Lay 1950; Ogle 1985:44; Tlachac 1991). In the late 1940s, both low and high yielding nuclear tests were conducted at the Pacific Proving Grounds. Transporting personnel and equipment back and forth between the test area and the scientific laboratories in the continental United States was expensive and time-consuming. The Armed Forces Special Weapons Project conducted a top secret feasibility study named Project Nutmeg to find a suitable nuclear test site in the continental United States (NNSA/NFO 2004; Fehner and Gosling 2006:36). The Korean War, which began in 1950, also provided impetus to finding a continental testing site because of security concerns for the Pacific testing site (DTRA 2002:77; Friesen 1995:4). The ideal continental test site would have favorable and predictable weather and terrain conditions making it possible to test year round. It would also be under federal control and have an infrastructure already in place (Lay 1950; Tlachac 1991). Other factors were security, remoteness from populated areas, and reasonably close proximity to the scientific laboratories in New Mexico. The Las Vegas Bombing and Gunnery Range in southern Nevada was the place chosen that best met these conditions (Fehner and Gosling 2006:43). The range also had large flat terrain for conducting the tests, easterly prevailing winds away from the densely populated west coast, and natural topographic barriers to screen the test areas from public viewing. Based on the recommendations of LANL, the AEC, and the National Security Council, President Truman approved the new test site location on December 18, 1950.

The AEC made use of the existing nearby facilities and services of the U.S. Air Force to prepare for the first tests at the new test site (Fehner and Gosling 2000:50). Lacking facilities at the site, the McKee Construction Company and REECo were hired to begin preparing for the first tests, focusing most of their attention on the ground zero area in Frenchman Flat (Campbell et al. 1983:174; Fehner and Gosling 2000:51, 64). Both companies worked as construction contractors at the LANL in New Mexico and were familiar with the proposed tasks. The Ranger nuclear test series began on January 27, 1951 with the Able test, and ended with the Fox test on February 6 (Fehner and Gosling 2000:70, 75; NNSA/NFO 2015; Ogle 1985:43-44; Titus 1986:58). As a safety measure, the primary testing area was moved from Frenchman Flat to Yucca Flat for the next series of tests

scheduled for the fall of 1951. Construction of permanent facilities also began with utility and operational structures, communications, a Control Point, and additional accommodations (Fehner and Gosling 2000:81). Haddock Engineering constructed Buildings CP-1 and CP-2 at the Control Point, the first structures at Camp Mercury, and the test sites in Yucca Flat for Operation Buster-Jangle in the fall of 1951 (Campbell et al. 1983:175). The first land withdrawal by the AEC establishing the official nuclear weapons testing ground in southern Nevada occurred February 12, 1952 under Public Land Order 805. Additional land parcels were obtained under public orders and memoranda of agreement.

Nuclear testing at the NNSS can be divided into two types: atmospheric tests from 1951 to 1962 and underground tests from 1957 to 1992. For atmospheric tests in the 1950s, nuclear devices were initially dropped from airplanes, but later were placed near the ground, on top of towers, and eventually elevated by balloons to the desired height. Main objectives of this early testing were for monitoring, measuring, perfecting techniques, and technological improvements of the nuclear weapons. Other objectives included physical effects of nuclear weapons and were typically carried out by the DOD (DTRA 2002:106). These effects tests were an extensive part of the testing program in the 1950s (Ogle 1985:84-87). At that time, test objectives included the physical effects of detonations on structures and objects. Physical experiments measured effects on airplanes, tanks, jeeps, automobiles, clothing, docks, houses, underground structures, and radio and radar transmissions. In Frenchman Flat, structures and buildings such as underground shelters, domed subterranean structures, concrete and brick buildings, a school, a metal bridge, and a bank vault were constructed and tested for civil defense (Scammell 1999; Fehner and Gosling 2006:172-173; Johnson et al. 2000). U.S. military personnel, crouching in foxholes and trenches, participated in some of the tests in Yucca Flat and Frenchman Flat in order to prepare for nuclear warfare (Edwards et al. 1985; Goetz et al. 1985; Harris et al. 1981; Massie et al. 1982; Miller 1991; Ponton et al. 1981; Viscuso et al. 1981).

The first underground nuclear test, named Uncle, was a crater test in Yucca Flat in November 1951 (NNSA/NFO 2015). Several years later, underground containment of nuclear explosions became a major focus (Carothers 1995:16, 20; Johnson et al. 1959:2; Malik et al. 1981:12). In 1957 and 1958, there were several underground nuclear tests in unstemmed holes. The earliest one, Pascal-A, was the first non-crater underground test on the NNSS. The first underground nuclear detonation that was contained was the 1957 Rainier tunnel test. In 1958, testing in shafts and tunnels increased, reflecting the increased emphasis on containment. Radioactive fallout was a safety and health concern for both the workers doing the tests and for the public at large. Following the Limited Test Ban Treaty in 1963, all nuclear tests at the NNSS were designed to be placed and contained underground (Friesen 1995:6; Schoengold et al. 1996:2). Initially, underground testing posed a new engineering challenge and learning experience, and not all tests could be contained right away. After a number of underground nuclear tests had been completed and studied, it was confirmed by using various methods simultaneously that radioactive material from nuclear tests could be contained (Malik et al. 1981:12-15).

Nearly all the underground nuclear tests, with the exception of the near surface or crater tests, were either at the bottom of a vertical shaft or at the end of a horizontal tunnel (Campbell et al. 1983:168). Most vertical shaft tests were for the purpose of developing new weapon systems, while the tunnel tests were generally for evaluating the effects of radiation from a nuclear explosion on military hardware and systems (Brady et al. 1989:2; OTA 1989:18; Wolff 1984). The vertical shaft tests were the most common, representing over 90 percent of tests, and were primarily either on Yucca Flat or, if they were large-yield tests, on Pahute Mesa. The borehole for the vertical shaft tests was up to 10 feet in diameter and from 600 to more than 5,000 feet deep (OTA 1989:16). Some tunnels reached over a mile in length from the portal. The first underground shaft test, codenamed Pascal-A, took place in 1957 in Yucca Flat (NNSA/NFO 2015; Fehner and Gosling 2006:178). The first underground nuclear test in a tunnel, codenamed Saturn, was a safety experiment in 1957 (NNSA/NFO 2015). The Rainier nuclear weapons-related tunnel test a month later was the first contained underground nuclear detonation (Carothers 1995:31; NNSA/NFO 2015; Fehner and Gosling 2006:178-179; Jones et al. 2006). The Hunters Trophy test in 1992 was the last nuclear weapons effects tunnel test at the NNSS (Drollinger et al. 2011; NNSA/NFO 2015; DTRA 2002:296). The last nuclear weapons test at the NNSS was Divider, a week later, in a vertical shaft in Yucca Flat (NNSA/NFO 2015). Between 1951 and 1992, 928 tests, including 24 involving Great Britain, were conducted at the NNSS, and of these, 100 were atmospheric tests while the remaining 828 were underground tests.

During a test, most site workers were not allowed into the forward areas north of Mercury, and one of the most important safety roles of staff at CP-1 was to keep track of every single person who had to be in forward areas during a test. If they were on the site at all, they usually waited out the test in Mercury while a security checkpoint (Gate 200) at Checkpoint Pass just south of Frenchman Flat ensured they did not go into the forward areas. Located at CP's position in the pass on the main highway from the main support base of Mercury to the forward areas where most testing took place, another security checkpoint (Gate 300) provided another level of control over traffic into the areas of active testing to the north.

A self-imposed moratorium on nuclear testing by the United States was established in 1992. In 1996, the United States signed the Comprehensive Test Ban Treaty to ban all nuclear tests, but it has not been ratified by the United States Senate for various reasons (Medalia 2003). Since 1997, the United States has conducted subcritical experiments at the NNSS to determine the status and capability of its stockpiled nuclear weapons. Subcritical testing refers to an insufficient amount of fissionable material to maintain a chain reaction and become critical. Russia started its subcritical program in 1998 (Medalia 2002).

Following the moratorium on nuclear testing, the number of workers on the site declined substantially, eliminating the need for many nuclear testing era facilities (NNSA/NFO 2013). The NTS became the NNSS in 2010, reflecting the change in mission for the facility. Currently, the NNSS encompasses an area of approximately 1,360 square miles or 870,397 acres, and spans 89 miles north-south and 30 miles east-west. Infrastructure consists of 300 miles of paved roads, 500

miles of powerlines, three public water systems, three runways, two helipads, test areas, and numerous support and office buildings and warehouses.

IV. RESULTS

CP-1 (SHPO Resource Number B14490; NNSS Building Number 06-CP-01) is inside a fenced security area shared by several related buildings and structures. Eight of these are designated Accessory Resources (AR1-AR8) because they are so closely related to CP-1. CP-1 and the eight Accessory Resources are the only resources recorded and evaluated during this survey.

This section begins with a general description of the building as it now stands, followed by chronological descriptions of CP-1 at various stages of its complex history and culminating in its present state. All previous phases of building construction are described in past tense because so many of the construction details have been altered or removed through time. It is recognized that many other details have survived to the present.

Except for minor additions, CP-1 is built entirely of unpainted reinforced concrete. Initially it was a rectangular-plan one-story building with a walk-in basement and a low-pitch gable roof. It has a major addition (CP-1A) on its east side, which is also one-story with walk-in basement. CP-1A has a nearly flat-hipped roof and is linked to the original building with a flat-roofed hyphen. The second major addition (CP-1B) is also one-story with a walk-in basement, but unlike the other portions of the building it has a partial second floor or mezzanine. CP-1B has a low-pitch gable roof and is connected to the west side of the main building by means of a narrow partial hyphen which became the principal entrance. The final interior expansion (never numbered but called CP-1C in this report) completed the hyphen between CP-1 and CP-1B. The only new wall constructed as part of this expansion is on the north side and is built of lightweight metal. An emergency exit enclosure and a battery room, both sheathed with metal, completed the additions to CP-1. Ultimately the building with all of its additions cost $3,315,752 according to the Facilities Information Management System maintained by NSTec.

Due to expected blast effects from above-ground nuclear testing and possible radioactive fallout hazards, the exterior has a minimum number of steel doors and no operable windows. Fenestration is limited to a row of small viewing ports along the north side of the building. Communications equipment necessary for the building's main function is prominent from all sides. Included are suspended cables, cable troughs and conduits attached to the walls, and a large multi-story microwave tower. Not visible is an array of buried communications and power cables.

The interior of CP-1 has undergone extensive alterations through time. Because personnel sometimes spent days in the building, CP-1 has all the necessary support facilities, including a cafeteria, bunkrooms, laundry, and showers. It is capable of being shut off from the surrounding atmosphere and has its own uninterruptible sources of electrical power consisting of diesel generators and banks of storage batteries.

ORIGINAL DESIGN (1951)

The original Control Point was located 13 kilometers (8 miles) slightly southwest of the ground zero in Frenchman Flat for Operation Ranger, the first nuclear weapons test series in 1951 (Fehner and Gosling 2000: 64; Maag et al. 1982:22; NNSA/NFO 2015). This operational headquarters for the AEC consisted of a hastily reconstructed surplus wood building that was braced on one side as a precautionary measure before the first test (Figure 12). The Control Point had a control room, an administrative office, first-aid station, and showers for decontaminating personnel. Construction of permanent facilities, including a new Control Point, began soon after this test series ended. The buildings at the second permanent Control Point are the oldest structures associated with nuclear testing on the NNSS and represent a type of vernacular architecture specifically constructed for the systematic testing of nuclear weapons by the United States.

Even while the earliest Frenchman Flat tests were being conducted, it was realized that most future testing would take place farther from Highway 95 and the newly-established base in Mercury (Ogle 1985:44). Although the position selected for CP is on the ridge between the two basins, the new control building was designed with an orientation on Yucca Flat, not Frenchman Flat. The 23,316 square foot building cost $658,158.22 of which $125,694.54 was for engineering and inspection (REECo 1955). Although it has an official construction date of 1951 in the Facilities files at NNSS, as-built stamps on the engineering plans date to January 18, 1952 and February 1, 1952. Notes on these plans indicate that major changes to such things as roofing and ceilings were still being done in early 1952. It is possible to find 1951 as-built stamps on detail drawings; therefore, some parts were finished in 1951. The 1952 dates support Ristvet's (2016) recollection that the building was finished in 1952 prior to the Tumbler-Snapper tests in Yucca Flat. Apparently, CP-1 was in use in 1951 prior to completion of all construction activities.

The new CP-1 had a simple rectangular plan, and from the beginning it was intended to work in concert with an array of temporary trailers on the adjacent parking lots (Figure 13). Walls were bare concrete showing marks from plywood forms. The only finishing work done after form removal was filling in the form-tie divots. The concrete was designed to withstand about 5 psi peak overpressure to hold up under nearby atmospheric testing (Ristvet 2016).

As shown on Figure 14, the west façade, with its principal entry into the building, presented an extremely long and low profile since the basement was not visible from uphill. The steel panel double entry doors and all others were set directly into the concrete wall without any surrounds other than the narrow steel framing. The main entry was nearly centered in the façade. From this vantage a small observation balcony with steel railing was visible on the roof. It was accessed via a hatch from the attic. The main air exhaust shaft was capped with an L-shaped metal vent.

On the east façade, the Transformer Room retains a perfectly preserved example of the original steel panel doors (Figure 15). Another door on this facade enters into the new Boiler Room. The door was recycled from the original Boiler Room during the 1971-1972 remodel. The south end of the

building also had a double door in the west half of the façade. Another elaboration was a concrete cable vault entry with a top hatch.

Most of the north façade had a cantilevered concrete deck with steel pipe railing. No openings of any kind were in this end of the basement. On the first floor the east portion of the façade outside the Control Room had a series of three observation ports and a single steel door. These were followed by four more ports. An additional port was added to the original plans near the west end of the façade. All of these ports were fixed 2 foot x 1 foot 6 inch horizontally-oriented ½ inch thick tempered glass mounted in heavy steel frames.

The east (downhill) façade was the most imposing because it revealed the basement level for most of its length. There were no openings in the first floor to this side of the building. Near the center of the façade was the double door into the Transformer Room and a small steel louvered vent. In the center were two large louvered vents for the Mechanical Room. To the right of these was the wide double door to the Boiler Room flanked by two smaller louvered vents. Finally there was the double door for the basement Corridor. Visible on the roof above the Boiler Room was the stack for the boiler.

The interior structure of the building is shown in Figure 16. Both floors and the roof were 4 inch concrete. Basement walls were 10 inches thick and first floor exterior walls were 8 inches thick. Concrete below grade was coated with an asphalt compound. Floor joists, rafters, purlins, and the 14 x17 inch columns were all reinforced concrete. Cast concrete pilasters along the interior wall surfaces helped carry the loads generated by the horizontal structural members (Taly 2001:6.80). The sectional drawings show two air duct shafts extending the entire height of the building. Some first floor spaces had dropped ceilings while others extended to the underside of the roof, some of which were painted while others had 1 foot square acoustic tiles glued to them (Figure 17).

The detailed plan of the first floor is shown on Figure 18, and a diagram of the functional organization or parti for that floor is summarized on Figure 19. Upon entering the building and passing through a lobby, the principal north-south corridor would have been entered. This portion of the building was used for a variety of administrative and support purposes, along with minor maintenance spaces and restrooms.

The focal point of the building was the Control Room in its northeast corner, at the terminus of the northern branch of the main hallway. It had a superb view of Yucca Flat through the ports or from the deck just outside the door (Figure 20). The entire building was oriented with this particular view in mind. Most of the rest of the northern end of the building was occupied by technical support and radio communications rooms. A single row of rooms lined the west side of the building adjacent to the main corridor. North of the entrance were administrative spaces while technical support of various kinds occupied those to the south. At that time, the only lab involved was LANL, and there was almost no AEC involvement in the actual tests (Ristvet 2016). Hence, a single, fairly small control room was adequate.

The larger portion of the building east of the main corridor and on the south side of the northern corridor was a maze of rooms of varying sizes, packed as many as four deep away from the main corridor. Working down this block of rooms from north to south there was the Control Point Office and related administrative spaces, and the Security Office on the north hall. The Control Point Office had direct access to the Control Room. Next off a short corridor were radiation monitoring and restrooms. In the center of the building directly opposite the front office was the large Air Force Office of Atomic Testing (AFOAT) Office. South of that was a complex of United States Weather Bureau spaces and several communications spaces including the large Teletype Room. The southeast corner of the building was dedicated to technical support.

Aside from the few concrete interior walls of the staircase and two ducts, all of the partition walls were wood-framed stud walls clad mostly with drywall. These walls were anchored to the grid of columns arrayed at intervals ranging from 18 feet 8 inches to 23 feet. Since the ceiling was not supported by these interior partitions, it allowed for great flexibility in room placement. As the columns were considerably larger than the thickness of the interior walls, they protruded and normally were not sheathed. Corresponding to every alignment of columns was a pilaster protruding inward from the outer wall to help support the concrete framing of the floor and roof.

The basement plan is presented in Figure 21 and the design in Figure 22. Exterior entry was from the east, where, after a lobby, it continued in the northern leg of an L-shaped corridor. The other point of access was a concrete stairwell at the junction of the two corridors. The usage plan here was far simpler than that of the first floor. A technical support area was directly beneath the Control Room and more support areas were in the southwest corner. The northwest corner was occupied by the main personnel support spaces, including a Galley, men's and women's dormitories, and restrooms. Mechanical spaces, including the Boiler Room, Mechanical Room (mostly devoted to air handlers), and the Transformer Room, occupied the entire area southeast of the corridors. Here there was much less flexible division of space because the perimeter and interior walls of the mechanical area were all concrete, as were the staircase and adjacent air duct. The same column pattern was present in the basement as upstairs. While the inner north-south corridor followed a concrete wall and a row of columns, the east-west corridor was awkwardly placed between columns. This required pouring the concrete wall that defined the northern boundary of the machinery spaces between columns instead of incorporating the columns into the wall. In addition, the stairway jutted into the corridor.

The layout of the mechanical area in the basement is depicted in Figure 23, showing two boilers in the Boiler Room. The Mechanical Room had three air conditioning units and an evaporative condenser.

The interior finish is detailed in Drawing H&N ATS-F/1002, 2 of 66, 1951. Floors were bare concrete, weatherproofed concrete, or asphalt tile (called linoleum tile in this report). Walls were drywall or exposed concrete with 3 ½ inch wood baseboards at stud walls. Ceilings were drywall, acoustical plaster, perforated acoustical tile, or concrete. Most of the building had painted wainscot which was waterproofed in the restrooms. The Galley boasted a padded built-in booth.

The 2/12 pitch side-gable roof was 4 inch concrete under reflective composition material. No attempt was made to disguise the building from aerial observation. Eaves projected a moderate 1 foot 6 inches.

EARLY MODIFICATIONS (1952-1964)

From 1951 to 1958, nuclear testing rotated between the Pacific Proving Grounds and the NNSS. When NNSS tests were being conducted, it was hectic at CP-1 and the NNSS in general. During a testing hiatus, work continued on development of infrastructure and planning for the next test series. From August 1958 to late 1961, there was little activity at CP-1 due to the testing moratorium. During that time, most testing infrastructure was not in use, with dismantlement in some cases (Ogle 1985:6).

Mason & Hanger-Atlas Mason Co. Engineers/Contractors of Las Vegas designed several early modifications to CP-1. In 1954 a Motor Generator and Battery Room was added to the exterior of the building to serve as a backup power source. It was under the north balcony, which formed its roof, and extended from the northeast corner of CP-1 westward for 30 feet. The door at the east was louvered flush metal. Walls were made of I-beams clad with galvanized corrugated metal siding, and the floor was a concrete slab (Mason & Hanger C1-S1, 1954). That same year a detailed plan shows four radar scopes installed in the Air Operations Center with provision for the addition of what were likely among the first cable conduits to be attached to the outside of the building. Also, a 20 x 23 foot antenna shelter on a wooden frame platform was built on the roof for the radar (Mason & Hanger C-1-S2, C-1-S3, 1954). The steel ridgeline observation deck that still exists was also designed by this firm in 1954 (Mason & Hanger C399-S1, 1954). It was used by EG&G to take high-speed film of tests to supplement other photo stations (Ristvet 2016).

Figure 24 shows the first floor near the end of the first decade of use for CP-1. This plan is usefully supplemented with Figure 25 which shows partitioning that appears to have been done in 1957, but is not reflected in the 1958 plan. The 1958 plan shows expansions of both the Air Operations Center and the Control Room. The Air Operations Room acquired a storage mezzanine during this remodel which extended partway over the Control Room (REECo CP1-S1, 1956). The Conference Room was subdivided into four rooms. The general first floor parti for the period is shown in Figure 26.

These figures show that CP-1 evolved considerably during this time as a reflection of increasingly demanding tests. The Control Room had about doubled in size. One drawing of the Control Room shows the addition of a Balloon Winch Console and Balloon Microwave Racks (H&N JS-006-CP-1-W2, 1959). Technical support spaces replaced the administrative areas along the northwest corner of the building. In contrast, the Weather Service space was dramatically reduced in size to make room for the new tenants. While LANL dominated the building in 1951 to the point that it was not necessary to call out its presence on plans, by 1958 LLNL had begun have more personnel in CP-1.

This is reflected by the new division of the building. The AEC occupied spaces immediately south and southwest of the shared Control Room. LANL took over a reduced area in the northwest corner of the building, SNL had most of the spaces in the southern two-thirds of the west wall, and LLNL had the largest contiguous block of rooms in the central southeast portion of the building. Communications became concentrated in the southeast corner.

In contrast to the changes in both layout and use on the first floor, it can be seen in Figure 27 and Figure 28 that the basement spaces remained nearly unchanged. The most important change was doubling the size of the cafeteria, indicating a need to support a much larger workforce in CP-1. An important addition in 1962 was a large air conditioning unit, mounted in the Generator and Battery Room. The intake for this unit was over the room's door (REECo CP1-M10, 1962).

CP-1A IS ADDED (1965)

It was becoming clear that this building, which seemed huge when constructed, was no longer large enough to accommodate the increased demands placed upon it. Beginning in 1963, plans were developed to add a new wing to the northeast corner of the building adjacent to the Control Room. It was called CP-1A and would contain a new Control Room and cable runs. The old Control Room would be converted to a Monitoring Room. Various sources indicate this addition was not fully occupied until 1965. Figure 29 shows the interior of the new Control Room as it looked immediately after being occupied in 1965.

The main rectangular block of the CP-1A addition was 25 x 44 feet and connected to the east wall of CP-1 with an 8-foot-wide cable vault and entry corridor or lobby (Figure 30). Its concrete wall, floor, and roof thicknesses closely matched those of CP-1. All elevations presented a full two stories because the connection with the basement of the main building was concealed. The south elevation shows no openings in the first floor. The main eastern basement entrance with its two flush steel doors was at the left. Another set of double steel doors to the Mechanical Room was near the center. This view of the south elevation shows how the flat roof of the connecting Cable Vault was somewhat lower than the CP-1 main roof. The Cable Vault walls were an integral part of the addition except for the west wall, which was the existing east wall of CP-1. The east elevation shows a single steel door at basement level and a steel staircase leading to the northern observation deck. Again, there were no openings on the first floor.

The northern façade was split by a continuation of the observation deck on CP-1. The first floor had a steel flush door at the left with three observation ports matching those of CP-1 to its right. Another matching door was centered in the Cable Vault. There were no openings into the basement.

The nearly flat roof on CP-1A drained to the north. It had the same overhangs as CP-1, but had built-up roofing laid over 2 inches of insulation with an aluminum gravel stop around the edges rather than composition material. Instead of poured-in-place concrete, the roof of the Cable Vault was made of 2-foot-wide precast concrete panels, also called planks.

The large basement room was subdivided roughly into fourths in 1965. The plans for this division were made near the end of 1964, so this work was likely done shortly after the end of construction of the new wing (Figure 31). A suspended ceiling was put in these spaces at the same time.

LATE 1960S MODIFICATIONS (1965-1968)

The mid 1960s marked the increase of AEC control over testing operations. This coincided with the shift from atmospheric to underground testing and its complexities. This change is reflected in a major redesign of the central part of CP-1 as shown in Figure 32. The AEC Operations Room was reconfigured for use by the Test Manager's Advisory Panel (Figure 33). This involved erecting a new partition wall on the south side of the room (numbers 220 and 223A on Figure 32). This room was the prototype for the AEC War Room. The same remodel removed the partitioning of the central Conference Room to now serve as the Readiness Briefing Room, complete with a stage and large viewing screen. This room served as the prototype for the room of the same name that would be constructed later in CP-1B. It can be seen on Figure 32 that the walls for CP-1A are present, so this was part of a general reorganization of space in CP-1 and the new CP-1A at this time.

Figure 34 shows a complete remodel of the Control Room in CP-1. Most of the room beyond a carpeted entry area at the south was raised one foot off the ground with an "infinite access floor" of panels supported by a grid of metal stringers and screw pedestals. This same system was later introduced in several places of the building and the DNA Playback Trailer (AR3) to accommodate masses of cables along with air ducts. The north door retained its full height and was accessed via a ramp. Railings were installed at edges of the raised platform. Walls were furred out and covered with walnut veneer plywood panels to cover the many cables which had accumulated along them.

CP-1B IS ADDED (1969)

CP-1B is the final major addition to CP-1. Design began in 1966, but it was not until 1969 that it fully entered service according to as-built date stamps on the drawings. There is evidence that it was in use to at least some extent by 1968. Despite its superficial similarity to the rest of the building due to its concrete construction and similar massing, it was a markedly different design in response to increased knowledge of the seismic effects to be expected from continued underground testing and to the fact that it is centrally designed around two key spaces – the War Room on the first floor and the Briefing Room in the basement. CP-1B no longer needed windows and a balcony for a view of the tests. In contrast to atmospheric tests, there was little to see during an underground test. Also around this time, visuals could be provided by camera feeds to the building.

CP-1B elevations are shown in Figure 35. All exterior walls were 16 inches thick for their full height with no windows of any kind. Unlike the rest of the building, these walls had a thin layer of stucco applied, but it too was never painted. The walls were divided into panels by caulked "rustication

joints" which only extended 1 ½ inches into the concrete. If any wall cracking has occurred, these joints have successfully directed the damage to follow these seams beneath the protective caulking.

From the front parking lot, the south façade presented an imposing appearance with the first floor at a height of 19 feet. Presented in profile is the low-pitch 1/12 built up roof with its 2 foot overhangs. The main block of the structure was completely blank. To its right was a small concrete hyphen that served to connect the addition to CP-1 and to later become the new primary entrance to the building with a flush steel double door. As with the connection between CP-1A and the original building, the roof of this hyphen was tucked below the roof overhang of CP-1.

The west façade had a centered flush double door into the first floor. Just outside the wall to its left were twin insulated steel stacks for the diesel generators in the basement. At the foot of the wall to the right was the low structure for the emergency escape exit from the basement.

The basement was only revealed from the north where a cut led to the centered flush double door of the Mechanical Room. A large air handler was mounted on the ground just left of the door. Just left of the main part of the building was the deeply inset blank rear concrete wall of the entry hyphen. The concrete fresh air shaft was at the northeast corner of the addition and the exhaust air shaft at its northwest corner. Also shown on this elevation is the radiator cooling fans for the diesel-powered generators in the basement.

Due to the small size of the entry hyphen, CP-1B actually had an eastern elevation. Its only elaboration was the entry hyphen which clearly shows its low-pitch built-up concrete roof on the drawing. It had a 1 foot overhang at the rear, but the front overhang was cantilevered 3 feet to protect the front entry. The door shown within the hyphen was the only entry from CP-1. Despite their proximity, the basements were not connected except by cableways.

Interior support for the first floor and roof was supplied primarily by four pillars arranged in a 20 foot square. Aside from the mechanical room walls in the basement and the stairway, partitions were made of drywall on steel studs or of prefabricated metal panels.

As shown on Figure 36, the Operations Room, informally but almost universally known as the War Room, occupied the very center of CP-1-B. It was designed for a single purpose. In this room, the Advisory Panel (it had a variety of names) provided the AEC Test Manager (whose position also had a variety of names) with information needed to decide whether all technical conditions were met for conducting a successful test, while at the same time taking all reasonable precautions to ensure that it was conducted safely. Therefore, everything was designed around the conference table built specifically for the sunken space at which every member of the panel had a seat and a telephone. In addition to the phone lines, complex visual information was displayed on the massive curved wall which formed the west side of the room (Figure 37). Live feed cameras or still images could be projected onto the rear projection screen from the Projection Room (also called the Data Accumulation Room) behind the screen (Figure 38). A row of television monitors was mounted near the top of the wall, which, like all others, extended to the ceiling 20 feet 4 inches above the sunken floor. A supplemental arc of permanent desks with communication consoles inset into

attached credenzas was arrayed to the east of the conference table at general floor level for key representatives of the various organizations involved in a test. Additional specialists and important visitors could be seated in the sunken area just east of the conference table or along the east wall. This made for a deliberately crowded space because it was essential that everyone at the conference table be able to converse directly, and that other essential information could be obtained from a nearby specialist with no delay. Video reenactments of the activities in the War Room during tests, made later for training purposes, reveal how well this system worked. The Control Rooms responsible for actual timing and firing of the test devices were spatially separated, down the hall to the east. The other principal visual aids in the room at this time were a regional map on the south wall and a large map of the test site on the north wall.

A Viewing Balcony or Gallery overlooking the War Room was constructed in a mezzanine to accommodate other individuals (Figure 39). This balcony extended across the entire east end of the War Room and was sealed off from it with a continuous ribbon of fixed glass windows. A smaller room west of the balcony had a sliding window which allowed elevated photographs to be made of the War Room. This room, sometimes referred to as the Crow's Nest, was also used by local radio to announce tests. The rest of the mezzanine was used for storage and telephone equipment.

Returning to the first floor, the Test Manager's office adjoined the War Room on the north. Technical support occupied the entire west end of the building. Communications was across the hall to the south of the War Room. A row of offices east of the War Room and Test Manager's office completed the arrangement except for circulation and restrooms in the southeast corner.

The focus of the basement was the large Briefing Room directly under the War Room (Figure 40). Its entrance was located so as to minimize the distance that had to be traversed between there and the War Room, as the two rooms were very closely related and used by the same core group of people. Informational briefings were held there, often with quite a large audience of people who would be elsewhere during the actual test. Weather briefings were so important in test scheduling that this space was often called the Weather Briefing Room.

No technical support areas were in the basement. A kitchen and storage rooms opened off the Briefing Room. South and west of the Briefing Room were personnel support areas consisting of dormitories, restrooms, and a small laundry.

A concrete wall separated all of these spaces from the mechanical rooms to the north (Figure 41). Two diesel generators occupied the northeast corner. The central area was filled mainly with electric boilers, chillers, air handlers, and ducting. Two small rooms in the northeast corner were dedicated to filtering air coming into CP-1B. The air handling system in CP-1B was completely separate from that of CP-1 and CP-1A.

CP-1 IN 1970

Beginning in 1970, an extensive series of remodels to the building was designed by Ben Bechler & Associates Architects & Engineers, North Hollywood, California. As part of the planning process, a set of drawings of the existing condition was made, and, along with other sources, document the building quite well as it existed in 1970 prior to the alterations. At this time the building was shared by LANL and LLNL.

The west façade of CP-1 had been dramatically altered by the entry hyphen to CP-1B. Although not portrayed, CP-1B would have masked the north half of the original façade from all normal points of view. The original double front door was still in use. Three loudspeakers were located below the eave, of which the southern one is still in place. Cable conduits were attached to the exterior of the wall, and a ladder was added for roof access.

The south wall of CP-1 had acquired cable conduits, conduit for an exterior light, and a single door near the southeast corner of the building accessed via a steel stairway (Figure 42). The south wall of CP-1A was pierced in three places for vents to the Mechanical Room. The east wall of CP-1 had a variety of cable and electrical conduits with a speaker near the ridgeline. Two mechanical appliances were located outside the Boiler Room, one of which blocked the southern wall vent to the Boiler Room. The east wall of CP-1A acquired a large louvered vent to the Mechanical Room in the southeast corner, a mechanical appliance under the stairs, and cable conduits running up the northeast corner.

The north façade of CP-1 included two microwave dishes mounted in the gable end, wall mounted conduits, and a small mechanical appliance. The Battery Room below the deck had a single small wall vent. A staircase was added to provide access to the west end of the deck after excavation for the north entrance to the basement of CP-1B made it impossible to approach it from the west by walking around the building. A ladder provided roof access to the CP-1A hyphen, and cable conduits ran up the northwest corner of the main block of CP-1A.

The first floor plan early in 1970 and modifications to the LLNL operations area in the southeast corner of CP-1 are shown in Figure 43 and Figure 44. The parti showing spatial usage by function is depicted in Figure 45. The space distribution changed dramatically since the 1958 parti. The AEC moved nearly all of its operations to CP-1B and completely occupied that area. The spatial pattern remained unchanged and centered on the War Room. The Control Room and Timing and Firing Room continued to occupy the northeast corner of the building and expanded into CP-1A. Functions of most of the subsidiary administrative and technical spaces in CP-1 could not be precisely identified for this period and are left blank on the parti.

A photo of the War Room at this time shows it essentially unchanged since its construction (Figure 46). Figure 47 of the Timing and Firing Room in the first floor of CP-1A shows consoles and electronic equipment racks typical of those throughout the building. Also shown is the wood paneling favored by LANL and SNL.

The basement floor plan early in 1970 is shown in Figure 48 and the parti in Figure 49. All three of the basement areas were nearly unchanged except the interior partitions were removed from CP-1A to restore the single large room for Timing and Firing. The AEC Briefing Room in the CP-1B basement is shown in Figure 50. This shows that monitors and projection screens were on the east wall, with the table for the Advisory Panel at the front and observers occupying the rest of the room. This basic arrangement remained unchanged through time.

Floors throughout the building were either concrete or vinyl asbestos tile except for a small amount of carpet in the EG&G Control Room (209). CP-1 still had its original 4 inch wood baseboard while that of CP-1A was plastic. Ceilings were variously concrete, acoustic tile affixed to drywall, and suspended acoustic tile systems.

THE BECHLER REMODEL (1971-1972)

In many ways the major remodeling of the building at this time established the way it would remain throughout the rest of the Cold War period. The laboratories usage after the remodel was about half LANL/SNL and half LLNL.

The original front doors on the west façade of CP-1 were blocked with concrete masonry unit blocks (CMU). The former lobby became a Security Office. The primary entrance for the entire building became the one in the CP-1B hyphen.

The only major exterior changes were made to the east façade (Figure 51). These changes related to moving the Boiler Room south to its present location in the east half of the former Mechanical Room. The Boiler Room double door was moved to a new opening cut in the wall for the new Boiler Room, and the old opening was plugged with CMU. The boiler stack was moved from its internal position to the outside of the building. It and an evaporative cooler were surrounded by a chain link fence. A first floor doorway and staircase near the south end of this façade were on the plans but were never built. Several vents into the mechanical rooms at the southern end of CP-1A were blocked with CMU at this time.

Interior modifications to the first floor are shown in Figure 52. These included a higher (12 inch) raised floor in Timing and Firing Room 200, installation of carpeting, paneling, and an extended raised floor in Control Room 250, and numerous minor alterations of interior walls (Figure 53). Of particular interest was the construction of a spiral staircase in the southeast corner of CP-1A.

Modifications to the basement are shown in Figure 54. A change in the demographics of the test site is reflected by creation of a larger Women's Dormitory by moving the Men's Restroom into its current position in what was formerly the Women's Dormitory. The Snack Bar space was again enlarged to the south. As mentioned above, the biggest change was moving the Boiler Room. The two boilers and the chiller were mounted in their present positions (Figure 55). A CMU wall was built to divide the Mechanical Room to accommodate this change. The former south double door to

the old Boiler Room was moved into this wall, where it remains today. Similarly, the single door in the southwest corner of the old Boiler Room was moved to replace the former door at the southwest corner of the Mechanical Room. Both former interior door openings were then blocked with CMU. The former Boiler Room was then taken over by SNL.

A major modification was installation of large air handlers in the attic of CP-1. At the same time, several vault spaces on the first floor were made more secure by extending their walls all the way to the underside of the roof (Figure 56). Access to both spaces was via folding stairs concealed in ceiling hatches. Both spaces included plywood flooring for work areas while a steel mezzanine was constructed to support the weight of the northern air handler (Figure 57). During the remodel, about half of the baseboard was converted to plastic and most ceilings were suspended. Many of the doors were replaced.

THE FINAL COLD WAR YEARS (1973-1992)

Minor room partition changes were always taking place. In 1976, an unusually extensive set of such room changes occurred in the central and southern portions of CP-1 (Figure 58 and Figure 59). The Vault (Room 242) was upgraded with partitions extending upward to the roof rather than ending at the suspended ceiling. This particular enhancement was proposed during the Bechler remodel for several vault rooms, but it appears that it was not executed at that time for this particular vault. In addition, the kitchen and food service areas were modernized and expanded to their present extent, occupying the entire west side of the CP-1 basement (Figure 60).

By 1978, Control Room 100 in the basement of CP-1A had been equipped with a 12-inch-high raised access floor, and a clean room had been installed on it. The raised floor and clean room were removed in 1978 and the room was again subdivided into thirds: an office, computer and peripheral support, and laboratory. The concrete floor was carpeted and the room painted in a color selected by SNL. Based on the modification plan (Figure 61), the circular staircase in Room 102 appears to have been removed.

In 1983, Control Room 200 upstairs in CP-1A received a major make-over. Its walls were furred out and covered with the fabric wall panels now present. The existing raised computer floor was retained, but the lower south half of the floor including the entry foyer was re-carpeted. All ceiling tiles were replaced. The outside door was still full-height. The viewing port adjacent to the door was replaced with a vent for an HVAC machine mounted on a concrete pad at ground level north of the building (Figure 62).

The undated photograph in Figure 63 shows the War Room as it looked, probably sometime in the 1970s. The War Room was heavily remodeled in 1984 with new viewing screens and sound attenuation panels (Figure 64). A photograph of the new changes is shown in Figure 65. It was at this time that the War Room took on the look it retains to this day with minor subsequent changes.

By 1985, the building reached the culmination of its development during the Cold War. Its first floor plan immediately prior to the addition of the Field Office (in this report CP-1C) is shown in Figure 66. Figure 67 illustrates in plan and section the final expansion of the building. This suite of rooms provided additional space for the LANL Test Group Office. It filled the space between CP-1 and CP-1B north of the CP-1B entry hyphen, which by now was the main entrance to the building. The north wall was made of 6 inch metal studs with metal siding. All other walls were narrow metal studs and drywall attached directly to existing concrete walls. Metal studs and drywall were also used to divide the space into three offices, a hallway, and a storage room (Rooms 280-284). Access was via two doorways cut through the west wall of CP-1. Two additional small apertures were cut through the same wall to make small pass-through windows for the southern two offices. The south end of the flat metal roof rested on the ridgeline of the existing entry hyphen. The north eave of this hyphen was concealed by the suspended acoustic tile ceiling.

The layout of CP-1 in 1985 was so similar to what it is today that the plans were used as the bases for the partis of space usage. The 1985 drawings are much more complete than those for 1970 since the functions of all rooms could be identified on the plans. Figure 68 shows how space was used on the first floor and mezzanine. The pattern only changed in minor details from that of 1970. What had really changed by that time was that LLNL had moved into adjacent Building CP-9, completely vacating this building. LANL now occupied all of CP-1 and CP-1A north of the east-west corridor. This resulted in the following layout changes on the first floor of CP-1 and CP-1A:

- Control/Monitoring Room 250 had expanded to the west. Figure 69 shows how the room looked in 1988. Notable is how the row of observation ports was hidden in a narrow aisle behind a row of electronic equipment racks. Scientists with LANL occupied the Monitoring Room while the LANL Test Director and staff ran the firing sequence from the Control Room.
- The equipment layout in Timing and Firing Control Room 200 was entirely different from that shown on the 1970 plans. A drawing of changes to console and monitors is shown in Figure 70. Photographs of the room from 1988 are in Figure 71. The viewing ports with their magnificent vistas of Yucca Flat are hidden behind equipment racks.
- In addition to the offices in the northeast corner of the first floor of CP-1, the LANL Test Group Offices included the new Field Office addition. These offices had a single signed entrance, distinctive carpet, paneling, and wainscot, and even a different door molding material from that used in other areas (Figure 72). The extreme importance of the LANL Test Group Director is shown by his huge office with the only office window in the building. Despite its small size, the 2 foot viewing port sheds a remarkable amount of light, giving this office a pleasant ambiance missing from all of the other offices with their harsh artificial lights.
- The northern half of the block of rooms in CP-1 south of the east-west corridor and east of the north-south corridor was occupied by LANL technical support of various kinds (Figure 73). The extreme seriousness of the work conducted there is indicated by the large hand

drawn sign signifying "No Goofy" or no goofing around, further emphasized by a company newsletter cartoon with an underground nuclear device going "KA-BOOM."

- SNL's technical support spaces were concentrated along the south edge of CP-1, immediately south of that group's administrative area (Figure 74). The area was accessed mainly by a single signed entrance from the north-south corridor. SNL's office spaces and corridor had their own distinctive carpet, wall paneling, and doors (Figure 75).
- The narrow southwest strip of rooms along the west edge of CP-1 was used by a variety of DOE personnel and contractors, particularly Wackenhut Security, Inc. (WSI). The southern three rooms were used by the DNA. The occupants of one of these offices decorated the bleak windowless office environment with colorful posters (Figure 76).

A series of historic photographs from 1988 provides a glimpse of the context of some of the rooms in the basement. Figure 77 shows the CP-1 and CP-1A basement plan in 1985, and Figure 78 shows basement space usage that year.

- The Sandia Office and Software Development Room 100 is shown in Figure 79.
- SNL combined two rooms in the basement to form a single large room, Computer Room 104. This room was given a typical raised access floor (Figure 80).
- The vacated Boiler Room was dramatically modified for use by SNL and DOD into Monitor Room 105 (Figure 81). This room included a complete raised access floor. The half-glassed partition was decorated with commemorative test decals.
- Figure 82 shows the kitchen office in Room 120 and refrigeration equipment at the southern end of the service area. Kitchen and service counters are shown in Figure 83. The Dining Room (Room 110) and the large room used for food storage (Room 108) occupied the northwest corner of the basement (Figure 84).

CP-1B was essentially unchanged from 1970, but on the 1985 plan it is possible to definitely plot the location of the Environmental Protection Agency southwest of the projection equipment behind the War Room.

Changes to the War Room in 1984 were described above. In a 1988 photograph, the DOE Test Controller's Office is decorated to look something like a comfortable study or living room (Figure 85). The curtains mask a concrete wall. The row of offices immediately east of the War Room was the home of Operations Control Center (OCC) and administrative support for the Test Controller (Figure 86). The principal communications console was positioned at the window and door into the War Room, providing immediate access. Immediately behind the consoles was an elaborate sliding multi-leaf map board which is still in place.

One of the most important aspects of any test was obtaining the most accurate possible weather forecasts and displaying that information immediately in the War Room. The Weather Service Nuclear Support Office (WSNSO), part of the Department of Commerce, was located in the northwest corner of CP-1B adjacent to the projection area for the War Room. It had bright blue

floor tiles and wall paint unlike any colors used elsewhere (Figure 87). According to Byron Ristvet (2016) "This was the most complete, up-to-date weather forecasting station in the world. That includes global weather central at StratCOM [Strategic Air Command]." The WSNSO was a highly specialized unit of the National Weather Service that provided direct support to the underground nuclear testing program.

The mezzanine in CP-1B was largely unchanged, but by 1988 audio-visual equipment was installed to convert the room behind the viewing balcony from storage to a technical support area for the War Room. In addition, a wall was removed to allow expansion of the telecommunication equipment in the southwest corner of the mezzanine (Figure 88).

A series of photos shows the rear and both sides of Briefing Room 130 in the basement of CP-1B with its distinctive stage and wall treatment (Figure 89). The large wall map in the corner could be swung out from the wall to make it easier for viewing by the audience. The small Kitchen (Room 130C) entered from the Briefing Room was abandoned to casual storage following construction of the stage which partly blocked the door (Figure 90).

An aerial view of CP-1 likely taken in the late 1980s is shown in Figure 91. The DNA Playback facility (AR3) and substation (AR2) were not yet built when this photo was taken.

CP-1 TODAY

The Exterior

The outside of the building as a whole is best portrayed by a series of low angle aerial photos taken from all sides in 2007 (Figure 92). The exterior as it now exists will be described counter-clockwise from the front entrance with reference to a set of 10 photos.

The main entrance is a double door in the south façade of the CP-1B hyphen. The main mass of the south façade of CP-1B has no openings but is heavily festooned with electrical communications and power conduits and junction boxes along with signage (Figure 93).

The west façade of CP-1 also has no openings since the original main door to the building has been blocked with CMU (Figure 94). It has conduit, two speakers, and a fire box. The ladder for roof access and a wood communications pole are at the right end of the façade. The left third of the original façade is obscured by CP-1B.

The west side of the south façade of CP-1 has a double door leading to the principal north-south corridor at the top of a concrete ramp with pipe railings (Figure 95). Near the east (right) corner is the single door leading into one of the SNL labs (Room 261). It is at the top of a steel staircase with pipe railings. In addition to the mass of conduits affixed to the outside wall are two above-ground communications lines leading to the gable end. Several of the conduits lead down into the riser

above a southern Cable Vault which is well south of the basement. A steel manhole provides access to the vault.

The southern end of the east façade of CP-1 has no openings (Figure 96). Most of the lower portion of the wall which serves as a retaining wall for earth fill within the structure is obscured by the Garbage Enclosure and Fuel Tank. It has some exterior conduits. In contrast, the façade north of Garbage Enclosure and Fuel Tank is extremely complex. Figure 97 clearly shows the pattern of the 4 x 8 foot sheets of plywood used as forms for the concrete. Below the eave a cable tray supplements the conduits. At left is the double door to the Transformer Room. This is one of the steel panel doors to survive from original construction of CP-1. At center is the stack and cooling unit for the Boiler Room, and immediately to the right of these is the double door to that room. Although obscured by twin steel mesh security doors, this door is from the original Boiler Room. The void where these doors came from is the prominent CMU wall patch at the junction of this wall with CP-1A. The northern part of the east wall of CP-1 is obscured by CP-1A.

The upper part of the south façade of CP-1A is blank except for a recent rain gutter downspout (Figure 98). The double door in the hyphen leads to a lobby with easy access to the east-west basement corridor. In the center of the façade is the double door to the CP-1A Mechanical Room. All former wall vents in this area are plugged with CMU. This wall has abundant conduits.

The east façade of CP-1A shows very clearly a series of pour lines in the concrete, some of which have been caulked. The upper part of the wall is blank except for conduit. A large vent into a former extension of the Mechanical Room has been blocked with CMU. To the right of this vent is the single door into Room 100. A steel stair with pipe railings leads up to the northern balcony. A cluster of above-ground communications lines enters the building at its northeast corner.

The north façade is shown on Figure 99. At the extreme left is CP-1A with its extension of the balcony. From left to right in the first floor is a door, similarly cut off to allow another HVAC duct to run beneath it and over the edge of the balcony, a viewing port opening used for another HVAC duct, and two viewing ports along with a mass of conduit. Electrical boxes are attached to the basement level, but there are no openings into the basement. There is a single door in the first floor of the hyphen connecting the main mass of CP-1A with CP-1.

The north façade of CP-1 is clearly delimited by its gable end which protrudes above additions of both sides. A steel observation tower crowns the roof. In the gable end are steel brackets for microwave equipment, which has been removed. A cable tray and numerous conduits run along the top of the wall. A concrete deck with steel pipe railing runs along most of the façade. The left half has the openings to Control/Monitor Room 250. From left to right are two viewing ports, a port plugged by a HVAC duct, a door (bottom cut off to provide space for a HVAC duct), two ports, a port covered by a conduit junction box, and a plugged port. The viewing port for the LANL Test Director's Office is near the right of the façade. Below the left side of the balcony is the 1954 steel Battery Room, and below the ramp leading to the balcony is the 1989 Emergency Exit. Most of the HVAC equipment has been removed from a series of concrete pads along the north wall.

The metal north wall of the CP-1C Field Office addition in the hyphen between CP-1 and CP-1B is barely visible at right behind HVAC equipment.

Due to the proximity of the Microwave Tower (AR1), it is not possible to obtain a straight-on photo of the north wall of CP-1B. The oblique photos of this façade in Figure 100 and Figure 101 show a mostly blank wall except for numerous conduits and a cable tray. They also show communications lines connecting the building with the Microwave Tower. The double door into the basement Mechanical Room is centered in the façade. In the foreground of Figure 101 are the two radiators for the emergency diesel generators in the basement of CP-1B.

The west façade of CP-1B is shown in Figure 102. The most prominent feature on the wall is a cable tray which emerges from an exterior vault with a steel cover at the southwest corner of the building. A small electrical substation is within a chain link barrier in front of the left portion of the wall. Mounted on the wall behind this fence are the twin exhaust stacks for the emergency diesel generators. A double door is centered on the façade. The galvanized cover for the emergency exit tunnel from the basement is near the right end of the façade next to the cable cellar.

First Floor

Figure 103 is the present plan of the first floor and mezzanine. It and the basement plan below are based on the current NNSS Space Management Plans, but redrafted for this report to incorporate corrections based on field observations.

These present day plans show earlier uses to some extent. Actual building use at the time of abandonment is not of great interest, since by that time there were very few active offices and the rest of the building was either vacant or used for storage. A review of the individual room descriptions with photographs is in Appendix B. The descriptions provided below focus on individual rooms of great importance or on examples of types or clusters of related rooms. They are organized similarly to those presented earlier to facilitate comparison of rooms between present condition and the series of photos taken from the 1988 video while the building was still used to control nuclear tests in the closing years of the Cold War.

Principal Control Rooms

A comparison between Figure 63 and Figure 65, and Figure 104, Figure 105, and Figure 106 shows that the only alteration made in the War Room was replacement of the series of double desks for the technical support representatives with a continuous curved desk. On this new desk the phones were moved from the credenzas to small consoles on the top of the desk. By the time of field recording all portable objects and several wall-mounted objects had been removed from the room (Figure 106). In the Projection Room behind the War Room, equipment used to project images onto the War Room screens is still present as is the black curtain along the west side of the space (Figure 107).

Control Room 250 is just as it was in 1988 except for removal of equipment (Figure 108). In contrast, Control Room 200 received a complete renovation of its test-related equipment as well as the room décor, indicating confidence that testing would continue for quite some time. Figure 109 shows the elaborate new doors at the entry to the foyer for the Control Room. The foyer received new flooring in an imitation wood pattern. The Control Room itself received new carpet, a remodeled raised computer floor, new control consoles, new equipment racks, and a new reflective ceiling and lights (Figure 110). A series of flat-screen monitors were also mounted to the wall, replacing earlier ceiling-mounted racks for CRT screens.

Technical Support

Aside from removal of testing-era equipment, few changes appear to have been made in the LANL and SNL technical support areas of CP-1 (Figure 111, Figure 112, and Figure 113). Although not in the rooms shown in these figures, post-testing installation of semi-portable office partitions and cubicles is commonplace throughout most of the building as it was repurposed. One change throughout much of the first floor of CP-1 was application of a pinkish-tan paint over large areas that formerly exhibited a collection of off-white, tan, pale green, and pale blue walls. A typical empty support room along the west edge of CP-1 exhibits this new generation of paint (Figure 114). The DNA office at the south end of this block combined Rooms 234 and 236 by removing a partition and blocking one entry sometime after 1985 to create the present Room 234.

Administration

In the DOE Test Controller's Office adjacent to the War Room, furniture and some wall decorations remain. In Figure 115 the wall curtains are pulled back to reveal a white board and a framed regional map. The administrative and Operations office east of the War Room is about the same as it was in 1988 except for installation of a newer generation of cubicles and removal of the communications equipment (Figure 116). The SNL administrative area is essentially unchanged except for a change in carpet color (Figure 117 and Figure 118). Finally, most of the LANL administrative complex is little changed since 1988. An exception is the LANL Test Director's Office, which was entirely filled with cubicles, most of which have recently been removed (Figure 119).

Communication

Almost every communication device has been removed from the building. This has left unattached wiring and cables of all kinds protruding from conduits, walls, floors, and ceilings. In some cases the conduit itself has been removed. For example, a 2 inch diameter hole was left completely open to the outside when conduit was pulled from the exterior wall of Room 232.

Weather

Much of the portable equipment in the Weather Service Office (Room 273) is still present (Figure 120).

Mezzanine and Attic

Principal Control Rooms

The shortened Observation Gallery, also known as the Viewing Balcony, is the same as it was in 1988 (Figure 121).

Technical Support

The 1988 photograph series caught the moment when the rooms adjacent to the Observation Gallery were being converted to visual-aids support for the War Room. Room 301A has a row of projectors used to send still images to screens in the War Room (Figure 122), and Room 301B has video equipment to monitor several fixed cameras focused on test areas and to edit VCR tapes (Figure 123). Presumably videos were directed to the War Room displays from the console located next to the window overlooking the War Room.

Communication

Although most equipment was removed from OCC/Communications Room 303, some equipment and a mass of wiring remains (Figure 124).

CP-1 Attic Mechanical

Air handlers in both the north and south attic areas continued to be maintained and used until the building was shut down. Some of the air handling equipment in the south end of the attic is shown in Figure 125.

Basement

Figure 126 is the plan of the basement in 2016.

Principal Control Rooms

Figure 127 shows CP-1B Briefing Room 130. It was essentially the same as in 1988 except for the substitution of flat screens and a ceiling-mounted computerized image projector for the earlier CRT monitors and overhead transparency projector. Figure 128 shows the room without its furnishings.

Technical Support

Sandia Office and Software Development Room 100 has lost its interior partitions, the carpet has changed color, and the walls have been painted white since 1988 (Figure 129). The room most recently functioned as storage. Computer Room 104 is about the same as in 1988 except for the removal of equipment (Figure 130). Computer Room 105, also known as a Laboratory, has been changed extensively. The 1988 half-glass partition has been removed. The raised access floor has been carpeted, and the entire room has been filled with cubicles (Figure 131).

Communication

The mass of wiring and associated hardware remains in all of the Cable Runs. Figure 132 shows the cellar level of Room 115. Visible on the original wall of CP-1 is the remnant of the asphalt-based coating used to waterproof the concrete below grade.

Personnel Maintenance

All furnishings and nearly all of the removable equipment have been pulled from the kitchen and dining areas (Figure 133 and Figure 134). Prominent on these photos is the temporary duct installed to an exterior portable HVAC unit following the failure of the CP-1 air chiller. The HVAC unit has been removed and the ducts capped where they emerge from the outside wall of the Emergency Exit.

Mechanical and Custodial

Mechanical Room 116 and the diesel Boiler Room are shown in Figure 135 and Figure 136. The overall equipment layout has changed little since 1988. The two air ducts for CP-1 are shown in Figure 137. These concrete ducts extend from the basement where they connect to Mechanical Room 166 all the way to their entry or exhaust fittings on the roof. The pair of emergency generators for CP-1B is shown in Figure 138. The switchboard for controlling them is in the adjacent mechanical room (Figure 139). The Mechanical Room for CP-1B has air handlers, electric boilers, a chiller, and extensive ducting (Figure 140).

Circulation

Figure 141 shows a representative corridor in the CP-1 building. Fire extinguishers, alarms, service boxes, and telephone cabinets are along the hallways.

Figure 142 shows a small lobby typical of those at the exterior entrances on major corridors. The steel panel doors remain from initial construction of CP-1. Originally they were likely mounted on the interior door frame, which no longer has doors. The windows with lights are no longer on an outside wall, but rather open to a newer access lobby. This east basement entrance was heavily used by persons working elsewhere in the vicinity to access the cafeteria.

When the staircase was removed from the southeast corner of CP-1A, the hole left in the first floor was plugged with a steel plate. This plate is visible from below in Room 101A (Figure 143). A typical concrete staircase is also shown in Figure 143.

ACCESSORY RESOURCES

All eight accessory resources provided subsidiary services to CP-1. These services included communications (AR1), supplemental computing and data manipulation (AR3), supplemental power sources (AR2, AR4, AR5, AR6), garbage handling (AR7), and fuel for the boilers (AR8).

AR1: Microwave Tower (06-999929)

When CP-1 was built in the early 1950s, microwave communications were still in the future. Microwave devices were gradually added to the exterior of the building, but it became necessary to have many more antennas than could be conveniently attached. For example, two microwave antennae on the ridgeline of the roof were replaced by three located along the edge of the roof of CP-1 in 1972 (REECo 15262, 1971). Also, the increasing numbers of microwave devices required a large amount of support space which was not available in the existing building. Therefore, a major microwave tower structure was built just north of CP-1B in 1970. This structure (NNSS Facility 06-99929) was designed by Holmes & Narver (H&N) and is the only portion of the CP-1 complex recorded in this survey still in use (Lewis 2016).

The Microwave Tower is a 4-story L-plan open steel framework with galvanized expanded steel decks and yellow pipe railings (Figure 144, Figure 145, and Figure 146). Railings are supplemented with removable safety ropes attached to pipe stanchions. Access to the first level is via a ramp and stairs; however, other levels are accessed via ladders. I-beams form the principal pillars and other supports. Many angle braces are made of L-profile steel struts bolted together in pairs to form T-section braces. Posts are mounted on concrete pads. The structure was originally painted off-white but the paint has eroded away in many places. It supports numerous microwave dishes and other aerials. Three suspended communications conduits and two wire bundles connect this structure with CP-1B. It is also connected with other parts of the building via buried communications lines. Level 1 ranges from about 4 feet to 14 feet above grade. Level 2 is 13 feet above Level 1. Levels 3 and 4 are spaced 8 feet 6 inches apart, and equipment mountings extend a further 8 feet above Level 4. This gives a total height of over 52 feet.

The ground floor of the structure supports an L-plan support building surrounded on most sides by steel decks (Figure 147). Walls and the flat roof are made of heavy corrugated white-finished galvanized steel panels. The entire building was pre-fabricated by Behlen Manufacturing Co, Columbus, Nebraska (Behlen B-2491, 2 of 5, 1970). This building measures 25 x 50 feet with an interior width of about 9 feet throughout.

The west façade is approached via a ramp. It has tan, flush paired 2 foot 6 inch steel doors with integral steel frame entering the south wing. The same design is seen at all of the exterior doors. Clear and red light fixtures are over the door along with the building number placard (Figure 146).

The east façade has a single tan 3 foot door. A sign by the door warns of radio frequency radiation hazard and possible eye damage if standing in front of an antenna. This door is accessed from the ground via steps or by a ramp to the rear of CP-1B.

The north façade also has a single tan door, but the steel frame is light green. A clear light is over the door. There are no openings in the south façade.

As originally constructed, the building was a single large room but it is now subdivided into three rooms by drywall partitions that do not reach the ceiling. The long southern portion of the building

is divided in half. For convenience the west half is called Room S-1 and the east half Room S-2. The small north wing is called Room N-1. There are no windows.

Room S-1 is a rectangular room that adjoins with N-1 and S-2 (Figure 148). The exterior exit door is on the west side of the room and is a flush metal double leaf door with three metal hinges and a Corbin hydraulic mechanism. The door has a standard cylindrical lock mechanism. The interior/outside walls are the same as in N-1. The east wall is a partition to Room S-2, and the north wall on the west end of the room is a partition to Room N-1. There is no entry to N-1 from the southern rooms. On the east side of S-1, a single leaf metal door provides access to Room S-2. Attached to the south wall in the southwest corner of the room are two electric panel boxes. On the central area of the south wall is a fire alarm system. A two-drawer metal filing cabinet and racks for fiber optics and communication stand 1 feet 6 inches from the north wall. The racks are mounted to the floor. The floor is 1 foot linoleum tile on 1 inch thick plywood. The baseboard is black plastic. In the northeast corner of the room, tile is missing, exposing optic cable beneath the subflooring in a space about 6 inches deep. Cable runs under the sub-floor to beneath the building. The ceiling is the same as in Room N-1. Along the south wall is a blue metal workbench with electrical outlets. A 6.5 foot tall heavy duty metal storage cabinet stands directly east of the work bench.

Room S-2 is a rectangular room that adjoins with S-1 (Figure 149). The exterior exit door is on the east side of the room and is a single leaf metal door with a Corbin hydraulic mechanism. The door has a standard cylindrical lock. The interior and exterior walls are the same as in room S-1. Room S-2 is separated from room S-1 by a drywall partition with a single leaf door for access between the rooms. On the south wall in the southeast corner of the room are two mounted metal electric panel boxes. The ceiling and flooring materials are the same as described in S-1. In addition to fluorescent lighting in the ceiling, fluorescent lights (tubes exposed) are mounted on the wall at the ceiling on the north end of the room. Speakers (wood frame, approximately 1 foot square) are mounted on the north and south walls at the ceiling. Metal racks stand 1 foot 6 inches from the north wall for timing and firing, TC&S Microwave, patch/test equipment, and monitors. The racks are bolted to the floor. Along the south wall stand heavy duty green metal storage shelving and a work bench with fluorescent lighting. In the southeast corner of the room some of the linoleum tiles are missing.

Room N-1 is a square room with no interior furnishings (Figure 150). The exit door is on the north side of the room and is a standard, flush surface metal door with three hinges and a cylindrical lock mechanism. The steel walls are unlined. The south wall is a permanent partition to S-1 and is off-white drywall. The partition is 7 feet tall leaving a 1 foot space between the top of the partition and the ceiling. Attached to the partition wall on the west side of the room are a utility panel box and an instrument power box. On the east wall at the south end of the room is a terminal box mounted near the ceiling. The floor of the room is covered with durable gray-colored textured carpeting with a plastic base. The suspended acoustical ceiling has rectangular, plastic fluorescent light covers, two square air diffusers, and pendant sprinkler heads set in ceramic fixtures. At the ceiling along the west wall are fixtures for fluorescent lights. Ceiling water damage is present on the east side of this room.

Portions of the ceiling panels have collapsed, exposing the space between the ceiling and the roof of the building. Damage appears to be from the fire suppression system.

AR2: DNA Substation

The substation for the adjacent DNA Playback Facility was built on a 16 x 20 foot concrete slab in 1983 (H&N JS-006-CP20-E3.3, 1983). It originally had a large 300 KVA transformer and a small 75 KVA transformer. Transformers and other equipment mounted on the slab have changed through time, as indicated by engineering layouts. Electrical boxes are mounted facing outward on vertical steel panels along the south and east edges of the slab (Figure 151 and Figure 152).

The steel shelter was built in 1989 (H&N JS-006-CP20-S4, 1989). It consists of a nearly flat roof of corrugated galvanized sheets supported 10 feet off the ground by 4 inch steel pipe columns near the corners (Figure 153 and Figure 154). Rafters and fascia are welded steel U-beams. All of the steel supports are painted white, and the roof is left unpainted.

AR3: DNA Playback Building (06-CP-20)

The DNA Playback Building is a 20 x 60 foot, one-story, rectangular-plan Butler prefabricated corrugated metal structure on a concrete slab foundation. Despite its construction, it was often called the DNA Trailer by site workers. Based on plans for the adjacent substation (AR2), it appears the building was constructed at the same time as the substation, in 1983. Plans examined for this building all date to its extensive interior remodel in 1989. The walls and roof are off-white. Corners and fascia are tan steel. The gable roof has such a low pitch it is nearly flat (Figure 155 and Figure 156).

The building has four entries. The principal entry is via a small vestibule centered in the south façade. It and all other exterior doors are 4 foot flush white steel with matching steel frame. The vestibule is flanked on each side by sets of three air conditioner units. They are mounted on the original concrete slabs, though the units are fairly recent replacements. Signs by the entry include a hand-painted "CP20" and another warning of a halon fire extinguishing system. The east side has a centered double door. There is a louvered galvanized vent above the door. A fire hose attachment is in the right corner. A concrete ramp leads to the door. The west side has a centered door and a concrete slab before the entrance. A cable tray and conduits dominate the wall. Two floodlights mounted on tall poles flank the entrance. A centered door is at the rear on an otherwise blank wall.

The floor plan of the 1989 remodel is shown in Figure 157. Walls were newly lined with tan acoustical panels, but the roof remained uninsulated. Cable trays run along the ceiling. Lighting is continuous strips of 2-tube florescent fixtures without diffusers suspended below the roof. Ducting, fire mains, and plumbing are exposed under the roof. Part of the remodel involved splitting the building into two rooms by installing a metal-framed drywall partition with a flush 3 foot metal door.

The center area served as a lobby while the eastern third was packed with floor mounted consoles and overhead monitors, the frames of which remain in place (Figure 158). This area has a tan carpet laid directly on concrete.

The western third behind the new partition is modified for use as a computer room (Figure 159). The original off-white painted concrete floor is preserved beneath the 6 inch high raised floor of 2 foot white and silver mottled panels with dark borders mounted on a frame supported by screw jacks. This floor is of the same design as that seen in several rooms inside CP-1 and CP-1A.

AR4: Uninterruptable Power Source (06-CP-3)

AR4 is an 18 x 21 foot rectangular-plan one-story building set on a concrete slab foundation. Sides and roof are yellow corrugated steel and the steel fascia of the nearly flat shed roof is tan. According to engineering drawings, it was built in 1972.

The entry façade is on the west (Figure 160). At the right is a single tan flush steel door to the Battery Room. At the left is a matching double door to the Uninterruptable Power Source (UPS) Room. A large replacement transom of plywood is above each door. A white incandescent light is above and to the left of each door, and floodlights are mounted in the corners just under the narrow eaves.

The south façade has the "06-CP-3" signboard. Originally there was only a ventilation fan mounted on this wall, which remains (Figure 161). A concrete pad has been installed the full length of this side. Near the west end of the wall, a steel panel mounted on steel uprights that double as electrical grounding is next to the wall. Several electrical boxes were attached to the panel, of which one remains. The others were removed to make room for a recent Cummins Power Command Transfer Switch, which rests directly on the concrete slab. A smaller electrical box is mounted to the side of the building above the transfer switch.

At the rear of the building another fan protrudes from the wall of the Battery Room. An air handler is outside the UPS Room. Although a 2013 replacement, it is in the same location as the original Westinghouse air handling unit capable of both heating and cooling (NSTec 01132-S-1001, 2013).

Originally the north side of the building was bare, but it is now largely covered by a fairly recent large air handler on its own slab. The ductwork is considerably older than the present air handling unit.

The room is divided into a slightly larger UPS Room on the north and a Battery Room on the south (Figure 162). Both have concrete floors, fiberglass insulation in the roof and walls, and drywall interiors which were originally light green but are now white.

As shown in Figure 162, the center of the UPS Room was once entirely filled with a continuous row of inverters and rectifiers. The modern equipment, including the air ducting, is smaller, leaving enough space for a wooden cabinet, table, and open area at the west end of the room (Figure 163). Lighting is by surface-mount 3-tube florescent fixtures without diffusers, replacing the original

incandescent fixtures. Electrical panels are on the north and south walls. The UPS is a Powerware 9-315 120KW/150KVA produced by International Power Machines Corporation. The original UPS only produced 30 KW (H&N 006-CP3-E2.2, 1972).

As shown on Figure 162, battery banks originally lined all three walls of the Battery Room. The present battery bank occupies the entire north side of the room (Figure 164). This room retains its original incandescent globe lighting.

AR5: Transformer

AR5 is a Square D 500/560KVA 4,160V transformer flanked by two large electrical boxes (Figure 165). All three units rest on a concrete slab protected by bollards.

AR6: Backup Diesel Generator

AR6 is a Detroit Diesel back-up generator with automatic start-up and Westinghouse electrical components (Figure 166). It was originally on an open concrete slab. The date of its first installation is not known but the 15 x 20 foot flat corrugated steel roof was added in 1979 (Figure 167). It is supported by 4 inch square steel posts and U-section steel beams and rafters, all painted gray, as is the casing for the generator. Incandescent globes provide light under the canopy. Fuel was provided by a portable steel tank (now removed) on an adjacent concrete slab. Although unrelated to the generator, an electric panel with sweeps provided power to the parking area south of the generator. Trailers were often parked in the spaces adjacent to CP-1, particularly prior to its expansion, to provide additional space for equipment and offices.

AR7: Garbage Locker

Garbage Locker AR7 is a 9 x 9 foot single-story one-room building with walls and roof of corrugated metal exactly matching that used for the DNA Playback Building in materials and finish (Figure 168). It is built on a concrete slab with low sills. The flush door is centered in the east façade. A ventilation transom over the door is now blocked with plywood. Centered in each of the other walls is a horizontal screened window without glazing. The building was built in 1972 (REECo 6-CP-1-S2, 1972). It replaces a larger garbage enclosure formerly located in the area now occupied by AR8.

AR8: Diesel Fuel Tank

AR8 is a white rectangular steel fuel tank resting on a concrete slab and surrounded by portable concrete barriers (Figure 169). It is a Hoover Vault Tank produced by Hoover Containment Systems, Inc. It has a capacity for 5,021 gallons, has integrated secondary containment for spills, and is ballistic resistant. A ladder leads to the top of the tank. It is fairly recent, but, based on aerial photographs, it appears to have been in place at least since 1998.

CHARACTER-DEFINING FEATURES

At first glance, CP-1 does not appear to have a lot of character. In fact it looks like a typical building in any post-war warehouse or factory complex. Due to advances in interior fluorescent lighting (invented in 1938) and advances in air condition technology, "windowless boxes" for such purposes became widespread during and after the war years (Cohen 2011:401-403). This impression is deceptive and incorrect. The building abounds with design and use elements that mark it as an exceptional piece of Cold War architecture molded to serve a unique set of requirements. CP-1 suffers from the universal problem of Brutalist architecture in that it is difficult to appreciate. The rather unpleasant name does not help, leading several scholars involved with the Docomomo Organization, devoted to the study and preservation of modern architecture, to prefer the alternate name "Heroic" for this substyle (Fleming et al. 1999:75; Jencks 1985:257; Michael and Smith 2011:76).

Simplicity

In contrast to the elaborate architecture of some major government buildings, the architecture of the NNSS was strongly marked by its simplicity (Robinson and Foell 2003). It largely resembled World War II construction and made use of many war surplus demountable buildings. CP-1 was fully in keeping with this theme of architectural understatement. Looking back at the overview photos presented earlier, it does not stand out from the surrounding utilitarian buildings. Aside from having a greater concentration of placards and security devices, there is almost no indication where the main entrance to the building is located.

Interior furnishings were typical strong gray steel furniture common in government buildings everywhere in the era. They often lasted through the entire period with their AEC stencils intact.

CP-1 and other buildings at the Control Point were designed by engineers and pragmatic construction firms, not architects. This often subtle distinction regarding large utilitarian buildings is well illustrated when comparing CP-1 and its close relatives at NNSS with Albert Kahn's designs of the wartime Ford and Kaiser complexes in Richmond, California or Oliver Percy Bernard's 1939 design of the Vickers factory in Southampton, England (Cohen 2011:84). Although the building certainly falls within the stylistic category of Brutalism, it is an unconscious Brutalism far more similar to the vernacular industrial architecture seized upon by Le Corbusier (1931) and others as fine examples of simple and honest architecture. Use of structural concrete in its raw form and still showing form marks was a carryover from World War II, when it was one of the building materials that became heavily used during the conflict to save construction time, critical materials, transportation, and equipment (Cohen 2011:57). At that time it was specifically recommended that no attempt be made to obscure form marks after removal of the forms due to the waste of time this would entail.

Although many mechanical systems and communications cables are concealed in ducts and conduits, there was no systematic attempt to conceal them if it was inconvenient to do so. Eventually they

created a surface texture that added considerable interest to the otherwise bland concrete facades, but it was an accidental kind of art, quite unlike the deliberate exhibition of exposed ducting now popular.

Blast and Radiation Resistance

In1951, CP-1 was designed to withstand possible blast and radiation effects from atmospheric tests. Although these tests were to take place no closer than about two miles away and most at considerably greater distances, the design had to take into account that air-dropped device yields could be higher than expected and blast effects greater than anticipated. Also, although every effort was made to only detonate devices when there was not a wind blowing toward CP, deviations had to be anticipated.

CP-1 was built of very high cement content concrete throughout to provide it with extra strength. Although the building was quite strong and never suffered any damage resulting from atmospheric testing, it is not in the same category as buildings which are hardened against heavy blast effects. The wall, ceiling, and floor thicknesses of the concrete in CP-1 and CP-1A are really no more than what was required to make the structure stable even if no blast was anticipated. Blast resistance at this level was simply a positive side-effect from building entirely in concrete. For example, the principal building of the factory for the Société Centrale des Alliages Légers in Issoire, France was, like CP-1, a trabeated concrete design. It was given a concrete ceiling more than three feet thick for blast resistance compared with the 4 inches of CP-1 (Cohen 2011:84-85). Hitler's bunker at Wolfchanze had 6 foot thick concrete walls (Cohen 2011:481).

Facilities personnel have found the CP-1 concrete to be so solid that it is nearly impossible to drill holes in it. The building has no traditional windows - only a few very small fixed viewing ports. It also has a minimal number of doorways. All exterior doors are steel, but of ordinary manufacture.

The emergency egress tunnel from the CP-1B basement is the most elaborate example of engineering to counter both blast and radiation effects (Figure 170). A sand reservoir in the top of the vertical portion of the escape tunnel provides a radiation shield (Figure 171). In case personnel sheltering in the basement could not get out of the building due to blast damage or collapse from seismic effects, they would have been able to escape the building by tripping the trap door at the base of the sand trap, allowing the sand to fall down the tunnel to a sump. Then after opening the inner door and climbing up the tunnel, they had merely to push off the lightweight steel cover to exit.

One contingency in the case of a radiation release over the Control Point was to evacuate everyone except essential personnel within CP-1. Shields would be put against the outsides of vulnerable doors. The emergency escape tunnel would be used to get out if outside teams failed to remove the exterior shielding (Costa 2016).

In case of a radiation emergency, the air handlers were used to maintain positive pressure in relation to the outside atmosphere while all air intakes were shut down. Instructions for implementing this shutdown in CP-1 are still posted on the air intake ducts in Room 166:

> BUILDING SHUTDOWN
> BUTTON-UP CONDITIONS –
> NO OUTSIDE AIR TO BUILDING.
> SHUT OFF ALL FRESH AIR DAMPERS.
> PUSH BUTTON TO CLOSE DAMPERS.
> ALL FRESH AIR AND EXHAUST FANS WILL AUTOMATICALLY CLOSE.

Enough time has passed since the end of nuclear testing that facilities staff no longer know the location of this button, if it still exists, among the many disused control boxes in the room.

An even more sophisticated shutdown system was built into CP-1B. Both the fresh air intake and exhaust are heavy cast iron devices mounted directly into the concrete walls of the basement (Figure 172). In addition to manual shutoff valves, they each have dedicated compressed air supplies to blow the valves shut in case of emergency.

The basements of CP-1 and CP-1B were designated fallout shelters for use by workers in the immediate area as well as people already inside the building. Exterior signage is shown in Figure 173. Interior signage was used to direct people to designated shelter-in-place portions of the building, such as the Briefing Room (130) in CP-1B (Figure 174).

To minimize introduction of radiation into the building, only the main entrance would be used for entry. This entry was equipped with a decontamination station consisting of a ceiling shower, a portable shower, and a sump to contain contaminated water (Figure 175).

When CP-1 was built in 1951, the 4 inch thick roof and 8 inch thick walls were the minimum needed structurally, and it was assumed this would be adequate for radiation protection as well. CP-1B was of nearly the same construction as CP-1. In response to seismic problems with the earlier designs, CP-1C was massively built by comparison; with a 12 inch thick roof slab and 16 inch thick exterior walls.

In 1969 an elaborate experiment of fallout radiation protection was made on a sample of building types at the Control Point (Burson 1969). CP-1 and CP-1B were selected as part of this sample. The 4 inch thick roof failed to provide adequate protection to the first floor of CP-1. The basement did better, but radiation was able to enter through the east doorway and compromise the space. CP-1B did provide greater radiation protection due to its heavier construction, but radiation came through the common steel doors. Burson (1969:69) recommended that sandbags or concrete blocks should be used to block the north entrance of the CP-1B basement to protect the briefing room. A supplemental lead-shielded door was also designed for this entrance, but never installed. Burson also recommended construction of a baffle wall around the west main floor entrance to CP-1B to protect

the War Room. Rather than the wall, a heavy lead-shielded steel door was installed inside the regular door to prevent blast damage and radiation from this side (Figure 176).

The CP-1 basement was still considered a shelter area despite its radiation problems. A blast door, but of lighter construction than the one for CP-1B, was installed at the lower end of the interior concrete staircase to protect anyone sheltering in this basement. Later, the notion of using the CP-1 basement as a shelter was abandoned in favor of CP-1B and the blast door was removed. Most of its mounting hardware remains in place (Figure 177).

With all of this concern over protecting the building and its inhabitants from possible blast and radiation effects, the final addition to CP-1 in 1985 is puzzling. The Field Office (CP-1C) which filled in the hyphen between CP-1 and CP-1B was made entirely of lightweight metal with almost no shielding from either of these effects. It also opened up two doorways and two small windows in the concrete exterior wall of CP-1. Unlike the fixed viewing ports, these windows were not airtight when closed. The doors were simple interior office doors and not the standard exterior doors used elsewhere. Furthermore, the door with most immediate access to the thin north wall was later removed.

Security

Due to the critical role of CP-1 in testing, security has always been central to operations of the building. For many years, WSI was responsible for security at the site.

Security was organized in depth, starting with the guarded perimeter of the NNSS where every person entering was required to have a government badge and was subject to random searches. At the checkpoint at Gate 270, the entrance to the secure area at CP, only personnel with appropriate clearance were allowed to enter (Figure 178). Gate 270 is no longer manned and is left open to regular NNSS traffic. The area is surrounded by a chain-link fence topped by barbed wire and is posted against trespassing. As a further precaution, above-ground wires are guarded with barbed-wire hoops (Figure 179).

Every entrance to CP-1 is posted with a variety of warning and information placards. The most elaborate door is the main entrance which has an intercom, multiple key pads, and a key lock. One placard in particular indicates the special status of the building. It warns that only people with a Q clearance are allowed inside without escort (Figure 180). This and nearly all other exterior doors are also equipped with alarms.

Once inside, portable signs were used for information purposes (Figure 181). Lights above doors warned people about activities in control and briefing rooms (Figure 182). Other means of security were combination door locks. Dutch Doors allowed free conversation or passing materials through doorways while excluding uncleared personnel (Figure 183).

Although, in a sense, the entire building was a vault, several walk-in vaults are present in the building. The security of these vaults varied from being entirely steel-lined and equipped with a

heavy metal door as in Room 272 (Figure 184) to being not much more than ordinary rooms with special door locks. A later enhancement to the building as it became even more security-conscious through time was the extension of vault walls all the way to the ceiling to preclude entry via the attic.

An important aspect of security was maintaining the integrity of the myriad communications channels into and out of the building (Figure 185). Entire rooms were dedicated to this complex task.

Finally, security guards were stationed inside the building whenever required (Figure 186). This photo shows a WSI guard in Briefing Room 130. A WSI representative was also present in the War Room during tests for security issues.

Self-Sufficiency

During a test, 250 to 300 were typically in the forward area, most of them concentrated in the various buildings of CP. CP-1 was designed to be self-sufficient for extended periods. This was generally due to testing schedules and test delays which often resulted in increased occupancy. It was also necessary to have this capability in case the building should be isolated due to an unexpected release of radiation in the area.

Critical to the continued functioning of the building for mission purposes was a secure source of electricity. This was accomplished with the Generator and Battery Room attached to the north wall of CP-1, later replaced by the UPS adjacent to CP-1A (AR4) and with the emergency generators in CP-1B. This electricity was only adequate for critical purposes and did not extend to providing lighting or electrical power to most of the building. The generators were tested prior to each test.

The large cafeteria and smaller kitchens ensured that food would not be a problem (Figure 187 and Figure 188). Large store rooms were utilized to ensure that enough food was on hand to survive an unexpectedly long stay in the building.

In addition to dedicated dormitories, steel-frame bunks were scattered throughout the building (Figure 189 and Figure 190). To make long stays more bearable, showers and a laundry facility were available (Figure 191).

When the building was locked down, a full contingent of maintenance personnel was sequestered inside along with tools, spare parts and supplies.

Communications

Most functions of CP-1 depended on rapid communications using a variety of media. These included radio (OCC), microwave, and land lines (wire and fiber optic).

Internal communications of information included extensive media creation and presentation capabilities. All of this was needed to distill the masses of available data into forms that could be assimilated by the DOE and lab directors and their advisors to quickly make critical decisions. One

aspect of this was to record, in sound and video, at least a sample of events in the War Room for replay for both training and public relations purposes.

One reason that microwave communications became so heavily relied on was that animals, particularly badgers, were adept at frequently destroying land lines no matter how deeply they were buried (Ristvet 2016). The role of microwave communications in a typical test setup is shown in Figure 192.

Due to the extreme importance of communications during tests, there was extensive redundancy of key communication lines by duplicating cables. The immense importance of communications is expressed everywhere in the architecture by the microwave tower, antennae attached to the building itself, above-ground lines, buried lines, communications cellars, and the masses of conduits and cable trays affixed to the outside of the building. On the inside are dedicated cable rooms and vaults and numerous exposed conduits and wires. In every era there were multiple rooms dedicated to maintaining communications of various types.

Complex Electronic Systems

The highest level of computing and monitoring technology available was needed to perform and monitor the tests. There was a continued reliance on tube technology for many years. It was not until 1970-1978 that the tube-based Honeywell computers were replaced. This kind of early computer generated immense amounts of heat. To counter the problem, the computer spaces were kept extremely cold. This is reflected in the particularly robust cooling system of Room 104 where the entire raised floor was turned into a massive cold-air duct with numerous floor registers. Byron Ristvet (2016) recalls freezing in the weather station room (273), while projecting information onto the War Room monitors. The electronics ceased to be seriously updated after the end of the Cold War.

Architecturally, the requirements of various electronic technologies are expressed in raised computer floors, specialized cooling systems, and even a special door closure system to prevent overheating. Many rooms have large numbers of electrical outlets, often arranged in continuous strips. Specialized power sources were installed in the computer rooms. As shown in the historic photos of the various control, T&F, communications, and monitoring rooms, these spaces were crammed with electronic devices, often leaving barely enough room to walk between equipment racks (Figure 193).

Space Specialization

As shown by the sequence of partis presented above, the interior spaces of the building were organized quite strongly by function. The most critical spaces were always arrayed along the north end of the building in the first floor, followed closely by rooms directly below them in the basements. Beyond this, the arrangement of mechanical and personal spaces in the basements remained quite constant through time. Both CP-1A and CP-1B retained their spatial organization through time with little change. Being the last major part of the building constructed, CP-1B exhibited the most rational centralized plan, based on the War Room and the downstairs Briefing

Room, of any portion of the building. In contrast, the major portion of CP-1 was an ever-shifting agglomeration of rooms whose walls and functions changed rapidly and dramatically over the course of time. At any one time there were distinct clusters of room functions and users, but to the visitor the impression was of a chaotic maze. Away from the principal circulation corridors, one room opened to another in no set direction or pattern. With rooms embedded several deep, this was truly a maze.

The many federal agencies and contractors involved with CP-1 all had their own specific areas of the building ranging from a single room to an entire wing, as with AEC/DOE control of CP-1B.

Prior to 1958 "Los Alamos was clearly the senior organization and almost the controlling organization" (Ogle 1985:118). Through time LLNL gradually gained parity with LANL at the NNSS.

The reversal of this initial situation is expressed well by the very large proportion of CP-1 occupied by LLNL in the 1970s and even more so by construction of their own building, CP-9, which overlooks and dwarfs CP-1. After construction of CP-9, CP-1B was DOE territory, CP-1 and CP-1A were LANL, SNL, and DNA, and CP-9 became LLNL territory. Control Rooms were no longer shared. Similarly, the DNA Test Director later moved from the basement of CP-1 to CP-20.

Mission Flexibility

It is unlikely that during the design of CP-1 in 1951 that much thought was given to possible future demands on the building. As it turned out, nearly every aspect of testing and associated technologies would change immensely. Although not designed for flexible response to these changes, CP-1 was used throughout the entire testing era. Some aspects of the building happened to be well suited to such changes while others were problematic.

Architectural results of this constant change include: major and minor additions; frequent interior design changes (made possible by largely self-supporting concrete roof and floor structures); and the addition of many exposed cableways and raised floors to offset a major original design flaw, which was the lack of a service level between the basement and first floor. It took time for the architectural design community as a whole to recognize the need for a dramatic rethinking about the special space requirements for laboratory or high-technology workplaces. It was not until near the end of his career in the early 1960s that Louis Kahn designed full-height services levels between floors at the Salk Institute in California, correcting a severe problem of inflexibility in his earlier laboratory designs (Frampton 1992:245). It would not be until well into the next decade before this concept became widely applied.

It is to be expected that in a culture that values rapid change, many innovations would occur from one building design to the next (Petroski 1992:2). What is particularly challenging here is that so many should be incorporated in a single building through time.

Control Rooms

Control rooms created for the purpose of enabling efficient command and control constitute a distinctive property type in their own right which developed over the course of the twentieth century as a result of extreme technological changes. They were a military invention but proved to be extremely useful for other organizations as diverse as the space program and nuclear testing.

Traditionally, a military commander in tactical charge of a battle had little control over anything beyond what could be seen, supplemented by human sources of information such as runners, staff people on horseback, or couriers. Staff meetings usually could not be held once forces were engaged. Visual aids consisted at best of an inaccurate map. Decisions often had to be made instantly on the basis of poor information. Introduction of wire telegraphy helped to provide information beyond the range of seeing and hearing, but when General Grant directed Union forces in the Battle of the Wilderness during the Civil War, he was operating no differently than he would have a thousand years previously.

In contrast, strategic command and control was likely to be centered on a conference table. Visual aids would still be maps and perhaps a globe. A good example of this kind of control center is that of the British Lords of the Admiralty during the Napoleonic wars. An important communication advance at that time was introduction of visual telegraph and signal flag systems to speed up parts of the age-old methods of information gathering.

This setup changed rapidly in the mid-twentieth century with further expansion of communication systems using wire telegraphy, radio, and recorded video. Remote sensing, particularly by means of radar, started to come into use. Photos became commonplace means of conveying information, maps became far more accurate, and thematic maps for conveying information about specific problems began to be developed. During World War II, all of these changes came together to create the kinds of control centers we now regard as commonplace thanks to their presence in newsreels, illustrations in history books, and particularly because control centers are so frequently used as principal foci of dramatic action in movies that they have become iconic. Indeed a problem that arises when trying to assess the significance of real control centers, such as those in CP-1, is that they pale by comparison with their fictional counterparts. The conference table type War Room in Dr. Strangelove occupied an entire sound stage the size of all of CP-1 with towering interior spaces. The console type control room depicted in a recent movie about a daring rescue mission to Mars accorded Chinese Mission Control with another huge room and walls covered by towering flat screens. These images work because they are firmly grounded in the way actual control rooms were designed and operated, but being the movies, everything is considerably larger than life.

"Wartime 'situation rooms' were set up for conducting operations using maps, photographs, statistics, and diagrams to create panoptic systems that made it possible to view the 'theatres' of operations from the best seats available" (Cohen 2011:322). One of the most important and successful control rooms of World War II was the Royal Air Force Fighter Command Headquarters which was the central command center for the defensive Battle of Britain. Figure 194 shows the

controller and staff perched on a balcony. This position was required because a large map table was used to portray the theater of operations. The tactical situation was far too complex and fluid to keep in the mind of the controller, so a team of technicians moved markers around the display showing the positions of the various forces engaged. Other smaller displays on the balcony portrayed information such as the numbers of planes available. Each technician represented the ending point of an elaborate network of information inputs which were interpreted and condensed by analysts who then told the technicians where to move their markers via earphones. Throughout the war, the same basic pattern held in that no matter how sophisticated the means of gathering information, its portrayal usually was done in an extremely low-tech manner. A similar example can be made of the tactical control room for U-Boat command except that the principal display was a gridded wall map on which markers were moved about by technicians on movable ladders.

Thanks to numerous newsreel photo shoots and still publicity photographs, the conference table-based Presentation Room used by the Combined Chiefs of Staff became widely recognized during the war. As shown in Figure 195, large wall displays were principally of a variety of maps, again kept updated by a technician on a ladder. The purpose of this room was to facilitate making strategic decisions about policies that could take months or even years to play out.

By the end of the war, great advances had been made in the electronic portrayal of information, including use of simulations. Much of this development was under the Visual Presentation Branch (later the Presentation Division) which was created late in 1941 as part of the Office of Strategic Services. It brought a wide variety of specialists to the problem including artists, filmmakers, and architects. One of the first and perhaps the most ambitious of its projects was the design of a White House Situation Room for President Roosevelt. Henry Dreyfuss improved on the British model of control rooms by replacing the visible human display technicians with front and rear displays for images (Cohen 2011:322-323). His design, shown in Figure 196, looks remarkably like a multi-screen movie theater, and at first glance could be a photo of the CP-1B War Room. Distinctly ahead of its time and never built, it would be widely emulated after World War II.

The reality of situation room communications and graphic portrayals at the end of the war was far less impressive. Early in the Korean conflict, President Truman and his key military advisors met in the Army Teleconference Room to make some of the key decisions of the era. Their communications to Japan were typed into a teletype machine by a technician, and then they would watch a wall screen while, letter by letter, the reply would come back (Boettcher 1992:219-220). It was all very exciting to be in instantaneous communication with someone half a world away, and the Army was very proud of the facility, but Dreyfuss would likely have been embarrassed by it all.

The War Room in CP-1B represents the culmination of the conference table-based type of control room. At the same time, the console-based Monitoring and T&F Rooms, along with several of the computer/monitoring back rooms of CP-1 and CP-1A, represent the ultimate advancement for the time of an entirely new style of control room. This was a direct result of the massively increased input of information and the need to have a specialized technician interpret a small portion of it quickly and in such a way as to be useful for the person making the command decision. This kind of

console-based control room would later become standard at the National Aeronautics and Space Administration, best known as NASA. Like the World War II tactical control rooms, those at CP-1 were created to assist the AEC/DOE Test Controller and the Test Group Director in making immediate decisions about whether or not a device was ready to detonate, considering both safety and technical issues. They also could address any unexpected circumstances that occurred.

The War Room in particular had roles beyond those directly related to test control as one of the places where the Cold War was fought. It was highlighted in media presentations and to select visitors as the place where the United States made the 'yes and no' decisions on proceeding with tests, integrated with the countdown to detonation (Figure 197, Figure 198, and Figure 199). The War Room continued to be displayed in this way as part of standard tours of the NNSS until 2015. It was easy for visitors to imagine the room filled with Advisory Panel members and other personnel, sitting behind placards stating their function in the testing process, while providing the Test Controller information and feedback during and after a test. Above, separated by glass, is the Observation Gallery, also called the Viewing Balcony, with seating for people watching the testing process in the War Room. These observers usually were senior laboratory personnel and, on occasion, select media representatives. There was a conflict between need and desire to show results of the testing program versus security concerns and public relations. Media or uncleared guests were infrequent as they interfered with free discussion of secure matters (Ristvet 2016). Laboratory directors would show up about once a year, while "DC big wigs" occasionally showed up as well. The spontaneously generated term "War Room" is apt because tests demonstrated nuclear capabilities to our opponents. CP-1 was actually a principal component of a Cold War Battlefield, not simply a testing installation – and this one room was its visible command post.

PRESENT CONDITION

At present the building is vacant. All sources of electrical power or other possible sources of fire have been shut down or removed (Figure 200). The fire suppression system has been deactivated with all water drained from the pipes. All other plumbing has also been shut down and drained, eliminating the potential for water damage.

As historic buildings go, CP-1 is in good condition. Despite problems noted below, the facilities team with NSTec regards it as structurally sound, and for the most part it is protected from the weather. Its built-up roof is in excellent condition and appears to have many years of service left in it before it needs repair or refinishing since it was replaced ca. 2000-2005. Its interior condition is also good, but it must be recognized that all of its interior components are aging, and they have been on a minimal maintenance schedule for many years.

Steve Okosisi (NSTec), the facilities manager in charge of CP-1, estimates that $5.7 million of repairs and upgrades would be required to bring the building back into usable condition (Okosisi 2016). Before it was vacated, it was operating with maintenance issues that made it uncomfortable

for the few people still using it (only 15 by October 2015). The facilities office has a 25-page single-spaced list of corrective and preventive work orders that were put on hold when the building was closed down. This list documents that just about everything that could possibly be wrong with a building had taken place, including problems with plumbing, heating, air conditioning, cafeteria equipment, pests, electrical systems, lighting, and so on.

The following description is limited to obvious problems with the building, but is not intended to suggest that these problems are severe enough to seriously degrade its historic integrity. Rather, they help us understand some of the problems involved with continuing to maintain a building of this age, size, and complexity. Problems with specific rooms are detailed in Appendix B.

Seismic Damage

No seismic safety or condition study of CP-1 was available to DRI. Some damage to the building, which is likely related to test-related seismic effects, is noted in this section, but no member of the DRI team has the qualifications needed to evaluate the condition or safety of this building from an engineering standpoint. Some of the cracking observed in the interior and exterior could well be due to subsidence or other causes, but there is little doubt that much of it was a result of CP-1's proximity to underground tests.

Underground tests related to containment began in Yucca Flat and at Rainier Mesa in 1957. Due to the proximity of CP-1, lower yield underground tests were done in the southern part of Yucca Flat and higher yield tests were done farther away. In CP-1 during an underground test, "The first thing that happened was the high frequency waves came from the shock wave – just kind of a trembling and so the whole building shakes [very rapidly]. And then before very long you have the one cycle per second so the whole building shakes with the rhythm of one cycle per second [large even waves]." (Brownlee 2016). From this shaking at CP-1, some test panels would usually be able to correctly guess the actual yield of the test based on all the previous ones they felt.

The first event to cause cracks was the 249 kt Bilby test in 1963, which was about 10 miles from CP. It caused a heavy ground shock and looked like an ocean wave coming across the alluvium to the people who were lined up on the balcony at CP-1 observing the event. It shook the building "tremendously" when it arrived (Brownlee 2016). Bilby caused some damage as far away as Las Vegas. The Carpetbag test and quite a few others also caused damage (Ristvet 2016).

CP-1B was built to rock like a boat. The other parts of the building did not move in this unified fashion (Brownlee 2016). Due to differences in size and construction, each part of the building had a different "seismic moment" so when the ground motion hit the building each part moved quite differently. This resulted in the continual cracking where they were joined together. Cracking at the junction of CP-1 and CP-1B is shown in Figure 201. Similar floor cracks at the junction between CP-1 and CP-1A are shown on Figure 202. A problem for the building was that it was solidly constructed on bedrock, which readily transmitted the seismic shocks to the building. It lacked base isolation, which if properly designed may have insulated the buildings from these shocks.

The 4 inch thick basement floor slab of CP-1 was subject to minor cracking. An example is shown in figure 203. Of the various phases of construction, only CP-1 has severe cracks in its walls. Exterior wall cracks are shown in Figures 204 and 205. These cracks have been caulked, but most of the caulking has eroded away. In some areas the cracking extends entirely through the wall and is visible from the interior (Figure 206).

The ceiling of CP-1 has also cracked. In the past this allowed some water infiltration (Figure 207). Hot tar from applying the built-up roof has come through the cracks as well (Figure 208). Presently there is no leakage through these cracks because the roof is now in good repair.

CP-1A has cracks through the exterior concrete walls radiating from various apertures, particularly former vents in mechanical spaces that have been plugged with CMU. These cracks extend all the way through the walls.

Structural Decay

Structural decay of CP-1 is minimal. Where it exists it is mainly due to construction flaws. One of the counter-intuitive aspects of concrete construction is that while it is remarkably flexible in what can be created out of it, and it appears to be an easy medium to work with for the most part -- it is also according to Ellison et al. (1987:103), "…more susceptible to permanent damage by the contractor than other construction materials."

The stucco near ground level along much of the perimeter of CP-1B has degraded since there was no provision to keep occasional ground water from creeping up the concrete to weaken the bond of the stucco to the concrete (Figure 209).

An asphalt-based water-resistant coating was applied to the exterior of CP-1 below grade. Areas where this has been exposed by later construction show that it was quite effective in protecting the concrete from water infiltration. In contrast, this precaution does not appear to have been taken at CP-1B where fairly deep exfoliation of the concrete below grade is exposed in the exterior of the north wall (Figure 210). Water infiltration damage and resulting exfoliation is present along the interior of the same wall (Figure 211).

The concrete work in CP-1A is inferior to the quality of the concrete work in CP-1 and CP-1B. Borders between pours have left voids, some of which are severe enough they have been caulked. In addition, the borders of the north porch have eroded to such an extent that pieces of concrete are falling out and rusting rebar is exposed (Figure 212). This is in contrast to the original CP-1 porch which is still in perfect condition. Another marker for lack of care during construction of CP-1A is the absence of corner chamfers in the concrete forms prior to pouring. The result is sharp, irregular, and friable corners in the finished concrete which is very much a contrast to the well-formed chamfers of the other parts of the building.

Plumbing Failures

There is an extensive amount of water-carrying plumbing throughout the building. In addition to potable water systems, water pipes are present for fire suppression, sanitary systems, heating, and cooling. Numerous suspended ceilings show the results of this kind of leakage, compounded by possible oil leakage from HVAC machinery in the attic (Figure 213). In some cases water has flowed down walls and damaged flooring as well (Figure 214).

Flooding

Insufficient attention was paid to periodic storm water flooding when the grading of the lot was altered for construction of CP-1A and CP-1B. The worst situation is the north basement entrance to CP-1B which is at the low point of a storm water channel passing under the Microwave Tower (Figure 215). Neither these nor any other exterior doors are sealed against groundwater flow, and the mechanical rooms have been periodically flooded. This flooding has deposited silt inside the building and has been frequent enough to rust out interior steel doors and door frames. Where drywall has been reached by this flooding it has been severely damaged (Figures Figure 216, Figure 217, and Figure 218). Water has entered the south double basement door of the CP-1A hyphen. Water has also flowed down the concrete sidewalk and under the west door of CP-1B.

Materials Failures

Failures of materials due to poor design or application are rare in CP-1. In some places, paint has failed to adhere to interior concrete walls (Figure 219). The dry atmosphere is superb for preserving materials that would be in serious difficulties in a damper climate, even when they are not subject to routine maintenance. The aridity also greatly retards potential interior problems, such as mold growth resulting from the building being closed for extended periods without ventilation.

Use Wear

For the most part, CP-1 exhibits remarkably little use wear and damage from its users. A few acoustic ceiling panels have been broken in the course of accessing plumbing and wiring concealed above the suspended ceilings. By far the heaviest use damage is to walls and floors in the kitchen, service area, food storage room, and hallways traversed by food-service carts in the basement of CP-1 (Figure 220 through Figure 223).

Animals

Infestation by small animals of various species has been an ongoing problem ever since the construction of CP-1. Maintenance diagrams even showed the places where mouse traps were routinely kept in place under raised computer floors. Exterior doors are generally poorly sealed, but the hardest points of entry to control are the many cable conduits of various types that enter the building below ground level, via cellars, through walls, and through the ceilings. When the building was vacated, some cables were pulled leaving openings up to 4 inches in diameter (in Room 115). Even after a short period of disuse, insect remains and rodent droppings were observed.

Equipment Failures

The worst failure is the CP-1 chiller, which has been broken for at least six years (Figure 224). In addition, one of the boilers in CP-1 is also disabled. Both of these pieces of equipment were essential for heating and cooling CP-1 and CP-1A.

V. RECOMMENDATIONS

NATIONAL REGISTER ELIGIBILITY

CP-1 (SHPO Resource Number B14490; NNSS Building Number 06-CP-1) is eligible to the NRHP under Criteria A, C, and D at the national level of significance from 1951 through the end of nuclear testing in 1992. It may also be eligible under Criterion B, but the research needed to support this is beyond the scope of the present project; therefore, CP-1 remains unevaluated under Criterion B.

Accessory Resources AR1 through AR7 were all built during the period of significance and all retain excellent integrity, and are, therefore, contributing resources. Accessory Resource AR8 was installed after the period of significance and is non-contributing to the NRHP eligibility of CP-1.

Criterion A

Overall, the historic significance of Cold War resources related to nuclear testing on the NNSS, administered by the NNSA/NFO, is at the national level of significance. Sedan Crater is an example of a nuclear testing resource on the NNSS already listed on the NRHP.

CP-1 was critical in the development of the United States' capability to successfully perform nuclear testing in the continental United States. This importance is revealed by its first designation, which was simply "Building 1 – Control Building" (REECo 1955). Taking the effort of erecting this major concrete structure was a crucial first step in the process of making the test site in Nevada a long-term endeavor requiring more than flimsy temporary support buildings.

Regarding the specific importance of CP-1 in relationship to nuclear testing, Chuck Costa (2016) states, "It was the hub for activities for tests. In those days that's where the Operations Control Center was; that's where the War Room was where you convened for a shot. That was control center for the main activities at the Test Site – that's what we were there for."

Criterion B

CP-1 is not evaluated at this time for its significance under Criterion B. As Bob Campbell, a long-term Test Director for LANL, said, "In the whole history of the world there has never been anybody like us and probably will never be anybody again – our testing is over now" (Brownlee 2016). Many important people used the facility, but this association usually does not relate to the portions of their active careers for which they were personally of importance. Some people only worked in CP-1 in preparation for and during tests but some Test Directors and members of the key scientific and technical staff spent most of their active careers at their laboratories in other states.

However, AEC/DOE Managers, Test Controllers, laboratory Directors and key personnel and staff were closely associated with CP-1, in some cases for many years. It is likely that association with one or more of these individuals would make it reasonable to consider the building eligible under Criterion B. At this time, the detailed comparative biographic information required for such an evaluation is beyond the already considerable scope of the present project. The magnitude of the decisions made by these people under the stress of evaluating so many different technical and safety issues related to nuclear testing is truly immense. Some individuals may well come up to this standard of both importance and association with this particular resource.

Criterion C

CP-1 is eligible to the NRHP under Criterion C at the national level of significance from 1951 through 1992. It is the oldest and most important example of a building designed to control nuclear testing experiments in the United States. Its design and the character-defining features discussed above all make this building a unique example of Brutalist Cold War architecture. Interior spaces in this building are at least as important for their significance as the exterior. Aside from a lack of windows to recess, CP-1 superbly represents the defining features of Brutalist architecture according to Michael and Smith (2011:76). These are massive appearance, unwelcoming entrance, flat roof, and exposed concrete walls.

CP-1 was designed in 1951 by Haddock Engineers (aka Haddock Engineering, Ltd or Haddock) and by Holmes & Narver, Inc., Engineers (H&N). It was built by Lembke Construction and Clough & King Construction (REECo1955; Campbell et al. 1983:175). At about the same time that Haddock designed CP-1, the firm also designed the Buckner Building for the Army at Whittier, Alaska. At that time, the 244,000 square foot concrete building was the largest in Alaska. It had many parallels with CP-1, particularly incorporating so many interior functions that it was known as the "City under one roof." It was abandoned by the Army in 1962 and after a period of disuse has been repurposed by a private company. It survived the great 1964 Alaska earthquake without damage. There is some deterioration of the building due to some rusting of the reinforcing steel and due to the intense freeze-thaw cycles (HDR 1995; Sheehy 2015).

Haddock's role at the new test site was limited to the first few buildings, including CP-2. In contrast, H&N was to have a major role there throughout the rest of the Cold War. This company was based in Los Angeles and Las Vegas. It provided architectural and engineering support for civil,

mechanical, and electrical design services. The firm also provided quality control services and materials testing. It was one of a relatively small set of contractors that, once initially established, continued to design, build, and operate the test site for the entire Cold War period and beyond. This remarkable continuance of major companies and personnel contributed strongly to the peculiar character and solidarity of the long-term workers at the site.

CP-1A was designed by REECo. The original construction company from Las Vegas was terminated due to suspicion of ties with organized crime. REECo out of El Paso, Texas was brought in to do the work. REECo was previously involved with building special weapons project sites and therefore already had most of the security clearances needed to work here (Ristvet 2016). REECo established an office in Las Vegas and became ubiquitous in its support services on site. These services included operations and maintenance; mining, drilling, and construction; environmental, safety, and health services; housing and cafeterias; motor pool; and medical services. In addition to major design, which in this case was essentially a copy of the design elements of the original CP-1 as designed by Haddock, REECo designed and installed a plethora of minor alterations and fabricated specialized furnishings for CP-1 throughout the years of the Cold War. REECo was a user as well as designer of the building, occupying several of its support spaces, staffing the cafeteria, and maintaining the building. The former functions of REECo have been taken over by NSTec.

CP-1B, which is by far the most capably designed element of CP-1, was designed by Norman Engineering Co. of Los Angeles (Norman). This firm had the benefit of years of practical experimentation on the previous phases of construction both in regard to how the building did or did not withstand the rigors of nearby underground testing, and in how the building was actually used. The result was a far more robust structural design. Its centralized planning of interior spaces was so well thought-out that it survived with almost no changes for the rest of the period of nuclear testing. By the time Norman designed CP-1B in 1966, the firm had been in business in Los Angeles for nearly a decade, having filed as a corporate entity there in 1957.

Other firms designed various modifications and minor additions, but the scale of their work does not merit discussion in regard to the overall architectural significance of the building.

A unique component of the building is the War Room, a concept developed during World War II by the military to efficiently organize information within a central command and control environment for operational decision-making. The War Room at CP-1 functioned within a similar environment in order to conduct nuclear weapons tests, the primary purpose of the test site. It and the Briefing Room below it were the focus of the CP-1B addition to the building. In the War Room, information was processed by a team of various key personnel responsible for conducting the tests. The room had large screens for real time visual displays of the tests, viewed by personnel sitting around a large table and at a row of consoles. Phones were available on the table and consoles for communicating with personnel outside the room. A large floor-to-ceiling map of the test site and surrounding areas covered a portion of one wall. A gallery in the mezzanine above and facing the main room was for additional observers.

In addition to the architectural significance of the building itself, many of the components developed there have been extremely important. A good example is the bhangmeter installed on the building. It was an early version of a device which remains central to remote sensing now done by satellites to detect the detonation of nuclear devices anywhere in the world and to estimate yield by its distinctive double flash of light.

Criterion D

This is an unusual case where a building appears to have significant information potential regarding the question of how a concrete building incorporating two different designs has reacted to a very long series of precisely documented seismic shocks. This makes it a surviving case study of a phenomenon which is both extremely rare and one that could have important implications to earthquake-resistant concrete designs.

In the past, this building was used for a ground-breaking study which developed a method of testing buildings for their resistance to radiation (Burson 1969). Although at present scientific interest in this topic is not high, an increase in the threat of nuclear attack could rekindle interest in it, in which case it could prove invaluable to have this test case available for restudy.

The building is also a focal point for questions regarding how a building for nuclear testing was designed and located on the landscape. It has a complex history of changes through time according to need, changing technology, and politics. It also reflects the complex history of interaction among the various groups which used the building. Questions regarding the complex sociology of the building as it related to the federal agency representatives, the laboratories, and other contractors, have only been touched upon by the research done for the present report.

Integrity

CP-1 retains a high integrity of location, design, setting, materials, workmanship, feeling, and association. Whether sitting in the War Room surrounded by the monitors and chairs of the Scientific Advisory Panel or looking out of a viewing port in a control room at the panorama of Yucca Flat, it is not at all difficult to imagine that another device is about to be detonated. Changes in the building that have been made since the end of the Cold War are matters of relatively small details. This is not surprising since for many years there was an imminent possibility of a renewal of testing as had occurred during the earlier testing moratorium. For the most part the building is still very similar to the way it was during testing, and the exterior is virtually unchanged. In addition, it is surrounded by buildings, structures, and landscape alterations which have survived almost intact from the Cold War period.

PROJECT EFFECTS

The determination of project effects to CP-1 is based on this building's eligibility to the NRHP with seven of the eight Accessory Resources designated as contributing resources. This report documents the condition of CP-1 and eight Accessory Structures in April and May 2016 after CP-1 was vacated and closed in place in December 2015. The decommissioning of the building involved removal of nearly all portable items and equipment, including furnishings, electronics, and other materials. The War Room and the DOE Test Controller's Office were excluded from this activity, with most items left in place. After the building was vacated, the connections to water and electricity were cut off from the building in tandem with drainage of the fire suppression system and interior water lines. Similarly, the Accessory Resources were vacated and without utilities during the recordation of the APE.

The decommissioning of CP-1 resources is closure in place and does not include plans for future activities, including maintenance. The exterior of CP-1, the walls and roofs, are reinforced concrete, built with the intent to withstand an atmospheric nuclear detonation and seismic ground wave movement. The exterior of the building will remain intact for decades, if not longer. In the foreseeable future, the lack of maintenance will have no adverse effect to the exterior. There is an expectation of adverse effect to the interior of the CP-1building. Although the arid environment will contribute to preservation, without maintenance the interior of the building will deteriorate slowly as insects and small animals, such as snakes and rodents, access and inhabit the area. All the Accessory Resources eventually will be altered by weathering. Three of these resources (AR3, 4 and 7) have the potential to have infestations over time, resulting in an adverse effect to these resources. None of these adverse effects are immediate results, but are long-term consequences of closure in place.

The closure of CP-1 and Accessory Resources has no indirect atmospheric or audible effects. There also are no indirect visual effects to historic properties because the exteriors of the resources are not altered by the closure activities.

VI. REFERENCES

Engineering drawings are cited in text by the firm responsible for creating the drawing, the, NNSS drawing number, and the earliest year found on the drawing. All drawings are on file at the NNSS in Mercury either in digital format or as aperture cards.

Anders, Roger M.
1978 *Institutional Origins of the Department of Energy*. Energy History Series 1(1), The Office of Military Application, U.S. Department of Energy, Washington, D.C.

Beck, Colleen M., Harold Drollinger, and Nancy Goldenberg
2000 *An Historical Evaluation of the Test Cell A Facility for Characterization Activities Associated with Decontamination and Decommissioning, Area 25, Nevada Test Site, Nye County, Nevada*. Cultural Resources Reconnaissance Short Report No. SR021400-1, Desert Research Institute, Las Vegas, Nevada.

2001 *Nevada Test Site, Test Cell A Facility*. Historic American Engineering Record No. Nv-33, U.S. National Park Service, Washington, D.C.

Beck, Colleen M., Nancy G. Goldenberg, Harold Drollinger, Robert Jones, and Diane L. Winslow
1996 *A Historical Evaluation of the Engine Maintenance Assembly and Disassembly Facility, Area 25, Nevada Test Site, Nye County, Nevada.* Cultural Resources Reconnaissance Short Report No. SR082696-1, Desert Research Institute, Las Vegas, Nevada.

Beck, Colleen M., Nancy G. Goldenberg, and Diane L. Winslow
1995 *A Historical Evaluation of Jr. Hot Cell for Characterization Activities Associated with Decontamination and Decommissioning, Area 25, Nevada Test Site, Nye County, Nevada.* Cultural Resources Reconnaissance Short Report No. 0332095-1, Desert Research Institute, Las Vegas, Nevada.

Bergkvist, Nils-Olov and Ragnhild Ferm
2000 *Nuclear Explosions 1945-1998*. Report FOA-R--00-01572-180–SE, Defence Research Establishment, Division of Systems and Underwater Technology, Stockholm, Sweden.

Blohm, Craig E.
2003 *Weapons of Peace: The Nuclear Arms Race*. Lucent Books, San Diego, California.

Boettcher, Thomas D.
1992 *First Call: the Making of the Modern U.S. Military, 1945-1953*. Little, Brown, and Co., Boston.

Brady, William J., Bernard Eubank, Elizabeth McDowell, and Joe A. Stinson
1989 *Operations Anvil, Cresset, Tinderbox, and Guardian: Events Husky Pup, Mighty Epic, Hybla Gold, Diablo Hawk, Huron King, and Miners Iron, 24 October 1975 - 31 October 1980*. Report DNA 6325F, Field Command, Defense Nuclear Agency, Kirtland Air Force Base, New Mexico.

Brownlee, Robert
2016 Personal Communication with Colleen Beck, 07/15/16. Loveland, Colorado.

Buck, Alice L.
1983 *A History of the Atomic Energy Commission*. Report DOE/ES-0003/1, U.S. Department of Energy, Washington, D.C.

Bundy, McGeorge
1988 *Danger and Survival: Choices About the Bomb in the First Fifty Years*. Random House, Inc., New York.

Burson, Zolin G.
1969 *Experimental Evaluation of the Fallout Radiation Protection Provided by Structures in the Control Point Area of the Nevada Test Site*. EG&G Technical Report L-939 (EGG-1183-1436).

Campbell, Bob, Ben Diven John McDonald, Bill Ogle, and Tom Scolman
1983 Field Testing: The Physical Proof of Design Principles. *Los Alamos Science* Winter/Spring, pp. 164-179.

Carothers, James
1995 *Caging the Dragon: The Containment of Underground Nuclear Explosions*. Report DOE/NV 388, Nevada Operations Office, U.S. Department of Energy, Las Vegas, Nevada.

Cohen, Jean-Louis
2011 *Architecture in Uniform: Designing and Building for the Second World War*. Canadian Centre for Architecture/Yale University Press, New Haven.

Costa, Charles (Chuck)
2016 Personal Communication with Colleen Beck, 5/26/2016. Desert Research Institute, Las Vegas, Nevada.

Defense Threat Reduction Agency (DTRA)
2002 *Defense's Nuclear Agency 1947-1997*. Defense Threat Reduction Agency, U.S. Department of Defense, Washington, D.C.

DOE, see U.S. Department of Energy

Dohrenwend, John C.
1987 Basin and Range. In *Geomorphic Systems of North America*, edited by W.L. Graf, pp. 303-342. Centennial Special Volume 2, Geological Society of America, Boulder, Colorado.

Drollinger, Harold
1999 *An Historical Evaluation of the Railroad Transport System at the Nuclear Rocket Development Station, Area 25, Nevada Test Site, Nye County, Nevada*. Cultural Resources Reconnaissance Short Report No. SR070799-1, Desert Research Institute, Las Vegas, Nevada.

2003 *An Historical Evaluation of Train Cars at the Radioactive Material Storage Facility in Area 25, Nevada Test Site, Nye County, Nevada*. Cultural Resources Reconnaissance Short Report SR052003-1, Desert Research Institute, Las Vegas, Nevada.

2012 *A Historical Evaluation of the Railroad Lines in Areas 25 and 26, Nevada National Security Site, Nye County, Nevada.* Historical Evaluation Short Report HE072610-1, Desert Research Institute, Las Vegas, Nevada.

Drollinger, Harold, Colleen M. Beck, and Nancy Goldenberg
2000a *Nevada Test Site, Reactor Maintenance and Disassembly Facility, Building 3110*. Historic American Engineering Record No. Nv-29, U.S. National Park Service, Washington, D.C.

2000b *Nevada Test Site, Test Cell C Facility, Building 3210*. Historic American Engineering Record No. Nv-30, U.S. National Park Service, Washington, D.C.

2000c *Nevada Test Site, Pluto Facility, Disassembly Building 2201*. Historic American Engineering Record No. Nv-32, U.S. National Park Service, Washington, D.C.

2003 *Historical Evaluations of Control Point Buildings 2, 10, 43, and 400 in Area 6, Nevada Test Site, Nye County, Nevada*. Cultural Resources Reconnaissance Short Report No. SR071602-1, Desert Research Institute, Las Vegas, Nevada.

Drollinger, Harold, Colleen M. Beck, Diane Winslow, and Nancy Goldenberg
1997 *Nevada Test Site, Engine Maintenance Assembly and Disassembly Facility*. Historic American Engineering Record No. Nv-25, U.S. National Park Service, Washington, D.C.

Drollinger, Harold, Thomas F. Bullard, Laurence J. Ashbaugh, and Wayne R. Griffin
2007 *A Historical Evaluation of the U12e Tunnel, Nevada Test Site, Nye County, Nevada*. Cultural Resources Technical Report No. 104, Division of Earth and Ecosystem Sciences, Desert Research Institute, Las Vegas, Nevada.

2011 *A Historical Evaluation of the U12n Tunnel, Nevada Test Site, Nye County, Nevada*. Cultural Resources Technical Report No. 106, Desert Research Institute, Las Vegas, Nevada.

Drollinger, Harold and Nancy Goldenberg
2004 *An Historical Evaluation of the Super Kukla Control Building, Area 27, Nevada Test Site, Nye County, Nevada*. Cultural Resources Reconnaissance Short Report No. SR042104-3, Desert Research Institute, Las Vegas, Nevada.

Drollinger, Harold, Nancy Goldenberg, and Colleen M. Beck
2000a *An Historical Evaluation of the Super Kukla Facility in Area 27 for Activities Associated with the Decontamination and Decommissioning Program, Nevada Test Site, Nye County, Nevada*. Cultural Resources Reconnaissance Short Report No. SR021700-1, Desert Research Institute, Las Vegas, Nevada.

2000b *An Historical Evaluation of the R-MAD Building in Area 25 for Planned Activities Associated with the Environmental Management Decontamination and Decommissioning Program, Nevada Test Site, Nye County, Nevada*. Cultural Resources Reconnaissance Short Report No. SR022900-1, Desert Research Institute, Las Vegas, Nevada.

2000c *An Historical Evaluation of the Test Cell C Facility for Characterization Activities Associated with Decontamination and Decommissioning, Area 25, Nevada Test Site, Nye County, Nevada*. Cultural Resources Reconnaissance Short Report No. SR021500-1, Desert Research Institute, Las Vegas, Nevada.

2000d *An Historical Evaluation of Pluto Building 2201, Area 26, Nevada Test Site, Nye County, Nevada*. Cultural Resources Reconnaissance Short Report No. SR102599-1, Desert Research Institute, Las Vegas, Nevada.

Drollinger, Harold, Nancy Goldenberg, and Carin Petersen
2005 *An Historical Evaluation of the Pluto Control Facility, Area 26, Nevada Test Site, Nye County, Nevada*. Cultural Resources Reconnaissance Short Report No. HE041305-1, Desert Research Institute, Las Vegas, Nevada.

Drollinger, Harold, Barbara A. Holz, Thomas F. Bullard, Nancy G. Goldenberg, Laurence J. Ashbaugh, and Wayne R. Griffin
2014 *A Historical Evaluation of the U15 Complex, Nevada Test Site, Nye County, Nevada*. Cultural Resources Technical Report No. 109, Desert Research Institute, Las Vegas, Nevada.

Drollinger, Harold, Robert C. Jones, Thomas F. Bullard, Laurence J. Ashbaugh, and Wayne R. Griffin
2009 *A Historical Evaluation of the U12t Tunnel, Nevada Test Site, Nye County, Nevada*. Cultural Resources Technical Report No. 105, Desert Research Institute, Las Vegas, Nevada.

Drollinger, Harold and Allison Vanderslice
2011 *A Historical Evaluation of the Pluto Compressor Building, Area 26, Nevada National Security Site, Nye County, Nevada*. Historical Evaluation Short Report HE083109-1, Desert Research Institute, Las Vegas, Nevada.

DTRA, see Defense Threat Reduction Agency

EG&G, see Edgerton, Germeshausen & Grier

Edgerton, Germeshausen & Grier (EG&G)
1954 *Technical Photography*. Report WT-639, Edgerton, Germeshausen & Grier, Inc., Boston, Massachusetts.

Edwards, R., J. Goetz, and J. Klemm
1985 *Analysis of Radiation Exposure for Maneuver Units: Exercise Desert Rock V, Operation Upshot-Knothole*. Report DNA-TR-85-303, Science Applications International Corporation, McLean, Virginia.

Edwards, Susan R.
1997 *Atomic Age Training Camp: The Historical Archaeology of Camp Desert Rock*. M.A. thesis, Department of Anthropology and Ethnic Studies, University of Nevada, Las Vegas.

Edwards, Susan R. and Nancy G. Goldenberg
2007 *Historical Evaluation of the BREN Tower Complex in Area 25, Nevada Test Site, Nye County, Nevada*. Historical Evaluation Short Report HE110106-1, Desert Research Institute, Las Vegas, Nevada.

2012 *Nevada Test Site, BREN Tower Complex, Jackass Flats, Area 25*. Historic American Engineering Record No. Nv-47, U.S. National Park Service, San Francisco, California.

Edwards, Susan R. and William G. Johnson
1995 *A Historical Evaluation of Building 2-300, Yucca Flat, Area 2, Nevada Test Site, Nye County, Nevada*. Cultural Resources Reconnaissance Short Report No. SR062095-2, Desert Research Institute, Las Vegas, Nevada.

Ellison, Donald C., W.C. Huntington, and Robert E. Mickadeit
1987 *Building Construction: Materials and Types of Construction*, 6th ed. John Wiley & Sons, New York.

Fehner, Terrence R. and F.G. Gosling
2000 *Origins of the Nevada Test Site*. Report DOE/MA--0518, Office of History and Heritage Resources, U.S. Department of Energy, Washington, D.C.

2006 *Atmospheric Nuclear Weapons Testing: 1951-1963*. Report DOE/MA-0003, Office of History and Heritage Resources, U.S. Department of Energy, Washington, D.C.

Fleming, John, Hugh Honour, and Nickolaus Pevsner
1999 The Penguin Dictionary of Architecture and Landscape Architecture, 5th ed. Penguin Books, New York.

Friesen, H.N.
1995 *A Perspective on Atmospheric Nuclear Tests in Nevada: Fact Book*. Report DOE/NV 296, U.S. Department of Energy, Nevada Operations Office, Las Vegas, Nevada.

Goetz, J., J. Klemm, and E. Ortlieb
1985 *Analysis of Radiation Exposure for Observers and Maneuver Troops: Exercise Desert Rock IV, Operation Tumbler-Snapper*. Report DNA-TR-85-277, Science Applications International Corporation, McLean, Virginia.

Goldenberg, Nancy G. and Colleen M. Beck
1991a *Historic Building Inventory and Evaluation: Underground Parking Garage, Nevada Test Site, Nye County, Nevada.* Cultural Resources Reconnaissance Short Report No. SR092691-1, Desert Research Institute, Las Vegas, Nevada.

1991b *Historic Structure Inventory and Evaluation: BREN Tower, Area 25, Nevada Test Site, Nye County, Nevada.* Cultural Resources Reconnaissance Short Report No. SR092791-1, Desert Research Institute, Las Vegas, Nevada.

Goldenberg, Nancy G., Harold Drollinger, and Colleen M. Beck
1996 *A Historical Evaluation of the E-MAD Facility, Area 25, Nevada Test Site, Nye County, Nevada*. Cultural Resources Reconnaissance Short Report No. SR082696-1, Desert Research Institute, Las Vegas, Nevada.

Goldenberg, Nancy G., William G. Johnson, and Alvin R. McLane
1994 *A Class III Cultural Resources Reconnaissance of a Proposed Soil Treatability Pilot Plant Site at the EPA Farm, Area 15, Nevada Test Site, Nye County, Nevada.* Cultural Resources Reconnaissance Short Report SR090893-1, Desert Research Institute, Las Vegas, Nevada.

Goldenberg, Nancy G., Diane L. Winslow, and Colleen M. Beck
1994 *A Historical Evaluation of Jr. Hot Cell for Characterization activities associated with Decontamination and Decommissioning, Area 25, Nevada Test Site, Nye County, Nevada*. Cultural Resources Reconnaissance Short Report No. SR032095-1, Desert Research Institute, Las Vegas, Nevada.

Harris, P.S., S. Obermiller, C. Lowery, W.J. Ozeroff, A. Nelson, and S.E. Weary
1981 *Plumbbob Series, 1957*. Report DNA 6005F, JAYCOR, Alexandria, Virginia.

HDR, see HDR Engineering, Inc.

HDR Engineering, Inc. (HDR)
1995 *Whittier Access Project Technical Reports*. Prepared for the Alaska Department of Transportation and Public Facilities. HDR Engineering, Inc.

Herken, Gregg
2002 *Brotherhood of the Bomb*. Henry Holt and Company, LLC., New York.

Hoffman, David E.
2009 *The Dead Hand: The Untold Story of the Cold War Arms Race and Its Dangerous Legacy*. Anchor Books, New York.

Jencks, Charles
1985 *Modern Movements in Architecture, 2nd ed.* Penguin Books, New York.

Johnson, Gerald W., Gary H. Higgins, and Charles E. Violet
1959 *Underground Nuclear Detonations*. Report UCRL-5626, Lawrence Radiation Laboratory, University of California, Livermore.

Johnson, William G.
2002 *A Historical Evaluation of the T-3b Fizeau Bunker, Area 3, Nevada Test Site, Nye County, Nevada*. Cultural Resources Reconnaissance Short Report No. SR082201-1, Desert Research Institute, Las Vegas, Nevada.

Johnson, William G. and Susan R. Edwards
1996 *Historic American Buildings Survey Documentation of the Japanese Village on the Nevada Test Site*. Historic American Building Survey No. NV-27, U.S. National Park Service, Washington, D.C.

2000 *Survival Town: The Apple-2 Historic District, Nevada Test Site, Nye County, Nevada*. Cultural Resources Technical Report No. 99, Division of Earth and Ecosystem Sciences, Desert Research Institute, Las Vegas, Nevada.

Johnson, William G. and Nancy G. Goldenberg
1998 *Historic American Buildings Survey documentation of the Environmental Protection Agency Farm on the Nevada Test Site*. HABS No. NV-28, Historic American Buildings Survey, National Park Service, Department of the Interior, San Francisco, California.

Johnson, William G., Barbara A. Holz, and Robert Jones
2000 *A Cold War Battlefield: Frenchman Flat Historic District, Nevada Test Site, Nye County, Nevada*. Cultural Resources Technical Report No. 97, Division of Earth and Ecosystem Sciences, Desert Research Institute, Las Vegas, Nevada.

Jones, Robert C.
2003 *Historical Evaluation of Kay Blockhouse, Frenchman Flat, Area 5, Nevada Test Site, Nye County, Nevada*. Cultural Resources Reconnaissance Short Report No. SR030703-1, Desert Research Institute, Las Vegas, Nevada.

2004 *A Historical Evaluation of Station 7-800 in Area 7, Nevada Test Site, Nye County, Nevada*. Historical Evaluation Short Report HE042004-1, Desert Research Institute, Las Vegas, Nevada.

2005 *An Inventory of Benches at Viewing Points for Atmospheric Nuclear Testing Events at the Nevada Test Site, Nye County, Nevada*. Cultural Resources Inventory Report SR020904-1, Desert Research Institute, Las Vegas, Nevada.

Jones Robert C. and Harold Drollinger
2010 *A Historical Evaluation of the L-2 Locomotive, Area 25, Nevada National Security Site, Nye County, Nevada.* Historical Evaluation Short Report HE072710-1, Desert Research Institute, Las Vegas, Nevada.

Jones, Robert. C., Colleen M. Beck, Ann DuBarton, Susan R. Edwards, Nancy Goldenberg, and Joni Carroll
1996 *A Class III Cultural Resources Reconnaissance of the Proposed Reentry Body Impact Fuze Flights (RBIFF), Area 26, Nevada Test Site, Nye County, Nevada*. Cultural Resources Reconnaissance Short Report SR121395-2, Desert Research Institute, Las Vegas, Nevada.

Jones Robert C., Colleen M. Beck, and Barbara A. Holz
2005 *Yucca Lake Historic District, Area 6, Nevada Test Site, Nye County, Nevada*. Cultural Resources Technical Report No. 102, Desert Research Institute, Las Vegas, Nevada.

Jones, Robert C., Thomas F. Bullard, and Colleen M. Beck
2006 *Historical Evaluation of U12b Tunnel Complex in Area 12, Nevada Test Site, Nye County, Nevada*. Short Report HE050106-1, Desert Research Institute, Las Vegas, Nevada.

Jones, Robert C., Harold Drollinger, Thomas F. Bullard, Laurence J. Ashbaugh, and Wayne R. Griffin
2012 *A Historical Evaluation of the U16a Tunnel, Nevada National Security Site, Nye County, Nevada.* Cultural Resources Technical Report No. 107, Desert Research Institute, Las Vegas, Nevada.

Jones, Robert C., Maureen L. King, and Colleen M. Beck
2014 *A Cultural Resources Inventory and Historical Evaluation of the Smoky Atmospheric Nuclear Test, areas 8, 9, and 10, Nevada National Security Site, Nye County, Nevada.* Cultural Resources Technical Report No. 108, Division of Earth and Ecosystem Sciences, Desert Research Institute, Las Vegas, Nevada.

King, Maureen L.
2015 *A Class III Cultural Resources Inventory and Historical Evaluation of the Shasta Atmospheric Test, Areas 2, 4, and 8, Nevada National Security Site, Nye County, Nevada*. Cultural Resources Technical Report No. 110, Desert Research Institute, Las Vegas, Nevada.

Langmuir, Irving
1946 An Atomic Arms Race and Its Alternatives. In *One World or None*, edited by Dexter Masters and Katharine Way, pp. 47-52. McGraw-Hill Book Co., Inc., New York.

Lay, James S., Jr.
1950 Memorandum for the President from the National Security Council, December 18, 1950. Manuscript on file, Accession No. 304388, Nevada Testing Archive, Department of Energy, National Nuclear Security Administration, Nevada Field Office, Las Vegas.

Le Corbusier
1931 *Towards a New Architecture*, trans. by Frederick Etchells. 1986 reprint, Dover Publications, New York.

Leffler, Melvyn P.
2007 *For the Soul of Mankind: the United States, the Soviet Union, and the Cold War*. Hill and Wang, New York.

Lewis, Jeff
2016 Personal Communication with Ron Reno, 4/14/16. NNSS, Mercury.

Loeber, Charles R.
2002 *Building the Bombs: A History of the Nuclear Weapons Complex*. Sandia National Laboratories, Albuquerque, New Mexico.

Maag, Carl, Stephen Roarer, and Robert Shepanek
1982 *Shots Encore to Climax: The Final Four Tests of the Upshot-Knothole Series, 8 May - 4 June 1953*. Report DNA 6018F, Defense Nuclear Agency, Washington, D.C.

Massie, Jeannie, Carl Maag, Stephen Roarer, and Robert Shepanek
1982 *Operation Ranger: Shots Able, Baker, Easy, Baker-2, Fox, 25 January - 6 February 1951*. Report DNA 6022F, Defense Nuclear Agency, Washington, D.C.

Malik, J.S., R.R. Brownlee, C.F. Costa, H.F. Mueller, and R.W. Newman
1981 *Radiological Criteria for Underground Nuclear Tests*. Report LA-8776-MS, Los Alamos Scientific Laboratory, New Mexico.

Medalia, Jonathan
2002 *Nuclear Weapons: Comprehensive Test Ban Treaty*. Order Code IB92099, Congressional Research Service, The Library of Congress, Washington, D.C.

2003 *Nuclear Testing and Comprehensive Test Ban: Chronology Starting September 1992*. Order Code 97-1007 F, Congressional Research Service, The Library of Congress, Washington, D.C.

Michael, Michelle and Adam Smith
2011 *The Architecture of the Department of Defense: A Military Style Guide*. DoD Legacy Resource Management Program, Washington, D.C. ERDC/CERL B-11-2.

Miller, Richard L.
1991 *Under the Cloud: The Decades of Nuclear Testing*. Two-Sixty Press, The Woodlands, Texas.

Nevada State Historic Preservation Office (SHPO)
2013 *Nevada Architectural Survey and Inventory Guidelines* (rev. fall 2013). Nevada State Historic Preservation Office, Carson City.

NNSA/NFO, see U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office.

Norris, Robert S. and W. Arkin
1996 Known Nuclear Tests. *Bulletin of the Atomic Scientists* 52(3):61-63.

Okosisi, Steve
2016 Personal Communication with Ron Reno, 4/14/16. NNSS, Mercury.

Ogle, William E.
1985 *An Account of the Return to Nuclear Weapons Testing by the United States after the Test Moratorium 1958-1961*. U.S. Department of Energy, Nevada Operations Office, Las Vegas. (Redacted version).

Ostler, W. Kent, Dennis J. Hansen, David C. Anderson, and Derek B. Hall
2000 *Classification of Vegetation on the Nevada Test Site*. Report DOE/NV/11718-477, U.S. Department of Energy, Nevada Operations Office, Las Vegas, Nevada.

OTA, see U.S. Congress, Office of Technology Assessment

Perkins, Ray, Jr.
1991 *The ABCs of the Soviet-American Nuclear Arms Race*. Brooks/Cole Publishing Co., Pacific Grove, California.

Petroski, Henry
1992 *To Engineer is Human: The Role of Failure in Successful Design*. Vintage Books, New York.

Pifer, Steven
2011 *NATO, Nuclear Weapons and Arms Control*. Paper 7, Arms Control Series, Brookings Institute, Washington, D.C.

Ponton, Jean, Carl Maag, Martha Wilkinson, and Stephen Rohrer
1981 *Shots Ess Through Met and Shot Zucchini: The Final Teapot Tests, 23 March-15 May 1955*. Report DNA 6013F, JRB Associates, McLean, Virginia.

Powaski, Ronald E.
2000 *Return to Armageddon: The United States and the Nuclear Arms Race, 1981-1999*. Oxford University Press, Inc., New York.

REECo, see Reynolds Electrical & Engineering Co., Inc.

Reed, Thomas C. and Danny B. Stillman
2009 *The Nuclear Express: A Political History of the Bomb and Its Proliferation*. Zenith Press, Minneapolis, Minnesota.

Reynolds Electrical & Engineering Co., Inc. (REECo)
1955 Report on Existing facilities at the Nevada Test Site for the United States Atomic Energy Commission. Manuscript on file at Nevada National Security Administration, Nevada Field Office.

Ristvet, Byron
2016 Personal Communication with Colleen Beck, 5/26/2016. Desert Research Institute, Las Vegas.

Robinson, Judith H. and Stephanie S. Foell
2003 Growth, Efficiency, and Modernism: GSA Buildings of the 1950s, 60s, and 70s, 2nd ed. GSA Office of the Chief Architect, Center for Historic Buildings.

Russell, Dudley
2016 Personal Communication with Ron Reno, 4/14/16. NNSS, Mercury.

Scammell, D.S.
1999 *Guide to Frenchman Flat*. Report DOE/NV-562, U.S. Department of Energy, Nevada Operations Office, Las Vegas, Nevada.

Schoengold, C.R., M.E. Demarre, and E.M. Kirkwood
1996 *Radiological Effluents Released from U.S. Continental Tests 1961 through 1992*. Report DOE/NV-317 (Revision 1), U.S. Department of Energy, Nevada Operations Office, Las Vegas.

Seitz, Frederick and Hans Bethe
1946 How Close is the Danger? In *One World or None*, edited by Dexter Masters and Katharine Way, pp. 42-46. McGraw-Hill Book Company, Inc., New York.

Sheehy, Erin
2015 Gold Rush Whittier. Chapter 5 in *City by City: Dispatches from the American Metropolis*, edited by Keith Gessen and Stephen Squibb. Macmillian.

SHPO, see Nevada State Historic Preservation Office

Shreffler, R.G. and W.S. Bennett
1970 *Tactical Nuclear Warfare*. Report LA-4467-MS, Los Alamos Scientific Laboratory, University of California, Los Alamos, New Mexico.

Stapp, Darby C.
1997 Documenting a Cold War Nuclear Reactor: Attempting Innovation. *CRM* 20(13):38-40.

Taly, Narendra
2001 *Design of Reinforced Masonry Structures.* McGraw-Hill, New York.

Titus, A.C.
1986 *Bombs in the Backyard: Atomic Testing and American Politics*. University of Nevada Press, Reno.

Tlachac, Eve M.
1991 Nuclear Testing. In *Nevada Comprehensive Preservation Plan*, edited by W.G. White, R.M. James, and R. Bernstein, pp. 25/1-25/12. Division of Historic Preservation and Archaeology, Department of Conservation and Natural Resources, Nevada Historical Society, Department of Museums and History, Carson City, Nevada.

Urey, Harold C.
1946 How Does It All Add Up? In *One World or None*, edited by Dexter Masters and Katharine Way, pp. 53-58. McGraw-Hill Book Co., Inc., New York.

U.S. Congress, Office of Technology Assessment (OTA)
1989 *The Containment of Underground Nuclear Explosions*. Report OTA-ISC-414, U.S. Government Printing Office, Washington, D.C.

U.S. Department of Energy (DOE)
1997 *Linking Legacies: Connecting the Cold War Nuclear Weapons Production Processes to their Environmental Consequences*. Report DOE/EM-0319, Office of Environmental Management, U.S. Department of Energy, Washington, D.C.

U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office (NNSA/NFO)
2004 *Project Nutmeg: The Birth of the Nevada Test Site*. Report DOE/NV--767, U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office, Las Vegas, Nevada.

2013 *Nevada National Security Site History, Mercury, Nevada*. DOE/NV--1094. U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office, Las Vegas, Nevada.

2015 *United States Nuclear Tests: July 1945 through September 1992*. Report DOE/NV--209-REV 16, U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office, Las Vegas, Nevada.

Viscuso, Jo, Steven Geller, Martha Wilkinson, James Striegel, and Burt Collins
1981 *Shot Priscilla: A Test of the Plumbbob Series, 24 June 1957*. Report DNA 6003F, Defense Nuclear Agency, Washington, D.C.

Walker, Martin
1993 *The Cold War: A History*. Henry Holt and Company, New York.

Wills, Cathy A. and W. Kent Ostler
2001 *Ecology of the Nevada Test Site: An Annotated Bibliography*. Report DOE/NV/11718-594, Bechtel Nevada Ecological Services, Las Vegas, Nevada.

Winslow, Diane L.
1999 *A Class III Cultural Resource Investigation for the Nevada Test Site Development Corporation's Desert Rock Sky Park at the Nevada Test Site, Area 22, Nye County, Nevada*. Report 5-175-1, Harry Reid Center for Environmental Studies, Marjorie Barrick Museum of Natural History, University of Nevada, Las Vegas, Nevada.

Wolff, Walter P.
1984 *A Typical Los Alamos National Laboratory Underground Nuclear Test*. Mini-Review LALP-84-47 Revision C.1, Los Alamos National Laboratory, Los Alamos, New Mexico.

VII. LIST OF FIGURES

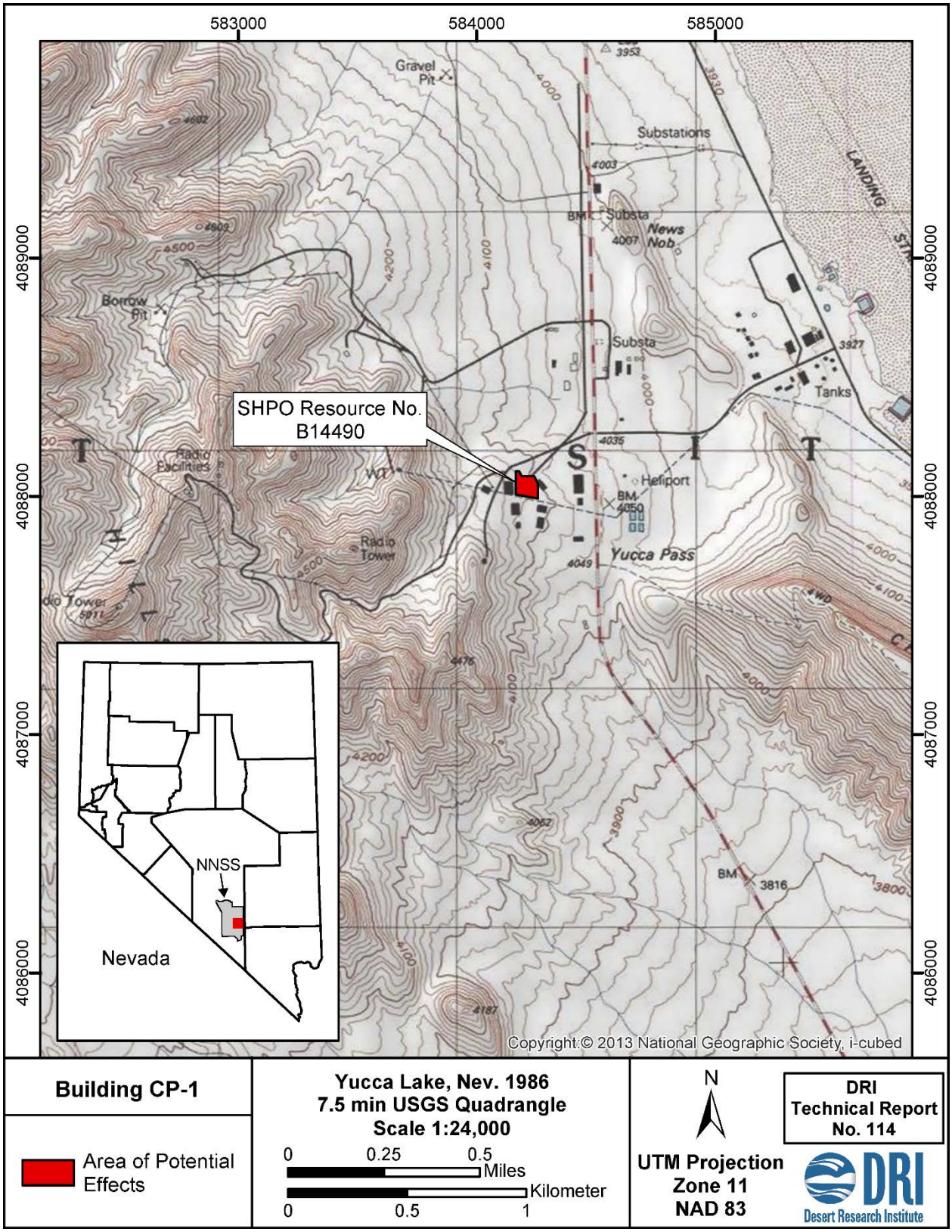


Figure 1. Map showing location of the project on the NNSS and the Area of Potential Effects (APE).

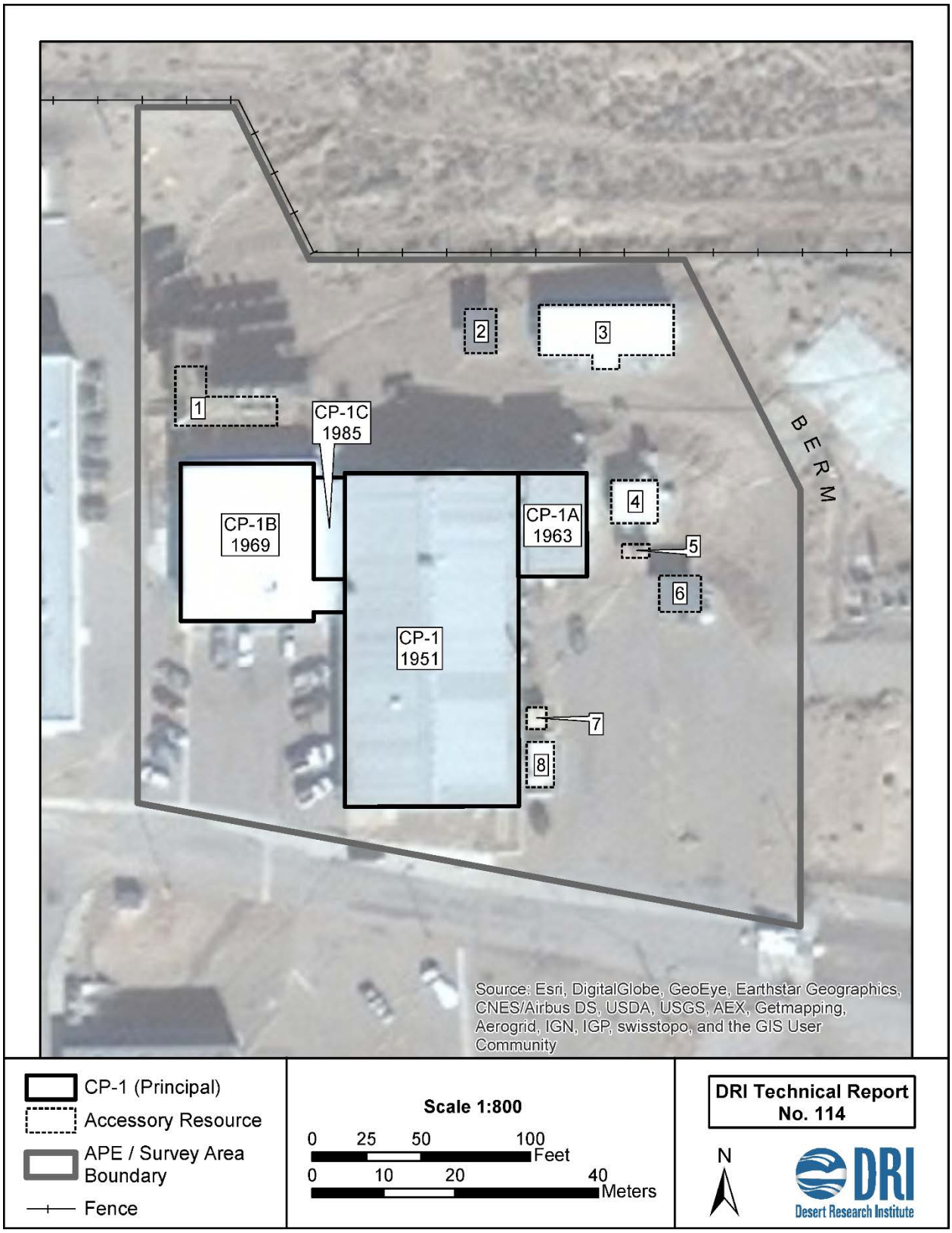


Figure 2. Aerial view of the CP-1 APE.

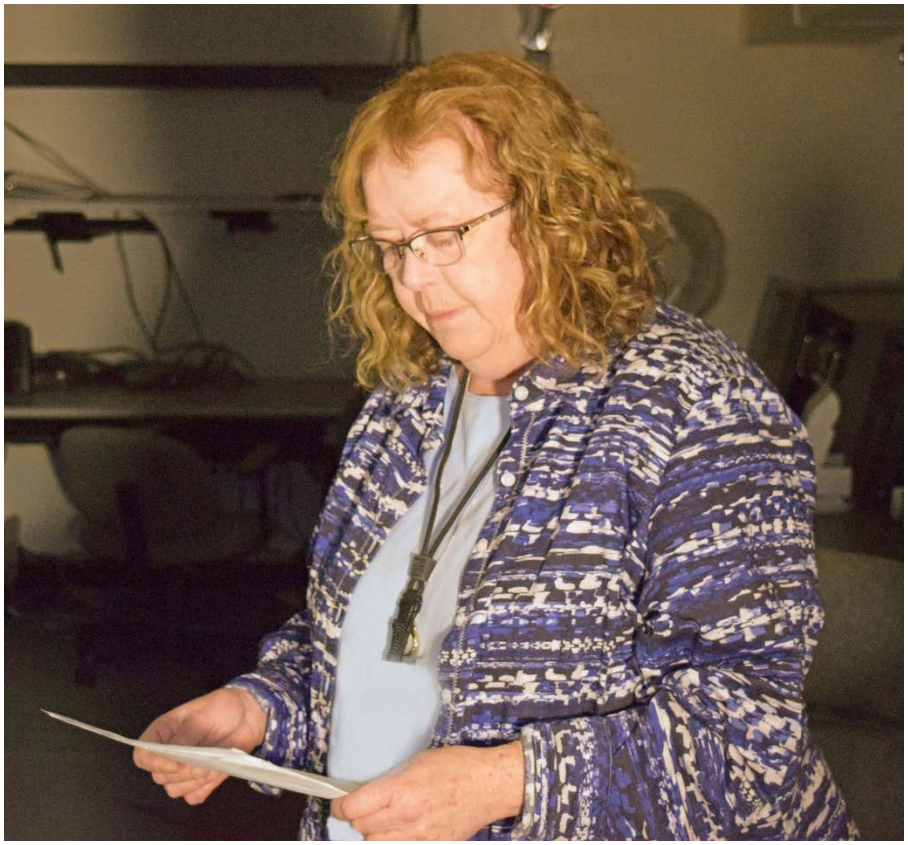


Figure 3. Beck inspects materials still in building for interpretive potential (2016).

Figure 4. Reno making detailed room descriptions (2016).

Figure 5. Photographic team with Carragher at camera and King logging (2016).

Figure 6. Treppicione assists with a typically difficult lighting setup (2016).

Figure 7. Overview of CP-1, view northwest (photograph DSC2555 dated 2016 on file at RSL).

Figure 8. Distant overview of the main Control Point area, view west (undated historic photograph D07_0073 on file at the RSL).

Figure 9. Satellite photograph of Control Point.

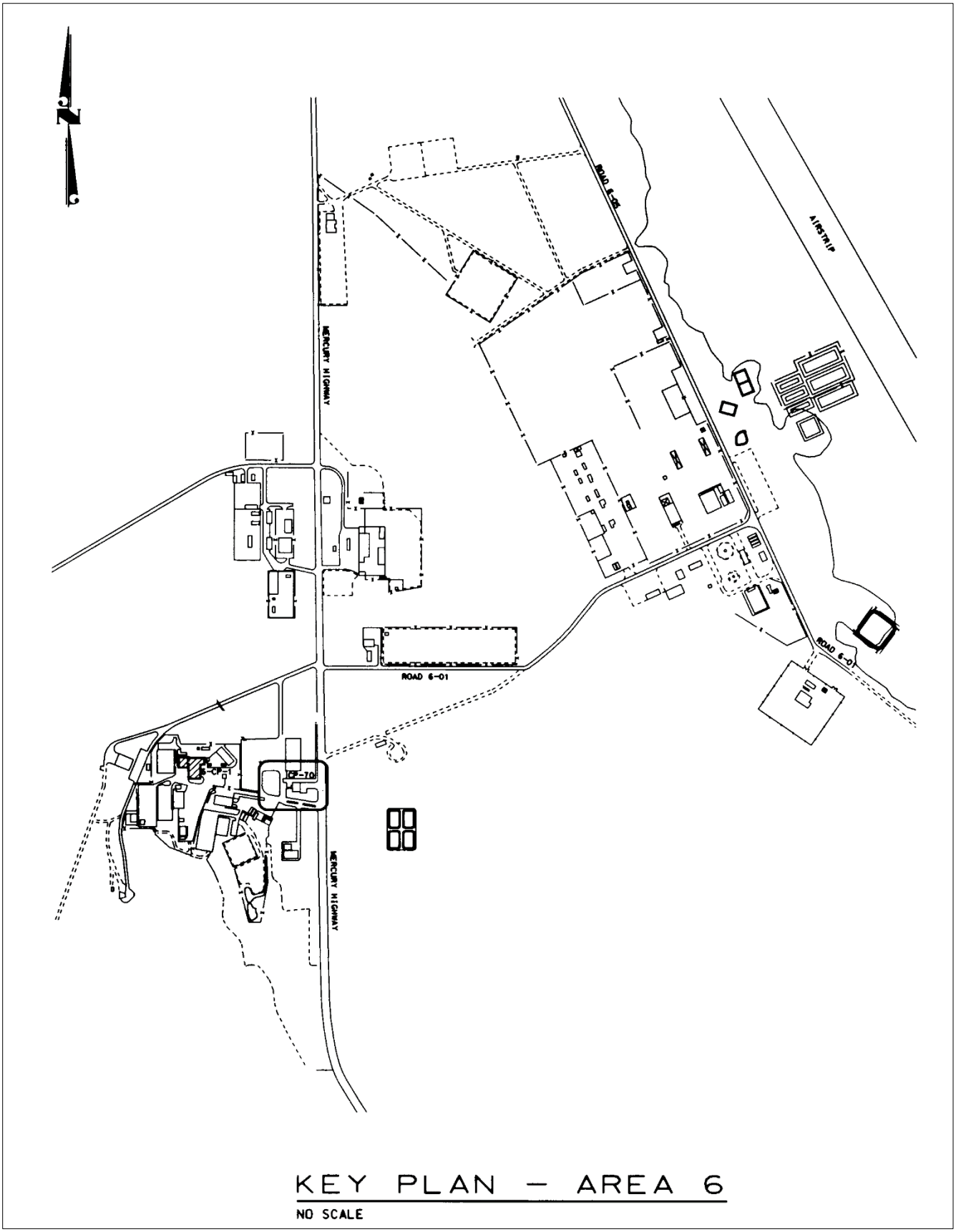


Figure 10. Map of Control Point (extracted from drawing JS-090-088-C6 dated 1997 on file at the Archives and Records Center, Mercury).

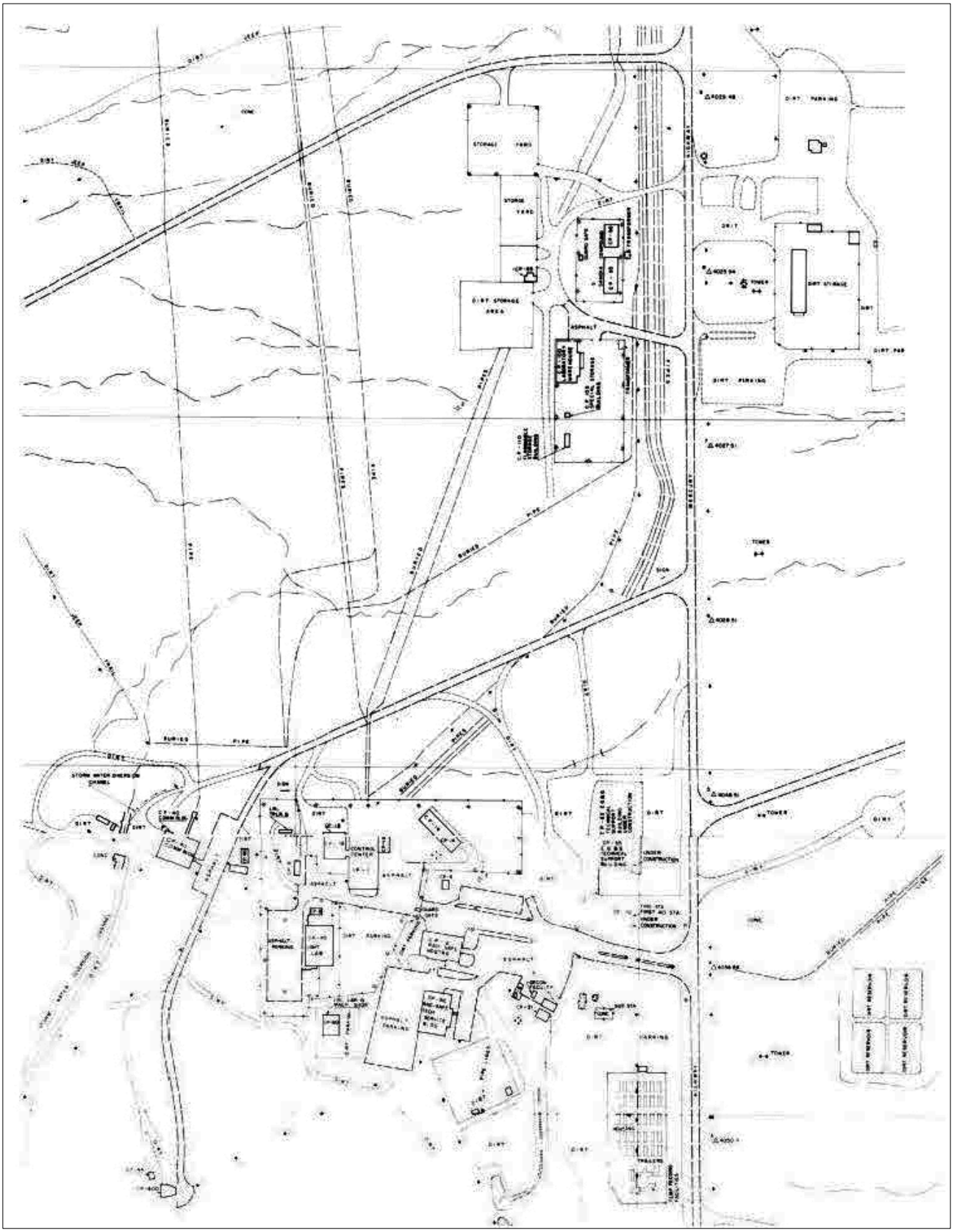


Figure 11. Detail map of portions of Control Point along the Mercury Highway (extracted from inventory numbers 185369 and 185423 on file at the Archives and Records Center, Mercury).

Figure 12. The first Control Building at Frenchman Flat. This light frame building was for the Ranger series of events (Fehner and Gosling 2000:64, original on file at Los Alamos National Laboratory).

Figure 13. Aerial photograph of the original CP-1, view southwest. This 1950s photo shows CP-1 flanked by numerous supplemental trailers (photograph P-612 dated 1957 on file at the Archives and Research Center, Lawrence Livermore National Laboratory).

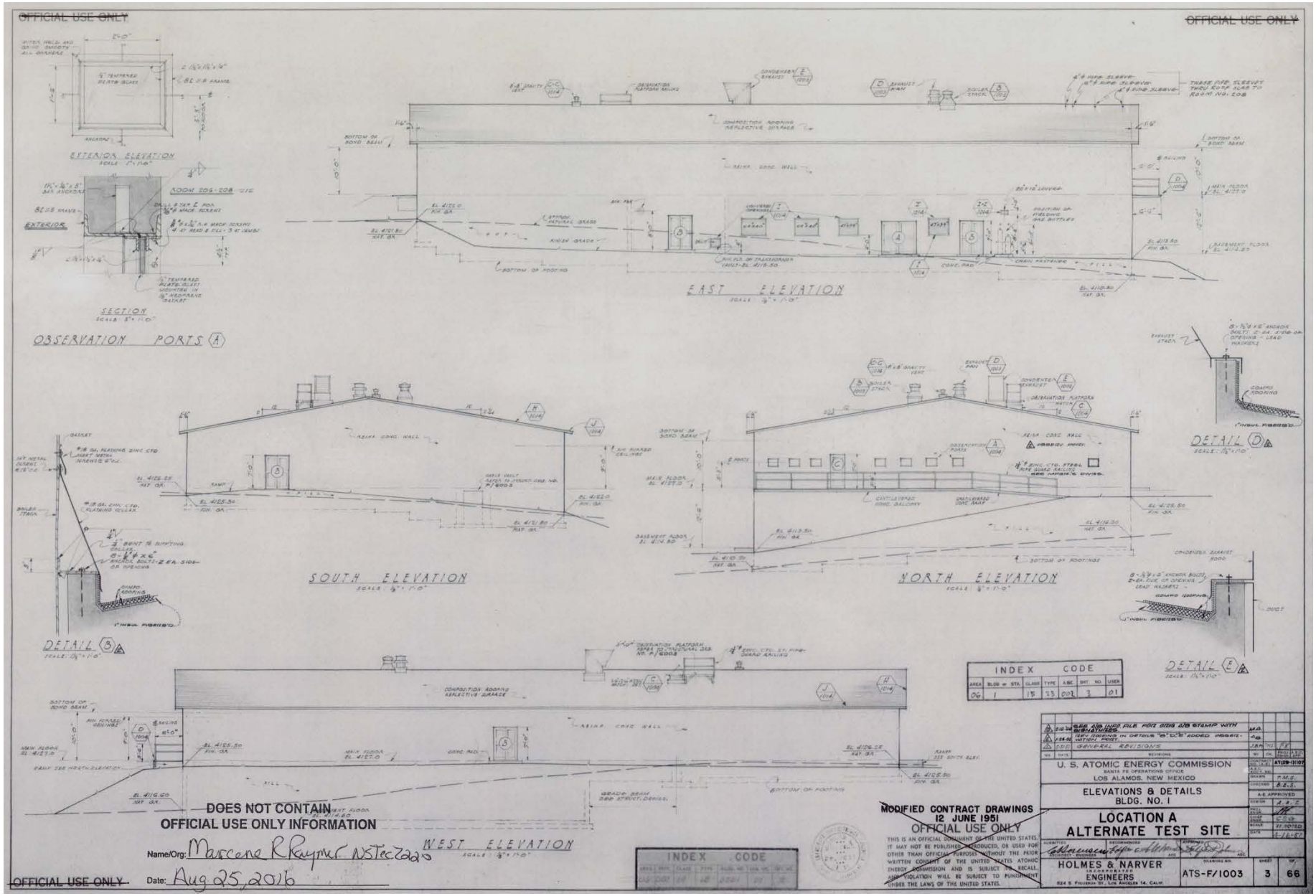


Figure 14. CP-1 original elevation drawings (drawing ATS-F/1003, 3 of 66, dated 1951 on file at the Archives and Records Center, Mercury).

Figure 15. Original exterior steel panel door on Transformer Room (photograph DSC2569 dated 2016 on file at RSL).

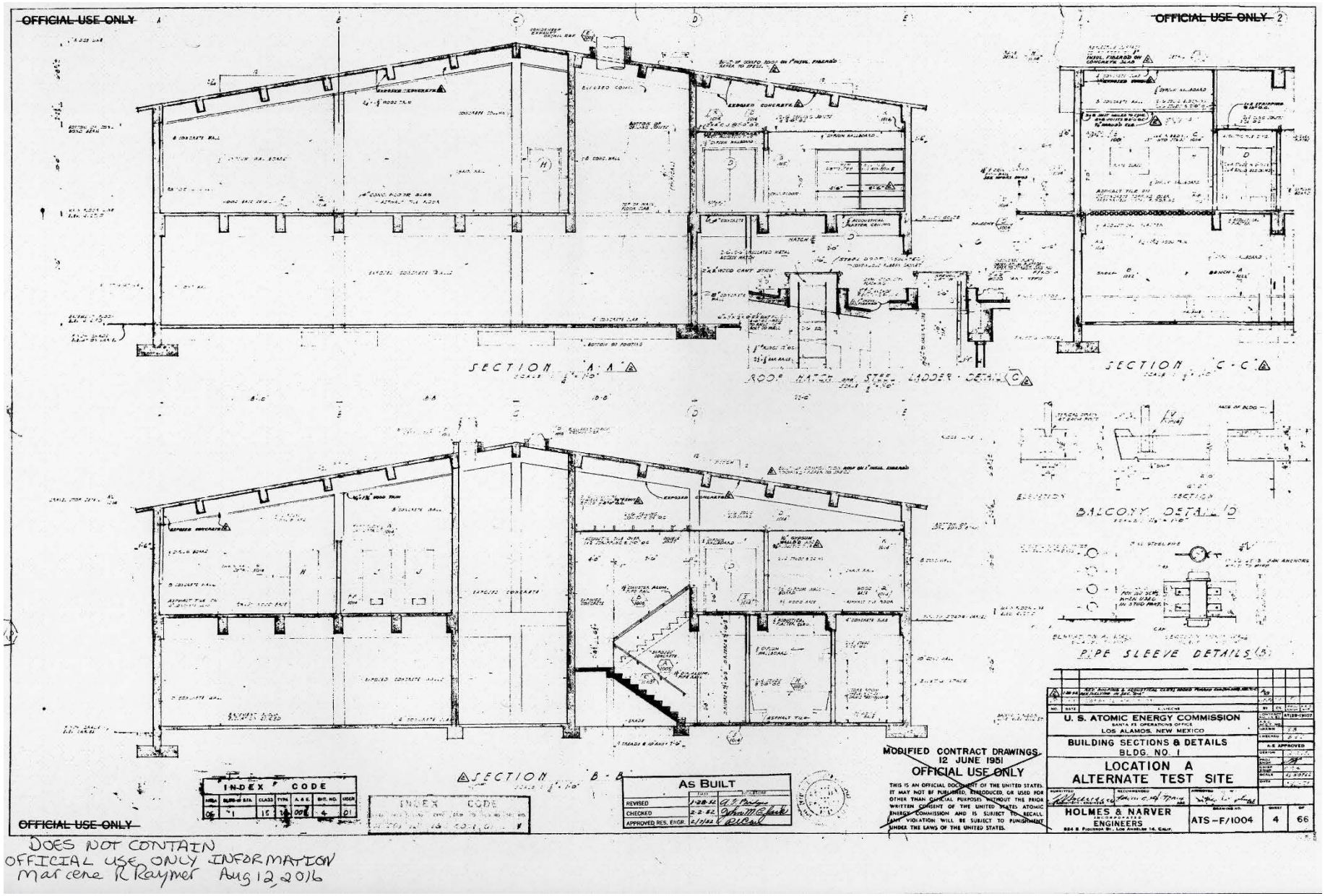


Figure 16. Original elevations sections (drawing ATS-F/1004, 4 of 66, dated 1951 on file at the Archives and Records Center, Mercury).

Figure 17. Remnants of original ceiling tiles preserved in attic.

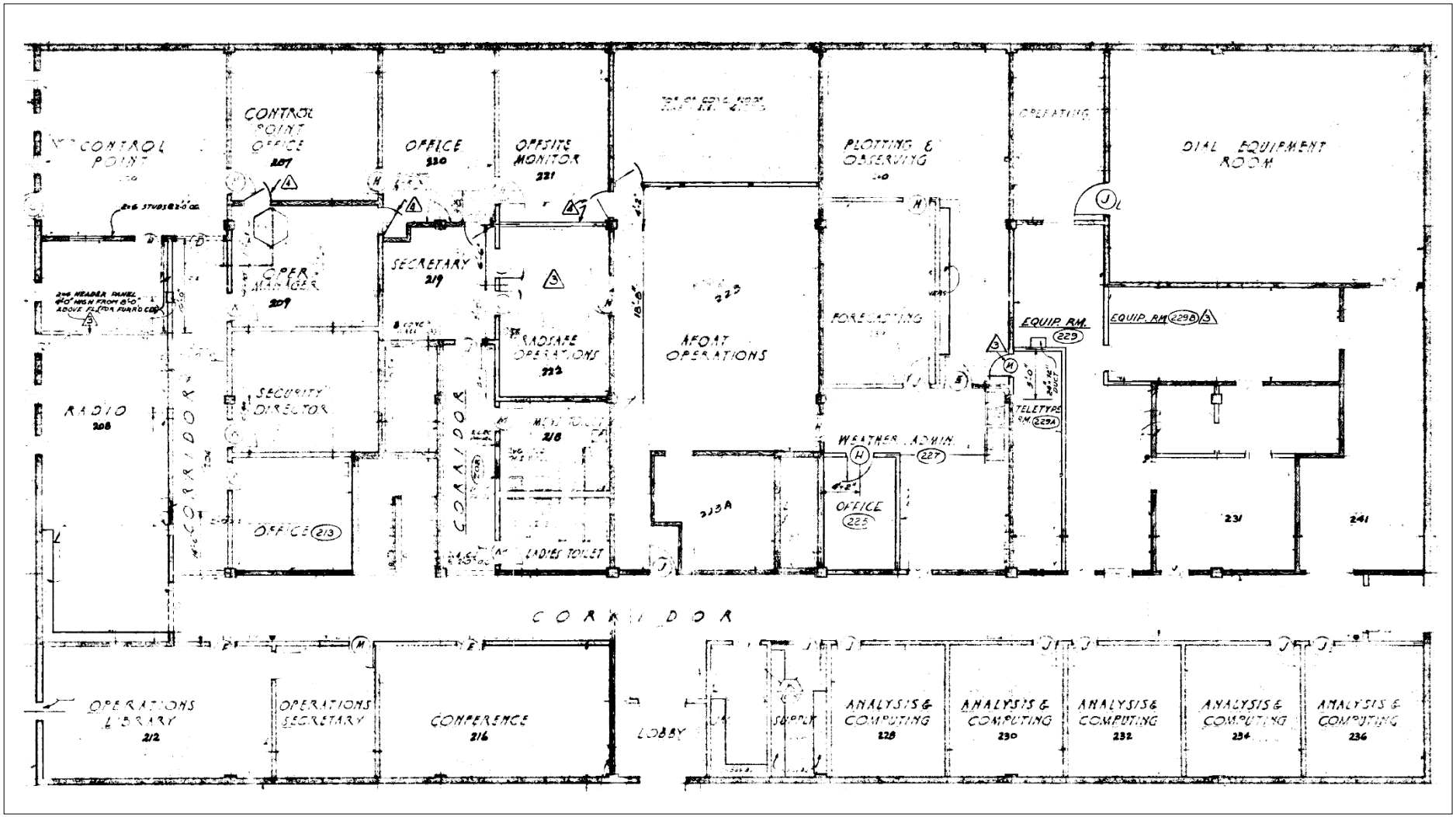


Figure 18. First floor space usage in 1951, north at left (extracted from drawing ATS-F/1001 on file at the Archives and Records Center, Mercury).

Figure 19. Original first floor plan.

Figure 20. View north (top) and northeast (bottom) of Yucca Flat from the Control Room (photographs DSC1959 and DSC1964 dated 2016 on file at RSL).

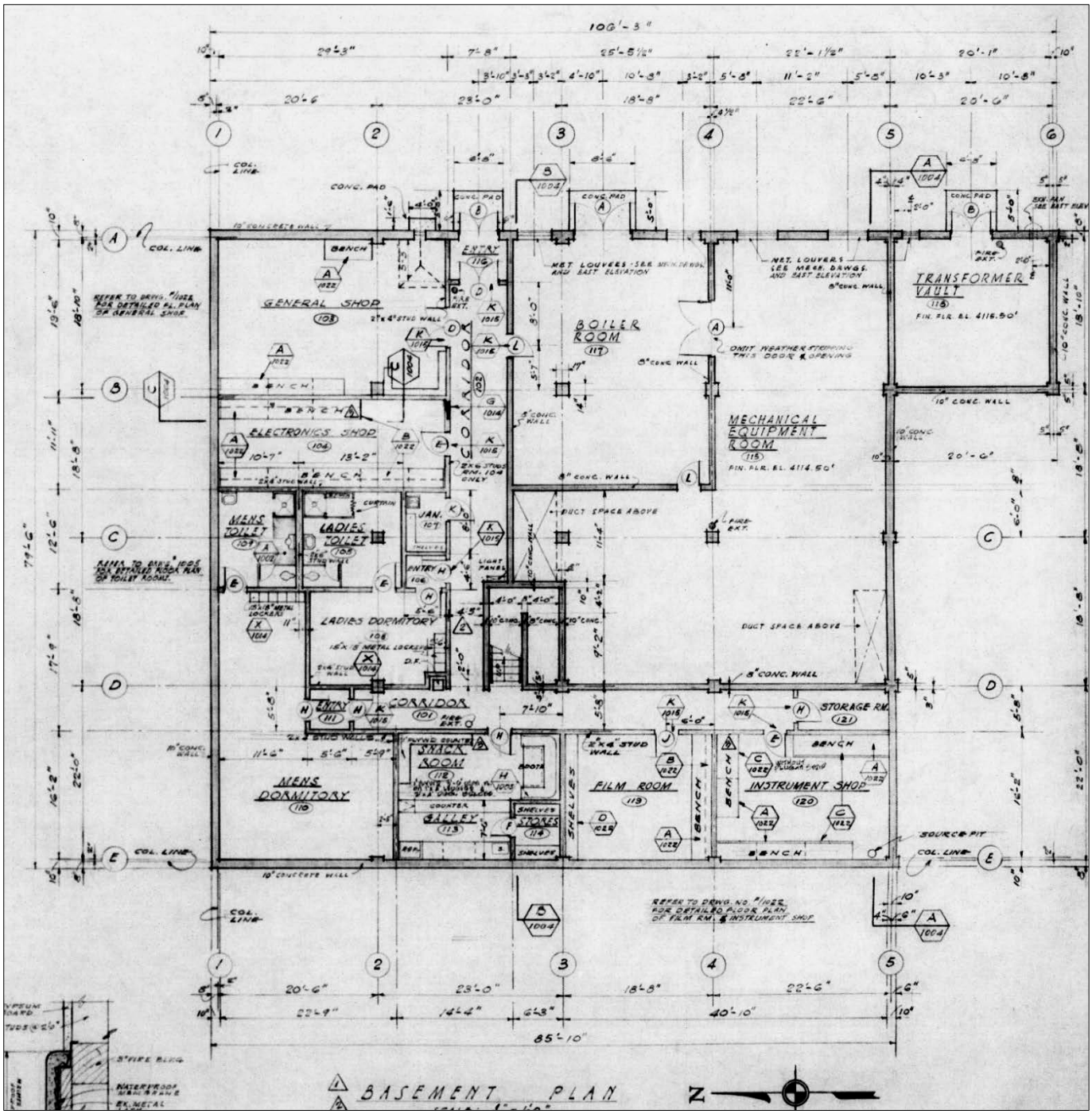


Figure 21. Original basement floor plan (extracted from drawing ATS F/1002 dated 1951 on file at the Archives and Records Center, Mercury).

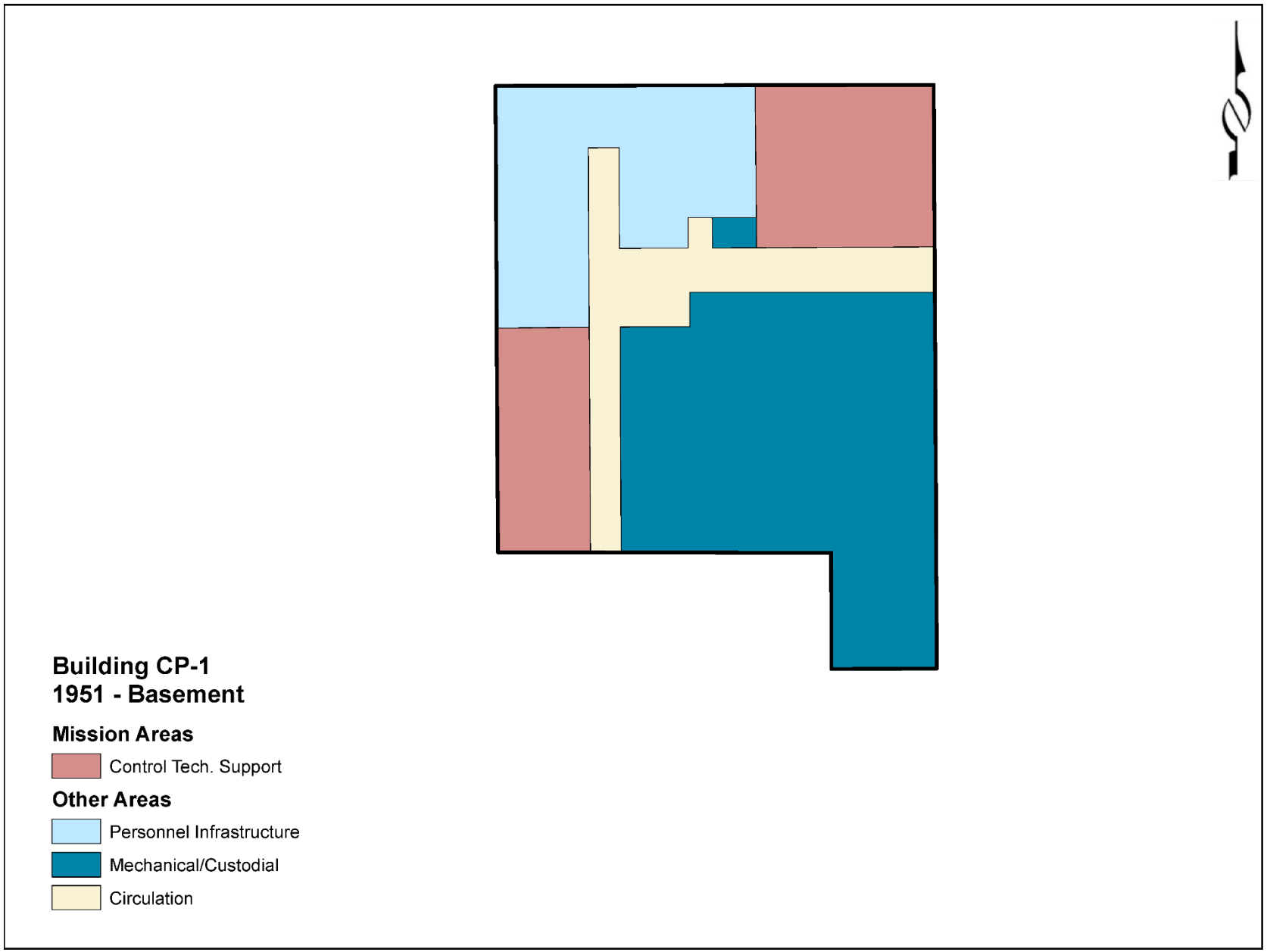


Figure 22. Basement space usage in 1951.

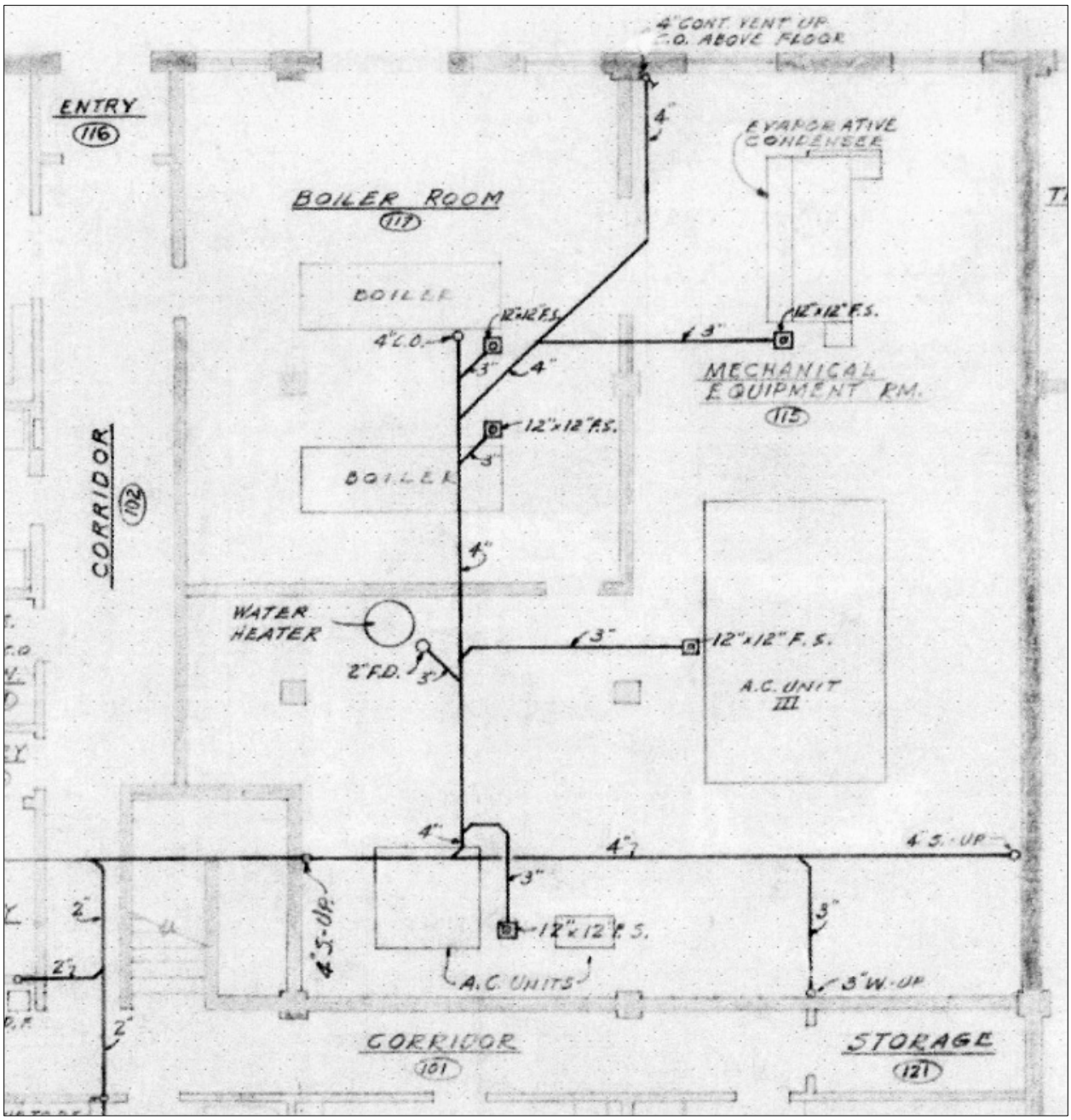


Figure 23. Mechanical layout in 1951. North is at left (extracted from drawing ATS F/4004 on file at the Archives and Records Center, Mercury).

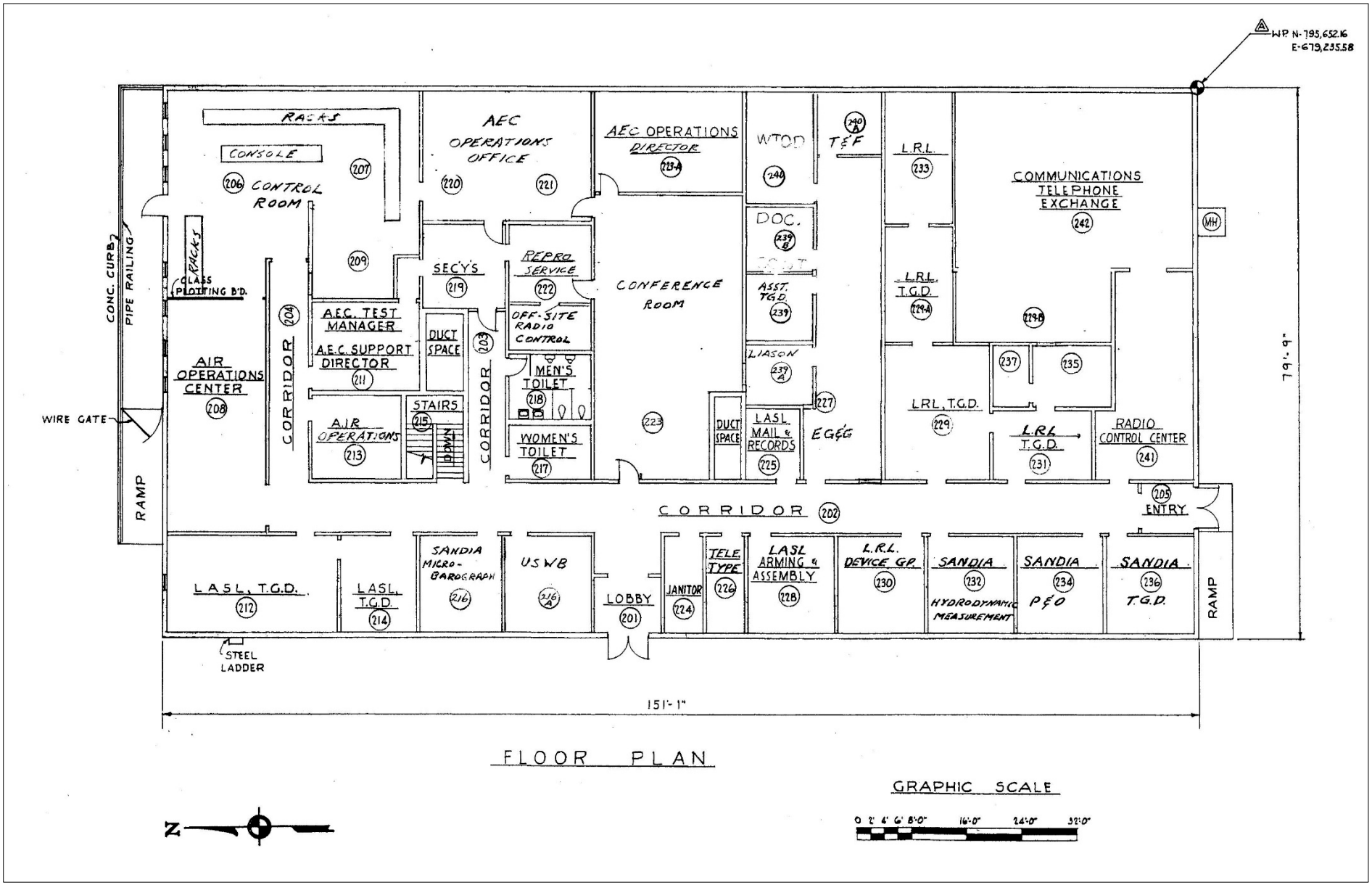


Figure 24. First floor plan in 1958 (extracted from drawing BD-CP-1-1 on file at the Archives and Records Center, Mercury).

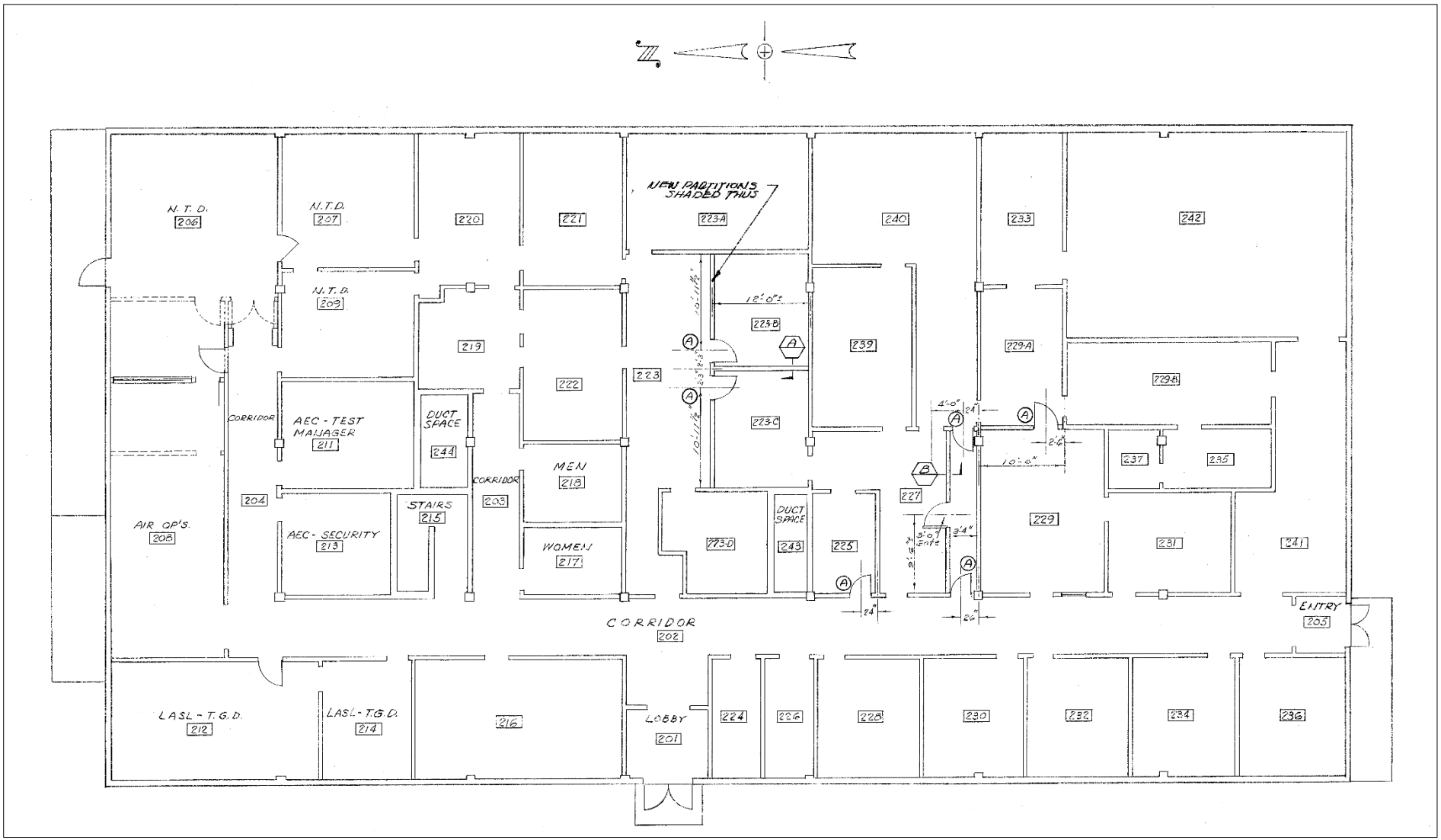


Figure 25. Modifications to the first floor plan in 1957 not shown on the 1958 plan (extracted from drawing CP1-S8 dated 1957 on file at the Archives and Records Center, Mercury).

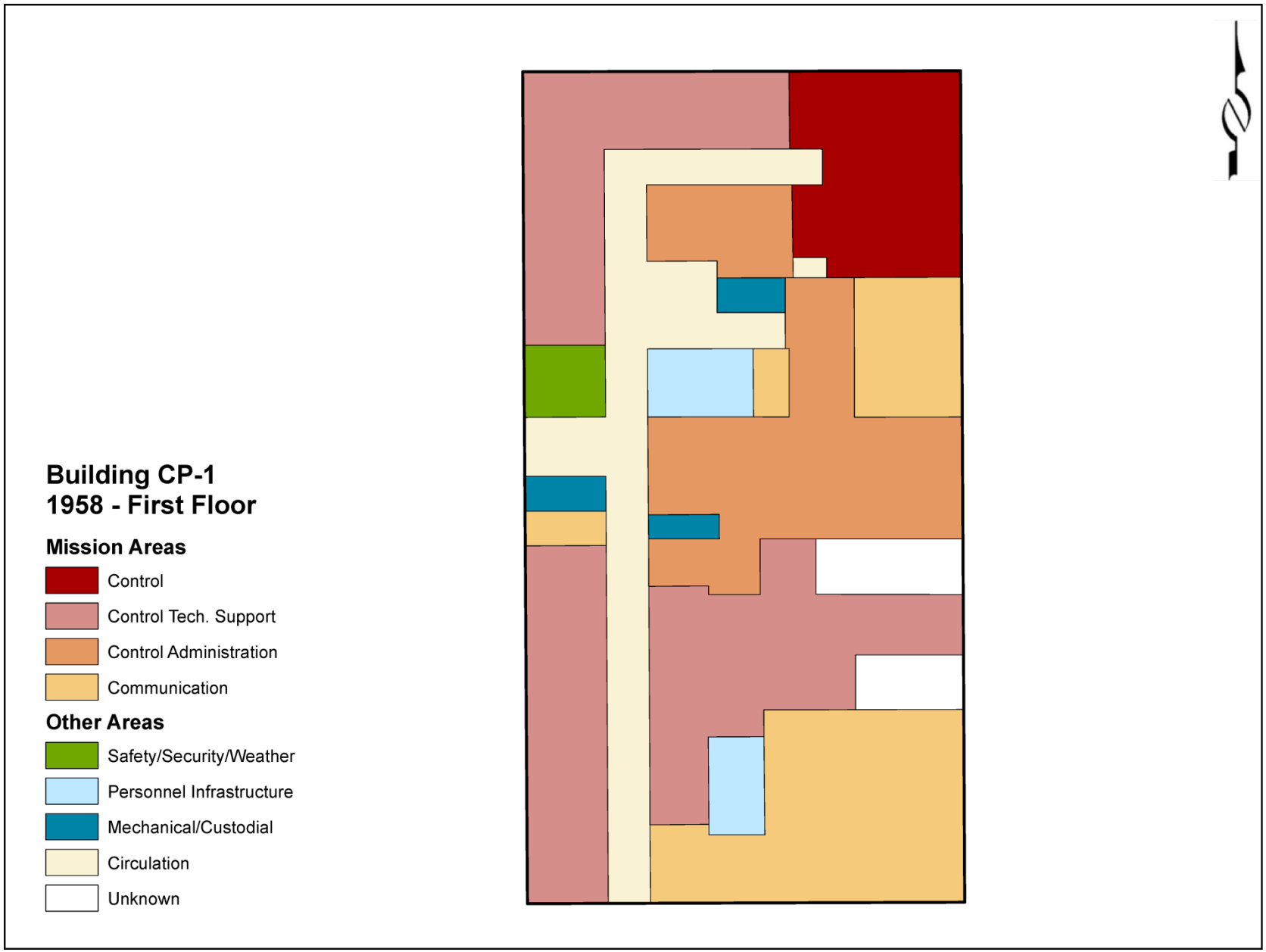


Figure 26. First floor space usage in 1958.

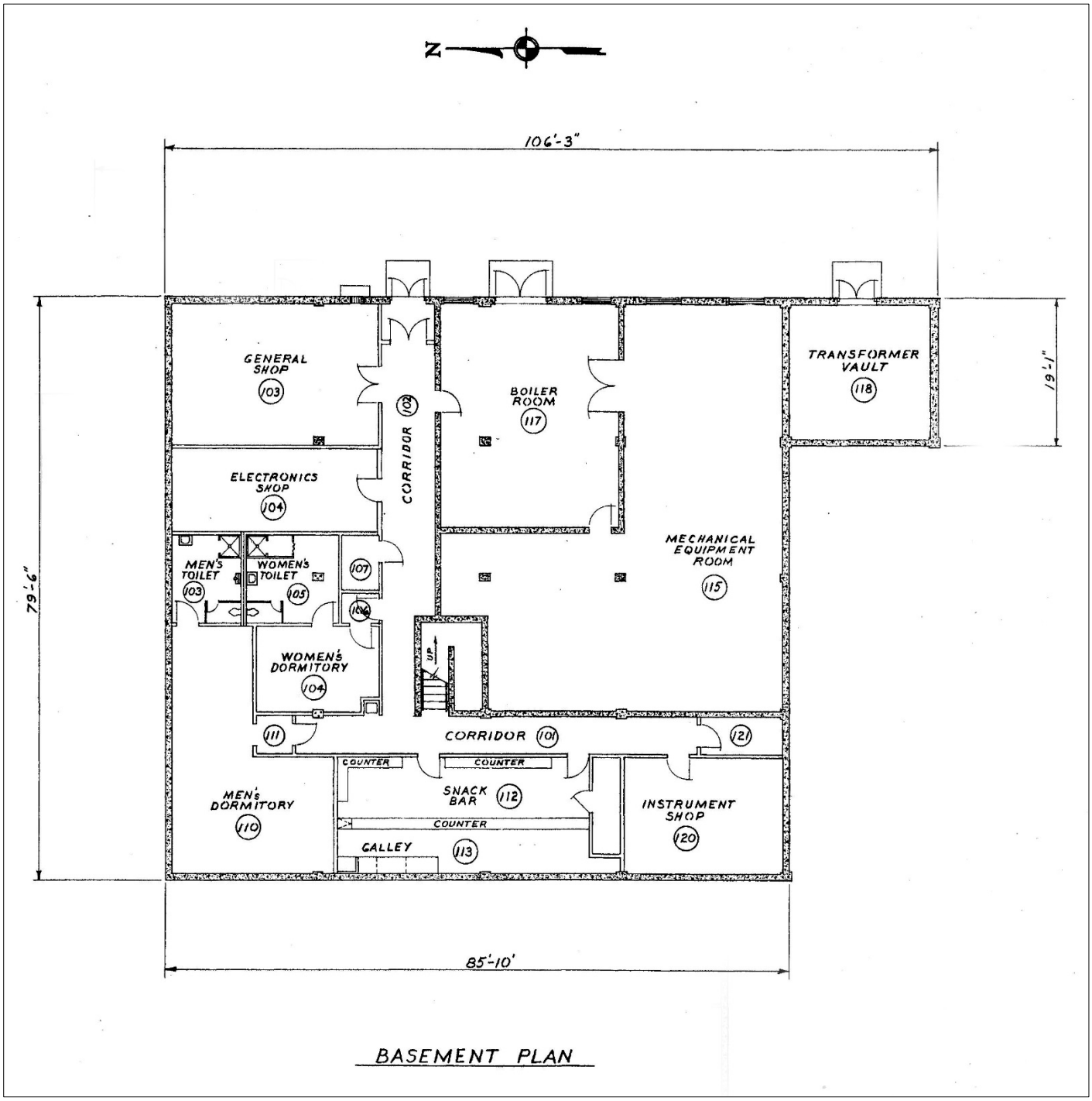


Figure 27. Basement floor plan in 1959 (extracted from drawing BD-CP-1-2 on file at the Archives and Records Center, Mercury).

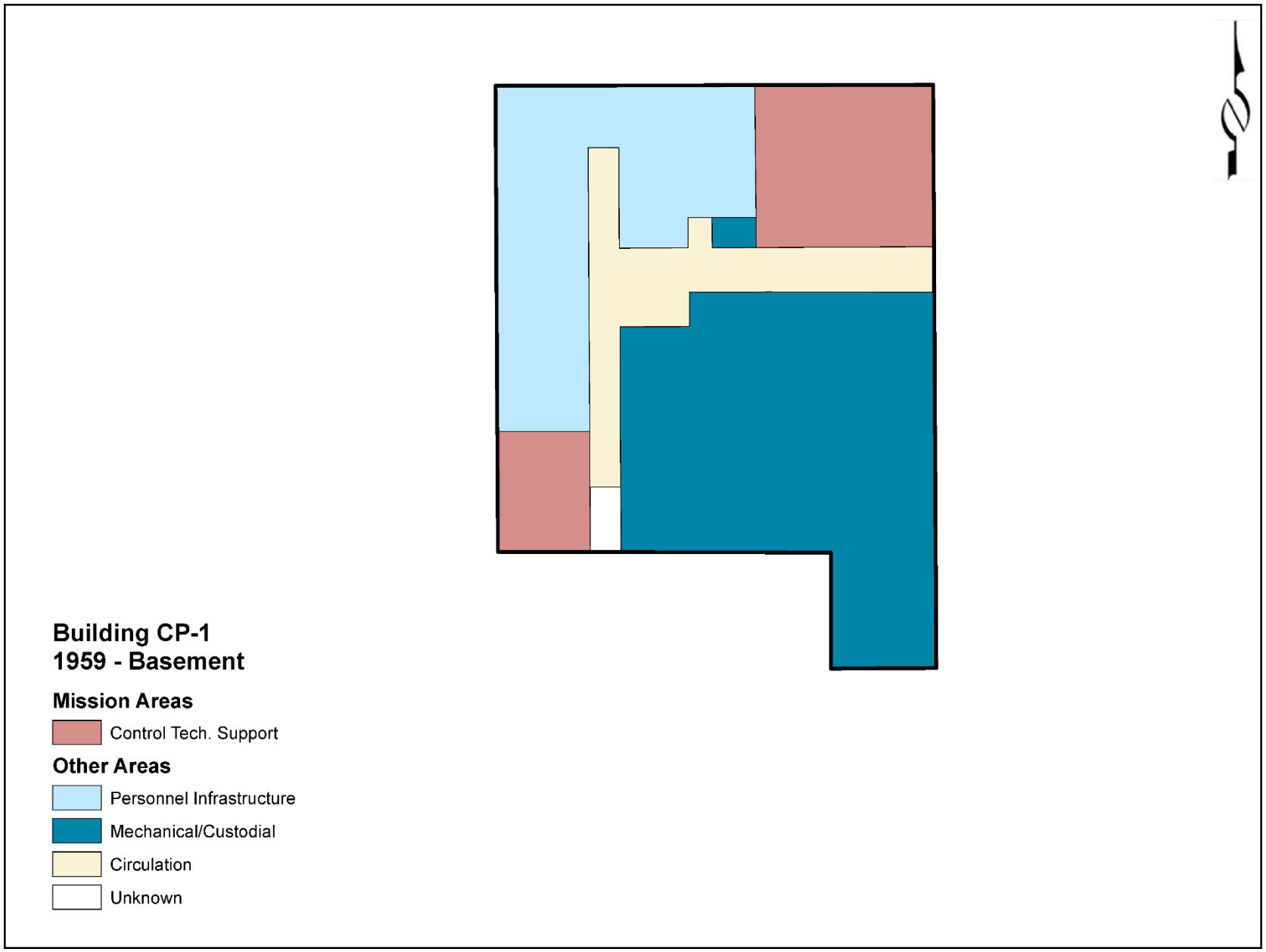


Figure 28. Basement space usage in 1959.

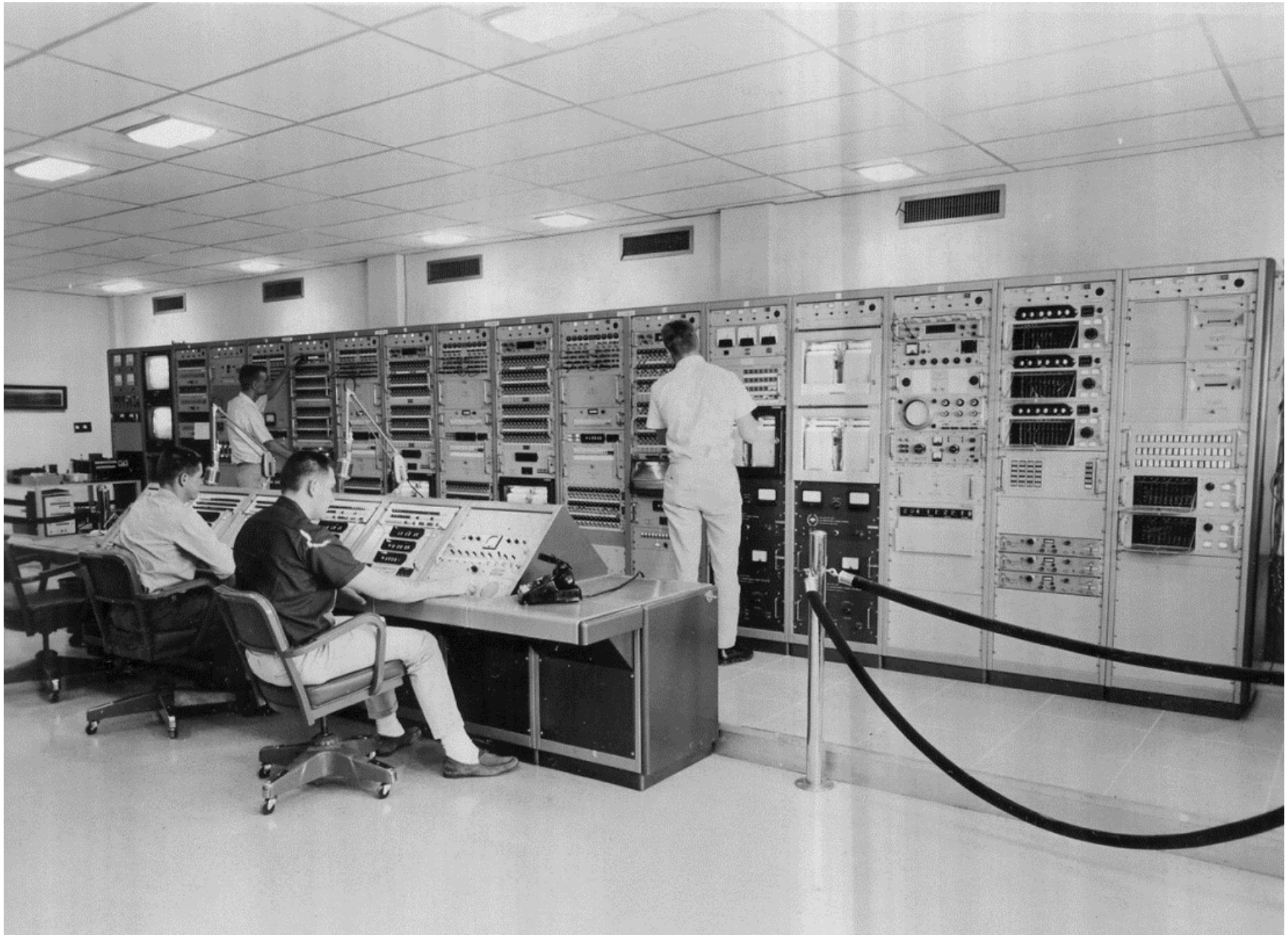


Figure 29. The Control Room on the first floor of CP-1A in 1965 showing the west side of the room (REECo photograph 3072-12 on file at the Nuclear Testing Archive, Las Vegas).

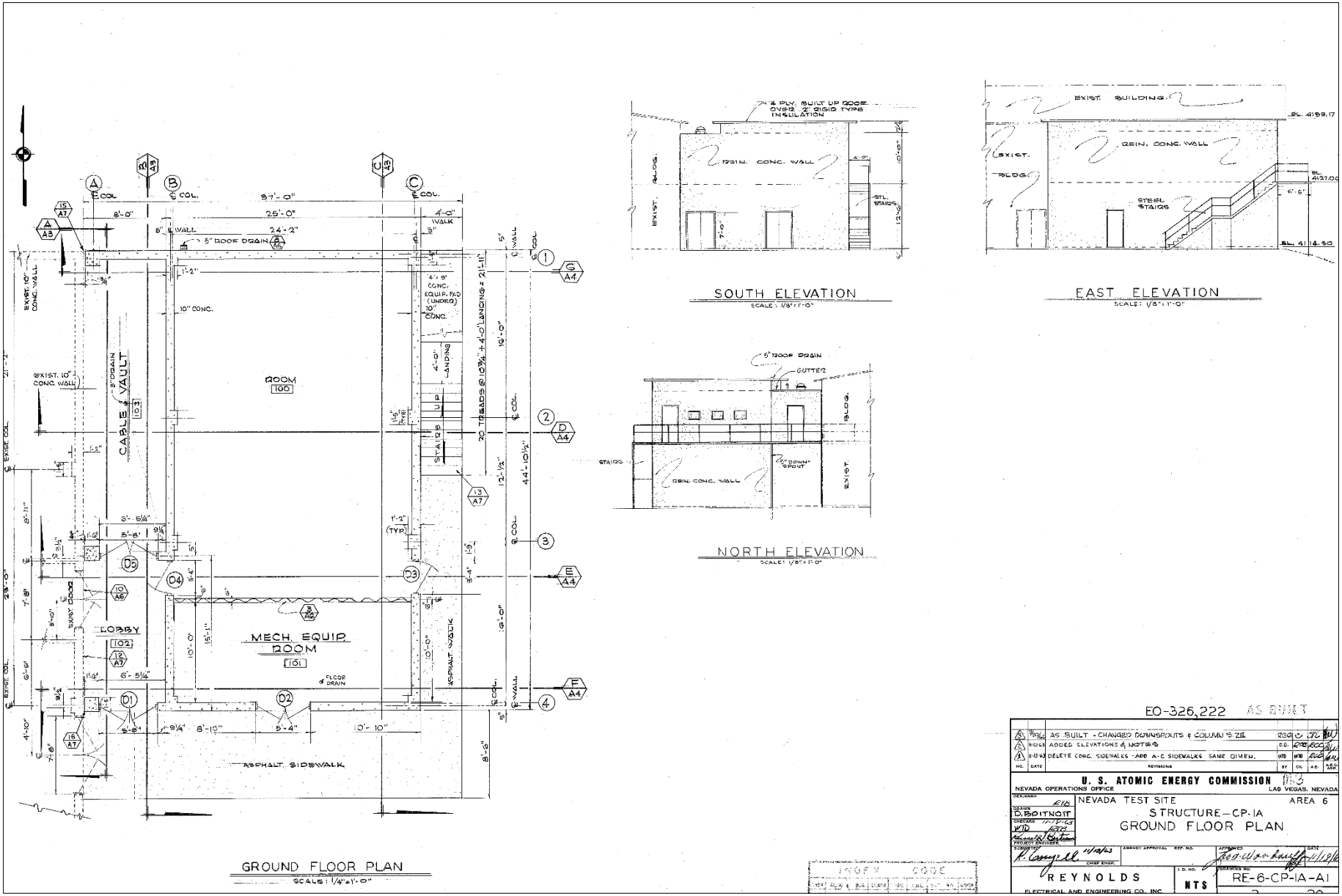


Figure 30. CP-1A basement plan and elevations in 1963 (drawing RE-6-CP-A-A1, 2 of 20, on file at the Archives and Records Center, Mercury).

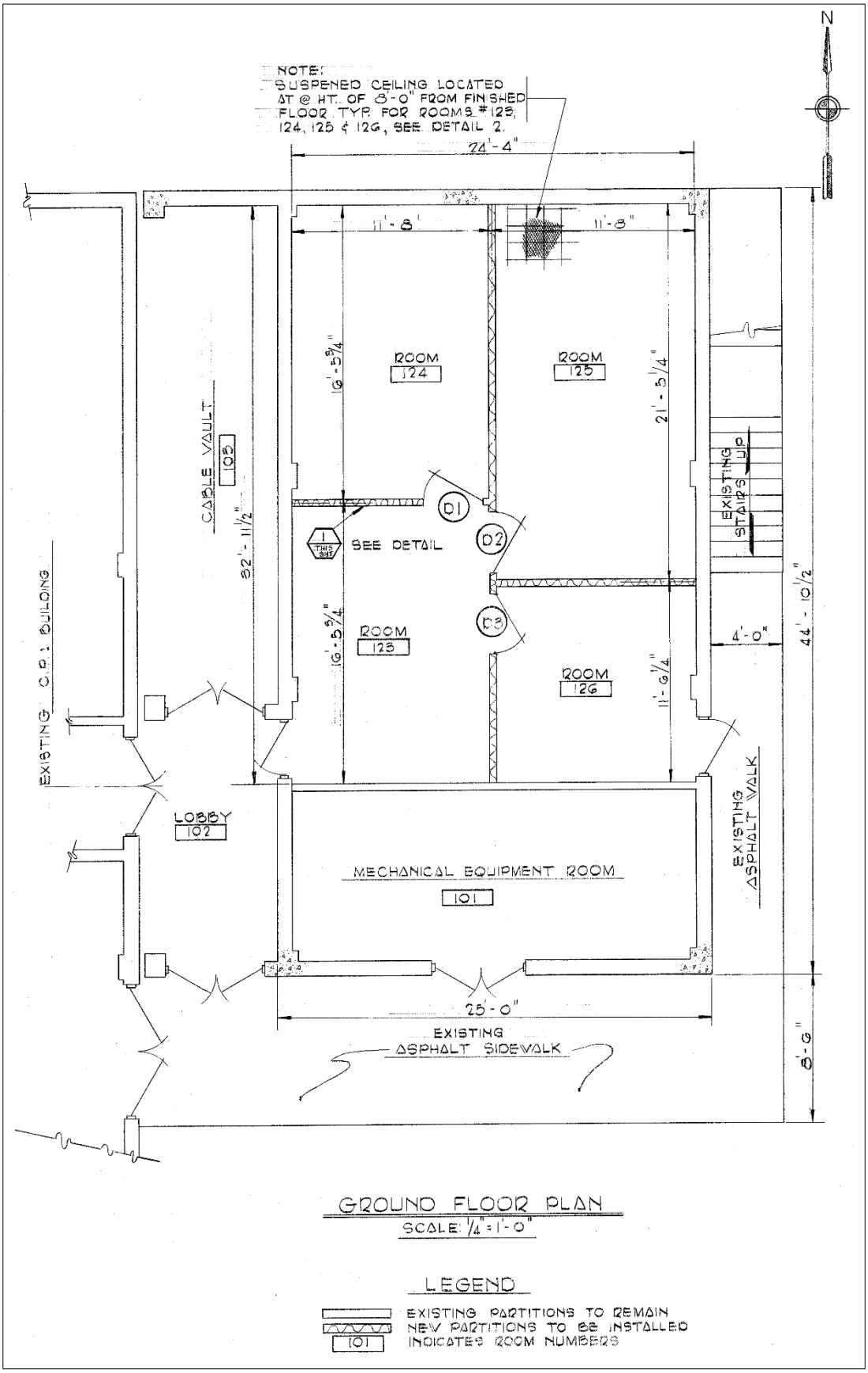


Figure 31. Subdivision of the CP-1A basement in 1964 (extracted from drawing RE-6-CP-1A-A9 on file at the Archives and Records Center, Mercury).

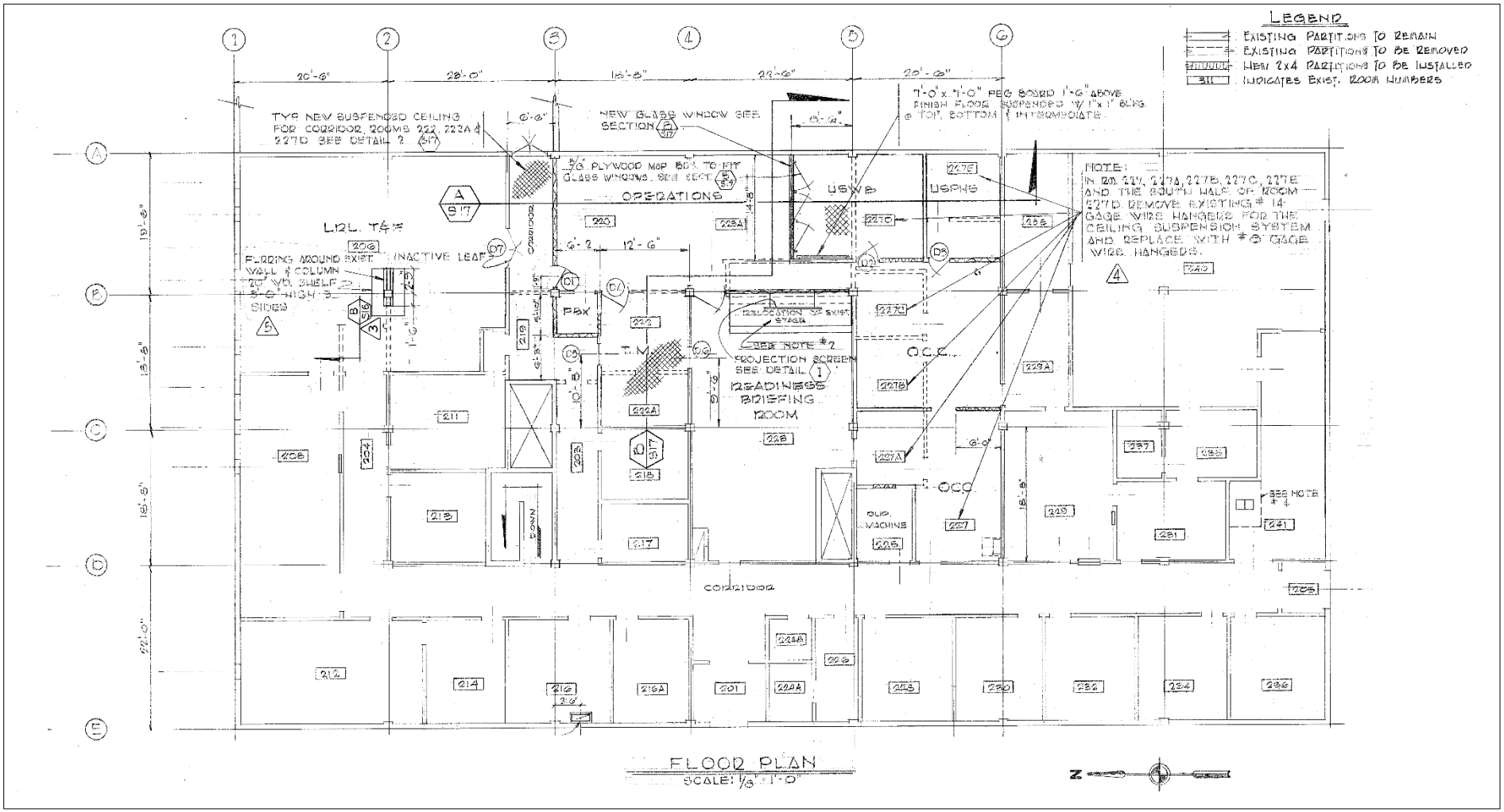


Figure 32. First floor modifications oriented on the new Readiness Briefing Room in 1964 (extracted from drawing RE-6-CP-1-S16 on file at the Archives and Records Center, Mercury).

Figure 33. The "Control Room Panel" meeting in the coordination center on the first floor of CP-1 in 1965. This room is the immediate precursor to the War Room. It has a projection screen, three glass-fronted wall map displays, and sliding map boards. As with the later War Room, the plates identify panel members by function rather than by name. This photo faces south (REECo photograph 3072-5 on file at the Nuclear Testing Archive, Las Vegas).

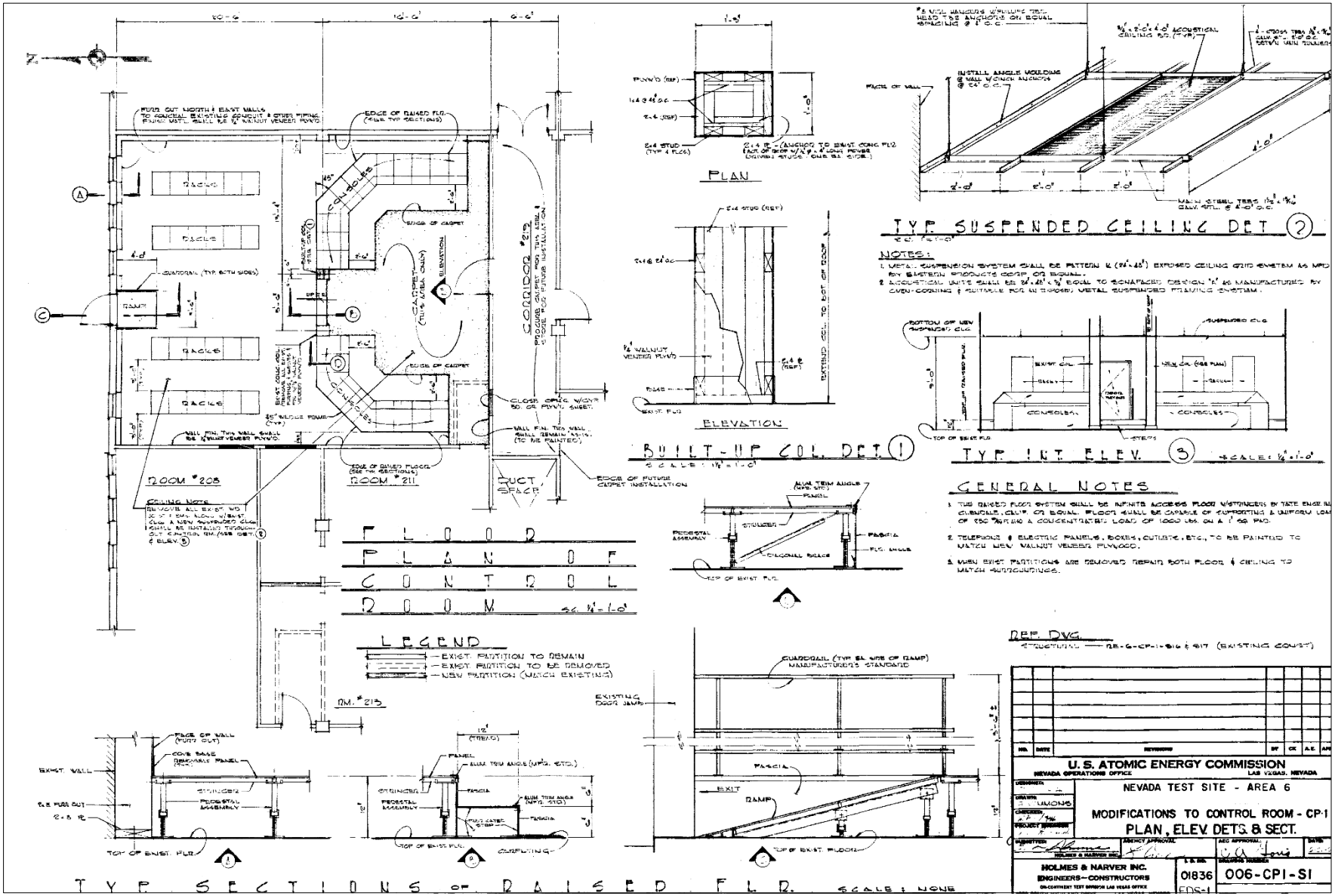


Figure 34. Control Room modifications, 1967 (drawing 006-CP1-S1 on file at the Archives and Records Center, Mercury).

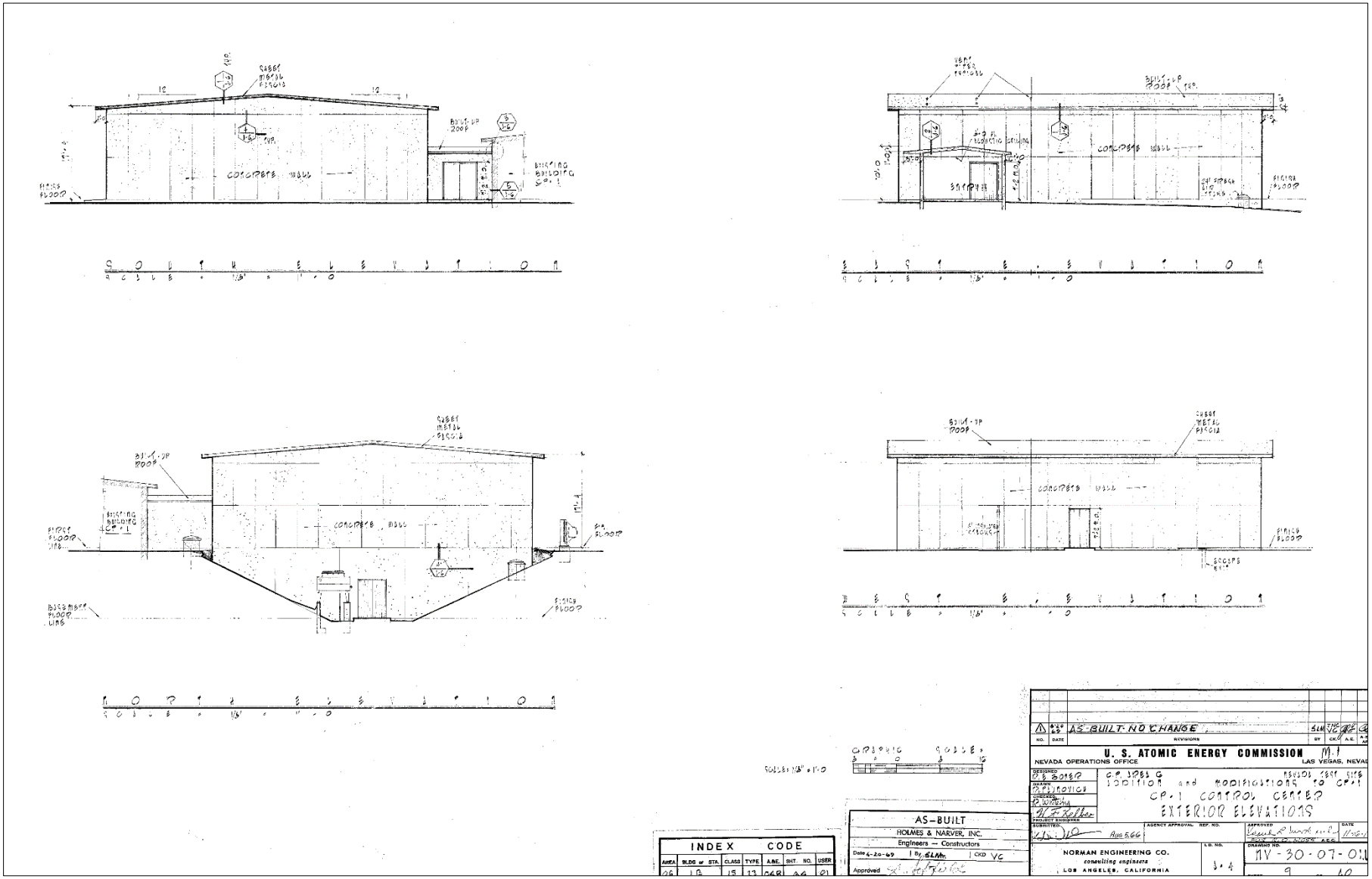


Figure 35. CP-1B elevations. Although drawn in 1966, the earliest as-built stamp is dated 1969, as are the rest of the design drawings (drawing NV-30-07-01.1, 9 of 40, dated 1966 on file at the Archives and Records Center, Mercury).

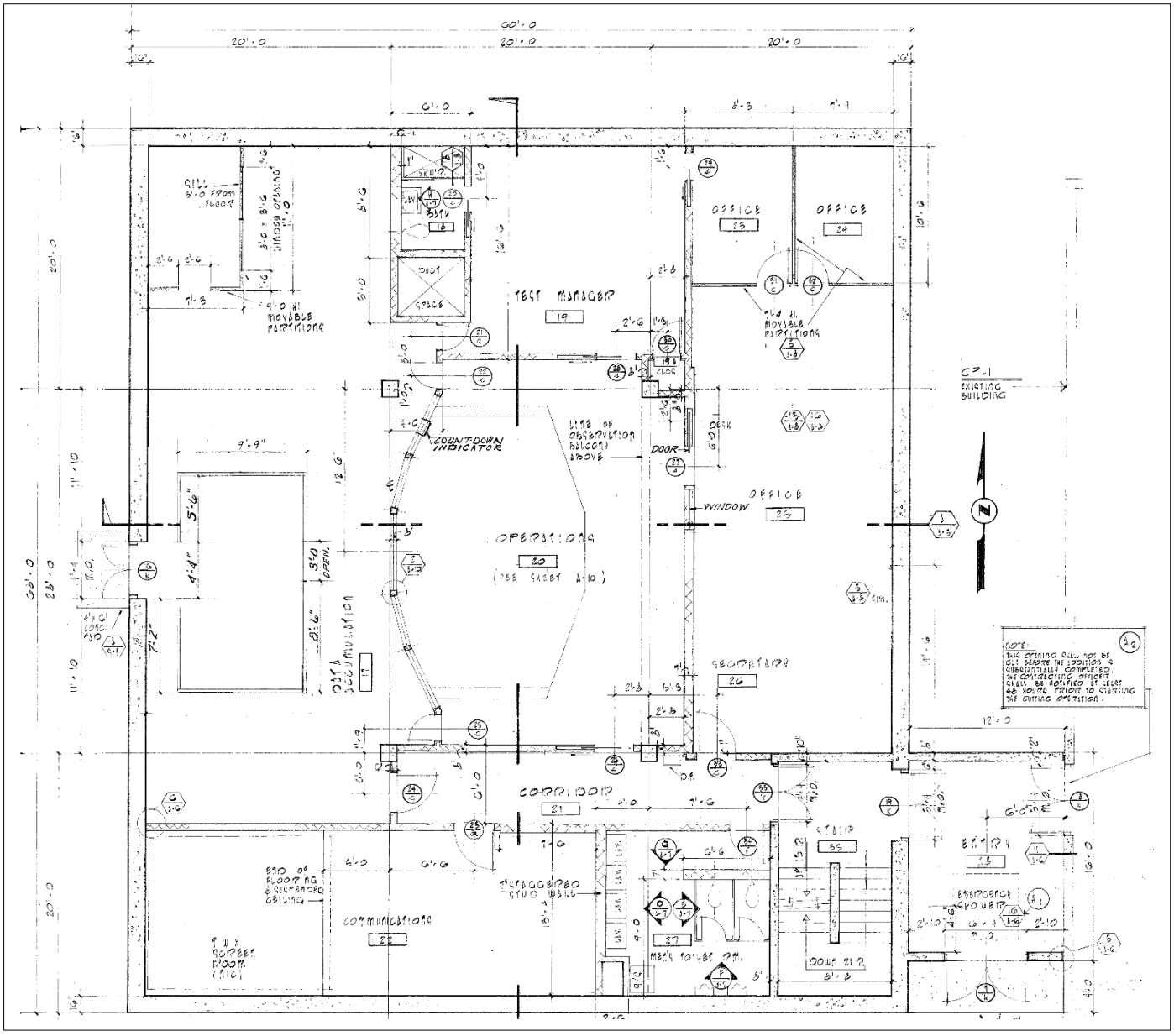


Figure 36. First floor plan for CP-1B (extracted from drawing NV-30-07-01.1 dated 1966 on file at the Archives and Records Center, Mercury).

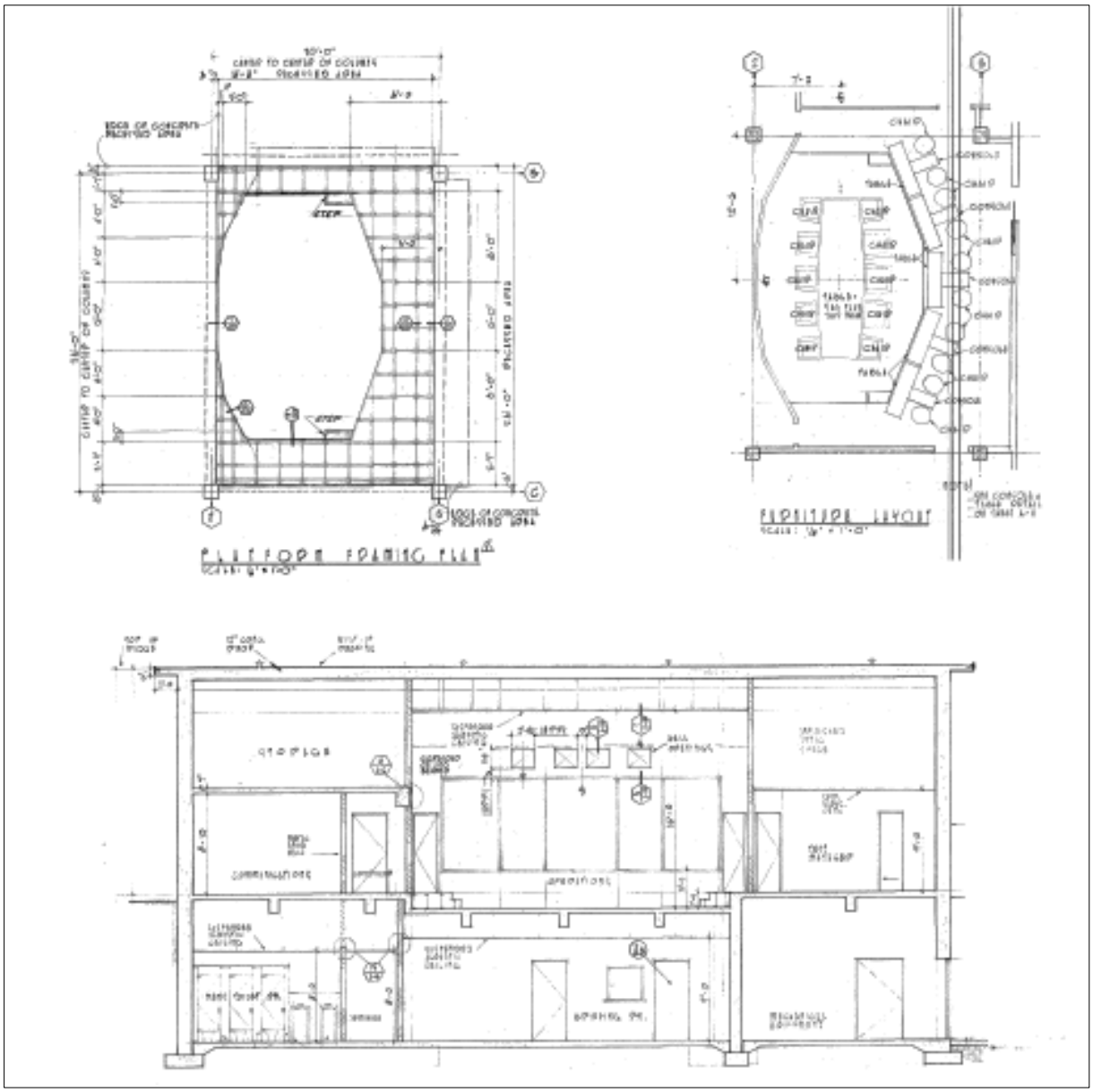


Figure 37. The War Room in CP-1B as originally designed. Plan views at top. The section facing west shows the layout of rear-projection screens with video monitors above them (extracted from drawings NV-30-07-01.1, 15 of 40 [top], and 19 of 29 [bottom], dated 1966 on file at the Archives and Records Center, Mercury).

Figure 38. The War Room in 1969 (REECo photographs 2958-5 and 2958-6 dated 1969 on file at the Nuclear Testing Archive, Las Vegas).

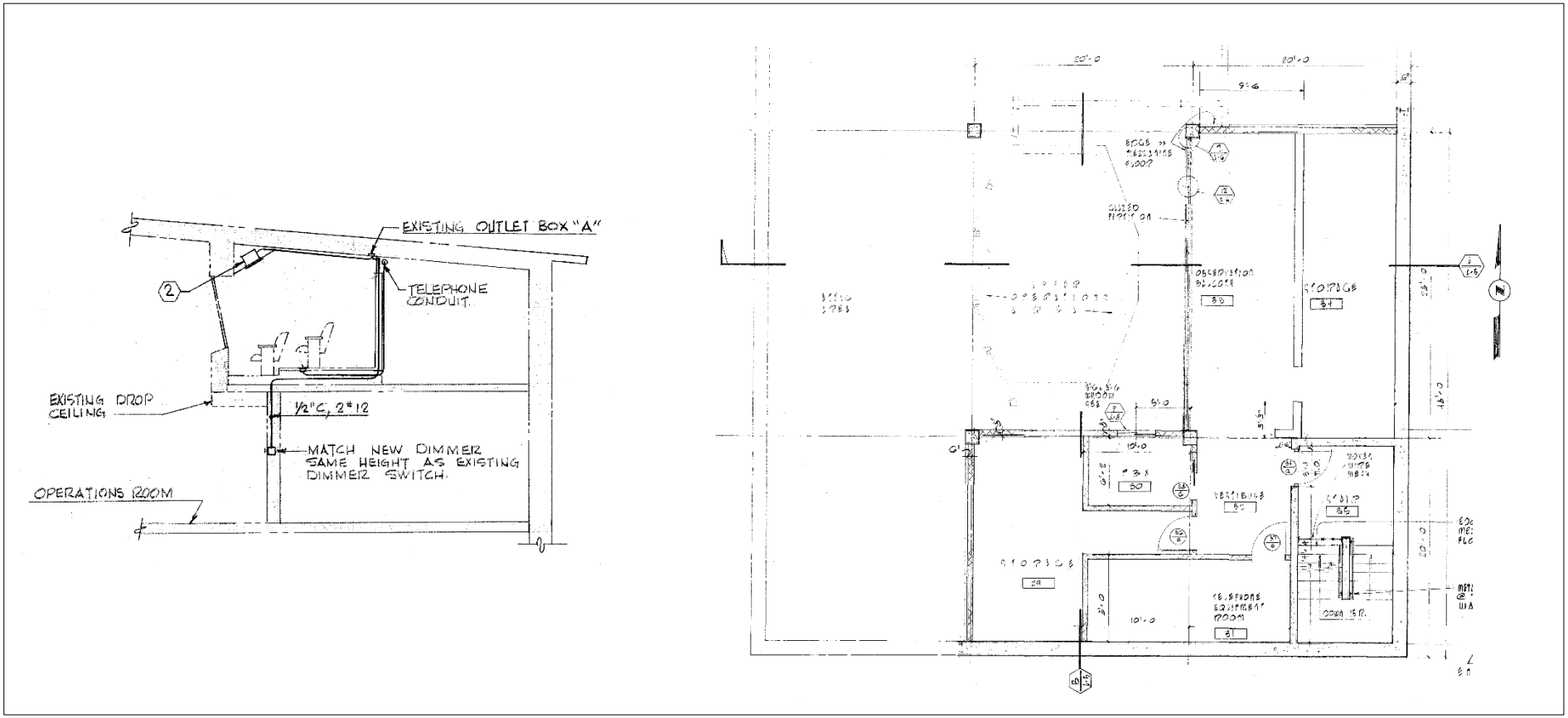


Figure 39. CP-1B mezzanine plan and section (extracted from drawings JS-006-095-E26.2 [left] and NV-30-07-01.1, 8 of 40 [right], on file at the Archives and Records Center, Mercury).

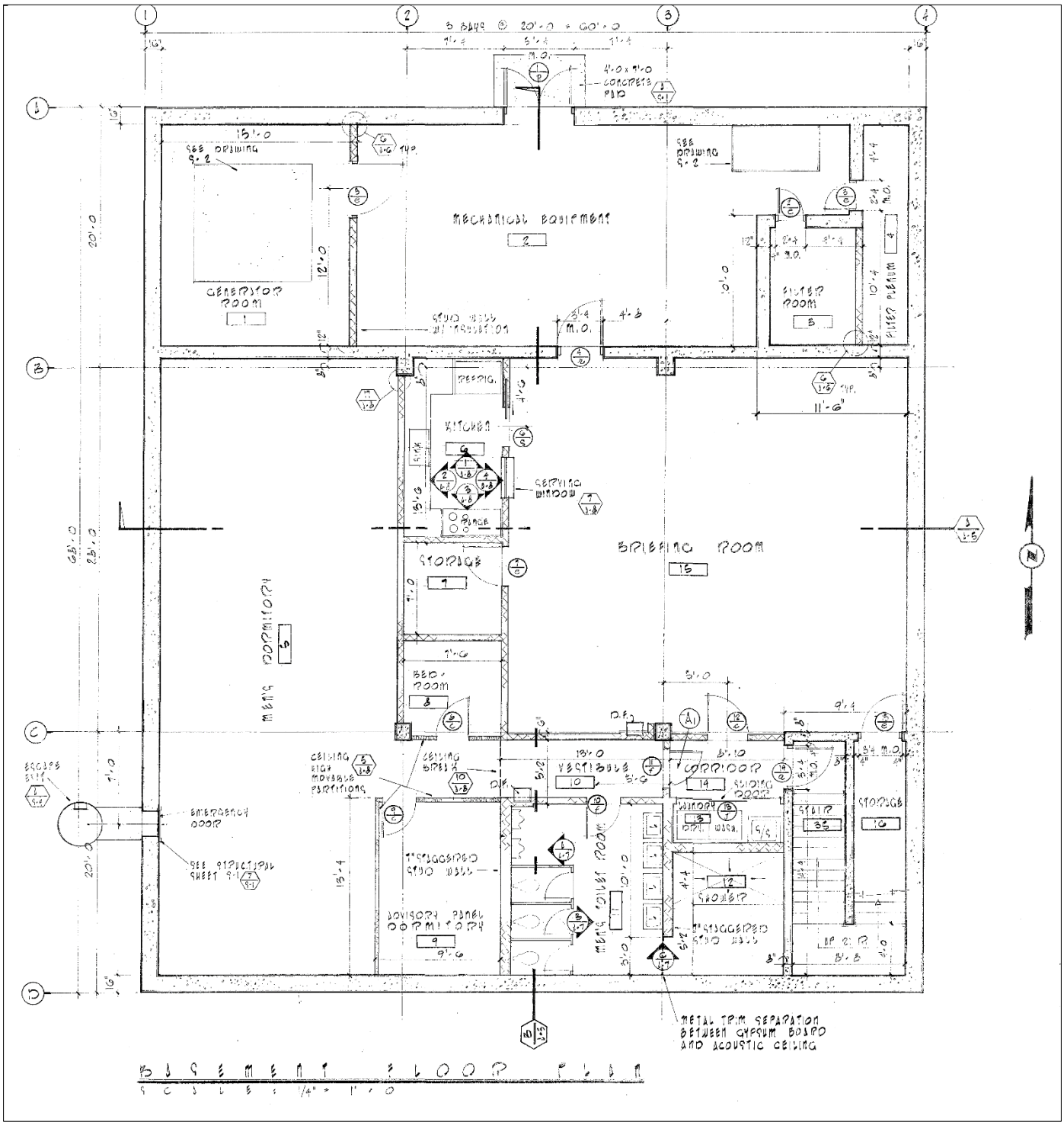


Figure 40. Basement plan for CP-1B in 1966 (extracted from drawing NV-30-07-01.1, 6 of 40, dated 1966 on file at the Archives and Records Center, Mercury).

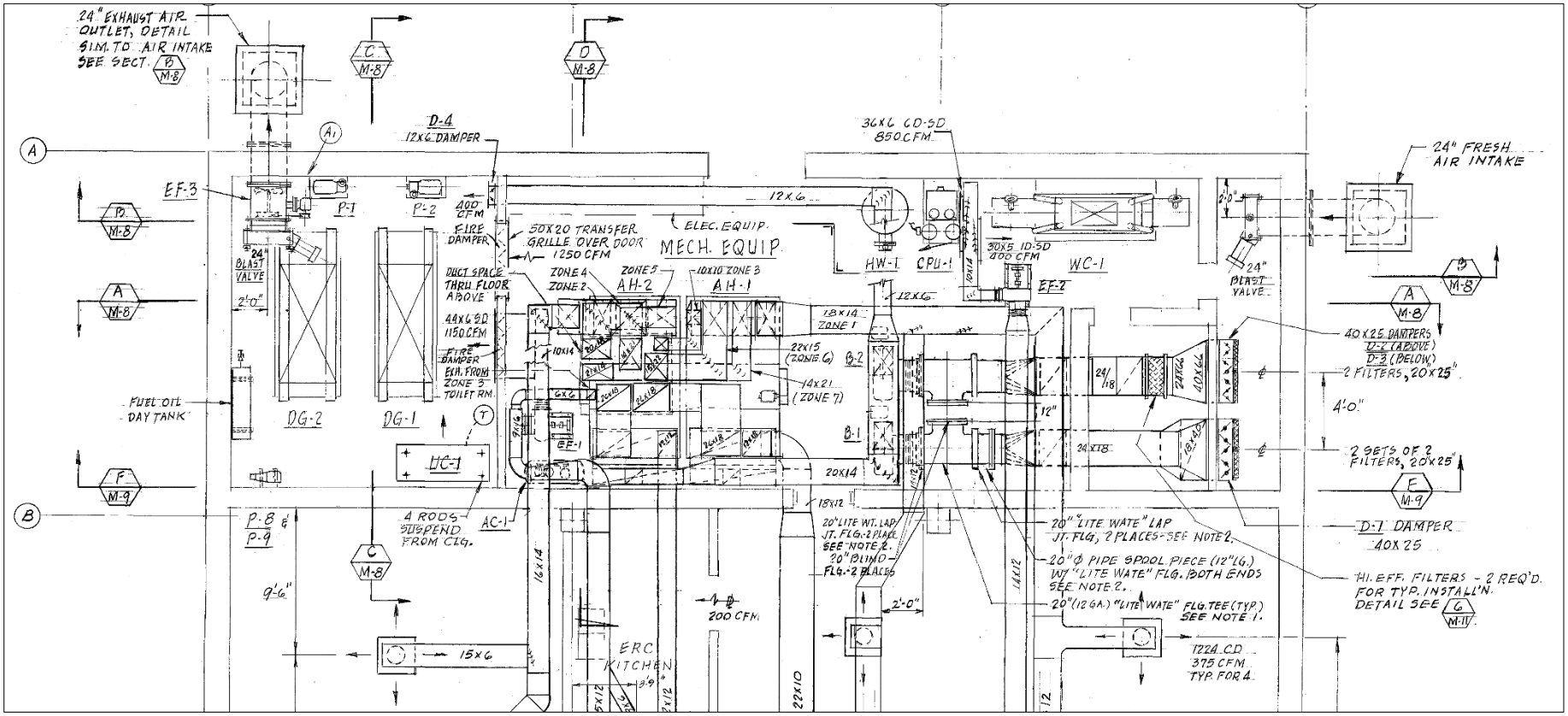


Figure 41. Mechanical rooms in CP-1B. From left to right: Generator Room, Mechanical Room, Filter Room, and Filter Plenum (extracted from drawing NV-30-07-01.1, 24 of 40, dated 1966 on file at the Archives and Records Center, Mercury).

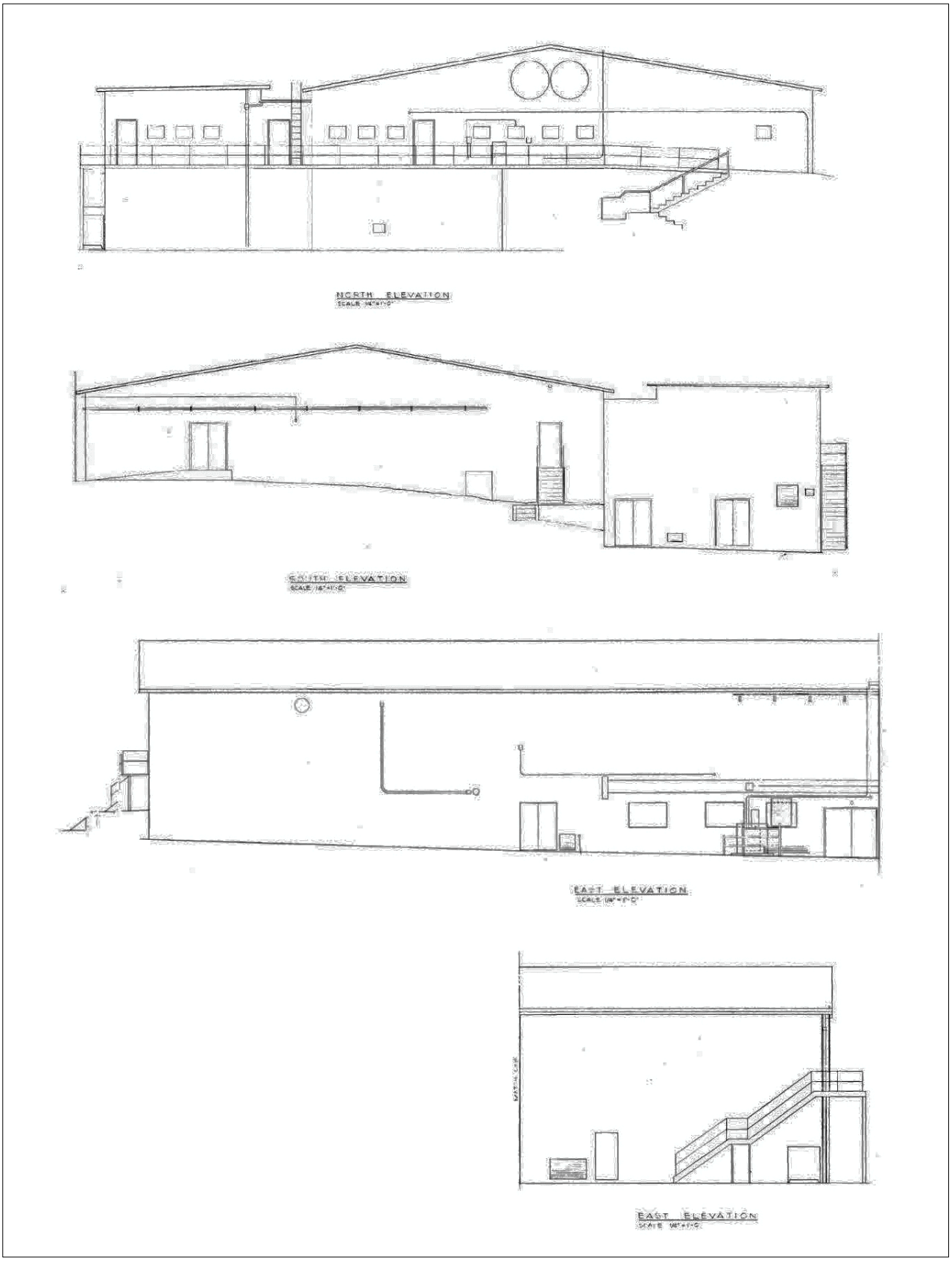


Figure 42. Elevations in 1970 (extracted from drawings AS-BLT-30-07-1, 6 of 45; AS-BLT-30-07-1, 9 of 45; and AS-BLT-30-07-1, 11 of 45, dated 1970 on file at the Archives and Records Center, Mercury).

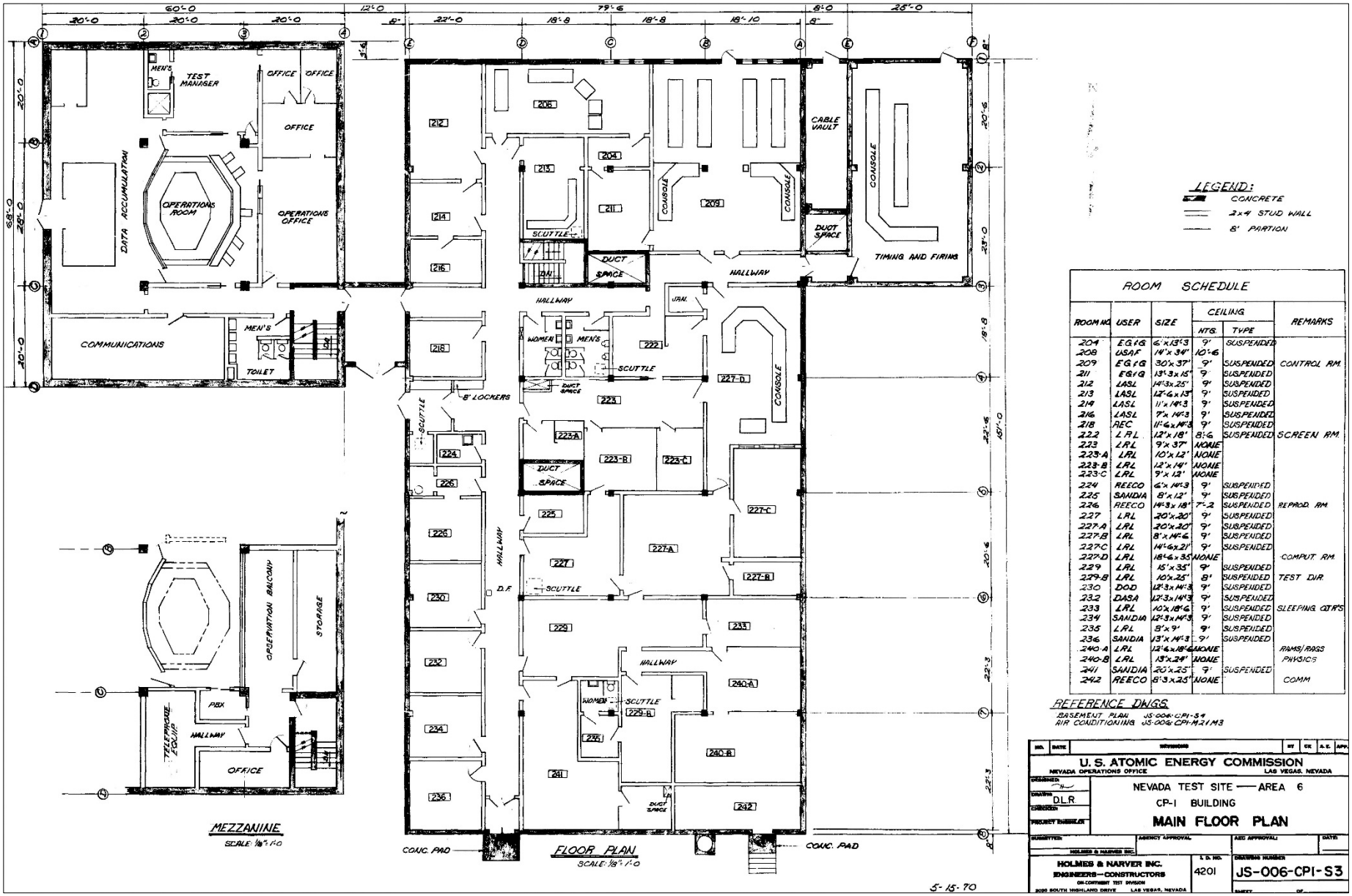


Figure 43. First floor plan early in 1970 prior to the Bechler modifications (drawing JS-006-CP1-S3 on file at the Archives and Records Center, Mercury).

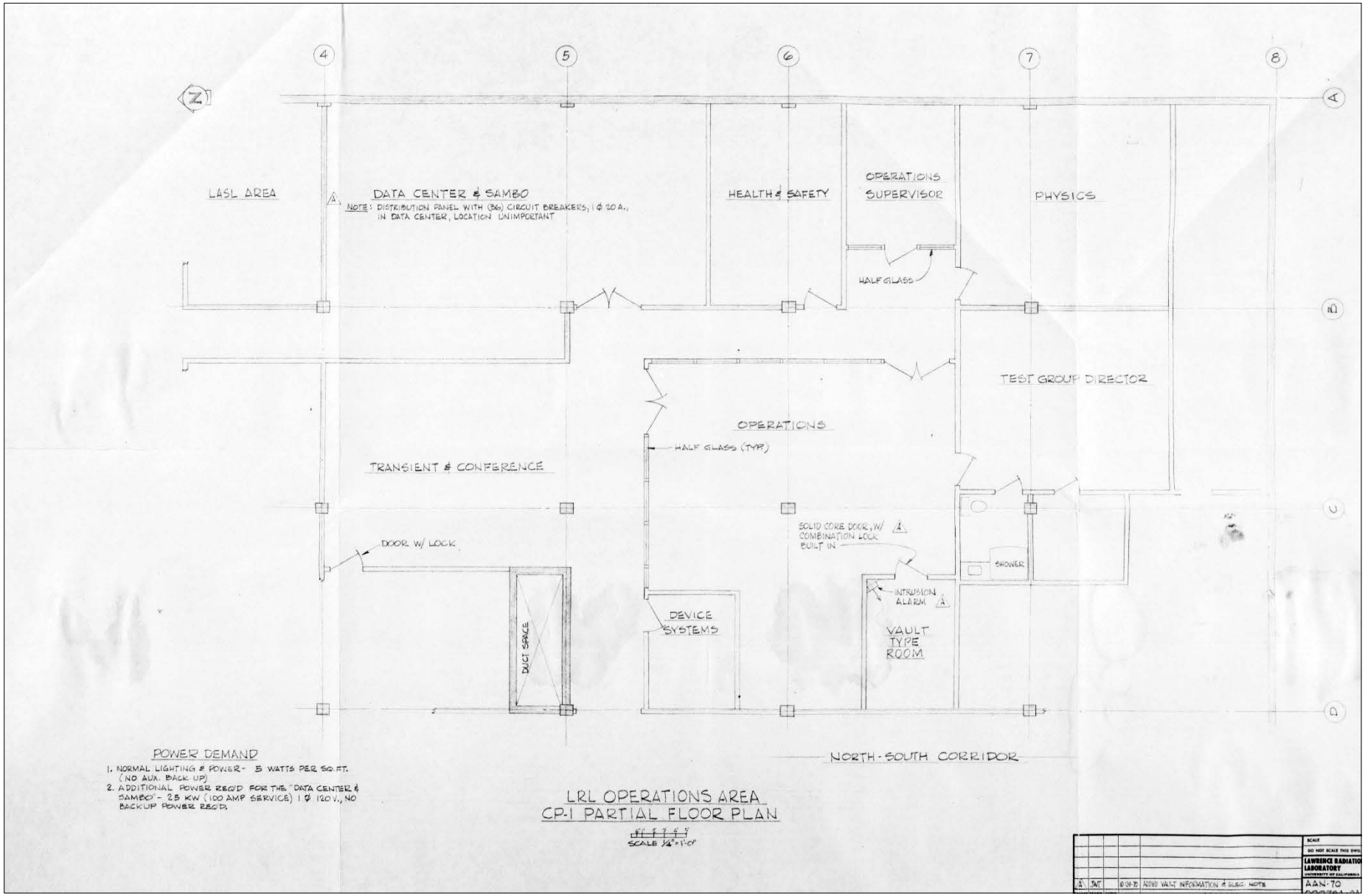


Figure 44. LLNL operations area in southeast corner of CP-1 first floor late in 1970 (drawing AAN-70 000 784-0A dated 1970 on file at the Archives and Records Center, Mercury).

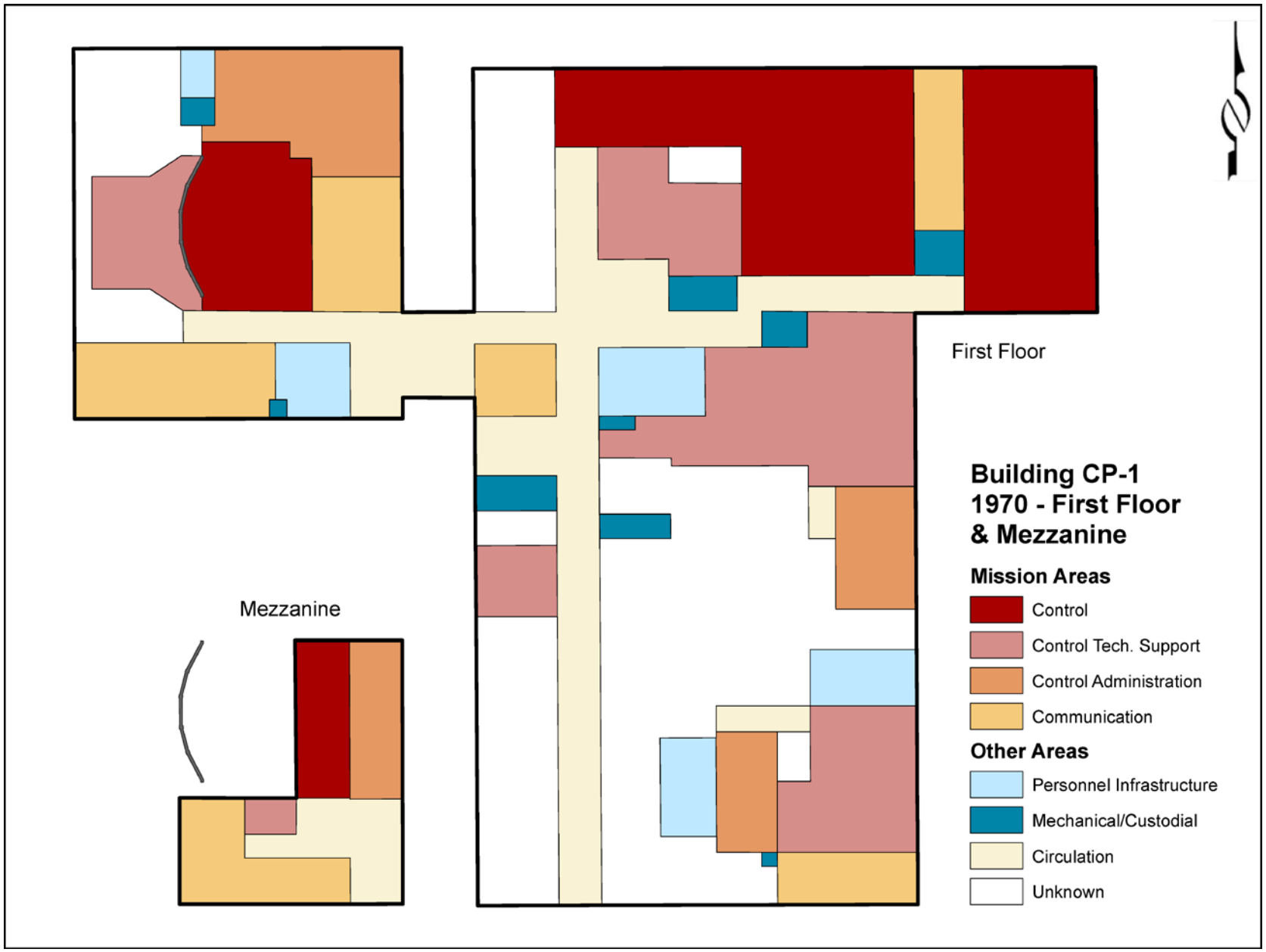


Figure 45. First floor space usage in 1970.

Figure 46. Photo of the War Room, 1970 (REECo photograph 3168-1 on file at the Nuclear Testing Archive, Las Vegas).

Figure 47. Photo of the Timing and Firing Room on the first floor of CP-1A, 1970 (REECo photograph 3271-10 on file at the Nuclear Testing Archive, Las Vegas).

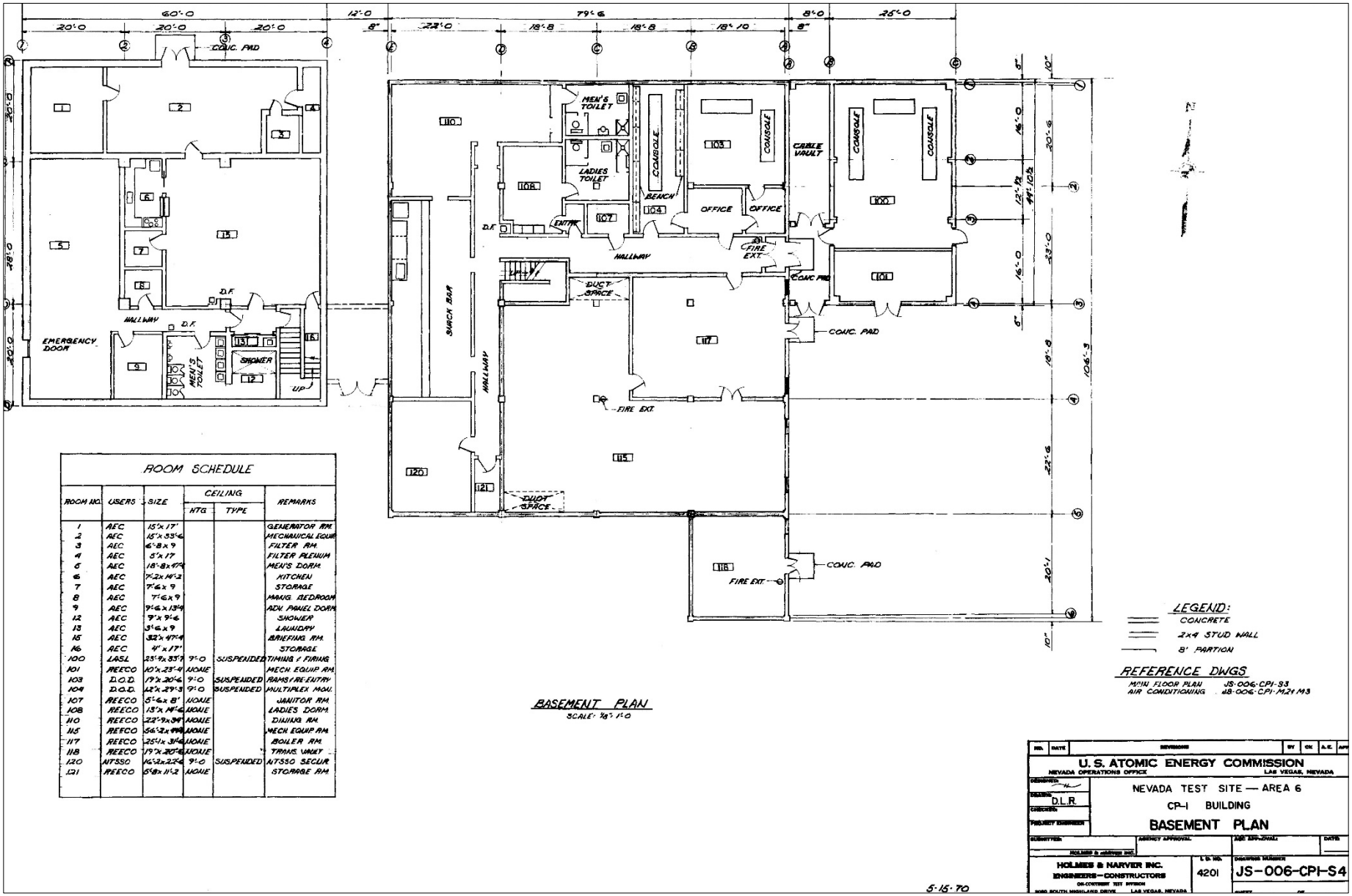


Figure 48. Basement floor plan early in 1970 prior to the Bechler modifications (drawing JS-006-CP1-S4 on file at the Archives and Records Center, Mercury).

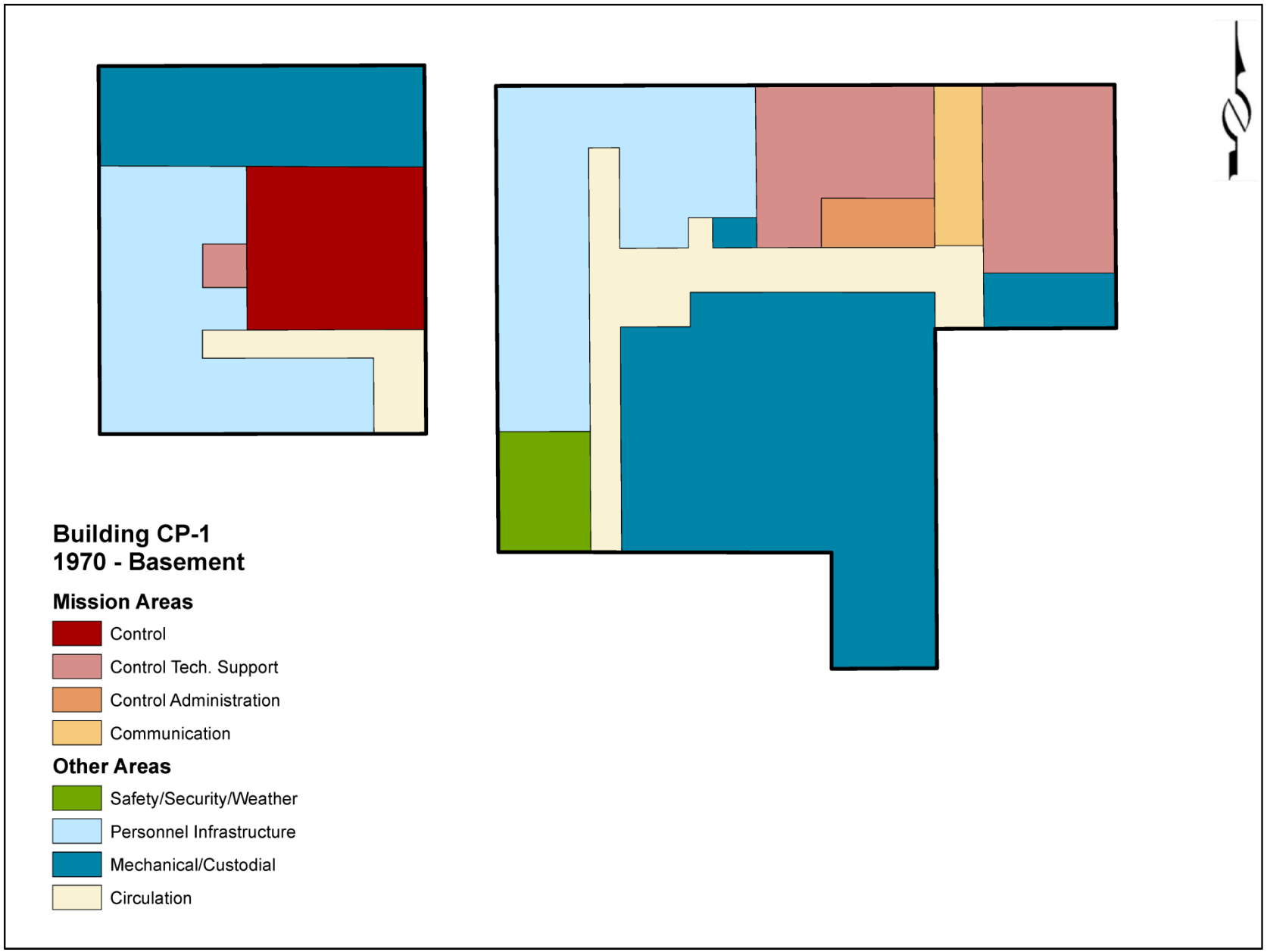


Figure 49. Basement space usage in 1970.

Figure 50. Two views of the CP-1B basement Briefing Room in 1970. The top view is facing southeast toward the front corner of the room. The bottom view faces the south wall (REECo photographs 3168-2 and 3168-7 dated 1970 on file at the Nuclear Testing Archive, Las Vegas).

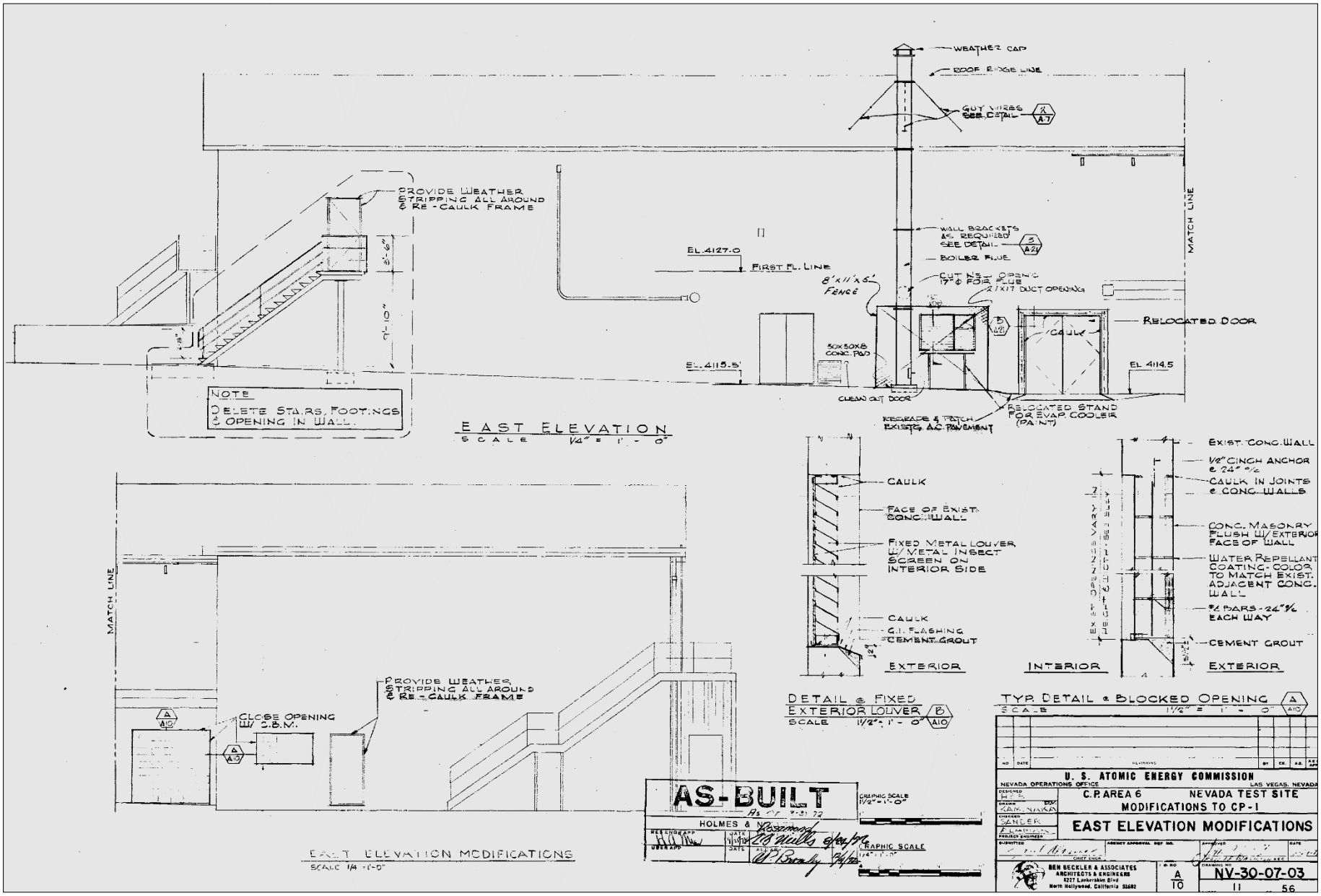


Figure 51. Modifications to the east façade, 1971 (drawing NV-30-07-03, 11 of 56, on file at the Archives and Records Center, Mercury).

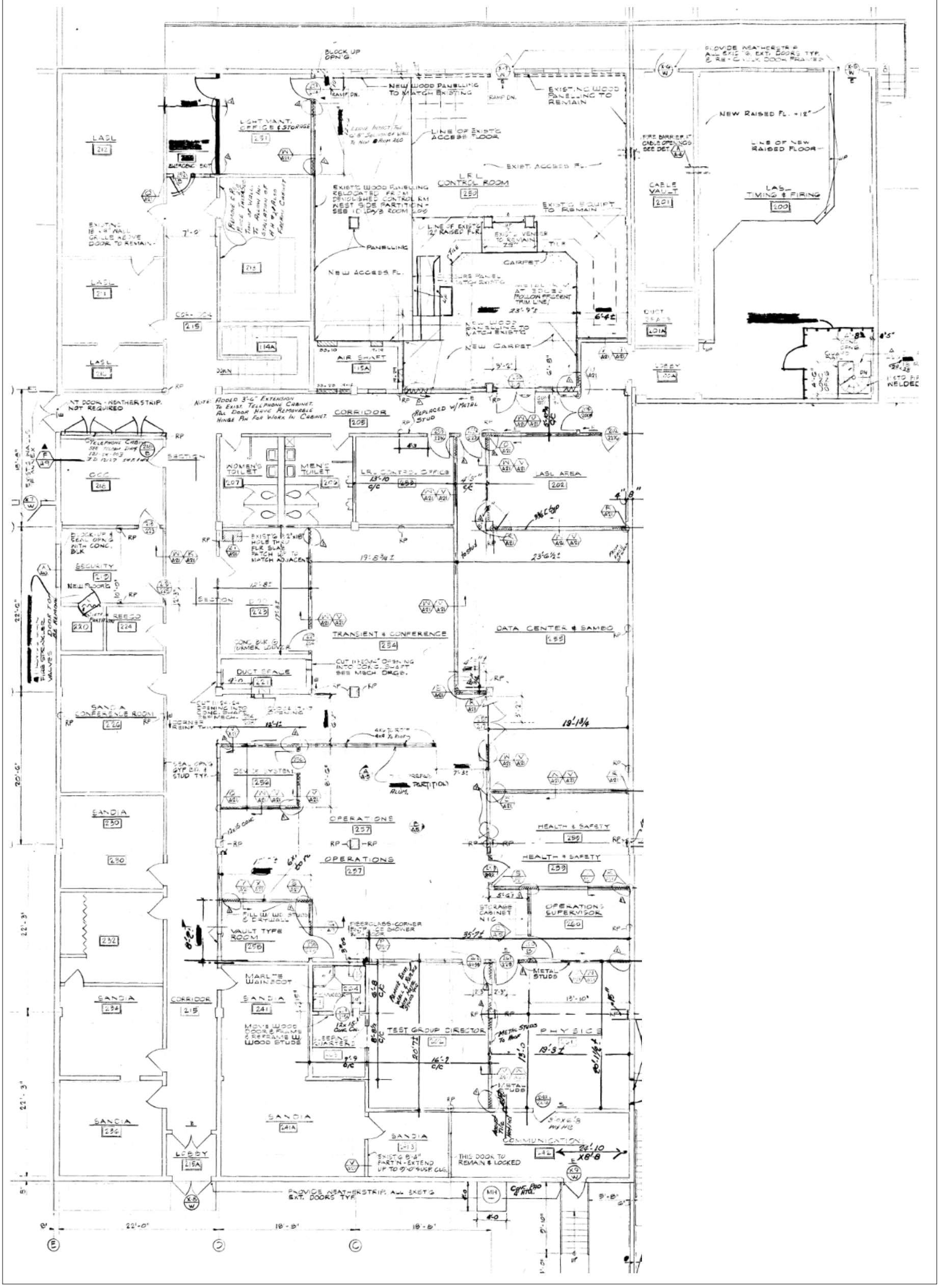
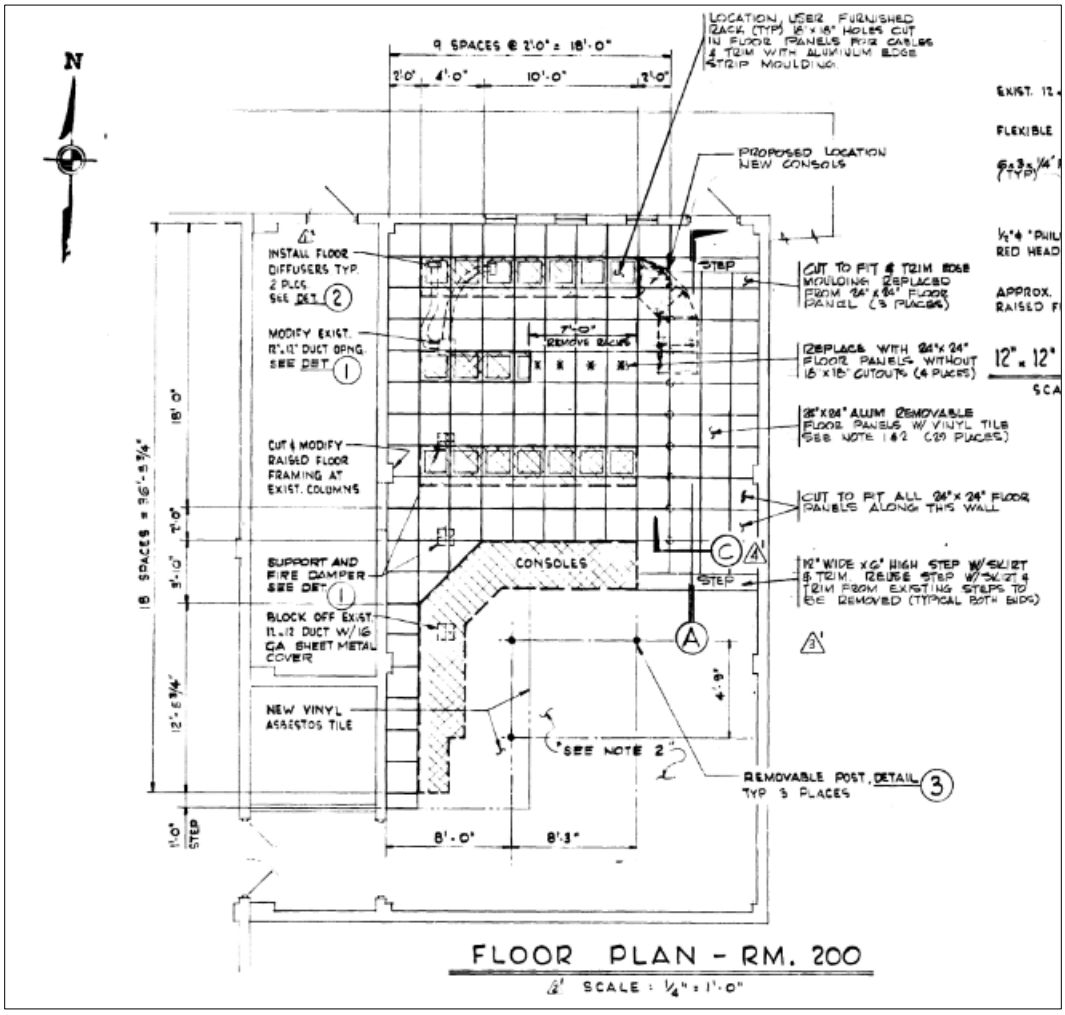


Figure 52. Bechler modifications to the first floor in 1971-1972 (drawings NV-30-07-03, 5 of 56, 6 of 56, and 7 of 56, on file at the Archives and Records Center, Mercury).



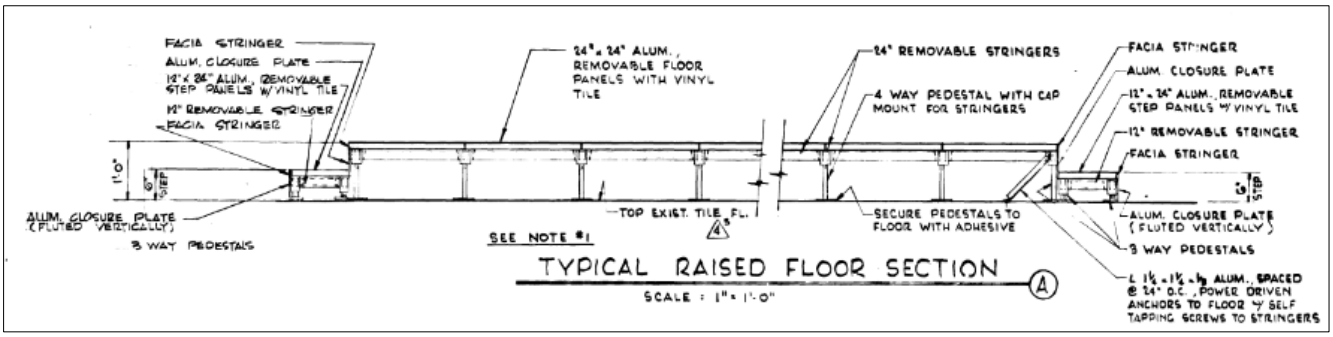


Figure 53. Modifications to Control Room 200 (extracted from drawing JS-006-CP1-S5.4 dated 1971 on file at the Archives and Records Center, Mercury).

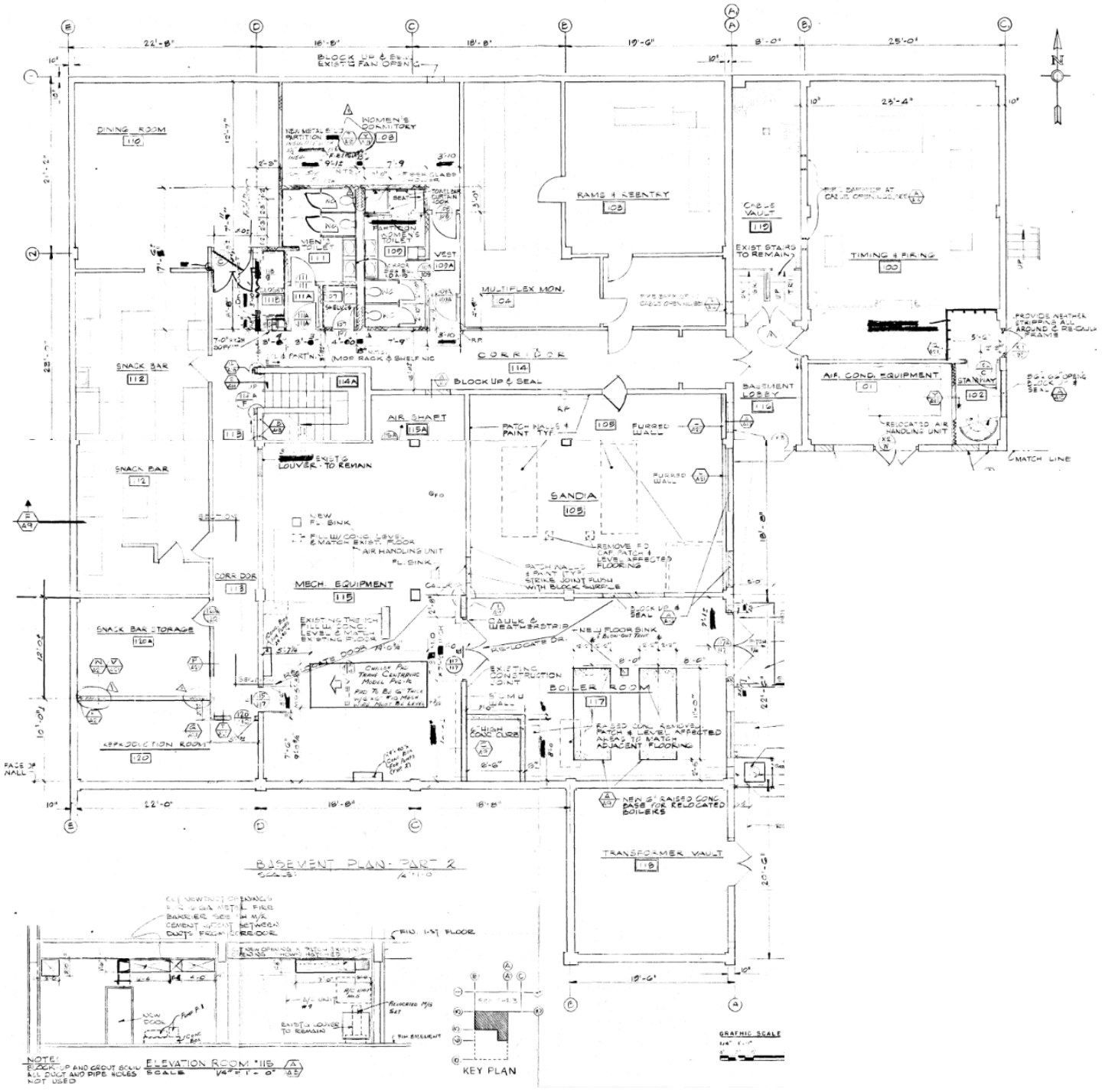


Figure 54. Bechler modifications to basement in 1970 including spiral staircase (drawings NV-30-07-03, 4 of 56, and 5 of 56, dated 1971 on file at the Archives and Records Center, Mercury).

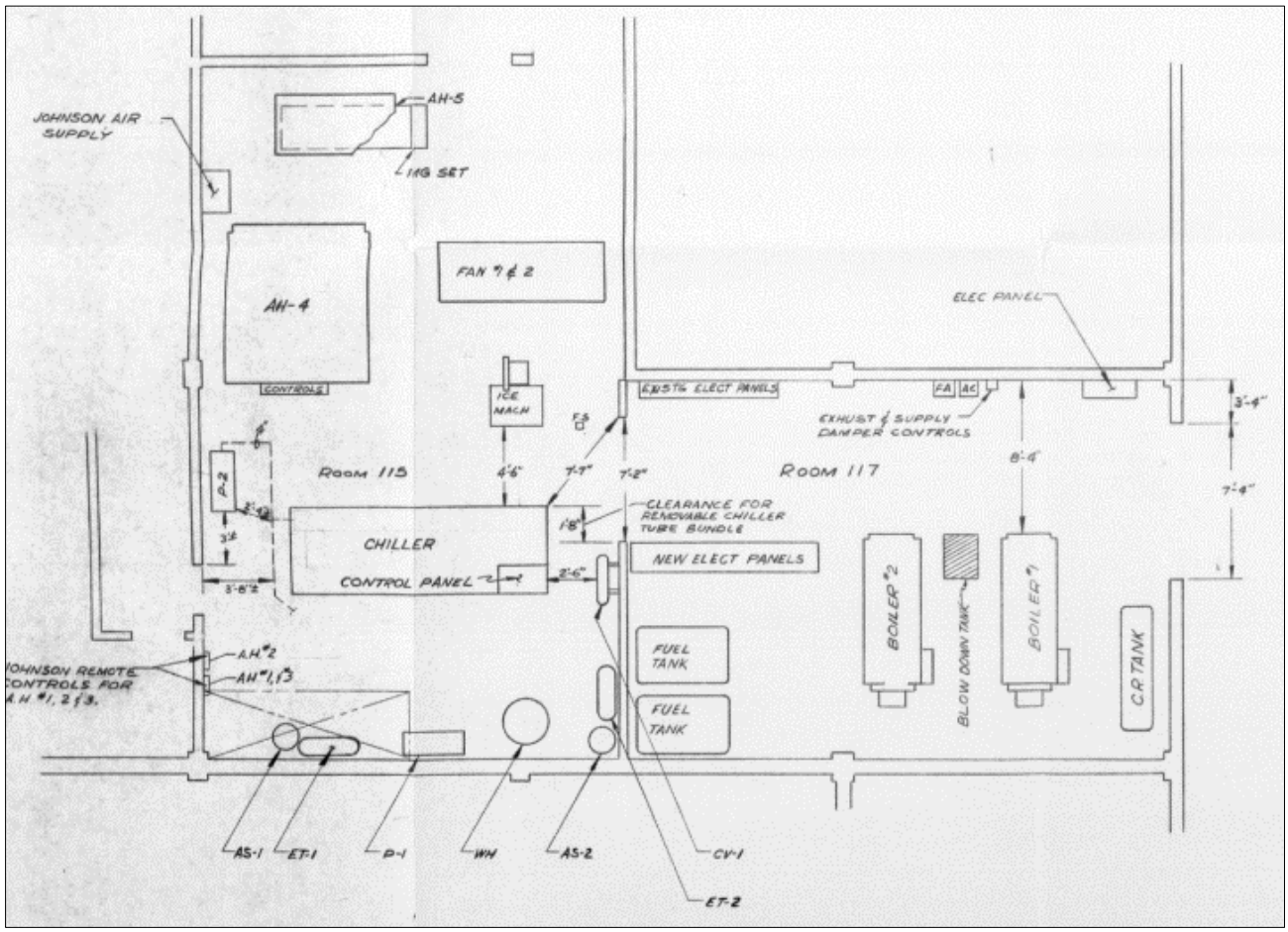


Figure 55. New Mechanical and Boiler Rooms in 1971 (extracted from inventory number 75259 dated 1971 on file at the Archives and Records Center, Mercury).

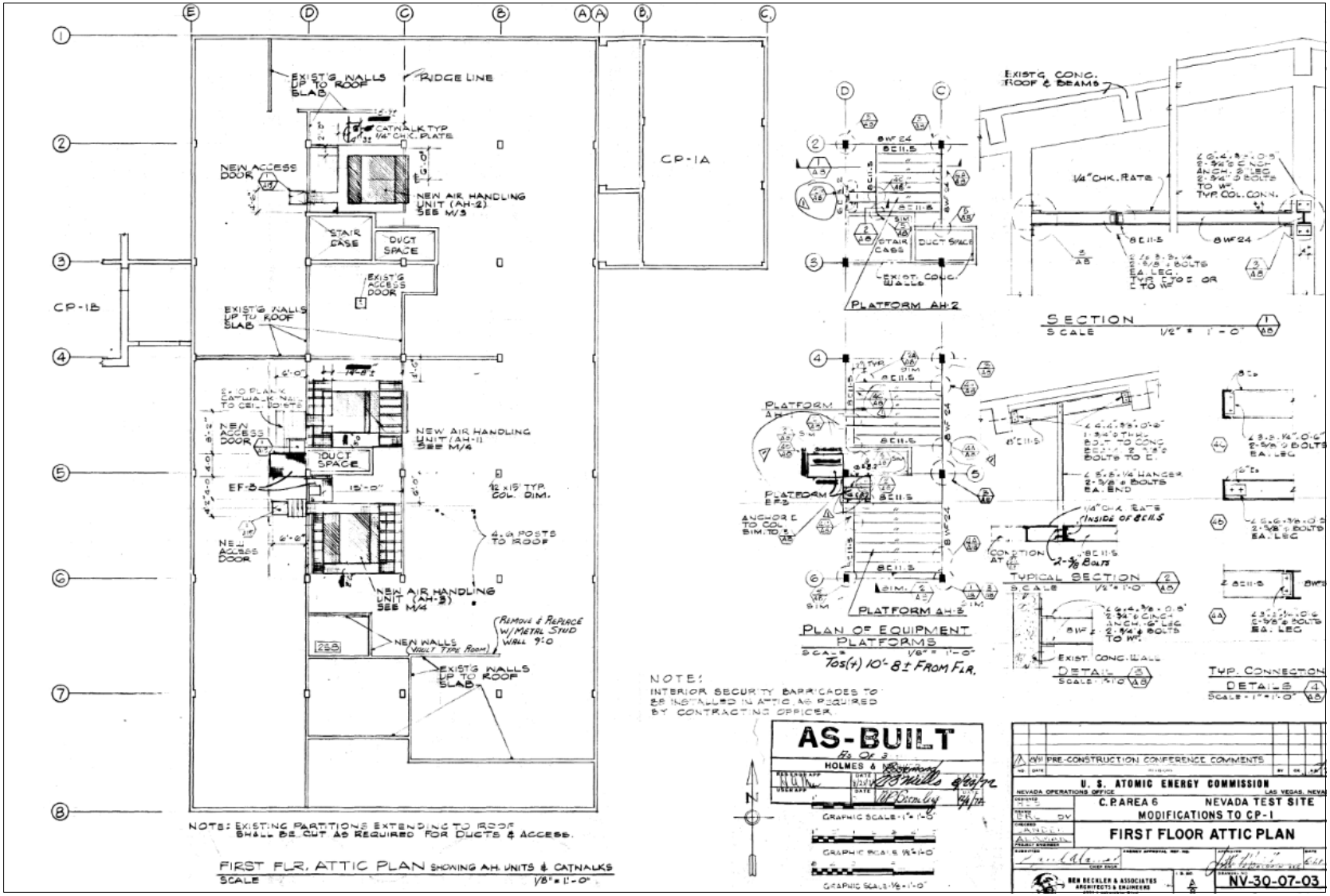


Figure 56. Attic plan with new air handlers and security bulkheads (drawing NV-30-07-03, 9 of 56, dated 1971 on file at the Archives and Records Center, Mercury).

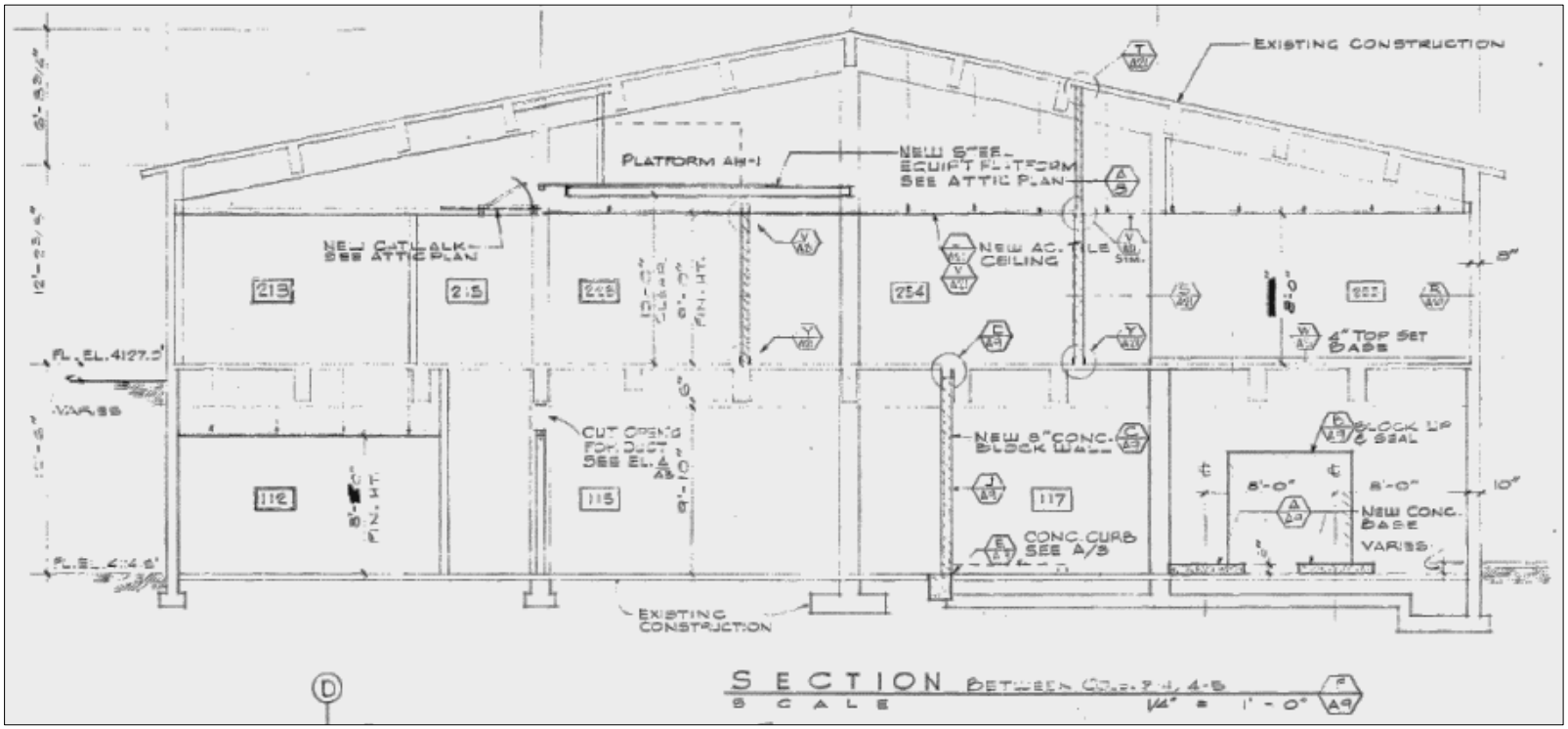


Figure 57. Cross section of CP-1 through northern air handler platform facing north (extracted from drawing NV-30-07-03, 10 of 56, dated 1971 on file at the Archives and Records Center, Mercury).

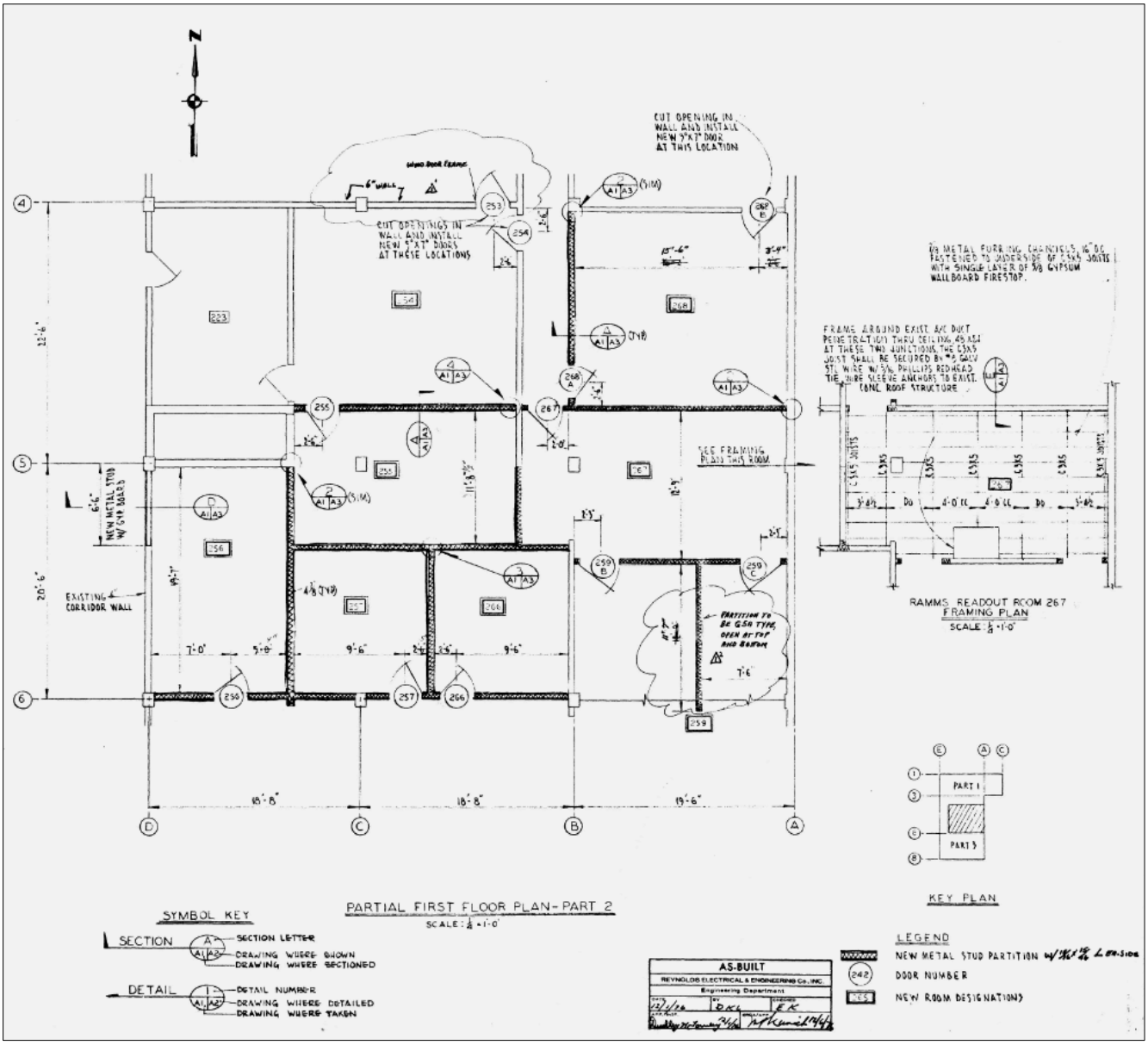


Figure 58. Modifications to room layout in central area of CP-1 (extracted from drawing 6-CP-1-A1 dated 1976 on file at the Archives and Records Center, Mercury).

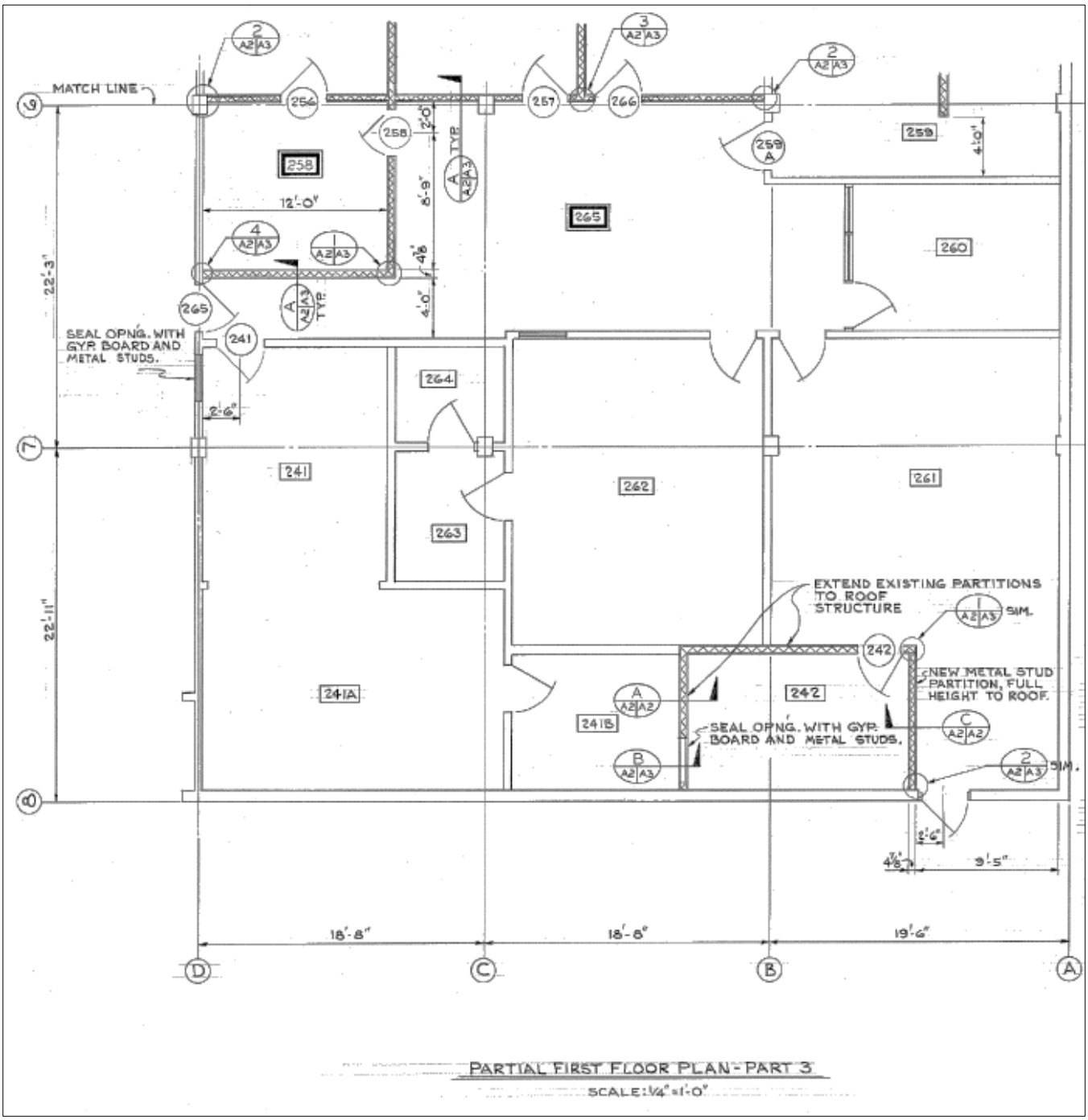


Figure 59. Modifications to room layout in southern area of CP-1 (extracted from drawing 6-CP-1-A2, 4 of 12, dated 1976 on file at the Archives and Records Center, Mercury).

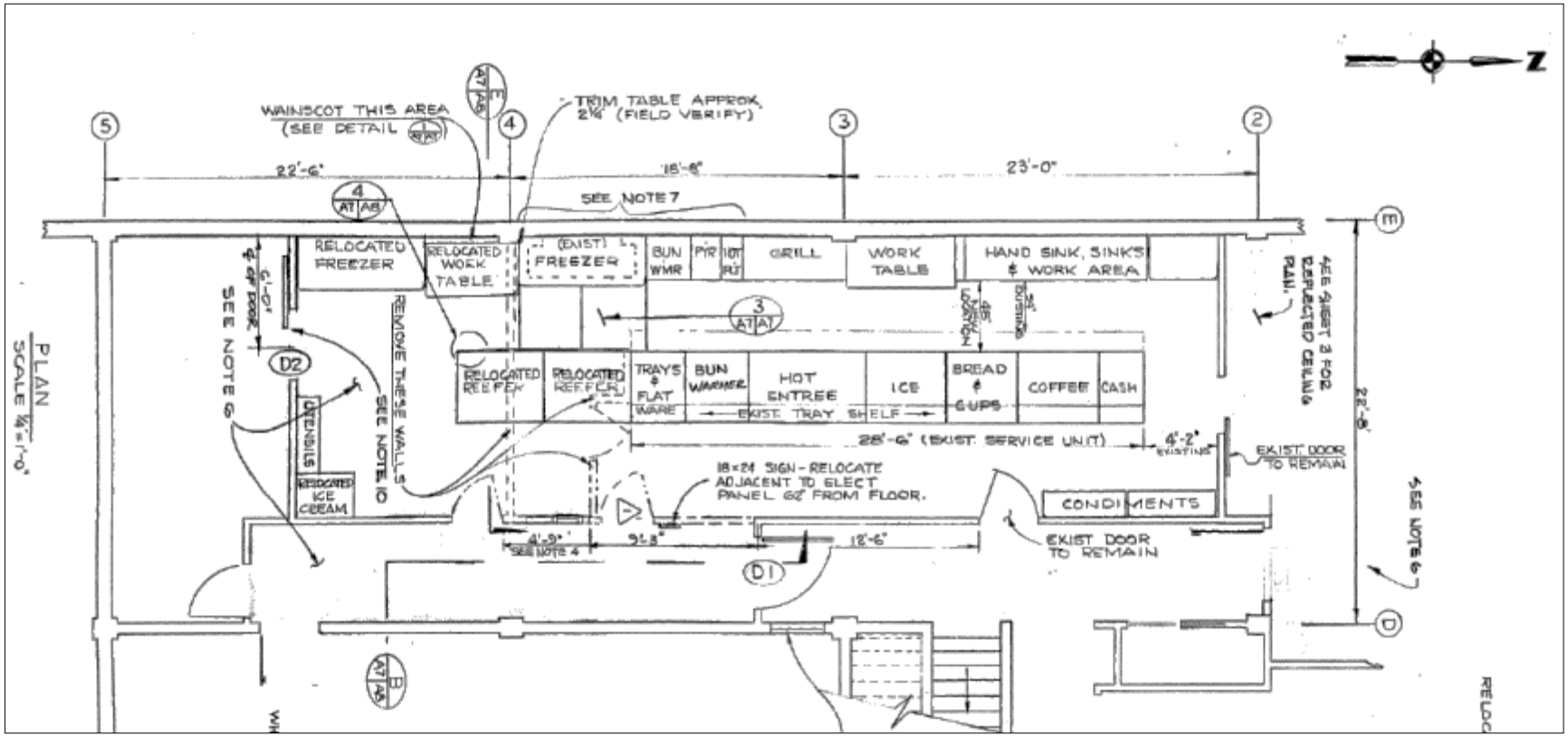


Figure 60. Expansion and detailed layout of kitchen and food service area in 1976 (extracted from drawing 6-CP1-A7, 1 of 5, dated 1976 on file at the Archives and Records Center, Mercury).

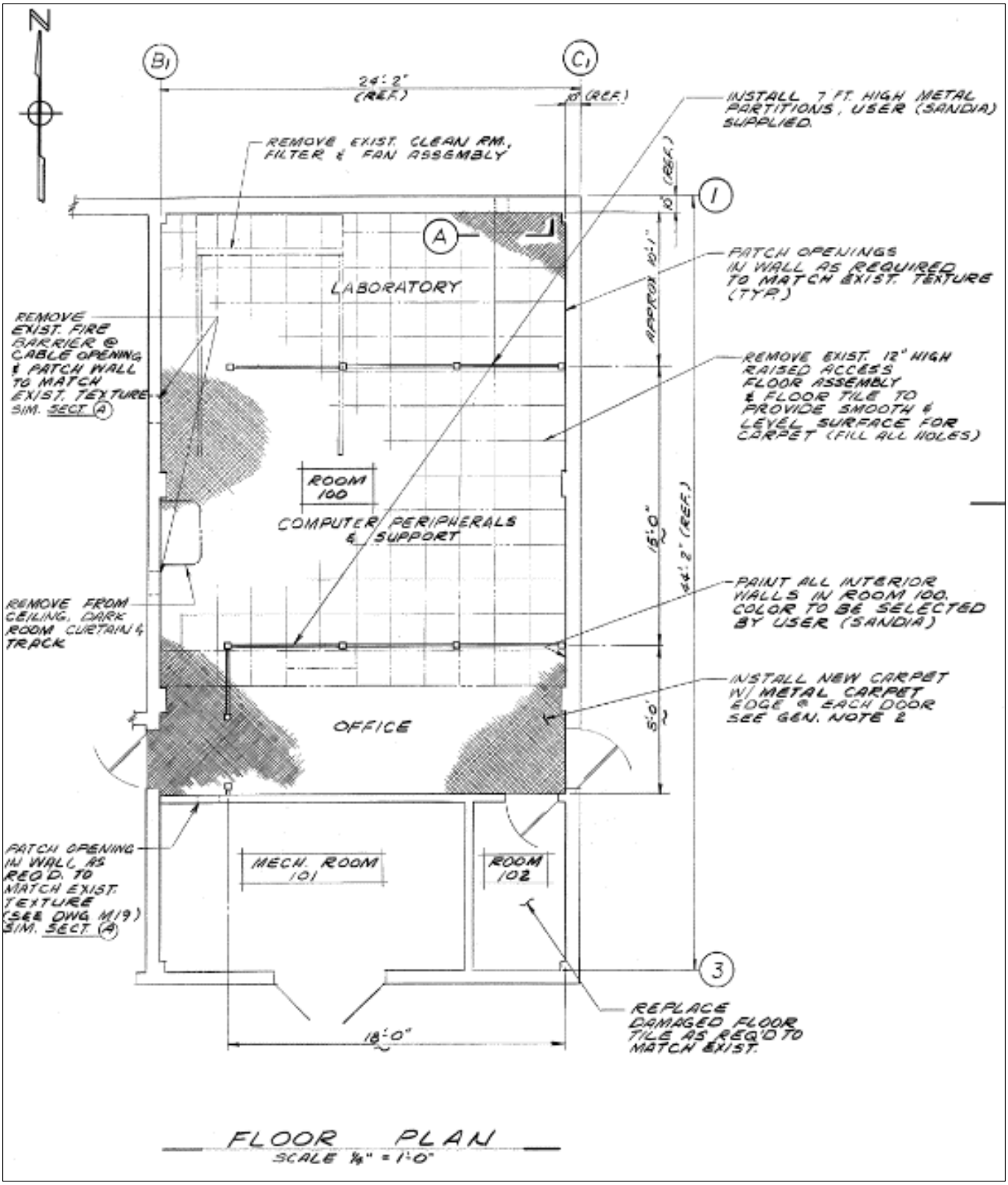


Figure 61. Modifications to Control Room 100 (extracted from drawing JS-006-CP1-S12 dated 1978 on file at the Archives and Records Center, Mercury).

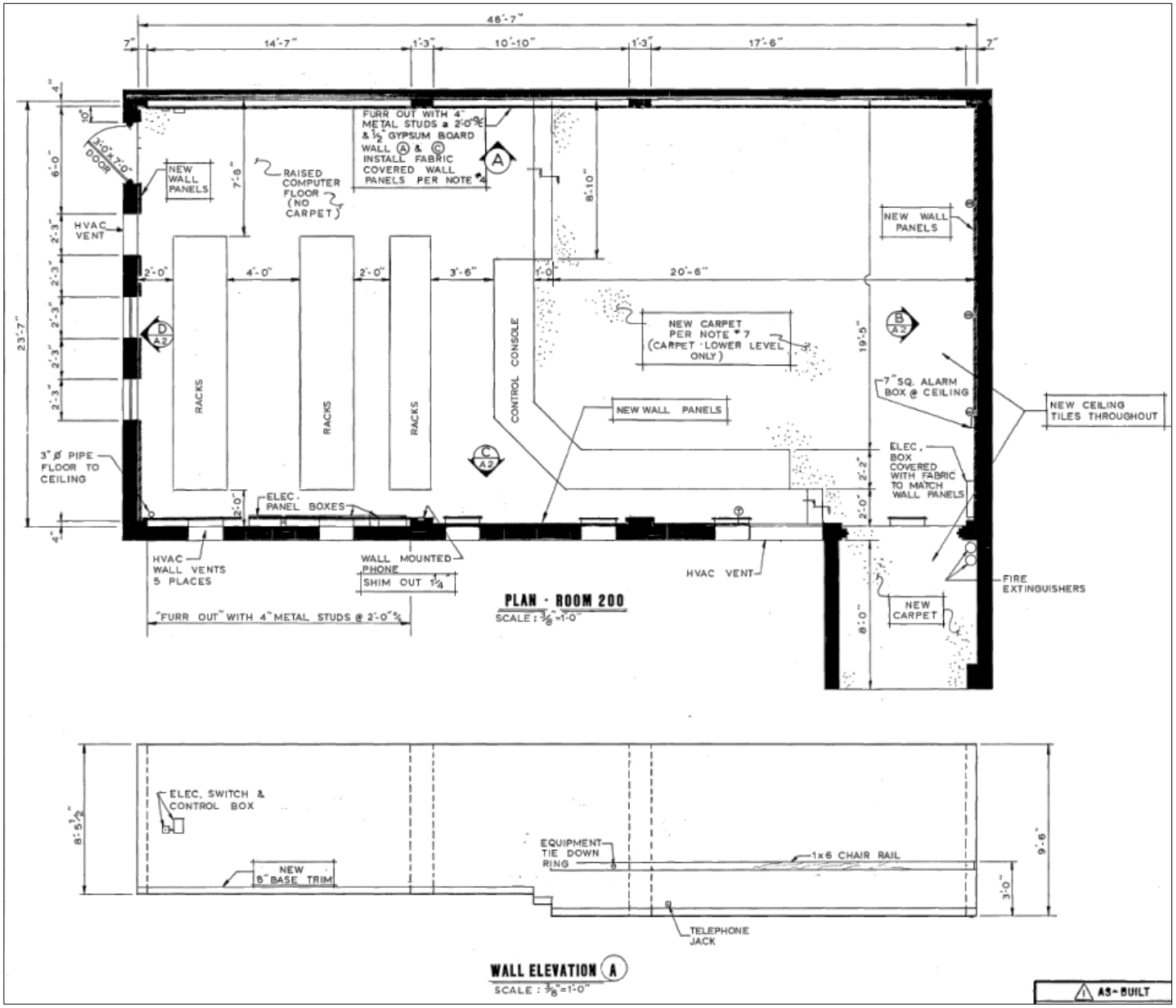


Figure 62. Modifications to Control Room 200 in CP-1A (extracted from drawing JS-006-CP1-A1-1, 1 of 2, dated 1983 on file at the Archives and Records Center, Mercury).

Figure 63. The War Room in the 1970s (photograph D01-0473 on file at RSL).

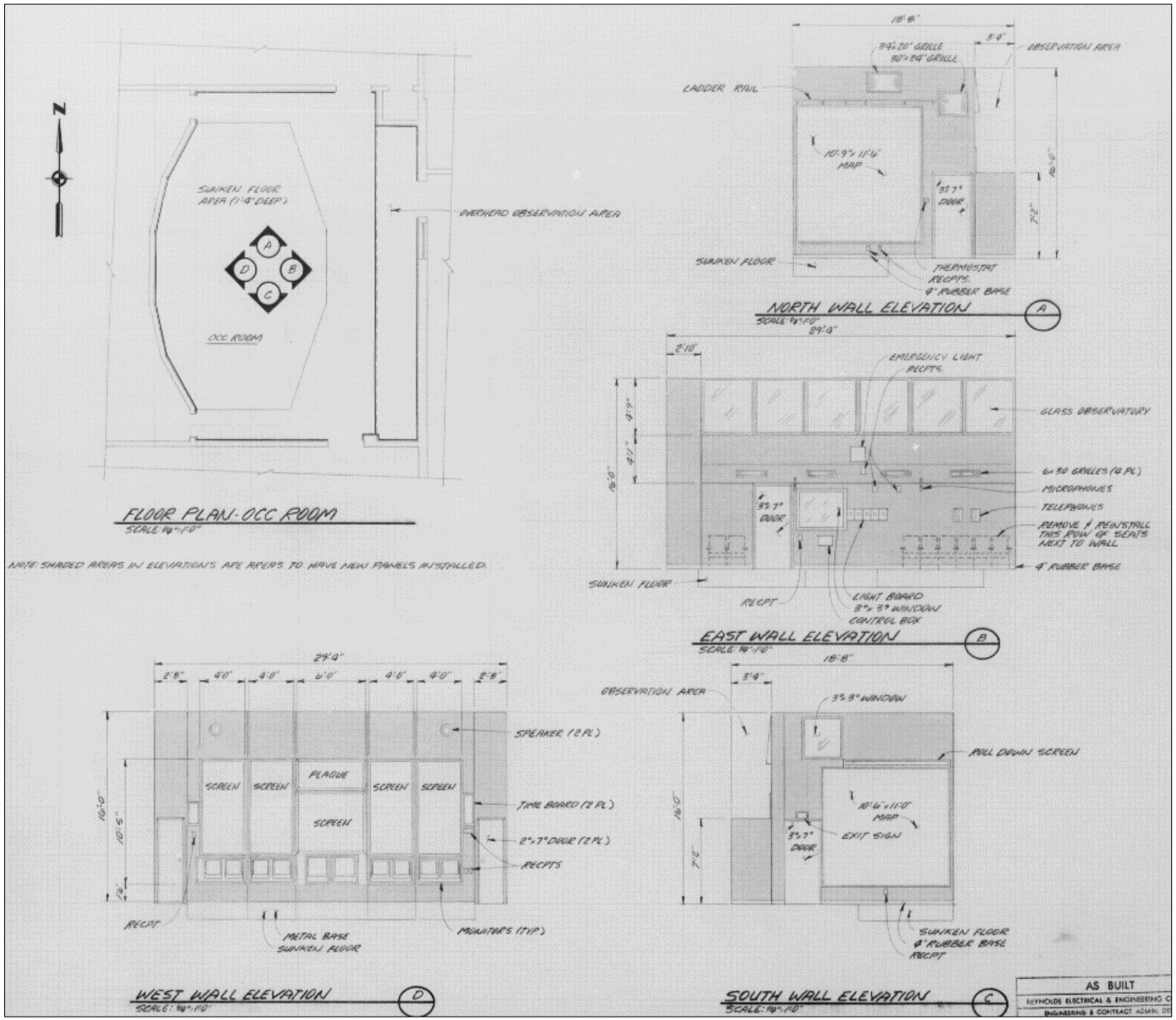


Figure 64. War Room remodel in 1984 (extracted from drawing 6-CP-1B-A7 dated 1984 on file at the Archives and Records Center, Mercury).

Figure 65. War Room (photograph D04-0148 dated 1985 on file at RSL).

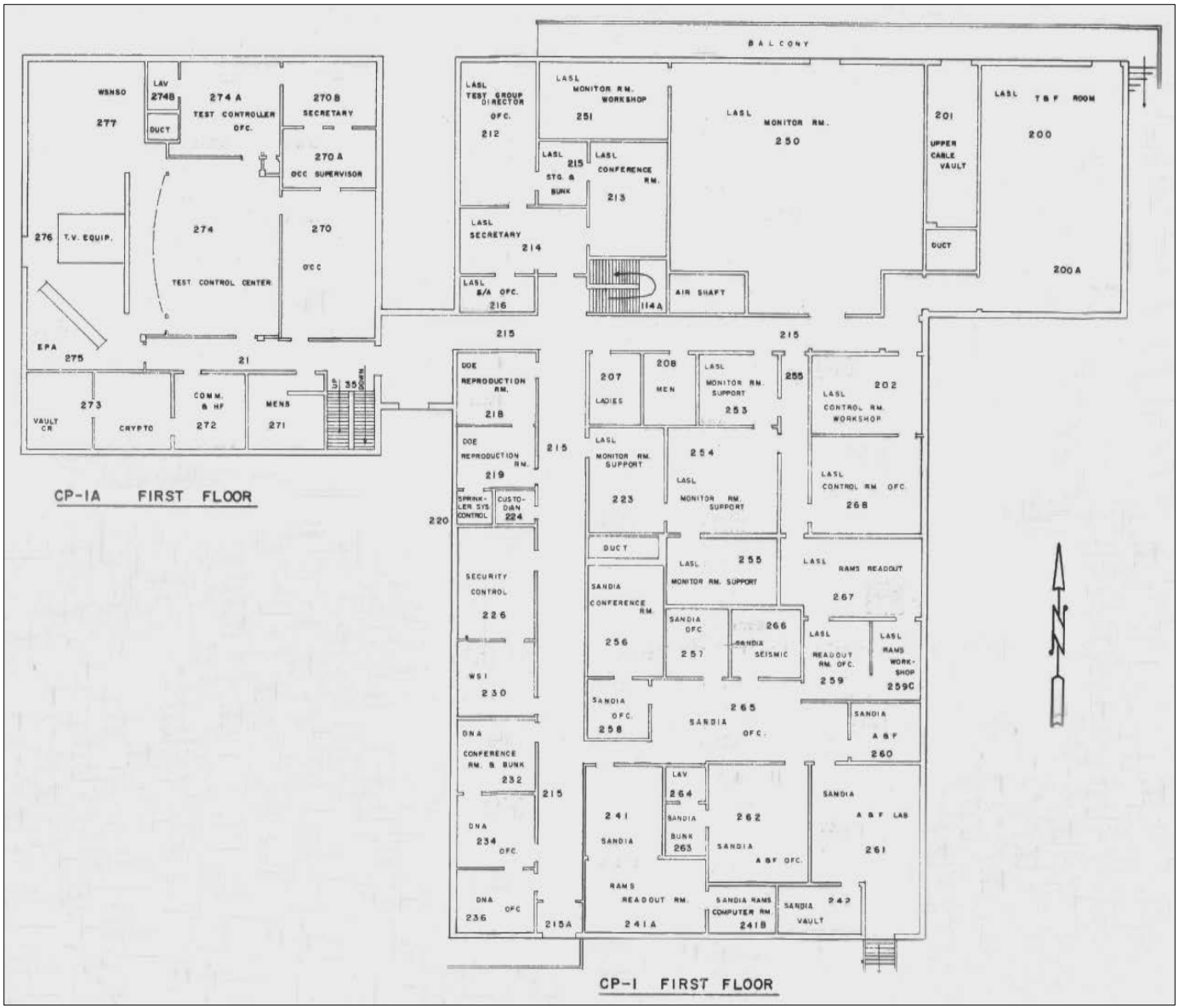


Figure 66. First floor before Field Office added (extracted from drawing CP-1 Phone Numbers [deleted], dated 1985, project file at NNSA/NFO curation facility, Las Vegas).

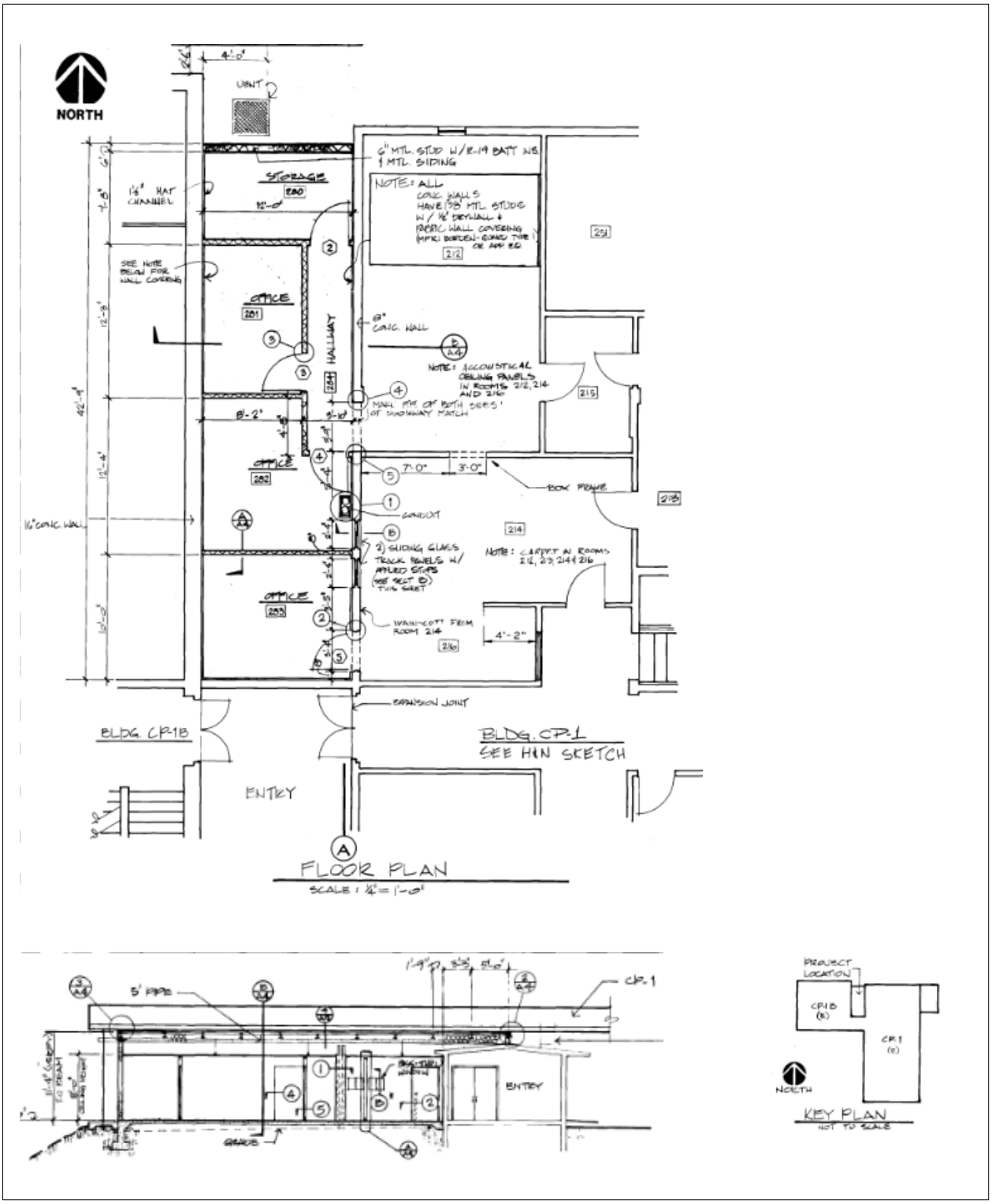


Figure 67. The Field Office addition plan and section (extracted from drawing JS-003-CP-1-A3-1, 1 of 7, dated 1985 on file at the Archives and Records Center, Mercury).

Figure 68. First floor space usage in 1985.

Figure 69. Four views of Control Room 250 (photographs CP1_131, CP1_133, CP1_136, and CP1_137 dated 1988 on file at RSL).

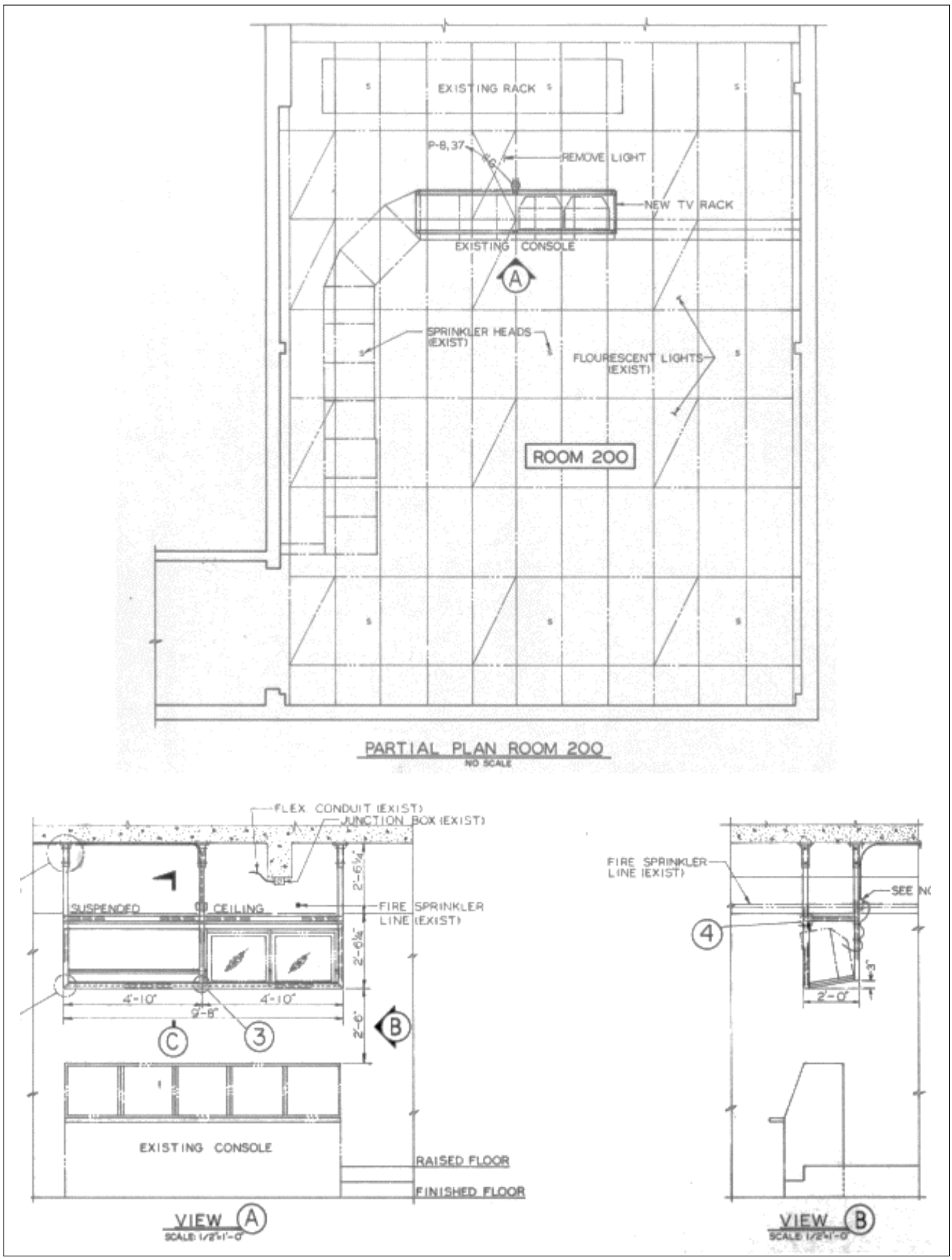


Figure 70. Equipment layout in Control Room 200 (extracted from drawing JS-006-CP1-S62 dated 1985 on file at the Archives and Records Center, Mercury).

Figure 71. Four views of Control Room 200 (photographs CP1_122, CP1_125, CP1_126, and CP1_127 dated 1988 on file at RSL).

Figure 72. Two views of the Los Alamos Test Group Offices (photographs CP1_69 and CP1_73 dated 1988 on file at RSL).

Figure 73. Four views of the LANL technical support areas south of the Control Room (photographs CP1_107, CP1_110, CP1_113, and CP1_116 dated 1988 on file at RSL).

Figure 74. Two views of the SNL technical support area in Rooms 241 and 261 (photographs CP1_159 and CP1_171 dated 1988 on file at RSL).

Figure 75.Two views of the Sandia administrative offices (photographs CP1_177 and CP1_178 dated 1988 on file at RSL).

Figure 76. View of the general support areas along west edge of CP-1 (photographs CP1_95 and CP1_98 dated 1988 on file at RSL).

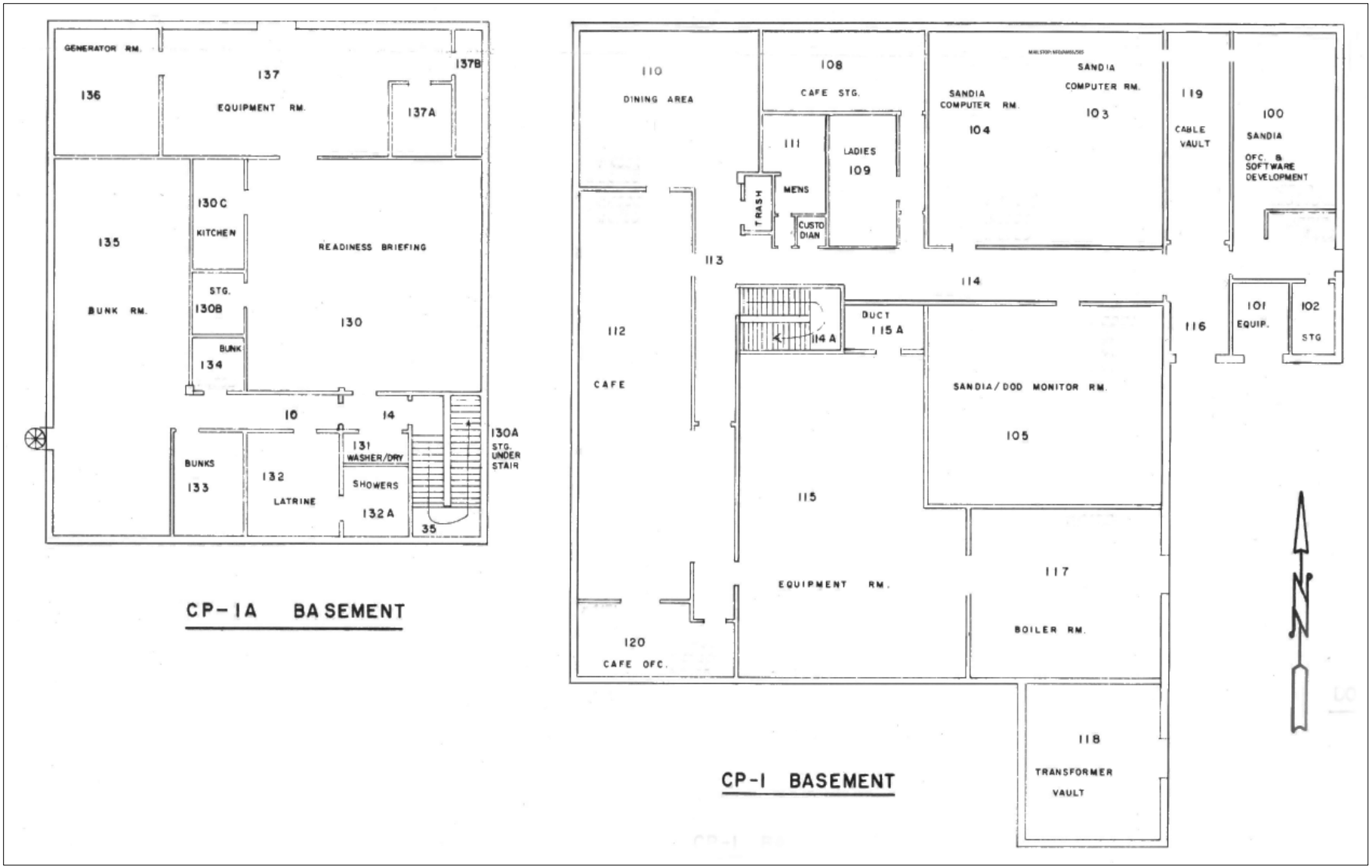


Figure 77. Basement in 1985 before Field Office added (extracted from drawing CP-1 Phone Numbers [deleted], dated 1985, project on file at NNSA/NFO curation facility, Las Vegas).

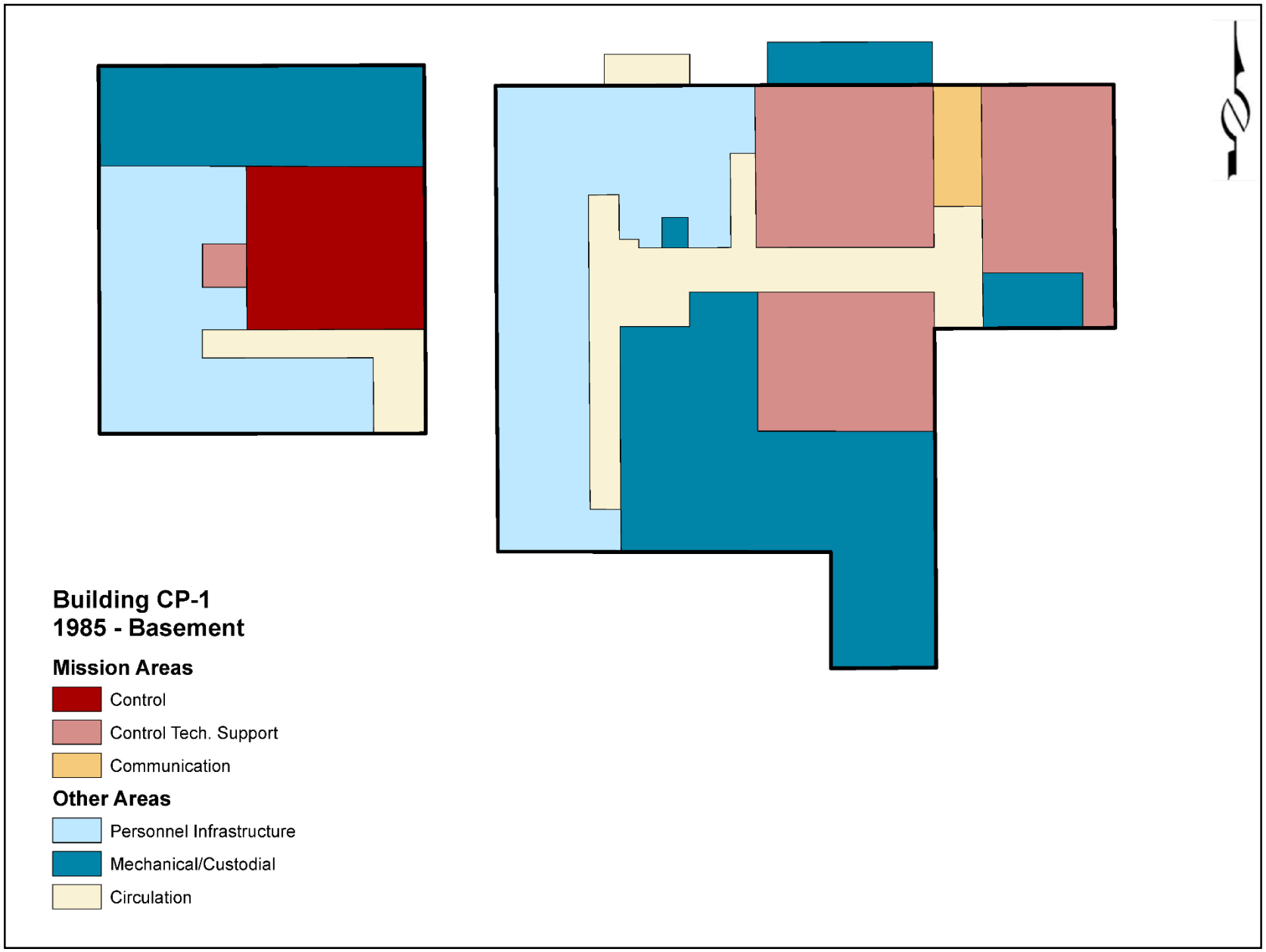


Figure 78. Basement space usage in 1985.

Figure 79. Two views of the Sandia Office and Software Development Room 100 (photographs CP1_267 and CP1_269 dated 1988 on file at RSL).

Figure 80. Two views of Computer Room 104 (photographs CP1_259 and CP1_260 dated 1988 on file at RSL).

Figure 81. Two views of Monitor Room 105 (photographs CP1_255 and CP1_256 dated 1988 on file at RSL).

Figure 82. Kitchen refrigeration (Room 120) and office (photographs CP1_241 and CP1_243 dated 1988 on file at RSL).

Figure 83. Kitchen counter and service counter (Room 112) (photographs CP1_244 and CP1_245 dated 1988 on file at RSL).

Figure 84. Dining Room (110) and Food Storage (Room 111) (photographs CP1_246 and CP1_253 dated 1988 on file at RSL).

Figure 85. Two views of the Test Director's Office (photographs CP1_41 and CP1_42 dated 1988 on file at RSL).

Figure 86. Two views of administrative support and operations offices next to War Room (photographs CP1_46 and CP1_48 dated 1988 on file at RSL).

Figure 87. Two views of the Weather Service office (photographs CP1_37 and CP1_39 dated 1988 on file at RSL).

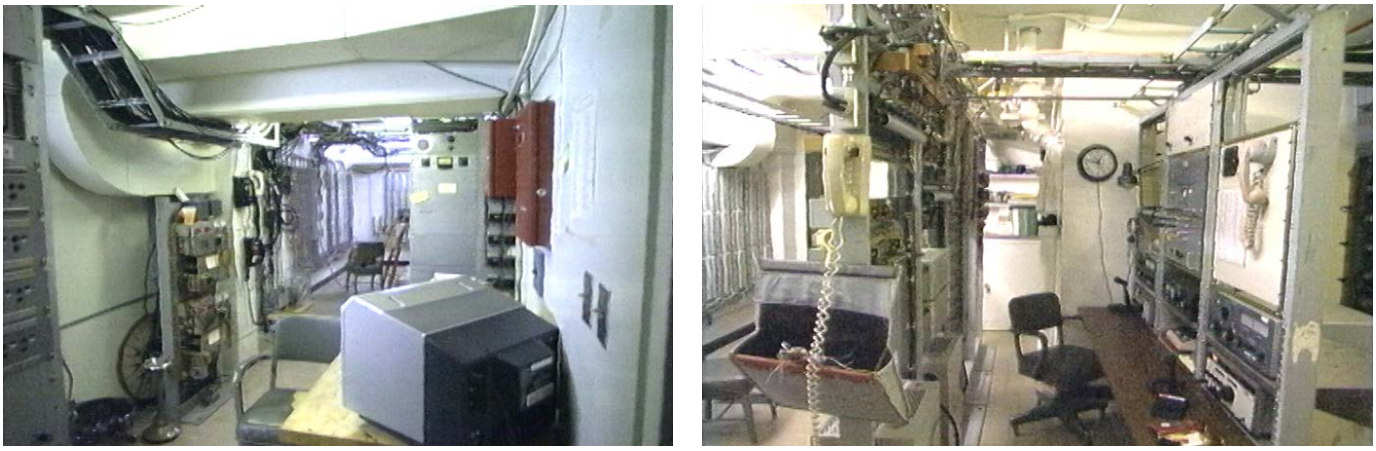


Figure 88. Two views of the Communications Room (photographs CP1_191 and CP1_194 dated 1988 on file at RSL).

Figure 89. Three views of the DOE Briefing Room (photographs CP1_200, CP1_201, and CP1_202 dated 1988 on file at RSL).

Figure 90. Two views of the kitchen in CP-1B (photographs CP1_205 and CP1_206 dated 1988 on file at RSL).

Figure 91. Aerial view of CP-1, view to southeast, ca. late 1980s. The DNA Playback Building has not yet been constructed (photograph D97_0208 on file at RSL).

Figure 92. Low angle aerial photos of CP-1. From top to bottom facing southwest, northwest, north, and southeast (photographs D07_6634, 6636, 6637, and 6638 on file at RSL).

Figure 93. South façade of CP-1B with main entrance (photograph DSC3351 dated 2016 on file at RSL).

Figure 94. West façade of CP-1 (photograph DSC3361 dated 2016 on file at RSL).

Figure 95. South façade of CP-1 (photograph DSC3346 dated 2016 on file at RSL).

Figure 96. Southern end of east façade of CP-1 (2016).

Figure 97. East façade of CP-1 north of garbage enclosure and fuel tank (photograph DSC3331 dated 2016 on file at RSL).

Figure 98. South and east façades of CP-1A. Pour lines are highly visible in this view (photograph DSC3330 dated 2016 on file at RSL).

Figure 99. North façade of CP-1, CP-1A, and CP-1C (2016).

Figure 100. North façade of CP-1B showing basement (2016).

Figure 101. North and west façades of CP-1B (2016).

Figure 102. West façade of CP-1B (photograph DSC3379 dated 2016 on file at RSL).

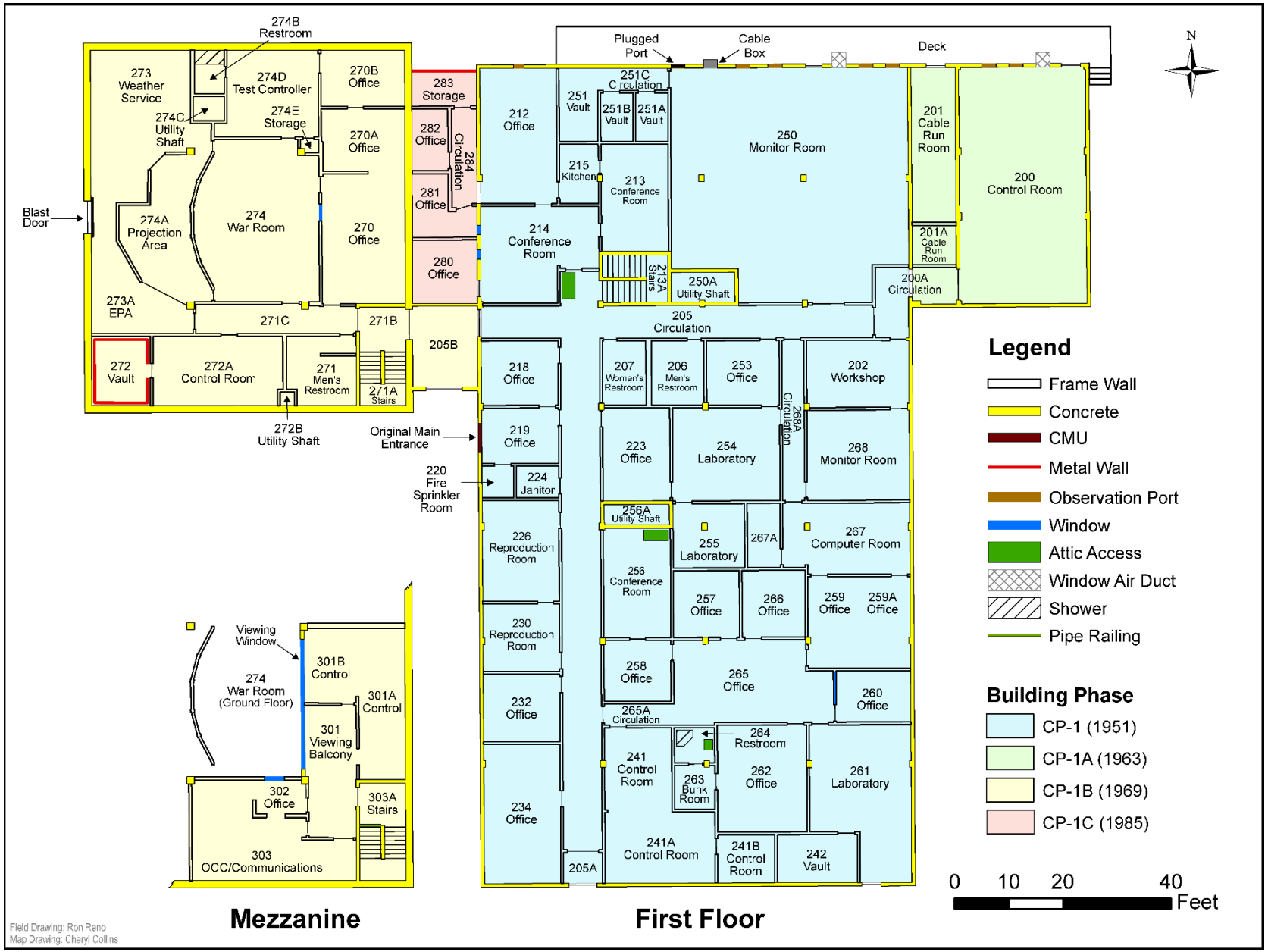


Figure 103. Plan of the first floor and mezzanine (2016).

Figure 104. War Room in the 1980s, view northwest
(photograph NF-8406 on file at RSL).

Figure 105. War Room in the 1980s, view southwest
(photograph D04-2216 on file at RSL).

Figure 106. War Room, view north from the mezzanine (photograph DSC2480 dated 2016 on file at RSL).

Figure 107. War Room projection equipment in Room 274A (photograph DSC2514 dated 2016 on file at RSL).

Figure 108. Control Room 250 (photograph DSC1925 dated 2016 on file at RSL).

Figure 109. This elaborate door into the Los Alamos Timing and Firing Control Room 200 was installed after 1988, replacing simple steel doors (photograph DSC2004 dated 2016 on file at RSL).

Figure 110. Los Alamos Timing and Firing Control Room 200
(photograph DSC2045 dated 2016 on file at RSL).

Figure 111. Typical LANL technical support room south of the Control Room
(photograph DSC1587 dated 2016 on file at RSL).

Figure 112. SNL technical support Room 241A (photograph DSC1300 dated 2016 on file at RSL).

Figure 113. SNL technical support Room 261 (photograph DSC1349 dated 2016 on file at RSL).

Figure 114. Typical support room along the west edge of CP-1 (photograph DSC1667 dated 2016 on file at RSL).

Figure 115. Test Director's Office 274D (photograph DSC2544 dated 2016 on file at RSL).

Figure 116. Administrative support and operations office next to War Room (photograph DSC2128 dated 2016 on file at RSL).

Figure 117. Principal SNL administrative office (photograph DSC1624 dated 2016 on file at RSL).

Figure 118. Typical SNL administrative office (photograph DSC1388 dated 2016 on file at RSL).

Figure 119. Los Alamos Test Director's Office. Viewing port has been covered for this photo (photograph DSC1833 dated 2016 on file at RSL).

Figure 120. Weather Service Room 273 (photograph DSC2528 dated 2016 on file at RSL).

Figure 121. War Room Observation Gallery, Room 301 (photograph DSC 2162 dated 2016 on file at RSL).

Figure 122. War Room still image projectors in Room 301A
(photograph DSC2166 dated 2016 on file at RSL).

Figure 123. War Room video support in Room 301B
(photograph DSC2171 dated 2016 on file at RSL).

Figure 124. Telecommunications equipment in Room 303
(photograph DSC2196 dated 2016 on file at RSL).

Figure 125. Air handling equipment in the south end of the CP-1 attic
(photograph DSC1468 dated 2016 on file at RSL).

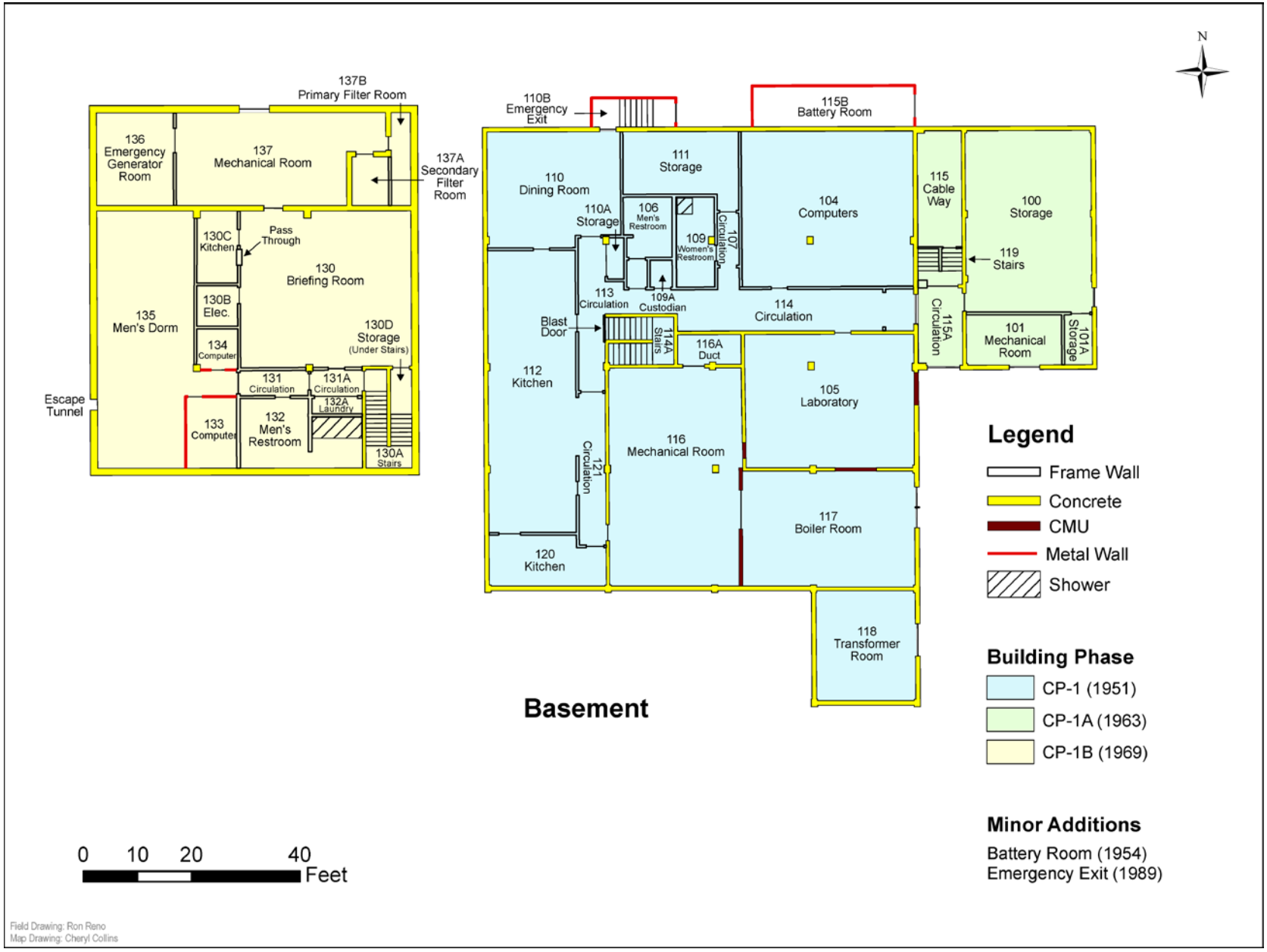


Figure 126. Plan of the basement (2016).

Figure 127. Briefing Room facing east. Although undated, this photo shows the room in a recent configuration (photograph D08_11655 on file at RSL).

Figure 128. DOE Briefing Room 130 (photograph DSC2269 dated 2016 on file at RSL).

Figure 129. Sandia Office and Software Development Room 100 (photograph DSC2822 dated 2016 on file at RSL).

Figure 130. SNL Computer Room 104 (photograph DSC2662 dated 2016 on file at RSL).

Figure 131. SNL/DOD Monitoring Room 105 (photograph DSC2807 dated 2016 on file at RSL).

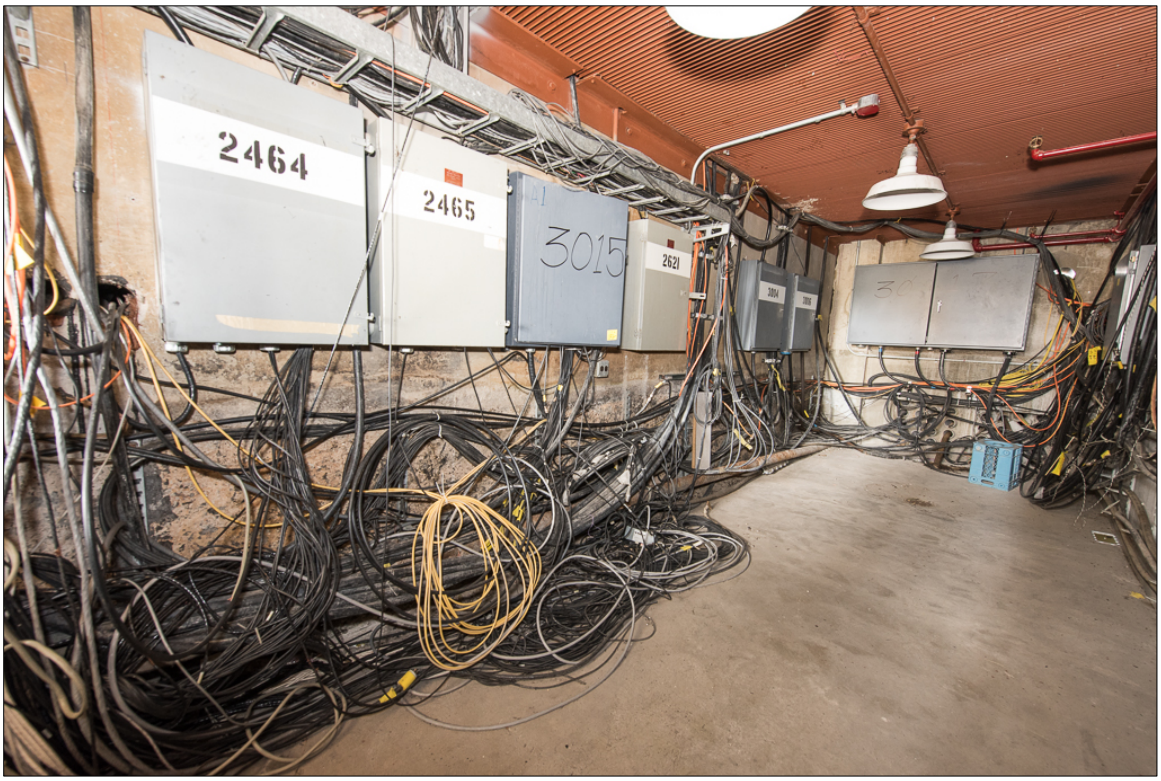


Figure 132. Cable Way cellar, Room 115 (photograph DSC2851 dated 2016 on file at RSL).

Figure 133. Kitchen and service counter, Room 112 (photograph DSC2889 dated 2016 on file at RSL).

Figure 134. Dining Room, Room 110 (photograph DSC2872 dated 2016 on file at RSL).

Figure 135. Air handler in Mechanical Room 116 (photograph DSC2923 dated 2016 on file at RSL).

Figure 136. Diesel-fueled boilers in Room 117 (photograph DSC2969 dated 2016 on file at RSL).

Figure 137. Views upward into the CP-1 air intake and exhaust ducts (photographs DSC2942 and DSC2983 dated 2016 on file at RSL).

Figure 138. Emergency generators in Room 136 (photograph DSC2304 dated 2016 on file at RSL).

Figure 139. Emergency generator control in Room 137
(photograph DSC2322 dated 2016 on file at RSL).

Figure 140. Electrical boilers and chiller in Room 137
(photograph DSC2327 dated 2016 on file at RSL).

Figure 141. Corridor 215 facing north (photograph DSC1234 dated 2016 on file at RSL).

Figure 142. Original basement east entry lobby (photograph DSC2812 dated 2016 on file at RSL).

Figure 143. At left is the ceiling plug in Room 101A after removal of spiral staircase. At right is the CP-1B staircase (photographs DSC2153 and DSC2835 dated 2016 on file at RSL).

Figure 144. Microwave Tower, view south
(photograph DSC3179 dated 2016 on file at RSL).

Figure 145. Microwave Tower, view southwest
(photograph DSC3207 dated 2016 on file at RSL).

Figure 146. Microwave Tower, view northeast
(photograph DSC3383 dated 2016 on file at RSL).

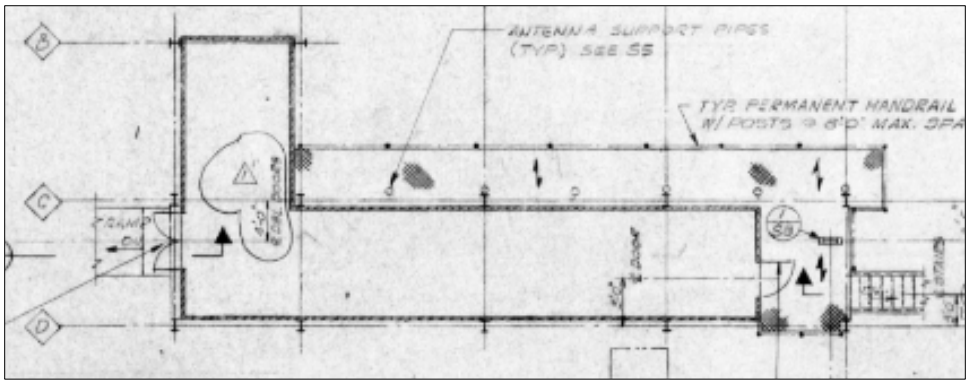


Figure 147. Microwave Tower Level 1 floor plan (extracted from drawing 006-CP1C-S6.1 dated 1970 on file at the Archives and Records Center, Mercury).

Figure 148. Microwave Tower west room (S-1) from west entry (photograph DSC3422 dated 2016 on file at RSL).

Figure 149. Microwave Tower east room (S-2) from east entry (photograph DSC3430 dated 2016 on file at RSL).

Figure 150. Microwave Tower room (N-1) in north wing from north entry (photograph DSC3438 dated 2016 on file at RSL).

Figure 151. AR2 DNA Substation, view northeast
(photograph DSC3197 dated 2016 on file at RSL).

Figure 152. AR2 DNA Substation, view east
(photograph DSC3245 dated 2016 on file at RSL).

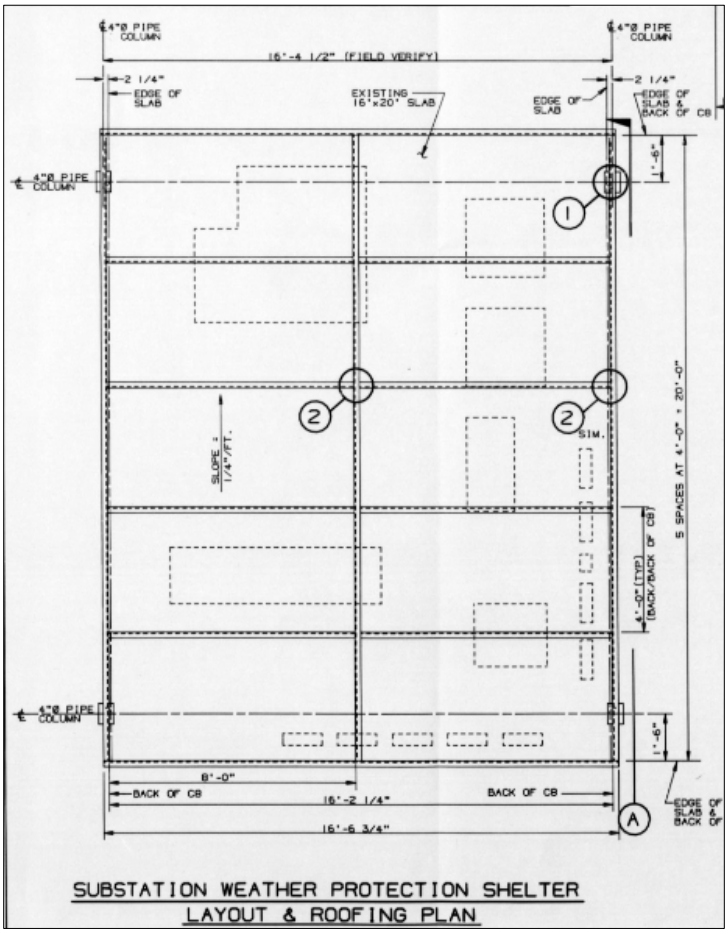


Figure 153. AR2 DNA Substation plan (extracted from drawing JS-006-CP20-S4 dated 1989 on file at the Archives and Records Center, Mercury).

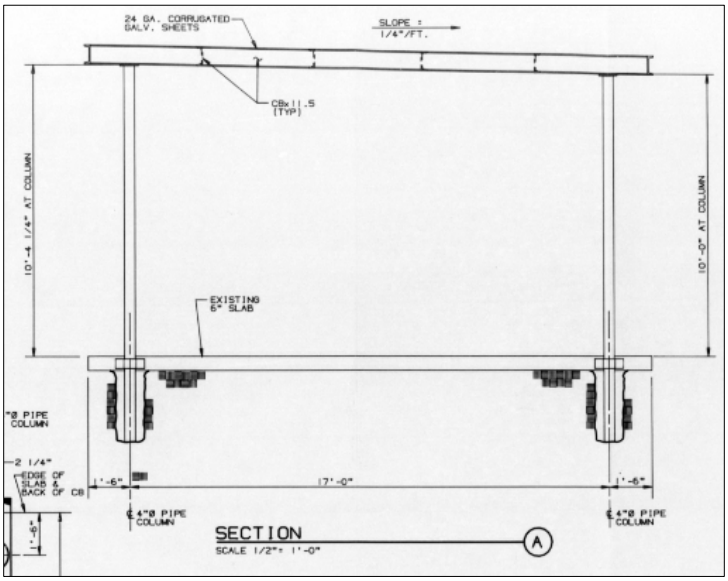


Figure 154. AR2 DNA Substation section (extracted from drawing JS-006-CP20-S4 dated 1989 on file at the Archives and Records Center, Mercury).

Figure 155. AR3 DNA Playback Facility, view north
(photograph DSC3203 dated 2016 on file at RSL).

Figure 156. AR3 DNA Playback Facility, view northeast (2016).

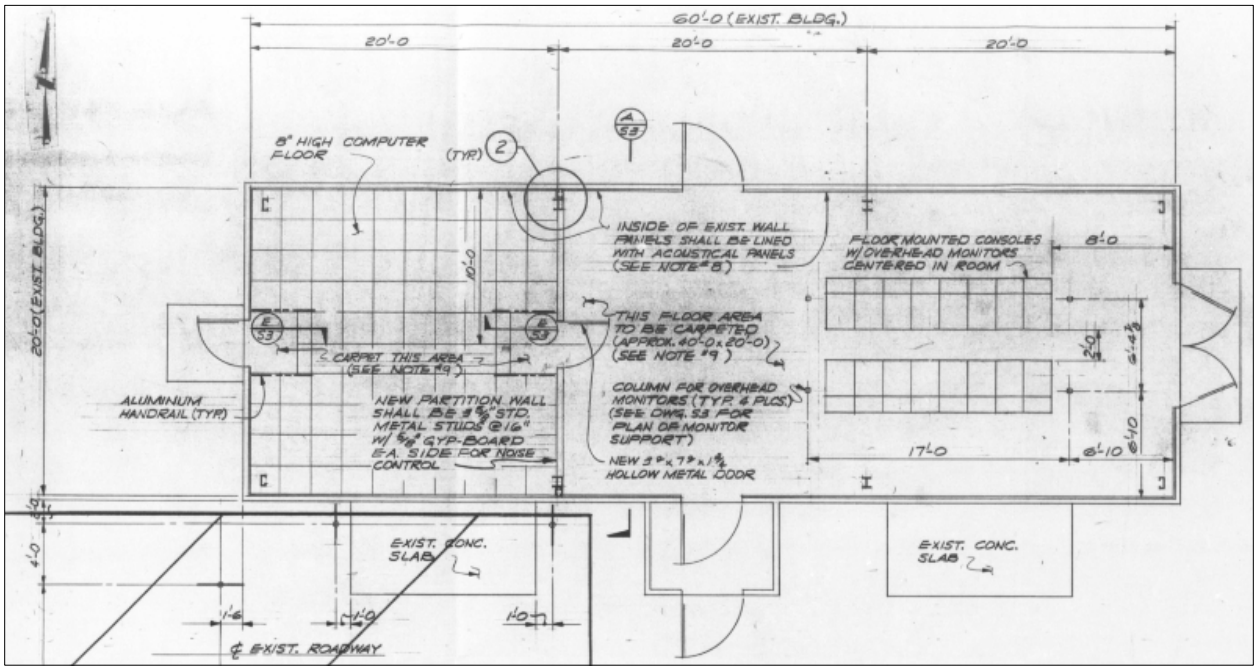


Figure 157. AR3 DNA Playback Facility plan (extracted from drawing JS-006-CP20-S2 dated 1987 on file at the Archives and Records Center, Mercury).

Figure 158. AR3 DNA Playback Facility monitoring room (photograph DSC2722 dated 2016 on file at RSL).

Figure 159. AR3 DNA Playback Facility computer room
(photograph DSC2731 dated 2016 on file at RSL).

Figure 160. AR4 UPS, view northeast
(photograph DSC3293 dated 2016 on file at RSL).

Figure 161. AR4 UPS, view northwest (photograph DSC3291 dated 2016 on file at RSL).

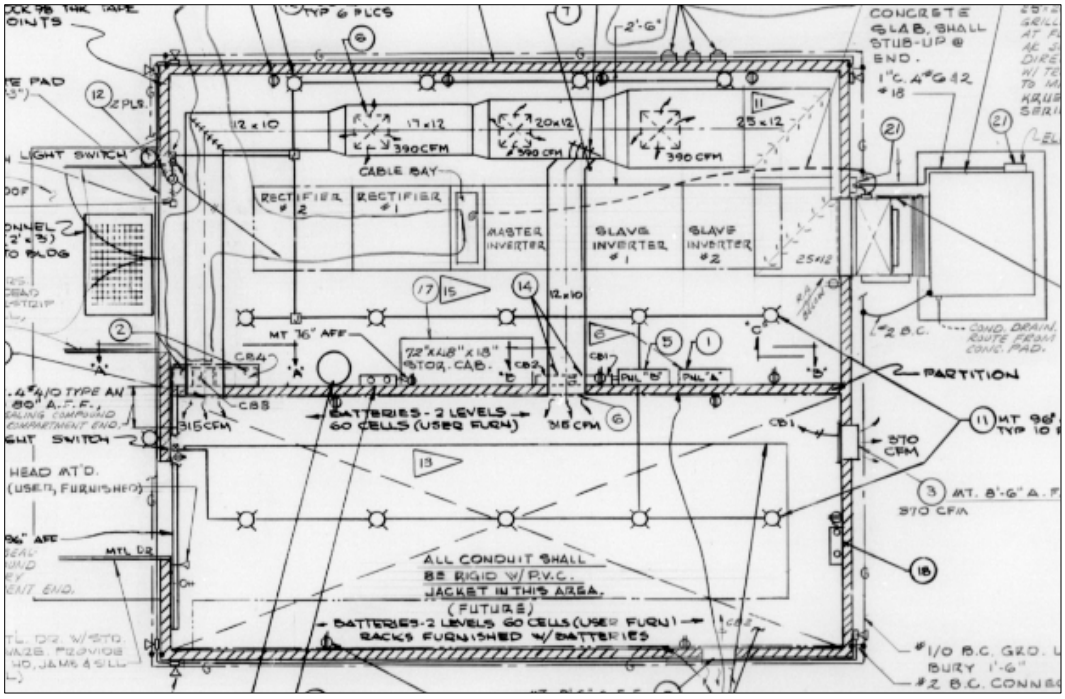


Figure 162. AR4 UPS plan (extracted from drawing 006-CP3-E2.2 dated 1972 on file at the Archives and Records Center, Mercury).

Figure 163. AR4 UPS Generator Room from north entrance (photograph DSC2710 dated 2016 on file at RSL).

Figure 164. AR4 UPS Battery Room from entrance (photograph DSC2706 dated 2016 on file at RSL).

Figure 165. AR5 transformer, view northwest
(photograph DSC3318 dated 2016 on file at RSL).

Figure 166. AR6 standby generator, canopy, and fuel tank (2016).

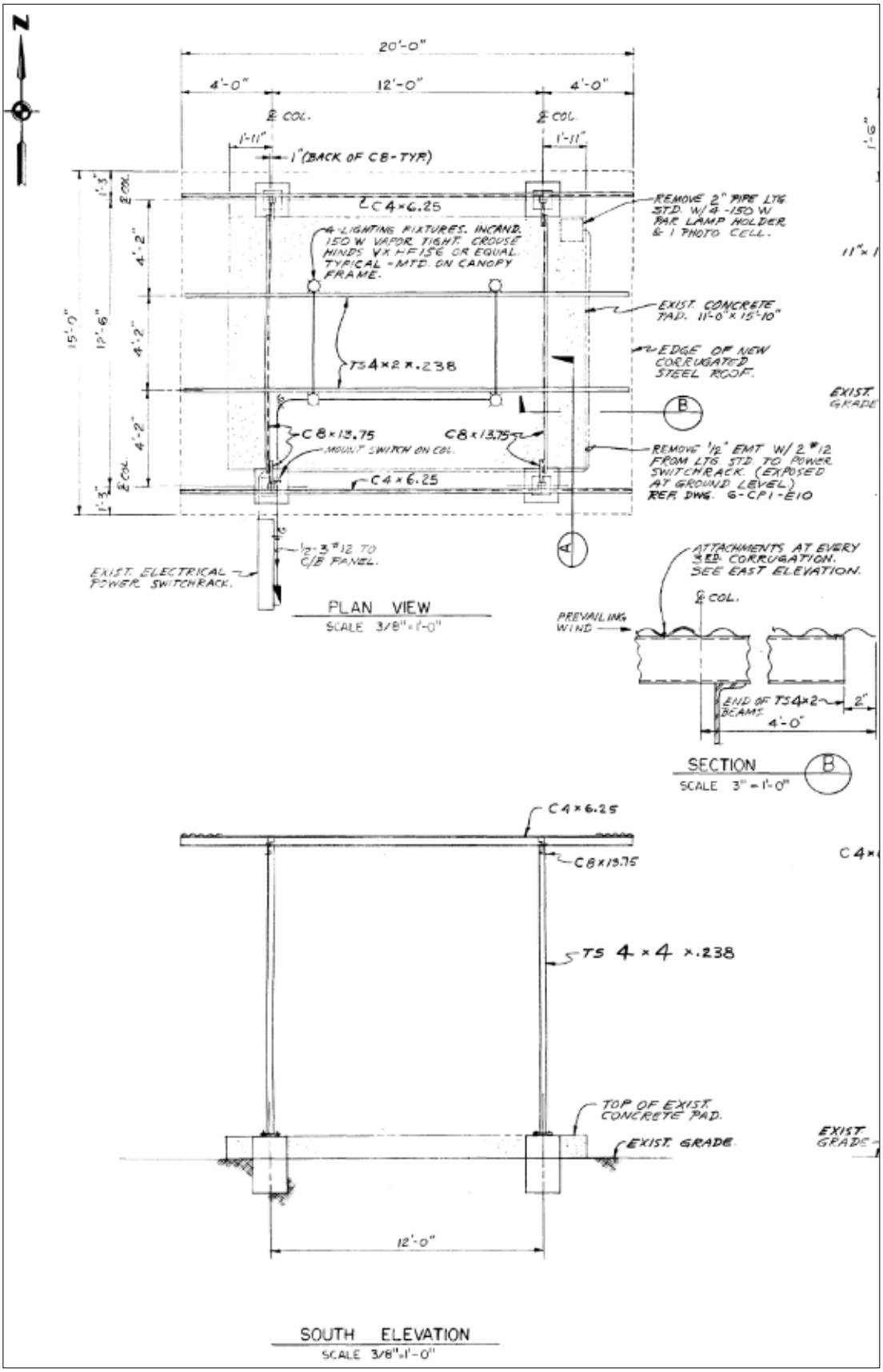


Figure 167. AR6 standby generator canopy plan and elevation (extracted from drawing 6-CP1-S19/E11.1 dated 1979 on file at the Archives and Records Center, Mercury).

Figure 168. AR7 garbage enclosure, view west (2016).

Figure 169. AR8 diesel fuel tank, view northwest (2016).

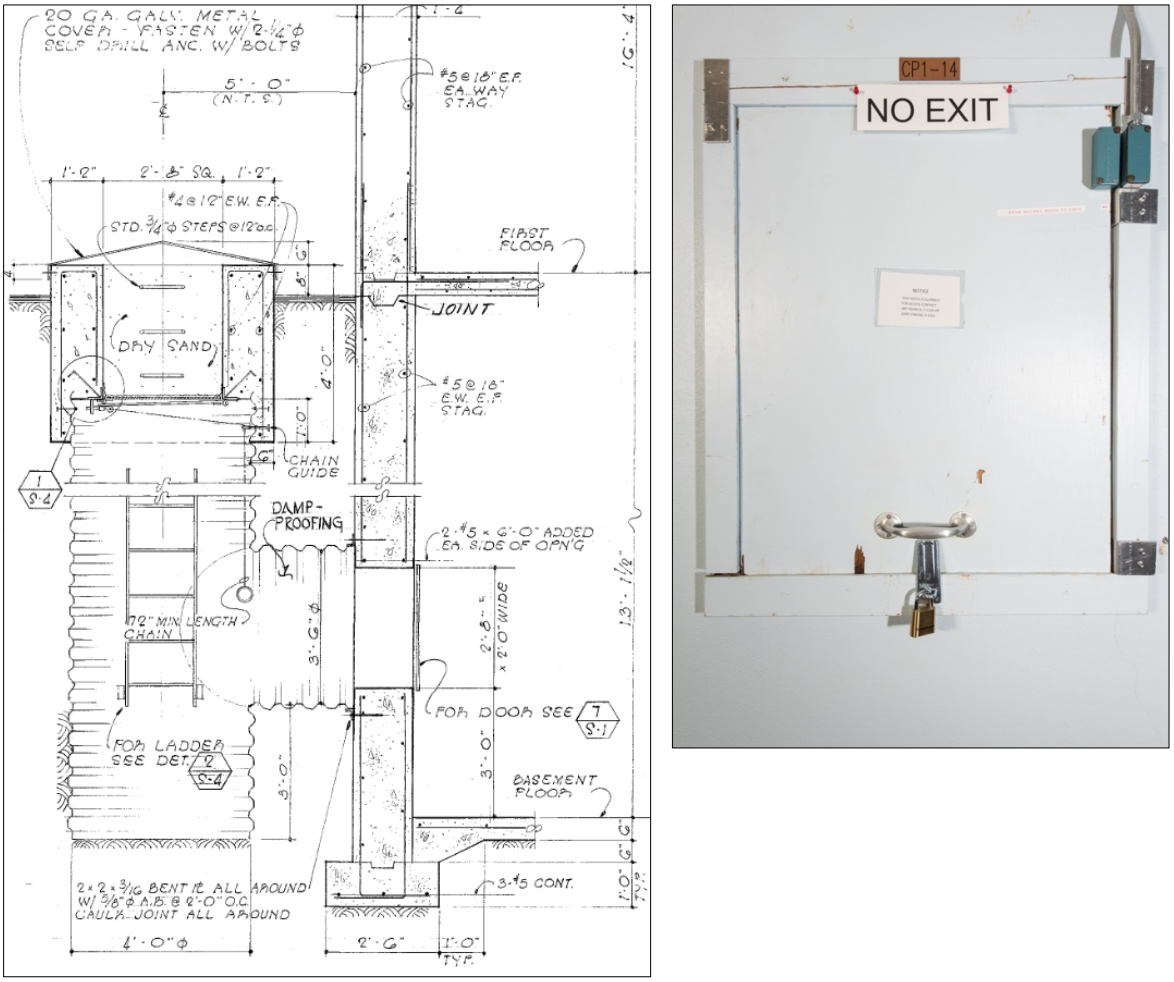


Figure 170. Emergency egress tunnel from CP-1B Room 112 (extracted from drawing NV-30-07-01.1, 20 of 40, dated 1966 on file at the Archives and Records Center, Mercury, and photograph DSC2253 dated 2016 on file at RSL).

Figure 171. Two views of the emergency egress tunnel exit with and without cover (photographs DSC3373 and DSC3376 dated 2016 on file at RSL).

Figure 172. CP-1B air intake (left) and exhaust valves (center). Both valves can be closed by compressed air in case of emergency. At right is the intake chimney, identical to the one for exhaust (photographs DSC2319, DSC2235, and DSC3242 dated 2016 on file at RSL).

Figure 173. Exterior fallout shelter signs (2016).

Figure 174. Shelter-in-place sign in CP-1B (2016).

Figure 175. Decontamination area inside front entrance, Room 205B. Clockwise from upper left: Main entrance foyer, view to southeast; tile covering drain in main entrance foyer, view southwest; hand-held sprayer mounted in box along the west wall; and decontamination shower head (photographs DSC2999, DSC3007, DSC3011, and DSC3001 dated 2016 on file at RSL).

Figure 176. Lead-shielded blast door at west entrance to CP-1B (photograph DSC2523 dated 2016 on file at RSL).

Figure 177. Overhead track and stop for blast door in basement of CP-1 (photograph DSC2614 dated 2016 on file at RSL).

Figure 178. Gate to CP-1 security compound with main gates, guard hut, and security fence (photograph DSC3314 dated 2016 on file at RSL).

Figure 179. Security fence and barriers on above-ground lines entering compound (photographs DSC3250 and DSC3301 dated 2016 on file at RSL).

Figure 180. Main entrance with door number, warning placards, intercom, and a variety of locks (2016).

Figure 181. Portable security signs in CP-1B (2016).

Figure 182. Control Room entry warning light
(photograph DSC1262 dated 2016 on file at RSL).

Figure 183. Typical interior Dutch door was often used to keep people out of spaces while allowing free communication through the open top panel. This door is also equipped with a combination lock. Small reinforced windows are also common to allow identification of visitors before opening the door (photograph DSC2118 dated 2016 on file at RSL).

Figure 184. Vault. Although the door has been removed from Room 272, the massive steel frame indicates that this was one of the higher-security vaults with steel and concrete walls (photograph DSC2105 dated 2016 on file at RSL).

Figure 185. Communications security (photograph DSC1984 dated 2016 on file at RSL).

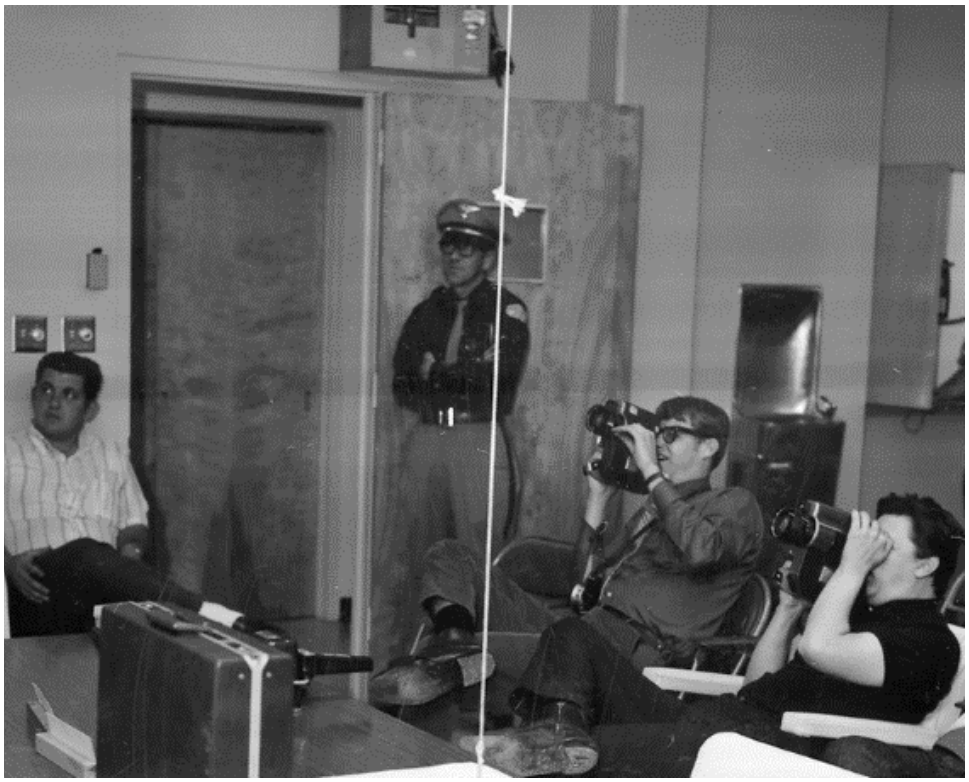


Figure 186. WSI security guard at door to Briefing Room 130 (REECo photograph 3168-2 dated 1970 on file at the Nuclear Testing Archives, Las Vegas).

Figure 187. Lunch menu at the cafeteria (2016).

Figure 188. The kitchen in use (photograph D10_06961 on file at RSL).

Figure 189. Sandia bunk beds (2016).

Figure 190. DNA and CP-1B bunkrooms (photographs CP1_211 and CP1_217 dated 1988 on file at RSL).

Figure 191. DOE Test Controller's Shower (photograph DSC2549 dated 2016 on file at RSL).

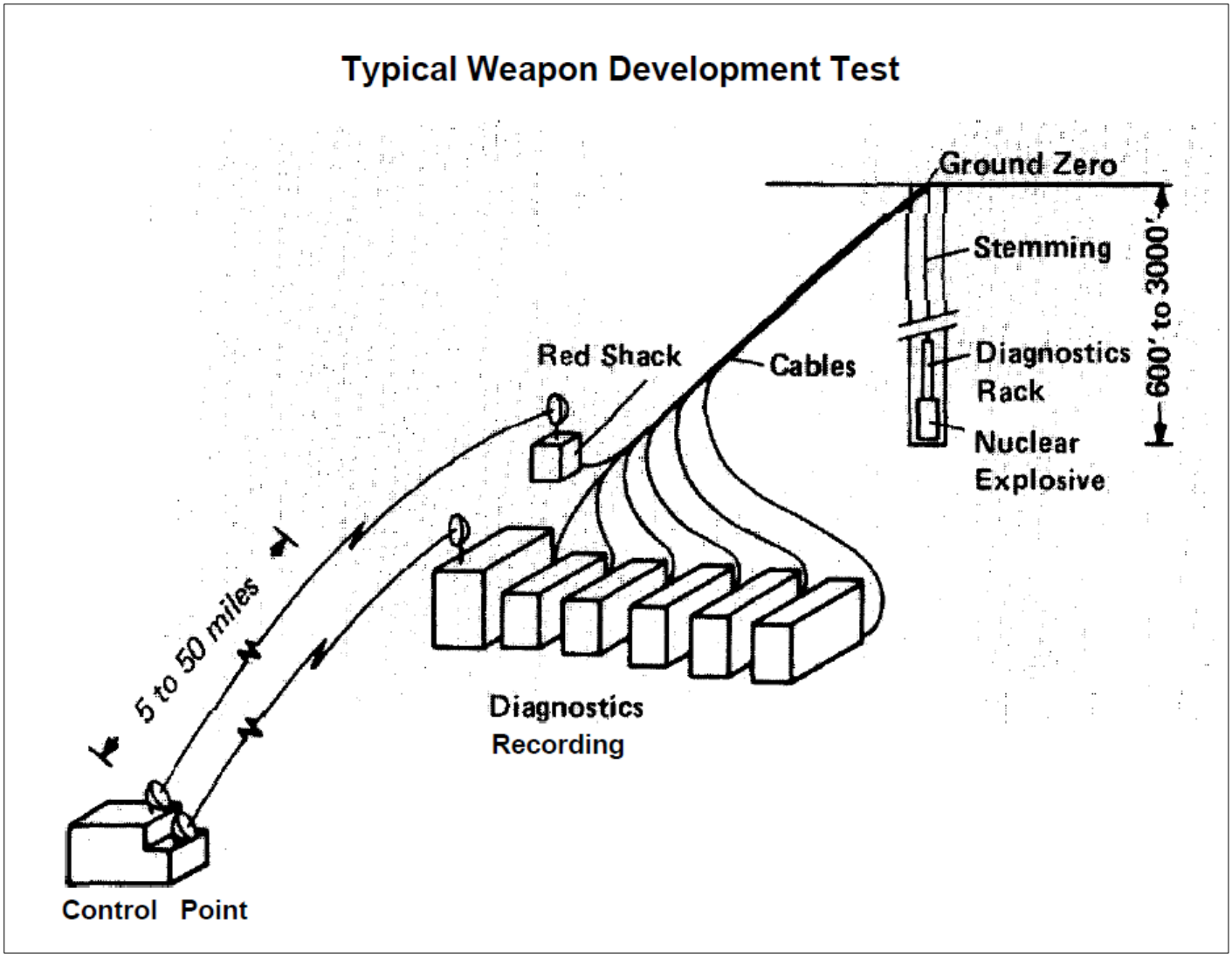


Figure 192. Schematic diagram of the basic communications system between facilities at CP and the test location. The diagnostics trailers and the Red Shack which housed the arming and firing equipment were located on a pad just outside of the area threatened by post-shot subsidence (Campbell et al. 1983:169).

Figure 193. Typical control and monitoring room electronics (photograph D10_01775 on file at RSL).

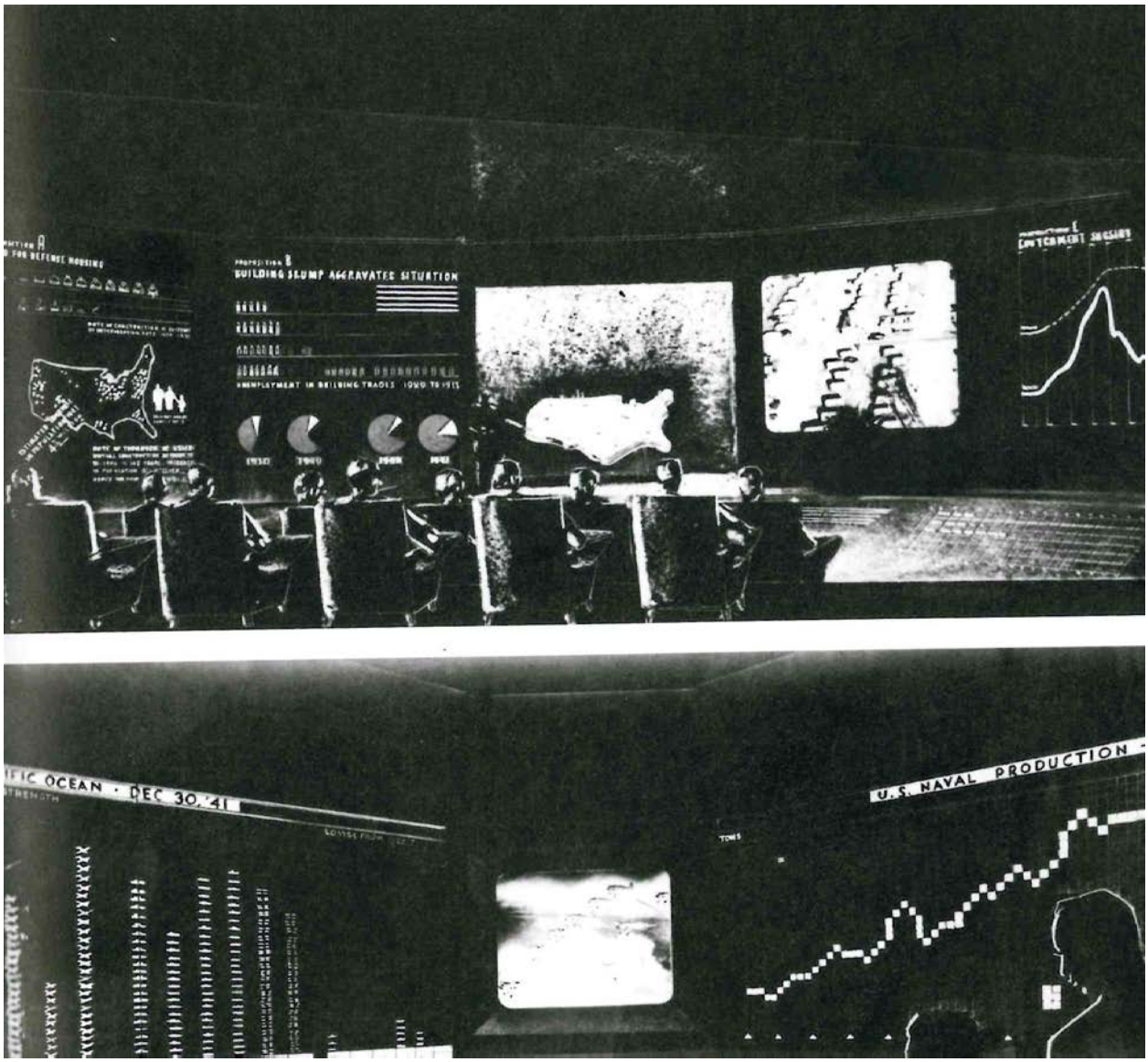


Figure 194. RAF Fighter Command Headquarters.

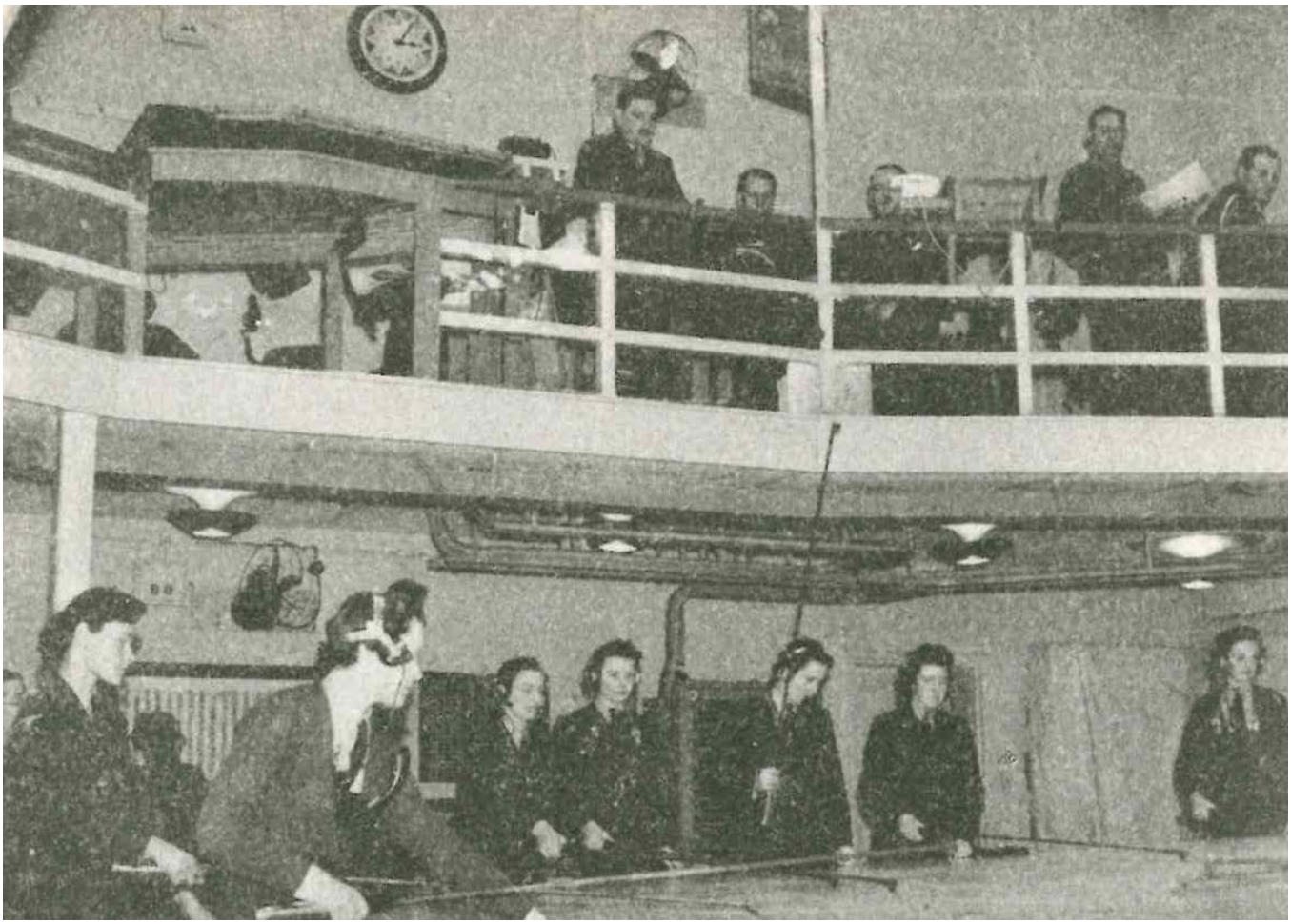


Figure 195. The presentation room of the combined Chiefs of Staffs building, Washington in 1942.

Figure 196. Henry Dreyfuss' 1941 project for a Presidential Situation Room.

Figure 197. Nevada legislators visit the War Room (REECo photographs 2885-5 and 2885-6 dated 1969 on file at the Nuclear Testing Archive, Las Vegas).

Figure 198. Onlookers in the Mezzanine watching the Handley test unfold below in the War Room (photograph 3189-30 dated 1970 on file at the Nuclear Testing Archive, Las Vegas).

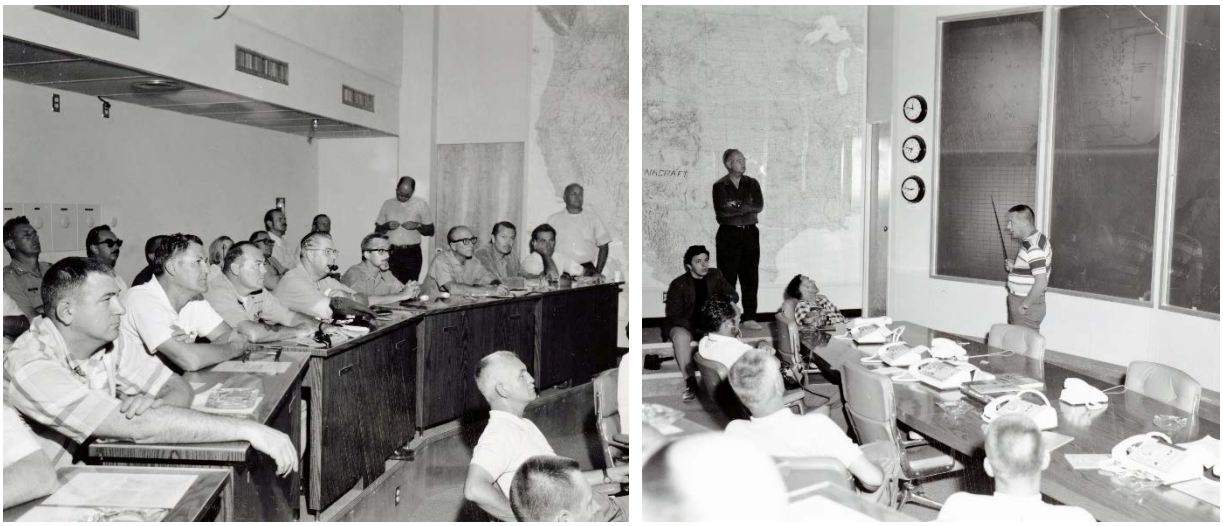


Figure 199. State officers watching a shot re-run in the War Room (REECo photographs 2958-5 and 2958-6 dated 1969 on file at the Nuclear Testing Archive, Las Vegas).

Figure 200. The coffee pot has been turned off along with all of the electricity to the building (photograph CP1_115 dated 1988 on file at RSL).

Figure 201. Cracking of concrete and tile at junction of CP-1 and CP-1B visible in main entrance lobby, Room 205 (2016).

Figure 202. Cracking of concrete and tile at junction of CP-1 and CP-1A visible in basement entrance, Room 115A. Also present is baseboard damage from minor flooding through doorway and heavy use wear. Note at least two earlier generations of tile replacements from older damage. Light is also visible through door, indicating a route of insect and possibly mouse access (2016).

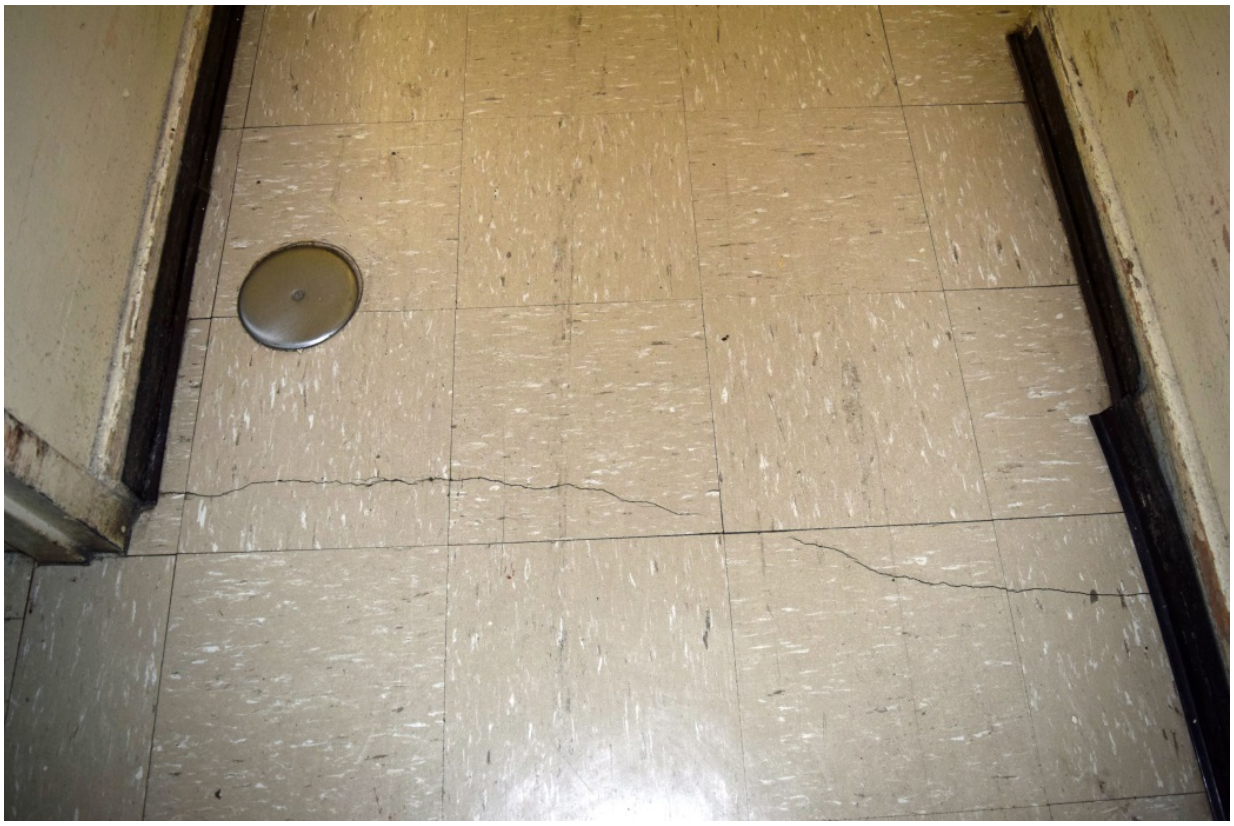


Figure 203. Crack in concrete basement corridor in CP-1. Also visible is wall and baseboard damage from kitchen carts (2016).

Figure 204. Wall cracks in west wall of CP-1 (2016).

Figure 205. Detail of CP-1 west wall cracks (2016).

Figure 206. Crack completely through concrete in south wall of CP-1, Room 241B (2016).

Figure 207. Water infiltration through ceiling cracks in CP-1 above Room 215 (2016).

Figure 208. Tar and water infiltration through ceiling crack in CP-1 above Room 213 (2016).

Figure 209. Erosion of stucco coating along foundation of CP-1B (2016).

Figure 210. Erosion of exterior concrete at CP-1B.
No waterproofing is visible (2016).

Figure 211. Exfoliation of concrete in basement Room 136 of CP-1B resulting from water infiltration through north foundation. This is the inside of the same wall shown above (2016).

Figure 212. Concrete decay at edge of north porch on CP-1A with exposed rebar (2016).

Figure 213. Water and possibly oil leakage onto ceiling of CP-1 Room 256 from air handler in attic (2016).

Figure 214. Water damage in ceiling, wall, and floor from ceiling leak in Room 255 (photograph DSC1612 dated 2016 on file at RSL).

Figure 215. Stormwater channel leading to basement door of CP-1B Room 137 (2016).

Figure 216. Silt accumulation and damage to steel door and frame to Room 137B from water entering through the door shown above and traversing entire length of Room 137 (2016).

Figure 217. Silt accumulation, drywall damage, and baseboard failure in Room 137B. Again, water has entered through the basement door shown above (2016).

Figure 218. Silt and floor damage from water entering west door of CP-1B (photograph DSC_2524 dated 2016 on file at RSL).

Figure 219. Failure of paint to adhere to concrete, interior of south wall, CP-1 (2016).

Figure 220. Wall damage caused by kitchen carts in CP-1 basement (2016).

Figure 221. Wall damage caused by kitchen carts in CP-1 basement corridor. Also visible are vertical cracks likely from seismic activity (2016).

Figure 222. Floor damage below and behind removed equipment in Kitchen, CP-1 Room 112 (2016).

Figure 223. Kitchen grease flowing down wall and pooling on floor from vent due to removal of lower part of duct. Ceiling also has water damage (2016)

Figure 224. Broken CP-1 chiller in Room 116 with end removed (2016).

APPENDIX A

Architectural Resource Assessment Form for B14490 (Building 06-CP-01)

1. SHPO Resource Number: B14490
Other ID Number: 06-CP-1

For SHPO Use Only

Lead Eligibility _____

SHPO Concurrence Y / N

NEVADA STATE HISTORIC PRESERVATION OFFICE
ARCHITECTURAL RESOURCE ASSESSMENT **(ARA)**
BUILDING FORM

2. PHOTO

3. PROPERTY OVERVIEW

URBAN X	RURAL	
ADDRESS	Control Point Complex, Mercury Hwy	
CITY, ZIP CODE	Area 6, Nevada National Security Site	
ASSESSOR'S PARCEL #	N/A	
CONSTRUCTION DATE	1951-1952	
SURVEY DATE	April-May 2016	
ACCESSORY RESOURCES TOTAL	8	
ACCESSORY RESOURCES FORM(S) ATTACHED?	Yes **X**	No
IMACS FORM(S) ATTACHED?	Yes	No **X**
DISTRICT #	N/A	

4. WRITTEN DESCRIPTION

Building 06-CP-1 (CP-1) is located within the Control Point location in Area 6 near the center of the Nevada National Security Site (NNSS), formerly the Nevada Test Site in Nye County, Nevada. CP-1 was one of the first buildings constructed on the NNSS in 1951-1952 and nearly every nuclear test there was controlled from this building, overlooking both Frenchman and Yucca Flats. The building is now vacant. CP-1 is inside a fenced security area shared by several related buildings and structures, eight of which are closely related to CP-1 and are recorded as Accessory Resources (ARs).

Except for minor additions, CP-1 is built entirely of unpainted reinforced concrete. Initially it was a rectangular-plan one-story building with a walk-in basement and a low-pitch gable roof. It has a major addition (CP-1A) on its east side which is one-story with a walk-in basement. CP-1A has a nearly flat hipped roof and is linked to the original building with a flat-roofed hyphen. The second major addition (CP-1B) also is one-story with a walk-in basement but, unlike the other portions of the building, it has a partial second floor or mezzanine. CP-1B has a low-pitch gable roof. As a result of construction of CP-1B, CP-1 was connected to the west side of the main building by means of a narrow partial hyphen which became the principal entrance. The final interior expansion (never numbered but called CP-1C here) completed the hyphen between CP-1 and CP-1B. Its only new wall on the north side is of lightweight metal construction. An emergency exit enclosure and a battery room, both sheathed with metal, completed additions to CP-1.

Due to expected blast effects from atmospheric nuclear testing and possible radioactive fallout, there are a minimum number of doors and no operable windows. Fenestration is limited to a row of small viewing ports along the north side of the building. Communications equipment necessary for the building's main function is visible from all sides. Included are suspended cables, cable troughs and conduits attached to the walls, and a large multi-story microwave tower. Not visible is an array of buried communications and power cables. CP-1 had a uninterruptible power source and was designed with the capability of being shut off from the surrounding atmosphere.

The interior of CP-1 has undergone extensive alterations through time and was occupied continuously from 1951 until 2015. Personnel worked there on a regular daily basis. In the days leading up to a test, more personnel occupied the building, often working long hours and days. In addition to mission-related facilities the building has all the necessary facilities required to support these personnel, including a cafeteria, bunkrooms, laundry, and showers. (CONTINUED)

IF FURTHER SPACE NEEDED FOR WRITTEN DESCRIPTION, PLEASE ATTACH A SEPARATE CONTINUATION SHEET.

Photo: Façade: South. Facing: North-northeast. Photographer: NSTec: DSC3349. Date: 5/24/2016.

4. WRITTEN DESCRIPTION (CONTINUED)

ORIGINAL DESIGN (1951)

CP-1 was built to meet the need for a permanent control building to replace the original Control Point building at the south end of Frenchman Flat. This temporary operational headquarters for the first Nevada nuclear tests, the Ranger series, was a hastily reconstructed surplus wood building that was braced on one side as a precautionary measure before the first test.

Even while the earliest Frenchman Flat tests were being conducted, it was realized that most future testing would take place farther from the highway and the newly-established base in Mercury. Although the position selected for CP-1 is on the ridge between the two basins, the new control building was designed with an orientation on Yucca Flat, not Frenchman Flat. The 23,316 square ft building cost $658,158.22 of which $125,694.54 was for engineering and inspection. Although it has an official construction date of 1951 in the Facilities files at NNSS, some aspects of construction continued until early 1952.

CP-1 had a simple rectangular plan and from the first it was intended to work in concert with an array of temporary trailers on the adjacent parking lots. Walls were bare concrete showing marks from plywood forms. The only finishing work done after form removal was filling in the form-tie divots. The concrete was designed to withstand an atmospheric test with a structural resistance to about 5psi peak overpressure.

The west façade with its principal entry into the building presented an extremely long and low profile since the basement was not visible from uphill. The steel panel double entry doors and all others were set directly into the concrete wall without any surrounds other than the narrow steel framing for the doors. This entry was nearly centered in the façade. From this vantage a small observation balcony with steel railing was visible on the roof. It was accessed via a hatch from the attic. The main air exhaust shaft was capped with an L-shaped metal vent.

The Transformer Room retains a perfectly preserved example of the original steel panel doors. Another example is in the new Boiler Room where the steel doors were recycled from the original Boiler Room during the 1971-1972 remodel.

The south end of the building also had a single set of double doors, in the west half of the façade. The only other elaboration was a concrete cable vault entry with top hatch.

Most of the north façade had a cantilevered concrete deck with steel pipe railing. No openings of any kind were in this end of the basement. On the first floor the east portion of the façade outside the Control Room had a series of three observation ports and a single steel door. These were followed by four more ports. An additional port was added to the original plans near the west end of the façade. All of these ports were fixed 2 x 1 ft 6 in horizontally-oriented ½ in thick tempered glass mounted in heavy steel frames.

The east (downhill) façade was the most imposing, since it revealed the basement level for most of its length. There were no openings in the first floor. Near the center of the façade was the double door into the Transformer Room and a small steel louvered vent. In the center were two large louvered vents for the Mechanical Room. To the right of these was the wide double door to the Boiler Room flanked by two smaller louvered vents. Finally there was the double doorway for the basement Corridor. Visible on the roof above the Boiler Room was the stack for the boiler.

Both floors and the roof were 4 in concrete. Basement walls were 10 in thick and first floor exterior walls were 8 in thick. Concrete below grade was coated with an asphalt compound. Floor joists, rafters, purlins, and the 14 x 17 in columns were all reinforced concrete. Cast concrete pilasters along the interior wall surfaces helped carry the loads generated by the horizontal structural members. The sectional drawings show two air duct shafts extending the entire height of the building. Some first floor spaces had dropped ceilings while others extended to the underside of the roof, some of which was painted while others had 1 ft square acoustic tiles glued to it.

Upon entering the building, after passing through a lobby the principal north-south corridor would have been entered. This portion of the building was used for a variety of administrative and support purposes, along with minor maintenance spaces and restrooms. (CONTINUED)

4. WRITTEN DESCRIPTION (CONTINUED)

The focal point of the building was the Control Room in its northeast corner, at the terminus of the northern branch of the main hallway. It had a superb view of Yucca Flat through the ports or from the deck just outside the door. The entire building was oriented with this particular view in mind. Most of the rest of the northern end of the building was occupied by technical support and radio communications rooms. A single row of rooms lined the west side of the building adjacent to the main corridor. North of the entrance were administrative spaces while technical support of various kinds occupied those to the south. At this time the only lab involved was Los Alamos National Laboratory (LANL) and there was almost no Atomic Energy Commission (AEC) involvement in the actual conduct of tests. Hence a single fairly small control room was adequate.

The larger portion of the building east of the main corridor and on the south side of the northern corridor was a maze of rooms of varying sizes packed as many as four deep away from the main corridor. Working down this block of rooms from north to south there was the Control Point Office and related administrative spaces and the Security Office on the north hall. The Control Point Office had direct access to the Control Room. Next off a short corridor were radiation monitoring and restrooms. In the center of the building directly opposite the front office was the large Air Force Office of Atomic Testing (AFOAT) office. South of that was a complex of United States Weather Bureau spaces and several communications spaces including the large Teletype Room. The southeast corner of the building was again dedicated to technical support.

Aside from the few concrete interior walls of the staircase and two ducts, all of the partition walls were wood-framed stud walls clad mostly with drywall. These walls were anchored to the grid of columns arrayed at intervals ranging from 18 ft 8 in to 23 ft. Since the ceiling was not supported by these interior partitions, it allowed for great flexibility in room placement. Since the columns were considerably larger than the thickness of the interior walls they protruded and normally were not sheathed. Corresponding to every alignment of columns was a pilaster protruding inward from the outer wall to help support the concrete framing of the floor and roof.

Exterior entry to the basement is from the east, where after a lobby it continued in the northern leg of an L-shaped corridor. The other point of access was a concrete stairwell at the junction of the two corridors. The usage plan here was far simpler than that of the first floor. A technical support area was directly beneath the Control Room and more support areas were in the southwest corner. The northwest corner was occupied by the main personnel support spaces, including Galley, men's and women's dormitories, and rest rooms. Mechanical spaces including the Boiler Room, Mechanical Room (mostly devoted to air handlers), and the Transformer Room occupied the entire area southeast of the corridors.

Here there was much less flexible division of space since the perimeter and interior walls of the mechanical area were all concrete, as was the staircase and adjacent air duct. The same column pattern was present in the basement as upstairs. While the inner north-south corridor followed a concrete wall and a row of columns, the east-west corridor was awkwardly placed between columns. This required pouring the concrete wall that defined the northern boundary of the machinery spaces between columns instead of incorporating the columns into the wall. In addition, the stairway jutted into the corridor.

There were two diesel-heated boilers in the Boiler Room. The Mechanical Room contained three air conditioning units and an evaporative condenser.

Floors were bare concrete, weatherproofed concrete, or asphalt tile. Walls were drywall or exposed concrete with 3 ½ in wood baseboards at stud walls. Ceilings were drywall, acoustical plaster, perforated acoustical tile, or concrete. Most of the building had painted wainscot which was waterproofed in the restrooms. The Galley boasted a padded built-in booth.

The 2/12 pitch side-gable roof was 4 in concrete under reflective composition material. Eaves projected a moderate 1 ft 6 in. (CONTINUED)

4. WRITTEN DESCRIPTION (CONTINUED)

EARLY MODIFICATIONS (1952-1964)

From 1951 to 1958, nuclear testing rotated between the Pacific Proving Grounds and the NNSS. When NNSS tests were being conducted, it was hectic at CP-1 and the NNSS in general. During a testing hiatus, work continued on development of infrastructure and planning for the next test series. From August 1958 to late 1961, there was little activity at CP-1 due to the testing moratorium. During that time, most testing infrastructure was not in use, with dismantlement in some cases.

Mason & Hanger – Atlas Mason Co. Engineers/Contractors of Las Vegas designed several early modifications to CP-1. In 1954 a Motor Generator and Battery Room was added to the exterior of the building to serve as a backup power source. It was under the north balcony, which formed its roof, and extended from the northeast corner of CP1 westward for 30 ft. The door at the east was louvered flush metal. Walls were made of I-beams clad with galvanized corrugated metal siding. It had a concrete slab floor.

That same year a detailed plan shows four radar scopes installed in the Air Operations Center with provision for addition of what were likely among the first additional cable conduits to be attached to the outside of the building. A 20 x 23 ft antenna shelter on a wooden frame platform was built on the roof for the radar. The steel ridgeline observation deck that still exists was also designed by this firm in 1954 (Mason & Hanger drawing number 15544). It was used by Edgerton, Germeshausen, and Grier, Inc. (EG&G) to take high-speed film of tests to supplement various other photo stations (Ristvet 2016).

By 1958 there were expansions of both the Air Operations Center and the Control Room. The Air Operations Room acquired a storage mezzanine during this remodel which extended partway over the Control Room. The Conference Room was subdivided into four rooms.

CP-1 evolved considerably during this time as a reflection of increasingly demanding tests. The Control Room had about doubled in size. Technical support spaces replaced the administrative areas along the northwest corner of the building. In contrast the Weather Service space was dramatically reduced in size to make room for the new tenant. While LANL dominated the building in 1951 to the point that it was not necessary to call out its presence on plans, by 1958 Lawrence Livermore National Laboratory (LLNL) had begun its dramatic rise in importance. This is reflected by the new division of the building. The AEC occupied spaces immediately south and southwest of the shared Control Room. LANL took over a reduced area in the northwest corner of the building, Sandia National Laboratories (SNL) had most of the spaces in the southern two-thirds of the west wall, and LLNL had the largest contiguous block of rooms in the central southeast portion of the building. Communications became concentrated in the southeast corner.

The basement spaces remained nearly unchanged in the late 1950s. The most important change was about doubling the size of the cafeteria, indicating a need to support a much larger workforce in CP-1.

CP-1A IS ADDED (1965)

It was becoming clear that this building which seemed huge when constructed was no longer large enough to accommodate the increased demands placed upon it. Starting in 1963 plans were developed to add a new wing to the northeast corner of the building adjacent to the Control Room. It was to be called CP-1A. Various sources indicate that the addition was not fully occupied until 1965.

The main rectangular block of the addition was 25 x 44 ft and was connected to the east wall of CP-1 with an 8 ft wide cable vault and entry corridor or lobby. Its concrete wall, floor, and roof thicknesses closely matched those of CP-1.

All elevations presented a full two stories since the connection with the basement of the main building was concealed. The south elevation had no openings in the first floor. The main eastern basement entrance with its two flush steel doors was at the left. Another set of double steel doors to the Mechanical Room was near the center. The flat roof of the connecting Cable Vault was somewhat lower than the main roof.

(CONTINUED)

4. WRITTEN DESCRIPTION (CONTINUED)

Cable Vault walls were integral with the rest of the addition except for the west wall, which was the existing east wall of CP-1.

The east elevation of CP-1A had a single steel door at basement level and a steel staircase leading to the northern observation deck. Again there were no openings on the first floor.

The northern façade was split by a continuation of the observation deck on CP-1. There were no openings into the basement. The first floor had a steel flush door at the left with three observation ports matching those of CP-1 to its right. Another matching door was centered in the Cable Vault.

The nearly flat roof drained to the north. It had the same overhangs as CP-1 but had built-up roofing laid over 2 in of insulation with an aluminum gravel stop around the edges rather than composition material. Instead of poured-in-place concrete, the roof of the Cable Vault was made of 2 ft wide precast concrete planks.

The large basement room was subdivided roughly into fourths in 1965. The plans for this division were made near the end of 1964 so this work was likely done shortly after the end of construction of the new wing. A suspended ceiling was put in these spaces at the same time.

LATE 1960S MODIFICATIONS (1965-1968)

The early 1960s marked an increase of AEC control over testing operations. This particularly involved increasing concern regarding safety rather than focusing primarily on the technical aspects of interest to the laboratories. This change is reflected in a major redesign of the central part of CP-1. In 1964 the AEC Operations Room was reconfigured for use by the Test Manager's Advisory Panel, also called the Scientific Advisory Panel. This involved erecting a new partition wall on the south side of the room. This room was the prototype for the AEC War Room. The same remodel removed the partitioning of the central Conference Room to now serve as the Readiness Briefing Room, complete with a stage and large viewing screen. This room served as the prototype for the room of the same name that would be constructed later in CP-1B. This was part of a general reorganization of space in CP-1 and the new CP-1A at this time.

The Control Room in CP-1 was completely remodeled in 1967. Most of the room beyond a carpeted entry area at the south was raised 1 ft off the ground with an "infinite access floor" of panels supported by a grid of metal stringers and screw pedestals. This same system was later introduced in several places of the building and the DNA Playback Trailer (AR3) to accommodate masses of cables along with air ducts. The north door retained its full height and was accessed via ramp. Railings were installed at edges of the raised platform. Walls were furred out and covered with walnut veneer plywood panels to cover the many cables which had accumulated along them.

CP-1B IS ADDED (1969)

CP-1B is the final major addition to CP-1. Design began in 1966 but it was not until 1969 that it fully entered service according to "as built" date stamps on the record drawings. There is evidence that it was in use to at least some extent by 1968. Despite its superficial similarity to the rest of the building due to its concrete construction and similar massing, it was a markedly different design in response to increased knowledge of the seismic effects to be expected from continued underground testing and to the fact that it is centrally designed around two key spaces -- the War Room on the first floor and the Briefing Room in the basement. CP-1B no longer needed windows and a balcony for a view of the tests. In contrast to atmospheric tests, there was little to see during an underground test. Also around this time, visuals could be provided by camera feeds to the building.

All exterior walls of the new addition were 16 in thick for their full height with no windows of any kind. Unlike the rest of the building, these walls had had a thin layer of stucco applied, but it too has not been painted. The walls were divided into panels by caulked "rustication joints" which only extended 1 ½ in into the concrete. If any wall cracking has occurred, these joints have successfully directed the damage to follow these seams beneath the protective caulking.

From the front parking lot the south façade presented an imposing appearance since the first floor had a height of 19 ft. Presented in profile is the low pitch 1/12 built up roof with its 2 ft overhangs. (CONTINUED)

4. WRITTEN DESCRIPTION (CONTINUED)

The main block of the structure was completely blank. To its right was a small concrete hyphen that served to connect the addition to CP-1 and to become the new primary entrance to the building with a flush steel double door. As with the connection between CP-1A and the original building, the roof of this hyphen was tucked below the roof overhang of CP-1.

The west façade had a centered flush double door into the first floor. Just outside the wall to its left were twin insulated steel stacks for the diesel generators in the basement. At the foot of the wall to the right was the low structure for the emergency escape exit from the basement.

The basement was only revealed from the north where a cut led to the centered flush double doors of the Mechanical Room. A large air handler was mounted on the ground just left of the door. Just left of the main part of the building was the deeply inset blank rear concrete wall of the entry hyphen. The concrete fresh air shaft was at the northeast corner of the addition and the exhaust air shaft at its northwest corner.

Due to the small size of the entry hyphen, CP-1B actually had an eastern elevation. Its only elaboration was the entry hyphen with its low pitch built-up concrete roof. It had a 1 ft overhang at the rear but the front overhang was cantilevered 3 ft to protect the front entry. The door in the main wall of CP-1B within the hyphen was the only entry from CP-1. Despite their proximity the basements were not connected except by cableways.

Interior support for the first floor and roof was supplied primarily by four 16 in square pillars arranged in a 20 ft square. Aside from the mechanical room walls in the basement and the stairway, partitions were made of drywall on steel studs or of prefabricated metal panels.

The Operations Room, informally but almost universally known as the War Room, occupied the very center of CP-1B. It was designed for a single purpose, which was to facilitate the Advisory Panel (it had a variety of names) to provide the AEC Test Controller (whose position also had a variety of names) with the information needed to decide whether all the technical conditions were met for conducting a successful test while at the same time taking all reasonable precautions to ensure that it was conducted safely. Therefore, everything was designed around the conference table built specifically for the sunken space at which every member of the panel had a seat and a telephone. In addition to the phone lines, complex visual information was displayed on the massive curved wall which formed the west side of the room. Videos or still images could be projected onto the rear projection screen from the Projection Room (also called the Data Accumulation Room) behind the screen. A row of television monitors was mounted near the top of the wall, which like all others extended to the ceiling 20 ft 4 in above the sunken floor. A supplemental arc of permanent desks with communication consoles inset into credenzas was arrayed to the east of the conference table at general floor level for key representatives of the various organizations involved in a test. Additional specialists and important visitors could be seated in the sunken area just east of the conference table or along the east wall. This made for a deliberately crowded space since it was essential that everyone at the conference table would be able to converse directly, and that other essential information could be obtained from a nearby specialist with no delay. Videos of tests made later for training purposes reveal how well this system worked, and that it was an extremely good decision to keep this group separated from the laboratory control rooms responsible for actual timing and firing of the test devices. The other principal visual aids in the room at this time were a regional map on the south wall and a large map of the test site on the north wall.

Most visitors and observers had to be kept out of the War Room during tests to preserve security. An Observation Balcony or Gallery overlooking the War Room was constructed in a mezzanine to accommodate these individuals. This balcony extended across the entire east end of the War Room and was sealed off from it with a continuous ribbon of fixed glass windows. A smaller room west of the balcony had a sliding window which allowed elevated photographs to be made of the War Room. The rest of the mezzanine was used for storage and telephone equipment.

Returning to the first floor, the Test Controller's office adjoined the War Room on the north. Technical support occupied the entire west end of the building. Communications was across the hall to the south of the War Room. A row of offices east of the War Room and Test Manager's office completed the arrangement except for circulation and restrooms in the southeast corner. (CONTINUED)

4. WRITTEN DESCRIPTION (CONTINUED)

The focus of the basement was the large Briefing Room directly under the War Room. Its entrance was located so as to minimize the distance that had to be traversed between there and the War Room, as the two rooms were very closely related and used by the same core group of people. Informational briefings were held there, often with quite a large audience of people who would be elsewhere during the actual test. Weather briefings were so important in test scheduling that this space was often called the Weather Briefing Room.

No technical support areas were in the basement. A kitchen and storage rooms opened off the Briefing Room. South and west of the Briefing Room were personnel support areas consisting of dormitories, restroom, and a small laundry.

A concrete wall separated all of these spaces from the mechanical rooms to the north. Two diesel generators occupied the northeast corner. The central area was filled mainly with electric boilers, chillers, air handlers and ducting. Two small rooms in the northeast corner were dedicated to filtering air coming into CP-1B. The air handling system in CP-1B was completely separate from that of CP-1 and CP-1A.

CP-1 IN 1970

Starting in 1970 an extensive series of remodels to the building was designed by Ben Bechler & Associates Architects & Engineers, North Hollywood, California. As part of the planning process, a set of drawings of the existing condition was made, which with other sources document the building quite well as it existed in 1970 prior to the alterations.

By 1970 the west façade had been dramatically altered by the entry hyphen to CP-1B. CP-1B would have masked the north half of the original façade from all normal points of view. The original double front door was still in use. Three loudspeakers were located below the eave, of which the southern one is still in place. Cable conduits had been attached to the exterior of the wall and a ladder had been added for roof access.

The south wall of CP-1 had acquired cable conduits, conduit for an exterior light, and a single door near the southeast corner of the building, accessed via a steel stairway. The south wall of CP-1A was pierced in three places for vents to the Mechanical Room.

The east wall of CP-1 was festooned with a variety of cable and electrical conduits and had a speaker near the ridgeline. Two mechanical appliances were located outside the Boiler Room, one of which blocked the southern wall vent to the Boiler Room. The east wall of CP-1A acquired a large louvered vent to the Mechanical Room in the southeast corner, a mechanical appliance under the stairs, and cable conduits running up the northeast corner.

The north façade of CP-1 included two microwave dishes mounted in the gable end, wall mounted conduits, and a small mechanical appliance. The Battery Room below the deck had a single small wall vent. A staircase was added to provide access to the west end of the deck since excavation for the north entrance to the basement of CP-1B made it impossible to approach it from the west by walking around the building. A ladder provided roof access to the CP-1A hyphen and cable conduits ran up the northwest corner of the main block of CP-1A.

By 1970 the distribution of functions in the building had changed dramatically since the late 1950s. The AEC moved nearly all of its operations to CP-1B, which was completely occupied by that agency with the spatial pattern unchanged from that noted above, centered on the War/Operations Room. The lab Control Room and Timing Firing rooms continued to occupy the northeast corner of the building, though now expanded into CP-1A.

All three of the basement areas were nearly unchanged except that the interior partitions were been removed from CP-1A to restore the single large room for Timing and Firing.

The AEC Briefing Room in the CP-1B basement was arranged with the monitors and projection screen on the east wall with the table for the Advisory Panel at the front and the audience taking up the rest of the room. This basic arrangement remained unchanged through time. (CONTINUED)

4. WRITTEN DESCRIPTION (CONTINUED)

At this time the building was shared by LANL and LLNL.

Floors throughout the building were either concrete or vinyl asbestos tile except for a small amount of carpet in the EG&G Control Room 209. CP-1 still had its original 4 in wood base while that of CP-1A was plastic. Ceilings were variously concrete, acoustic tile affixed to drywall, and suspended acoustic tile systems.

THE BECHLER REMODEL (1971-1972)

In many ways the major remodeling of the building during this period established the way it remained throughout the Cold War period.

The original front doors on the west façade of CP-1 were blocked with concrete masonry units (CMU). The former lobby became a Security Office. The primary entrance for the entire building became the one in the CP-1B hyphen.

The only major exterior changes were made to the east façade. These changes related to moving the Boiler Room south to its present location in the east half of the former Mechanical Room. The Boiler Room double doors were moved to a new opening cut in the wall for the new Boiler Room and the old opening was plugged with CMU. The boiler stack was moved from its internal position to the outside of the building. It and an evaporative cooler were surrounded by a chain link fence. A first floor doorway and staircase near the south end of this façade were on the plans but were never built. Several vents into the mechanical rooms at the southern end of CP-1A were blocked with CMU at this time.

Interior modifications to the first floor included a higher (12 in) raised floor in Timing and Firing Room 200, installation of carpeting, paneling, and an extended raised floor in Control Room 250, and numerous minor alterations of interior walls. Of particular interest was construction of a spiral staircase in the southeast corner of CP-1A.

A change in the demographics of the test site is reflected by creation of a larger Women's Dormitory in the basement by moving the Men's Restroom into its current position in what was formerly the Women's Dormitory. The Snack Bar space was again enlarged to the south. As mentioned above, the biggest change was moving the Boiler Room. The two boilers and the chiller were mounted in their present positions. A CMU wall was built to divide the Mechanical Room to accommodate this change. The former south double doors to the old Boiler Room were moved into this wall, where they remain today. Similarly, the single door in the southwest corner of the old Boiler Room was moved to replace the former door at the southwest corner of the Mechanical Room. Both former interior door openings were then blocked with CMU. The former Boiler Room was then taken over by SNL.

A major modification was installation of large air handlers in the attic of CP-1. At the same time, several vault spaces on the first floor were made more secure by extending their walls all the way to the underside of the roof. Access to both spaces was via folding stairs concealed in ceiling hatches. Both spaces included plywood flooring for work areas while a steel mezzanine was constructed to support the weight of the northern air handler.

During the remodel, about half of the base was converted to plastic and most ceilings were suspended. Many of the doors were replaced.

Lab usage after the remodel was about half LANL/SNL and half LLNL.

THE FINAL COLD WAR YEARS (1973-1992)

Minor room partition changes were always taking place. In 1976 an unusually extensive set of such room changes occurred in the central and southern portions of CP-1. It was at this time that Vault 242 was upgraded with partitions extended upward to the roof. This particular enhancement was proposed during the Bechler remodel for several vault rooms but it appears that it was not executed at that time for this particular vault. Since the late 1960s, most new construction in the building was executed with metal studs.
(CONTINUED)

4. WRITTEN DESCRIPTION (CONTINUED)

That same year the kitchen and food service areas were modernized and expanded to their present extent, occupying the entire west side of the CP-1 basement.

By 1978 Control Room 100 in the basement of CP-1A had been equipped with a 12 in high raised access floor and a clean room had been installed on it. The raised floor and clean room were removed in 1978 and the room was again subdivided into thirds. The concrete floor was carpeted and the room painted in a color to be selected by SNL. By this time the circular staircase in Room 102 appears to have been removed.

In 1983 Control Room 200 upstairs in CP-1A also received a major make-over. Its walls were furred out and covered with the fabric wall panels now present. The existing raised computer floor was retained but the lower south half of the floor including the entry foyer was re-carpeted. All ceiling tiles were replaced. The outside door was still full-height. The viewing port adjacent to the door was replaced with a vent for an HVAC machine mounted on a concrete pad at ground level north of the building.

The War Room was heavily remodeled in 1984 with new viewing screens and sound attenuation panels. A photograph of the new changes is shown in Section 15. It was at this time that the War Room took on the look it retains to this day with minor subsequent changes.

By 1985 the building reached the culmination of its development during the Cold War. Its first floor plan immediately prior to addition of the Field Office (CP-1C) is attached.

The 1985 Field Office provided additional space for the LANL Test Group Office. It filled the space between CP-1 and CP-1B north of the CP-1B entry hyphen, which by now was the main entrance to the building. The north wall was made of 6 in metal studs with metal siding. All other walls were narrow metal studs and drywall attached directly to existing concrete walls. Metal studs and drywall were also used to divide the space into three offices, a hallway, and a storage room (Rooms 280-284). Access was via two doorways cut through the west wall of CP-1. Two additional small apertures were cut through the same wall to make small pass-through windows for the southern two offices. The south end of the flat metal roof rested on the ridgeline of the existing entry hyphen. The north eave of this hyphen was concealed by the suspended acoustic tile ceiling.

By 1985 LLNL had moved into adjacent Building CP-9, completely vacating this building. LANL now occupied all of CP-1 and CP-1A north of the east-west corridor.

Control/Monitoring Room 250 had expanded to the west. Experimenters with the LANL occupied the Monitoring Room while the LANL Test Director and his staff ran the firing sequence from the adjacent Control Room.

Sandia's technical support spaces were concentrated along the south edge of CP-1, immediately south of that group's administrative area.

The northern half of the block of rooms south of the east-west corridor and east of the north-south corridor was occupied by LANL technical support of various kinds.

The narrow southwest strip of rooms along the west edge of CP-1 was used by a variety of Department of Energy (DOE) personnel and contractors, particularly Wackenhut Services Inc. The southern three rooms were used by the Defense Nuclear Agency (DNA).

Changes to the War Room were described above. The DOE Test Director's Office was decorated to look something like a comfortable study or living room. Curtains masked north concrete wall of the office.

The row of offices immediately east of the War Room was the home of Operations Command Center (OCC) and administrative support for the Test Director. The principal communications console was positioned at the window and door into the War Room, providing immediate access. Immediately behind the consoles was an elaborate sliding multi-leaf map board which is still in place. (CONTINUED)

4. WRITTEN DESCRIPTION (CONTINUED)

As mentioned above, the LANL Test Group Offices were in the northwest corner of CP-1 and included the new Field Office addition. These offices had a single signed entrance, their own distinctive carpet, paneling, and wainscot, and even a different door molding material from that used in other areas. The extreme importance of the LANL Test Group Director is shown by his huge office with the only office window in the building. Despite its small size, the 2 ft viewing port sheds a remarkable amount of light which gives this office a pleasant ambiance missing from all of the other offices with their harsh artificial lights.

The south end of the large block of rooms southeast of the two CP-1 corridors was occupied by SNL, accessed mainly by a single signed entrance from the north-south corridor. Sandia's office spaces and corridor had their own distinctive carpet, wall paneling, and doors.

CP-1B was essentially unchanged from 1970, but at this time it is possible to definitely plot the Environmental Protection Agency (EPA) in the southern area behind (southwest of) the War Room.

One of the most important aspects of any test was obtaining the most accurate possible weather forecasts and displaying that information immediately in the War Room. The Weather Service Nuclear Support Office (WSNSO), part of the Department of Commerce, was located in the northwest corner of CP-1B adjacent to the projection area for the War Room. It had bright blue floor tiles and wall paint unlike any colors used elsewhere. The WSNSO was a highly specialized unit of National Weather Service that provided direct support to the underground nuclear testing program.

The mezzanine was largely unchanged but by 1988 audio-visual equipment was installed to convert the room behind the viewing balcony from storage to a technical support area for the War Room. In addition, a wall was removed to allow expansion of the telecommunication equipment in the southwest corner of the mezzanine.

The 1985 basement plan (Section 14) shows the relocation of the Boiler Room noted above. There were no plan changes in the CP-1B basement. The spiral staircase in CP-1A was removed by this time. SNL combined the two rooms to form a single large Computer Room 104. This room was given a typical raised access floor.

The vacated Boiler Room was dramatically modified for use by SNL and the Department of Defense as a Monitor Room. This room included a complete raised access floor. The half-glassed partition was decorated with commemorative shot decals.

The small kitchen in CP-1B was abandoned to casual storage use following construction of the stage which partly blocked the door.

By this time the kitchen and serving areas in the original part of CP-1 had taken over the entire west edge of the basement as was noted above. The Dining Room 110 and the large room used for food storage (Room 108) occupied the northwest corner of the basement.

THE PRESENT EXTERIOR

The outside of the building as a whole is best portrayed by the series of attached photos taken from all sides from a helicopter in 2007.

The exterior as it now exists will be described counter-clockwise from the front entrance with reference to the set of ten attached photos. The main entrance is a double door in the south façade of the CP-1B hyphen. The main mass of CP-1B has no openings but is heavily festooned with electrical communications and power conduits and junction boxes along with signage.

The west façade of CP-1 also has no openings since the original main door to the building has been blocked with CMU. It has conduit, two speakers, and a fire box. The ladder for roof access and a wood communications pole are at the right end of the façade. The left third of the original façade is obscured by CP-1B. (CONTINUED)

4. WRITTEN DESCRIPTION (CONTINUED)

The south façade of CP-1 has a double door leading to the principal north-south corridor at the top of a concrete ramp with pipe railings. Near the right corner is the single door leading into one of the SNL labs (Room 261). It is at the top of a steel staircase with pipe railings. In addition to the mass of conduits affixed to the outside wall are two above-ground communications lines leading to the gable end. Several of the conduits lead down into the riser above the southern Cable Vault which is well south of the basement. A steel manhole provides access to the vault.

The south half of the east façade of CP-1 has no openings. Most of the lower portion of the wall which serves as a retaining wall for earth fill within the structure is obscured by the Garbage Enclosure and Fuel Tank. It has some exterior conduits. In contrast, the north half of this façade is extremely complex. The pattern of 4 x 8 ft sheets of plywood used as forms for the concrete is readily seen on this wall. Below the eave a cable tray supplements the conduits. At left is the double door to the Transformer Room. This is one of the steel panel doors to survive from original construction of CP-1. At center is the stack and cooling unit for the Boiler Room while immediately to the right of these is the double door to that room. Although obscured by twin steel mesh security doors, this door is from the original Boiler Room. The void where these doors came from is the prominent CMU wall patch at the junction of this wall with CP-1A. The northern part of the east wall of CP-1 is obscured by CP-1A.

The upper part of the south façade of CP-1A is blank except for a recent rain gutter downspout. The double doors in the hyphen lead to a lobby with easy access to the east-west basement corridor. In the center of the façade are the double doors to the CP-1A Mechanical Room. All former wall vents in this area are plugged with CMU. This wall has abundant conduits.

The east façade of CP-1A shows very clearly a series of pour lines in the concrete, some of which have been caulked. The upper part of the wall is blank except for conduit. A large vent into a former extension of the Mechanical Room has been blocked with CMU. To the right of this vent is the single door into Room 100. A steel stair with pipe railings leads up to the northern balcony. A cluster of above-ground communications lines enters the building at its northeast corner.

The north façade of CP-1 is clearly delimited by its gable end which protrudes above additions of both sides. A steel observation tower crowns the roof. In the gable end are steel brackets for microwave equipment which has been removed. A cable tray and numerous conduits run along the top of the wall. A concrete deck with steel pipe railing runs along most of the façade. The left half has the openings to Control/Monitor Room 250. From left to right are two viewing ports, a port plugged by a HVAC duct, door (bottom cut off to provide space for a HVAC duct), two ports, a port covered by a conduit junction box, and a plugged port. The viewing port for the LANL Test Director's Office is near the right of the façade. Below the left side of the balcony is the 1954 steel Battery Room while below the ramp leading to the balcony is the 1989 Emergency Exit. Most of the HVAC equipment which was formerly on a series of concrete pads along the north wall has been removed.

At the extreme left is CP-1A with its extension of the balcony. From left to right in the first floor is a door, similarly cut off to allow another HVAC duct to run beneath it and over the edge of the balcony, a viewing port opening used for another HVAC duct, and two viewing ports along with a mass of conduit. Electrical boxes area attached to the basement level, but there are no openings. There is a single door leading to the hyphen connecting the main mass of CP-1A with CP-1.

The metal north wall of the CP-1C Field Office addition in the hyphen between CP-1 and CP-1B is barely visible at right behind HVAC equipment.

Due to proximity of the Microwave Tower (AR1), it is not possible to obtain a straight-on photo of the north wall of CP-1B. The oblique photos of this façade show a mostly blank wall except for numerous conduits and a cable tray. They also show communications lines connecting the building with the Microwave Tower. The double door into the basement Mechanical Room is centered in the façade. Near the northwest corner of the building are two radiators for the emergency diesel generators in the basement of CP-1B. (CONTINUED)

4. WRITTEN DESCRIPTION (CONTINUED)

The most prominent feature on the west façade of CP-1B is a cable tray which emerges from an exterior vault with a steel cover at the southwest corner of the building. A small electrical substation is within a chain link barrier in front of the left portion of the wall. Mounted on the wall behind this fence are the twin exhaust stacks for the emergency diesel generators. A double door is centered on the façade. The galvanized cover for the emergency exit tunnel from the basement is near the right end of the façade next to the cable cellar.

THE PRESENT FIRST FLOOR

A set of photos is attached depicting representative areas of the building interior in their present condition.

The present plan of the first floor and mezzanine is attached along with a plan of how these areas were laid out in 1985. At the time of abandonment there were very few active offices and the rest of the building was either entirely vacant or given over to storage. The descriptions provided below focus on individual rooms of great importance or on examples of types or clusters of related rooms.

The only alteration made in the War Room was replacement of the series of double desks for the technical support representatives with a continuous curved desk. On this new desk the phones were moved from the credenzas to small consoles on the top of the desk. By the time of field recording all portable objects and several wall-mounted objects had been removed from the room.

Control Room 250 is just as it was in 1988 except for removal of equipment. In contrast, Control Room 200 received a complete renovation of its test-related equipment as well as the room décor indicating confidence that testing would continue for quite some time. Control Room 200 received an elaborate set of new doors at the entry to the foyer for the control room. The foyer also received new wood pattern false wood flooring. The Control Room itself received new carpet, a remodeled raised computer floor, new control consoles, new equipment racks, and a new reflective ceiling and lights. A series of flat-screen monitors were mounted to the wall, replacing earlier ceiling-mounted racks for CRT screens.

Aside from removal of testing-era equipment, few changes appear to have been made in the LANL and SNL technical support areas of CP-1. Post-testing installation of semi-portable office partitions and cubicles is commonplace throughout most of the building as it was repurposed. One change throughout much of the first floor of CP-1 was application of a pinkish-tan paint over large areas that formerly exhibited a collection of off-white, tan, pale green, and pale blue walls. While most rooms have been emptied, the DNA office at the south end of this block has been used for storage during the moving process. This particular office combined rooms 234 and 236 by removing a partition and blocking one entry sometime after 1985 to create the present Room 234.

The DOE Test Director's Office adjacent to the War Room has been stripped of most portable items, but major items of furniture and some wall decorations remain.

The administrative and operations office east of the War Room is about the same as it was in 1988 except for installation of a newer generation of cubicles and removal of the communications equipment.

The SNL administrative area is essentially unchanged except for a change in carpet color.

Most of the LANL administrative complex is little changed since 1988. Most altered is the LANL Test Director's Office, which was entirely filled with cubicles, most of which have recently been removed.

Almost every communication device has been removed from the building. This has left unattached wiring and cables of all kinds protruding from conduits, walls, floors, and ceilings. In some cases the conduit itself has been removed. For example a 2 in diameter hole was left completely open to the outside when conduit was pulled from the exterior wall of Room 232.

The building is no longer a classified area but it is still locked down with entry only possible upon arrangement with National Security Technologies (NSTec) Facilities staff. (CONTINUED)

4. WRITTEN DESCRIPTION (CONTINUED)

Much of the portable equipment in the Weather Service Office 273 is still present.

THE PRESENT CP-1B MEZZANINE

As shown in the attached photo, the Observation Gallery was shortened to half of its former size sometime prior to the late 1980s.

The rooms adjacent to the Observation Gallery were converted to visual-aids support for the War Room. Room 301A has a row of projectors used to send still images to screens in the War Room while Room 301B has video equipment to monitor several fixed cameras focused on test areas and to edit VCR tapes. Presumably videos were directed to the War Room displays from the console located next to the window overlooking the War Room.

Communications equipment was being removed from Room 303 during Desert Research Institute's initial visit to the building. Although most equipment was removed, some equipment and a mass of wiring remains.

THE CP-1 MECHANICAL ATTIC

Air handlers in both the north and south attic areas continued to be maintained and used until the building was shut down.

THE PRESENT BASEMENT

The CP-1B Briefing Room 130 in its final form substituted flat screens and a ceiling-mounted computerized image projector for the earlier CRT monitors and overhead transparency projector.

Timing and Firing Room 100 has lost its interior partitions, the carpet has changed color, and the walls have been painted white.

Computer Room 104 is about the same as in 1988 except for removal of equipment.

Computer Room 105 has been changed extensively. The half-glass partition present in the late 1980s has been removed. The raised access floor has been carpeted and the entire room has been filled with cubicles which have been allowed to remain in place.

A mass of wiring and associated hardware remains in all of the Cable Runs. Visible on the original wall of CP-1 in the cellar level of Room 115 is the asphalt-based coating used to waterproof the concrete below grade.

All furnishings and nearly all of the removable equipment have been removed from the kitchen and dining areas. A temporary duct has been installed to an exterior portable HVAC unit following the failure of the CP-1 air chiller. The HVAC unit has been removed and the ducts capped where they emerge from the outside wall of the Emergency Exit.

These concrete air ducts for CP-1 ducts extend from the basement where they connect to Mechanical Room 166 all the way to their entry or exhaust fittings on the roof.

The Mechanical Room for CP-1B has air handlers, electric boilers, a chiller, and extensive ducting.

END

Note: See the survey report for detailed references, historic photographs, and historic plans.

5 REPORTED BY: Reno, Carragher, Beck, King *AGENCY REPORT NUMBER:* DOE/NV/0000939-33

6. INTEGRITY & CONDITION

Integrity:	Original	Intact	Altered **X**	Moved	Date(s): 1963, 69, 85
Condition:	Excellent	Good **X**	Fair	Poor	Other
If Other, Describe:					

7. PROPERTY INFORMATION

Historic Name	CP-1
Current/Common Name	CP-1; Control Point; CP
Original Owner	U.S. Atomic Energy Commission
Current Owner & Mailing Address	National Nuclear Security Administration Nevada Field Office (NNSA/NFO)
Architect/Engineer/ Designer	Holmes & Narver, Engineers, Los Angeles, CA; Haddock Engineering, Ltd.
Building/Contractor	Lembke Construction; Clough & King Construction

8. ARCHITECTURAL INFORMATION

Architectural Period	Post-World War II
Architectural Style	Modern
Architectural Sub Style	Brutalist

9. UTM LOCATION/REFERENCE(S)

ZONE: 11	EASTING: **584,200**	NORTHING: **4,088,030**	**NAD83**
ZONE:	EASTING:	NORTHING:	

10. TOWNSHIP/RANGE/SECTION/MAP

Township: 11S	Range: 53E	Section: 34	USGS Map/Date: Yucca Lake 1986

11. THREATS TO RESOURCE

Vacant: Minor structural decay and animal infestation likely unless controlled.

12. NATIONAL REGISTER ELIGIBILITY

NR Listed	Date NR Listed:			
Eligible Under:	Criterion A **X**	Criterion B	Criterion C **X**	Criterion D **X**
Not Eligible				
Unevaluated				
Historic Themes: Government and Politics / Federal Government / Nuclear Testing				
Eligibility Justification: Please attach continuation sheet.				

13. ELIGIBILITY JUSTIFICATION

CP-1 (SHPO Resource Number B14490; NNSS Building Number 06-CP-1) is eligible to the National Register of Historic Places (NRHP) under Criteria A, C, and D at the national level of significance from 1951 through the end of nuclear testing in 1992. It may also be eligible under Criterion B, but the research needed to support this is beyond the scope of the present project; therefore, CP-1 remains unevaluated under Criterion B.

Accessory Resources AR1 through AR7 were all built during the period of significance and all retain excellent integrity, and are, therefore, contributing resources. Accessory Resource AR8 was installed after the period of significance and is non-contributing to the NRHP eligibility of CP-1.

Criterion A

Overall, the historic significance of Cold War resources related to nuclear testing on the NNSS, administered by the NNSA/NFO, is at the national level of significance. Sedan Crater is an example of a nuclear testing resource on the NNSS already listed on the NRHP.

CP-1 was critical in the development of the United States' capability to successfully perform nuclear testing in the continental United States. This importance is revealed by its first designation, which was simply "Building 1 – Control Building" (REECo 1955). Taking the effort of erecting this major concrete structure was a crucial first step in the process of making the test site in Nevada a long-term endeavor requiring more than temporary support buildings.

Regarding the specific importance of CP-1 in relationship to nuclear testing, Chuck Costa (2016) states, "It was the hub for activities for tests. In those days that's where the Operations Control Center was; that's where the War Room was where you convened for a shot. That was control center for the main activities at the Test Site – that's what we were there for."

Criterion B

CP-1 is not evaluated at this time for its significance under Criterion B. As Bob Campbell, a long-term Test Director for LANL, said, "In the whole history of the world there has never been anybody like us and probably will never be anybody again – our testing is over now" (Brownlee 2016). Many important people used the facility, but this association usually does not relate to the portions of their active careers for which they were personally of importance. Some people only worked in CP-1 in preparation for and during tests but some Test Directors and members of the key scientific and technical staff spent most of their active careers at their laboratories in other states.

However, AEC/DOE Managers, Test Controllers, laboratory Directors and key personnel and staff were closely associated with CP-1, in some cases for many years. It is likely that association with one or more of these individuals would make it reasonable to consider the building eligible under Criterion B. At this time, the detailed comparative biographic information required for such an evaluation is beyond the already considerable scope of the present project. The magnitude of the decisions made by these people under the stress of evaluating so many different technical and safety issues related to nuclear testing is truly immense. Some individuals may well come up to this standard of both importance and association with this particular resource.

Criterion C

CP-1 is eligible to the NRHP under Criterion C at the national level of significance from 1951 through 1992. It is the oldest and most important example of a building designed to control nuclear testing experiments in the United States. Its design and the character-defining features discussed above all make this building a unique example of Brutalist Cold War architecture. Interior spaces in this building are at least as important for their significance as the exterior. Aside from a lack of windows to recess, CP-1 superbly represents the defining features of Brutalist architecture according to Michael and Smith (2011:76). These are massive appearance, unwelcoming entrance, flat roof, and exposed concrete walls. (CONTINUED)

13. ELIGIBILITY JUSTIFICATION (CONTINUED)

CP-1 was designed in 1951 by Haddock Engineers (aka Haddock Engineering, Ltd or Haddock) and by Holmes & Narver, Inc., Engineers (H&N). It was built by Lembke Construction and Clough & King Construction (REECo1955; Campbell et al. 1983:175). At about the same time that Haddock designed CP-1, the firm also designed the Buckner Building for the Army at Whittier, Alaska. At that time, the 244,000 square ft concrete building was the largest in Alaska. It had many parallels with CP-1, particularly incorporating so many interior functions that it was known as the "City under one roof." It was abandoned by the Army in 1962 and after a period of disuse has been repurposed by a private company. It survived the great 1964 Alaska earthquake without damage. There is some deterioration of the building due to some rusting of the reinforcing steel and due to the intense freeze-thaw cycles (HDR 1995; Sheehy 2015).

Haddock's role at the new test site was limited to the first few buildings, including CP-2. In contrast, H&N was to have a major role there throughout the rest of the Cold War. This company was based in Los Angeles and Las Vegas. It provided architectural and engineering support for civil, mechanical, and electrical design services. The firm also provided quality control services and materials testing. It was one of a relatively small set of contractors that, once initially established, continued to design, build, and operate the test site for the entire Cold War period and beyond. This remarkable continuance of major companies and personnel contributed strongly to the peculiar character and solidarity of the long-term workers at the site.

CP-1A was designed by REECo. The original construction company from Las Vegas was terminated due to suspicion of ties with organized crime. REECo out of El Paso, Texas was brought in to do the work. REECo was previously involved with building special weapons project sites and therefore already had most of the security clearances needed to work here (Ristvet 2016). REECo established an office in Las Vegas and became ubiquitous in its support services on site. These services included operations and maintenance; mining, drilling, and construction; environmental, safety, and health services; housing and cafeterias; motor pool; and medical services. In addition to major design, which in this case was essentially a copy of the design elements of the original CP-1 as designed by Haddock, REECo designed and installed a plethora of minor alterations and fabricated specialized furnishings for CP-1 throughout the years of the Cold War. REECo was a user as well as designer of the building, occupying several of its support spaces, staffing the cafeteria, and maintaining the building. The former functions of REECo have been taken over by NSTec.

CP-1B, which is by far the most capably designed element of CP-1, was designed by Norman Engineering Co. of Los Angeles (Norman). This firm had the benefit of years of practical experimentation on the previous phases of construction both in regard to how the building did or did not withstand the rigors of nearby underground testing, and in how the building was actually used. The result was a far more robust structural design. Its centralized planning of interior spaces was so well thought-out that it survived with almost no changes for the rest of the period of nuclear testing. By the time Norman designed CP-1B in 1966, the firm had been in business in Los Angeles for nearly a decade, having filed as a corporate entity there in 1957.

Other firms designed various modifications and minor additions, but the scale of their work does not merit discussion in regard to the overall architectural significance of the building.

A unique component of the building is the War Room, a concept developed during World War II by the military to efficiently organize information within a central command and control environment for operational decision-making. The War Room at CP-1 functioned within a similar environment in order to conduct nuclear weapons tests, the primary purpose of the test site. It and the Briefing Room below it were the focus of the CP-1B addition to the building. In the War Room, information was processed by a team of various key personnel responsible for conducting the tests. The room had large screens for real time visual displays of the tests, viewed by personnel sitting around a large table and at a row of consoles. Phones were available on the table and consoles for communicating with personnel outside the room. A large floor-to-ceiling map of the test site and surrounding areas covered a portion of one wall. A gallery in the mezzanine above and facing the main room was for additional observers.

In addition to the architectural significance of the building itself, many of the components developed there have been extremely important. A good example is the bhangmeter installed on the building. It was an early version of a device which remains central to remote sensing now done by satellites to detect the detonation of nuclear devices anywhere in the world and to estimate yield by its distinctive double flash of light.
(CONTINUED)

13. ELIGIBILITY JUSTIFICATION (CONTINUED)

Criterion D

This is an unusual case where a building appears to have significant information potential regarding the question of how a concrete building incorporating two different designs has reacted to a very long series of precisely documented seismic shocks. This makes it a surviving case study of a phenomenon which is both extremely rare and one that could have important implications to earthquake-resistant concrete designs.

In the past, this building was used for a ground-breaking study which developed a method of testing buildings for their resistance to radiation (Burson 1969). Although at present scientific interest in this topic is not high, an increase in the threat of nuclear attack could rekindle interest in it, in which case it could prove invaluable to have this test case available for restudy.

The building is also a focal point for questions regarding how a building for nuclear testing was designed and located on the landscape. It has a complex history of changes through time according to need, changing technology, and politics. It also reflects the complex history of interaction among the various groups which used the building. Questions regarding the complex sociology of the building as it related to the federal agency representatives, the laboratories, and other contractors, have only been touched upon by the research done for the present report.

Integrity

CP-1 retains a high integrity of location, design, setting, materials, workmanship, feeling, and association. Whether sitting in the War Room surrounded by the monitors and chairs of the Scientific Advisory Panel or looking out of a viewing port in a control room at the panorama of Yucca Flat, it is not at all difficult to imagine that another device is about to be detonated. Changes in the building that have been made since the end of the Cold War are matters of relatively small details. This is not surprising since for many years there was an imminent possibility of a renewal of testing as had occurred during the earlier testing moratorium. For the most part the building is still very similar to the way it was during testing, and the exterior is virtually unchanged. In addition, it is surrounded by buildings, structures, and landscape alterations which have survived almost intact from the Cold War period.

(CONTINUED)

13. ELIGIBILITY JUSTIFICATION (CONTINUED)

REFERENCES

Brownlee, Robert
2016 Personal Communication with Colleen Beck, 07/15/16. Loveland, Colorado.

Burson, Zolin G.
1969 *Experimental Evaluation of the Fallout Radiation Protection Provided by Structures in the Control Point Area of the Nevada Test Site*. EG&G Technical Report L-939 (EGG-1183-1436).

Campbell, Bob, Ben Diven John McDonald, Bill Ogle, and Tom Scolman
1983 Field Testing: The Physical Proof of Design Principles. *Los Alamos Science* Winter/Spring, pp. 164-179.

Costa, Charles (Chuck)
2016 Personal Communication with Colleen Beck, 5/26/2016. Desert Research Institute, Las Vegas, Nevada.

HDR Engineering, Inc. (HDR)
1995 *Whittier Access Project Technical Reports*. Prepared for the Alaska Department of Transportation and Public Facilities. HDR Engineering, Inc.

Michael, Michelle and Adam Smith
2011 The Architecture of the Department of Defense: A Military Style Guide. DOD Legacy Resource Management Program, Washington, D.C. ERDC/CERL B-11-2.

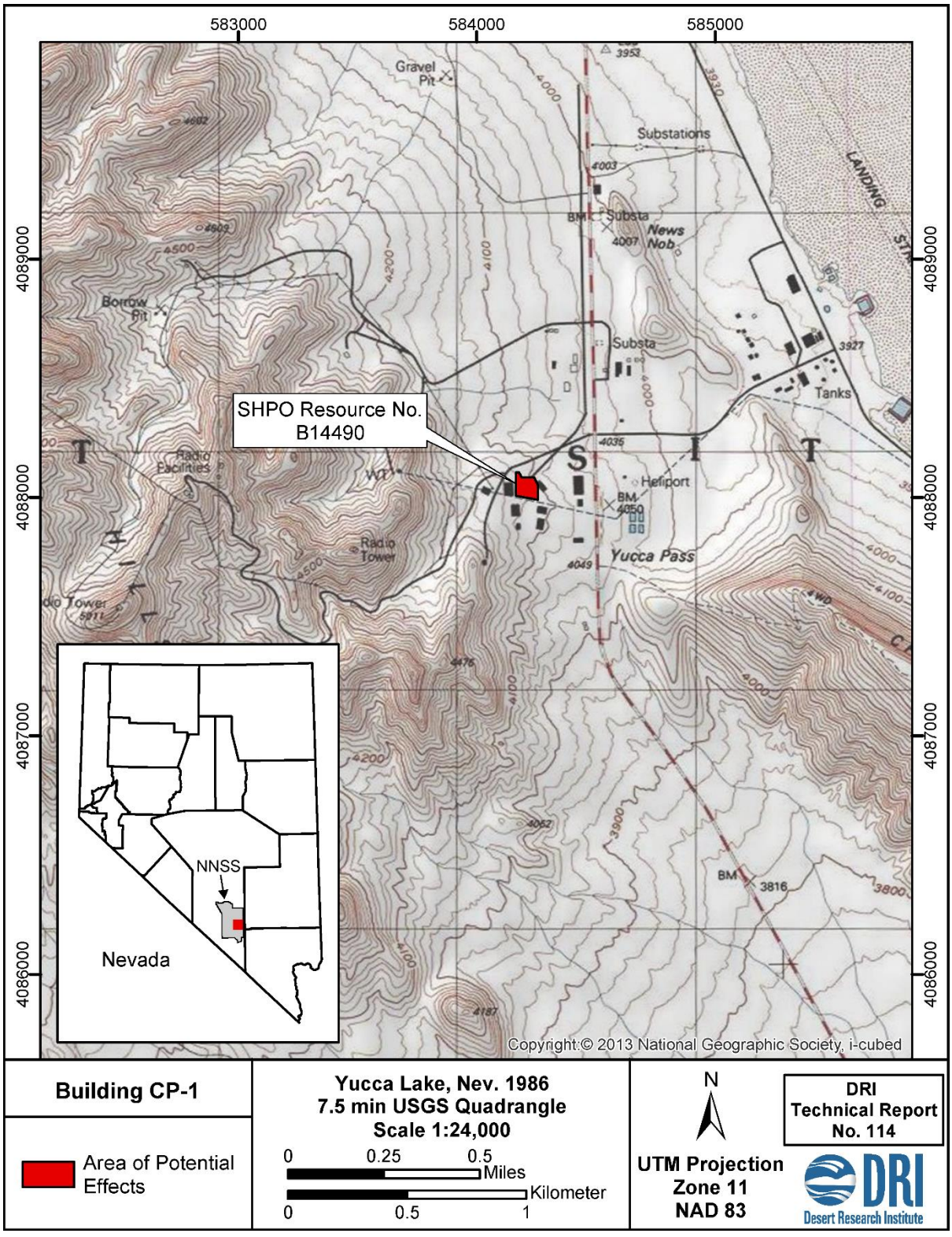
Reynolds Electrical & Engineering Co., Inc. (REECo)
1955 Report on Existing facilities at the Nevada Test Site for the United States Atomic Energy Commission. Manuscript on file at Nevada National Security Administration, Nevada Field Office.

Ristvet, Byron
2016 Personal Communication with Colleen Beck, 5/26/2016. Desert Research Institute, Las Vegas.

Sheehy, Erin
2015 Gold Rush Whittier. Chapter 5 in *City by City: Dispatches from the American Metropolis*, edited by Keith Gessen and Stephen Squibb. Macmillian.

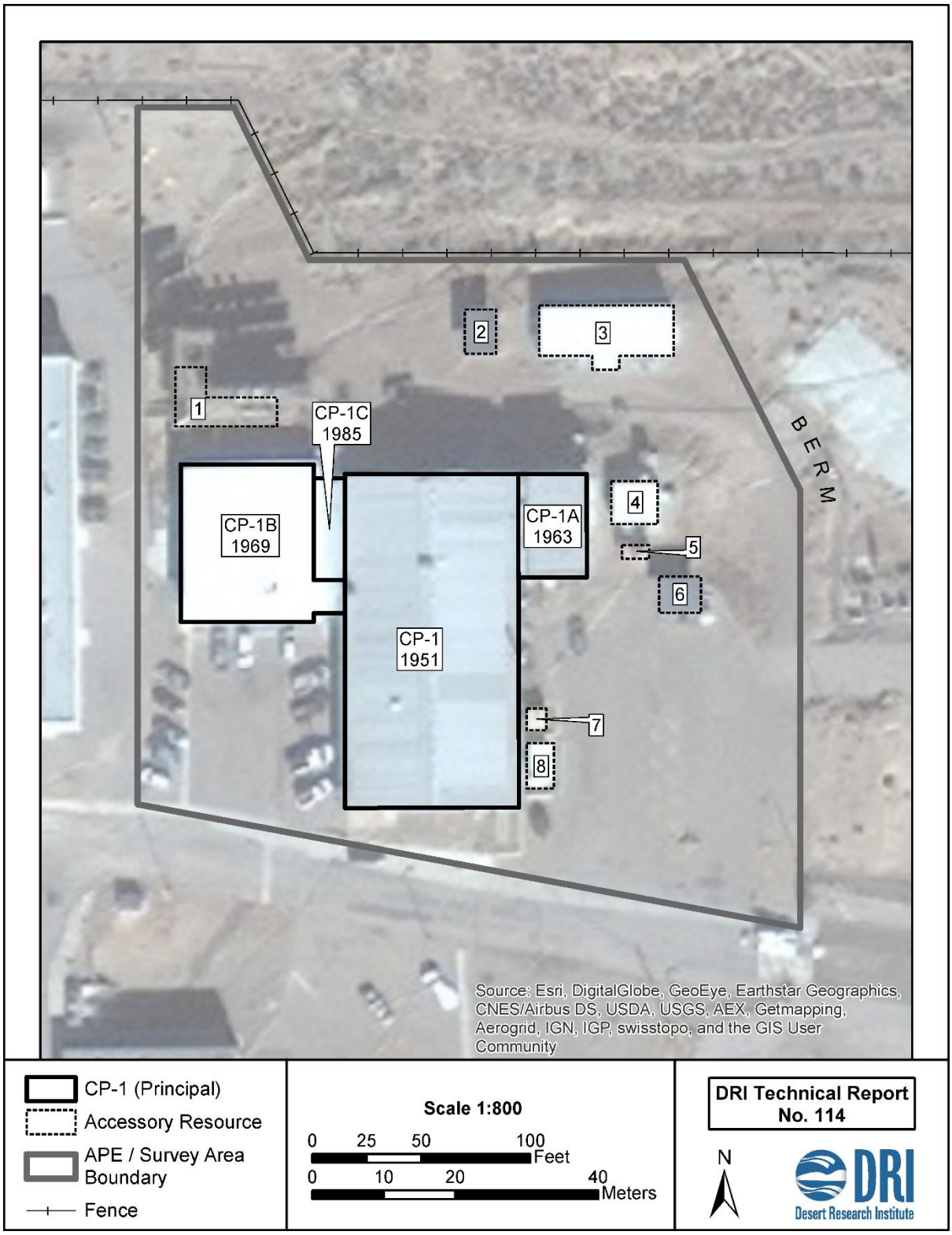
END

14. LOCATION MAPS & SITE PLANS



Resource Overview Map showing the APE of B14490.

14. LOCATION MAPS & SITE PLANS (CONTINUED)



Resource Plan and Boundary Map for B14490.

14. LOCATION MAPS & SITE PLANS (CONTINUED)

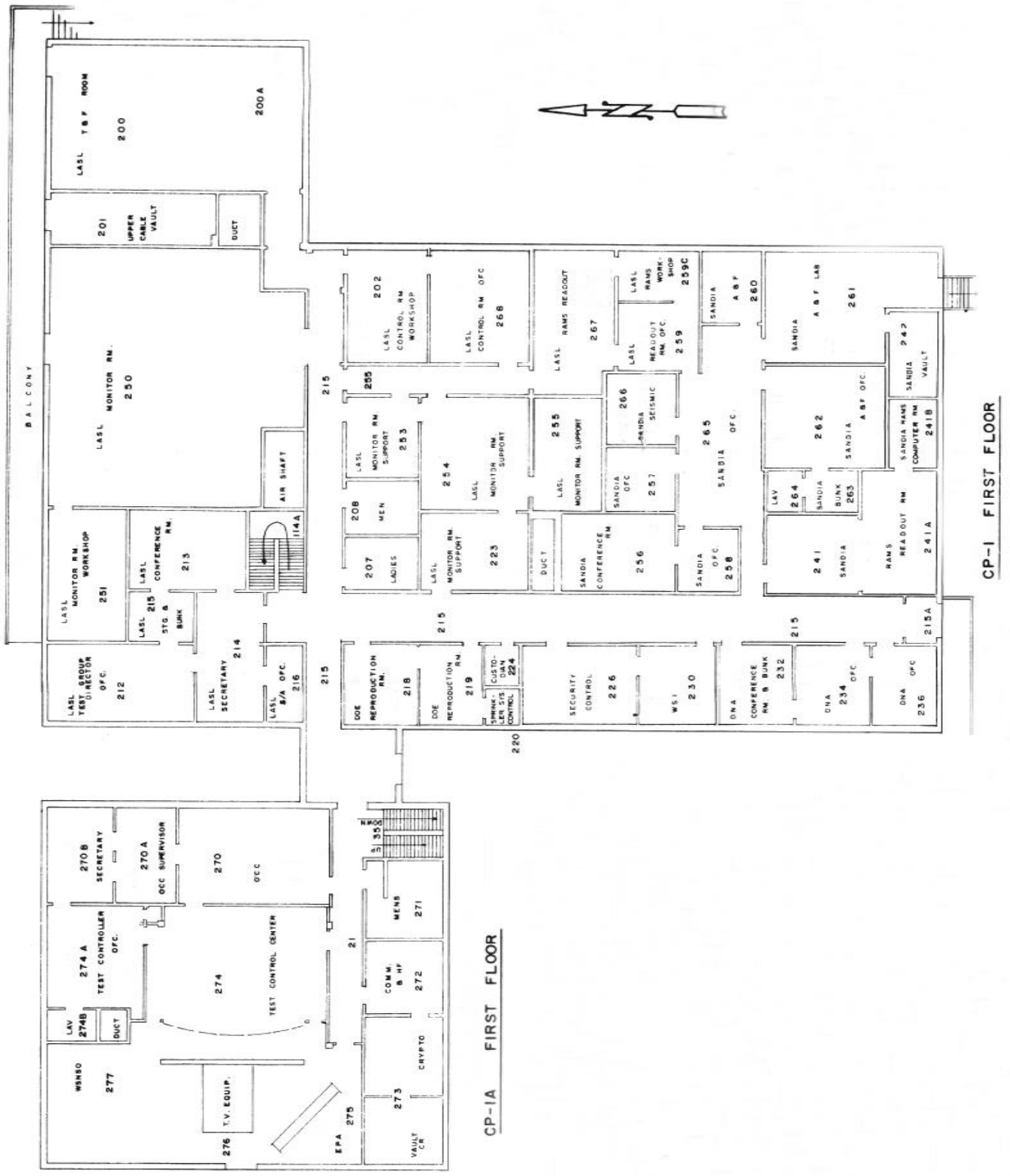
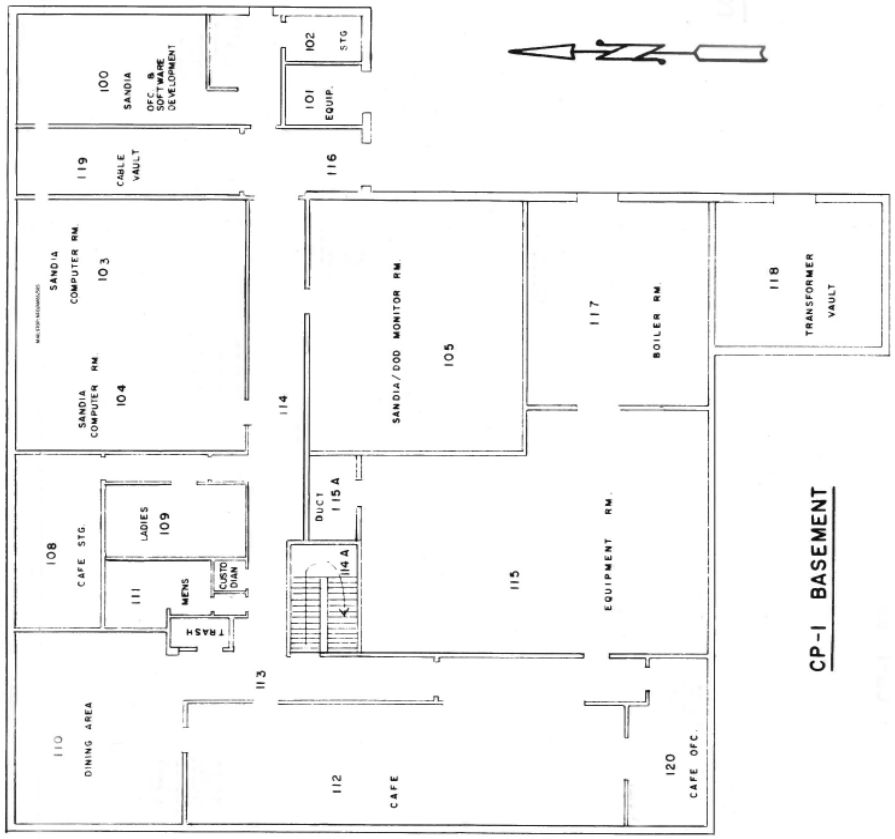


Figure 1985 1st FLR. First Floor in 1985 before Field Office added. (REECo CP-1 Phone Numbers [deleted])

14. LOCATION MAPS & SITE PLANS (CONTINUED)



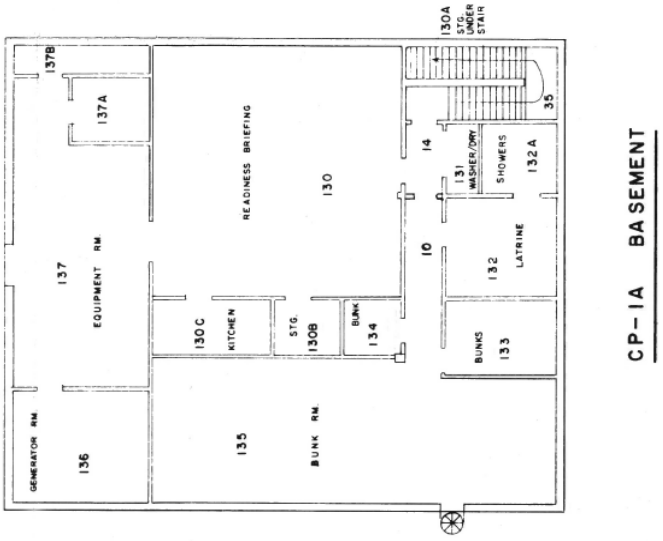
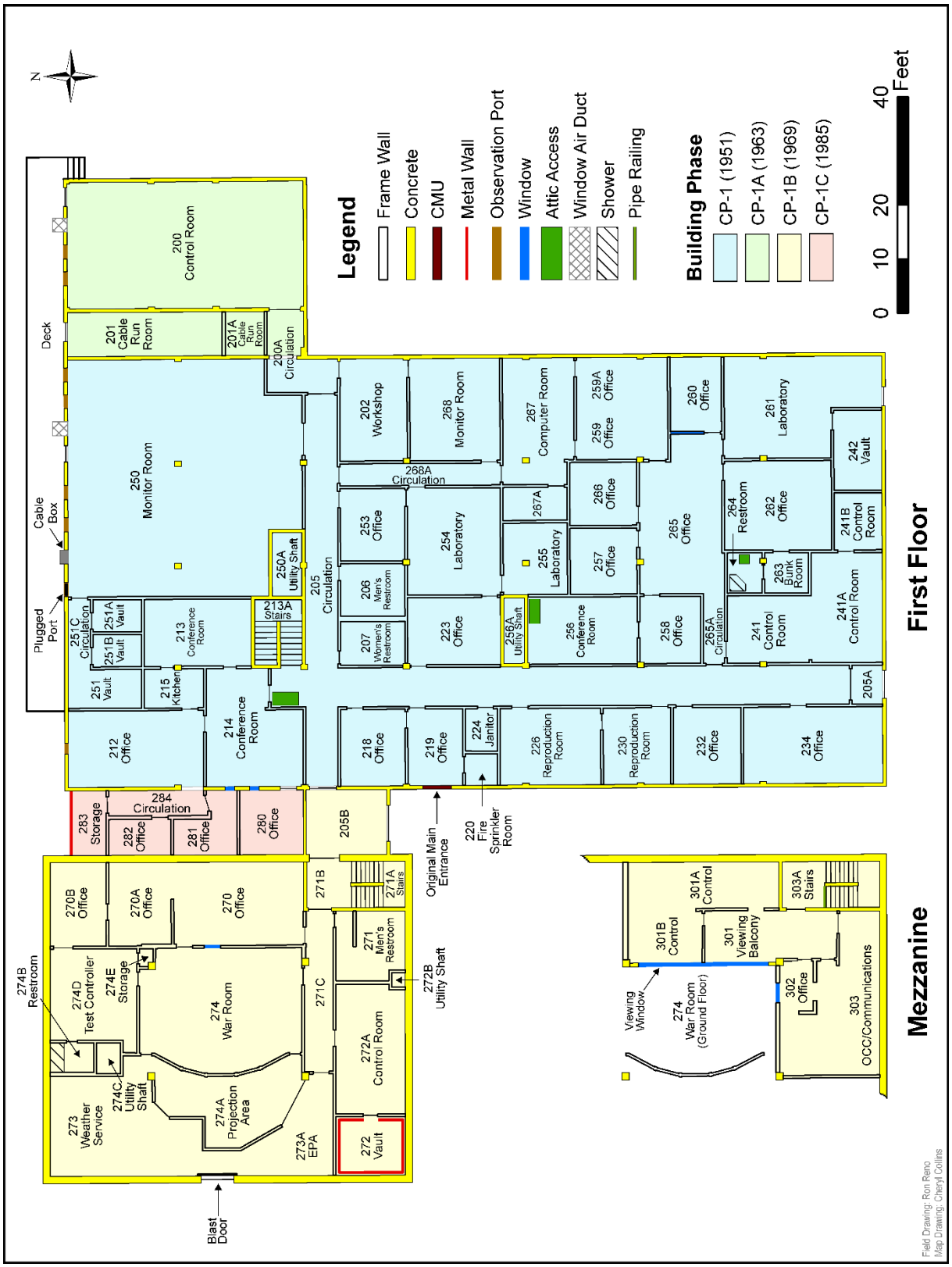


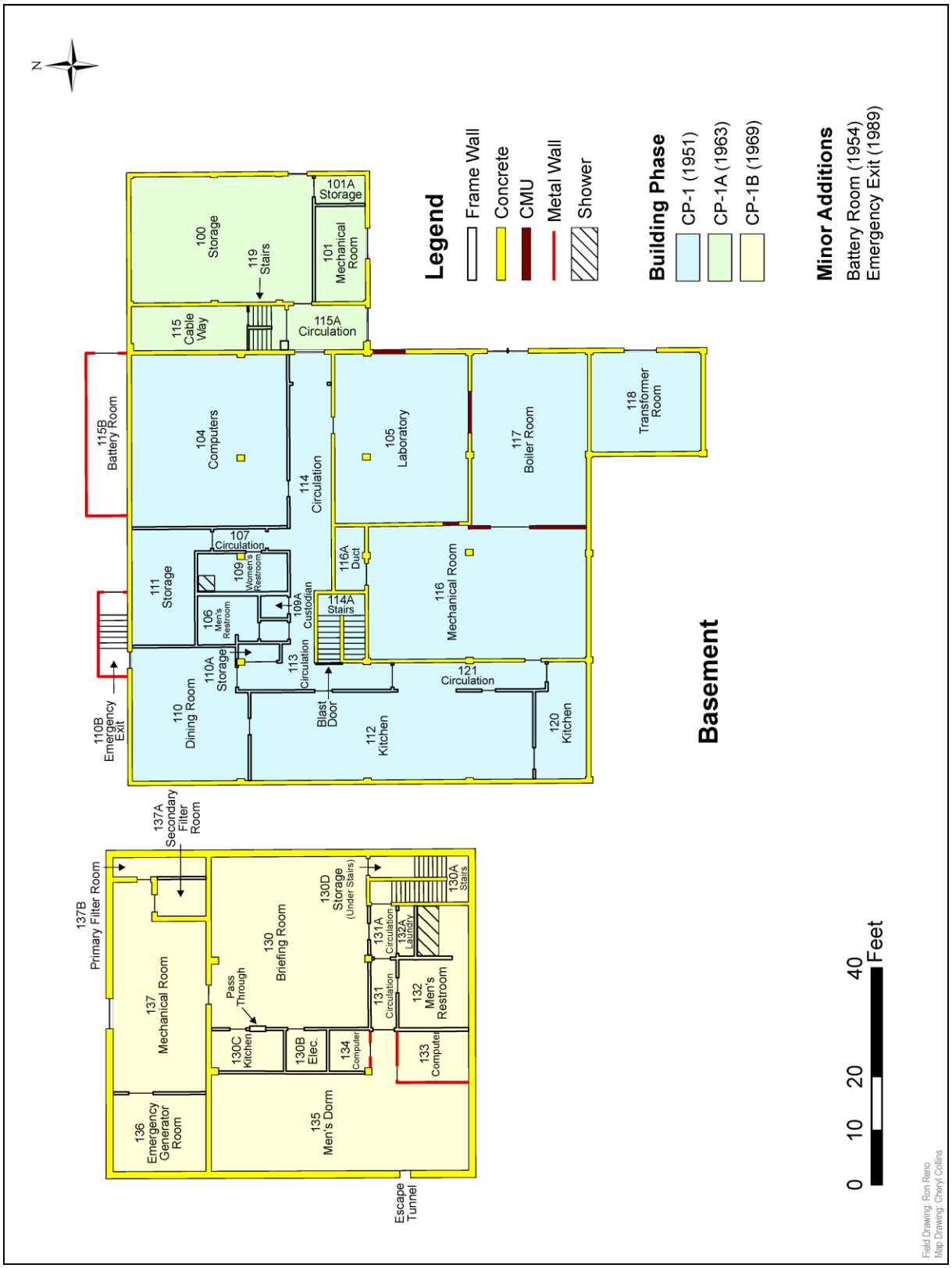
Figure 1985 BSMT. First Floor in 1985 before Field Office added.
(REECo CP-1 Phone Numbers [deleted])

14. LOCATION MAPS & SITE PLANS (CONTINUED)



Plan of the First Floor and Mezzanine in 2016.

14. LOCATION MAPS & SITE PLANS (CONTINUED)



Plan of the Basement in 2016.

15. PHOTOGRAPHS

Low angle aerial photos of CP-1 in 2007. From top to bottom facing southwest, northwest, north, and southeast. (NSTec: D07_6634, 6636, 6637, 6638)

15. PHOTOGRAPHS (CONTINUED)

South façade of CP-1B with main entrance, facing north. (NSTec DSC3351, 5/24/2016)

West façade of CP-1, facing east. (NSTec DSC3361, 5/24/2016)

15. PHOTOGRAPHS (CONTINUED)

South façade of CP-1, facing north. (NSTec DSC3346, 5/24/2016)

South half of east façade of CP-1, facing west. (DRI CP-1 004, 12/8/2015)

15. PHOTOGRAPHS (CONTINUED)

North half of east façade of CP-1, facing west. (NSTec DSC3331, 5/24/2016)

South and east façades of CP-1A, facing northwest. Pour lines are highly visible in this view. (NSTec DSC3330, 5/24/2016)

15. PHOTOGRAPHS (CONTINUED)

North façade of CP-1, CP-1A, and CP-1C, facing south. (DRI CMB_1719, 5/24/2016)

North façade of CP-1B showing basement, facing east-southeast. (DRI CP-1 041, 12/8/2015)

15. PHOTOGRAPHS (CONTINUED)

North and west facades of CP-1B, facing southeast. (DRI CP-1 039, 12/8/2015)

West façade of CP-1B, facing east. (NSTec DSC3379, 5/24/2016)

15. PHOTOGRAPHS (CONTINUED)

War Room still in use but as it is today. (NF-8406, no date)

War Room before portable objects were removed. (D04-2216, 1987)

15. PHOTOGRAPHS (CONTINUED)

War Room from the mezzanine. (NSTec DSC2480, 5/3/2016)

Control Room 250. (NSTec DSC1925, 4/20/2016)

15. PHOTOGRAPHS (CONTINUED)

Raised computer floor system in Room 250 is typical of all others. (NSTec DSC1972, 4/20/2016)

15. PHOTOGRAPHS (CONTINUED)

This elaborate door into the Los Alamos Timing and Firing Control Room 200 was installed after 1988, replacing simple steel doors. (NSTec DSC2004, 4/21/2016)

15. PHOTOGRAPHS (CONTINUED)

Los Alamos Timing and Firing Control Room 200. (NSTec DSC2045, 4/21/2016)

War Room projection equipment in Room 274A. (NSTec DSC2514, 5/3/2016)

15. PHOTOGRAPHS (CONTINUED)

Typical Los Alamos technical support room south of the Control Room. (NSTec DSC1587, 4/19/2016)

Sandia technical support Room 241A. (NSTec DSC1300, 4/18/2016)

15. PHOTOGRAPHS (CONTINUED)

Sandia technical support Room 261. (NSTec DSC1349, 4/18/2016)

Typical support room along the west edge of CP-1. (NSTec DSC1667, 4/19/2016)

15. PHOTOGRAPHS (CONTINUED)

Test Director's Office 274D. (NSTec DSC2544, 5/3/2016)

Administrative support and Operations office next to War Room. (NSTec DSC2128, 4/21/2016)

15. PHOTOGRAPHS (CONTINUED)

Principal Sandia administrative office. (NSTec DSC1624, 4/19/2016)

Typical Sandia administrative office. (NSTec DSC1388, 4/18/2016)

15. PHOTOGRAPHS (CONTINUED)

Los Alamos Test Director's Office. Viewing port has been covered for this photo. (NSTec DSC1833, 4/20/2016)

Weather Service Room 273. (NSTec DSC2528, 5/3/2016)

15. PHOTOGRAPHS (CONTINUED)

Restroom. (NSTec DSC1777, 4/19/2016)

Typical custodial closet. (NSTec DSC1674, 4/19/2016)

15. PHOTOGRAPHS (CONTINUED)

Corridor 215 facing north. (NSTec DSC1234, 4/18/2016)

DOE Briefing Room 130. (NSTec DSC2269, 5/2/2016)

15. PHOTOGRAPHS (CONTINUED)

Timing and Firing Room 100. (NSTec DSC2822, 5/5/2016)

Sandia Computer Room 104. (NSTec DSC2662, 5/4/2016)

15. PHOTOGRAPHS (CONTINUED)

Sandia/DOD Monitoring Room. (NSTec DSC2807, 5/5/2016)

Cable Way cellar 115. (NSTec DSC2851, 5/5/2016)

15. PHOTOGRAPHS (CONTINUED)

Kitchen and service counter 112. (NSTec DSC2889, 5/5/2016)

Dining Room 110. (NSTec DSC2872, 5/5/2016)

15. PHOTOGRAPHS (CONTINUED)

Air handler in Room 116. (NSTec DSC2923, 5/5/2016)

Diesel-fueled boilers in Room 117. (NSTec DSC2969, 5/5/2016)

15. PHOTOGRAPHS (CONTINUED)

Views upward into the CP-1 air intake and exhaust ducts. (NSTec DSC2942, 5/5/2016; DSC2983, 5/5/2016)

15. PHOTOGRAPHS (CONTINUED)

Emergency generators in Room 136. (NSTec DSC2304, 5/2/2016)

Emergency generator control in Room 137. (NSTec DSC2322, 5/2/2016)

15. PHOTOGRAPHS (CONTINUED)

Electrical boilers and chiller in Room 137. (NSTec DSC2327, 5/2/2016)

Original basement east entry lobby. (NSTec DSC2812, 5/5/2016)

15. PHOTOGRAPHS (CONTINUED)

At left is ceiling plug in Room 101A after removal of spiral staircase and at right is the CP-1B staircase. (NSTec DSC2153, 5/2/2016; DSC2835, 5/5/2016)

15. PHOTOGRAPHS (CONTINUED)

War Room Observation Balcony, Room 301. (NSTec DSC2162, 5/2/2016)

War Room still image projectors in Room 301A. (NSTec DSC2166, 5/2/2016)

15. PHOTOGRAPHS (CONTINUED)

War Room video support in Room 301B. (NSTec DSC2171, 5/2/2016)

Telecommunications equipment in Room 303. (NSTec DSC2196, 5/2/2016)

15. PHOTOGRAPHS (CONTINUED)

Air handling equipment in the south end of the CP-1 attic. (NSTec DSC1468, 4/18/2016)

1. ***SHPO Resource Number:*** **B14490**
Other ID Number: **06-CP-1**

NEVADA STATE HISTORIC PRESERVATION OFFICE
ARCHITECTURAL RESOURCE ASSESSMENT **(ARA)**
ACCESSORY RESOURCES FORM

IF INVENTORY INVOLVES ACCESSORY RESOURCES, PLEASE INCLUDE THIS FORM WITH THE CORRESPONDING ARA FORM.

2. District Summary

OF **CONTRIBUTING** RESOURCES: N/A
NON-CONTRIBUTING RESOURCES: N/A
TOTAL # OF RESOURCES: N/A

3. Photo

4. Resource

NAME: AR1	
RESOURCE TYPE: Microwave Tower	
DESCRIBE SUBORDINATE NATURE OF RESOURCE: The Microwave Tower is built adjacent to CP-1B. Its only function is to provide communications facilities for that building. (continued) Photo DoE NTS NF1762, undated, facing SE.	
CONSTRUCTION DATE:	1970
CONTRIBUTING	YES: X NO:
INTEGRITY: Good	
ORIGINAL INTACT ALTERED X MOVED	
IF MOVED, LIST DATES AND DESCRIPTION ABOVE:	
CONDITION:	
EXCELLENT X GOOD FAIR POOR	
OTHER DESCRIBE:	

5. Photo

6. Resource

NAME: AR2	
RESOURCE TYPE: DNA Playback Substation	
DESCRIBE SUBORDINATE NATURE OF RESOURCE: Substation originally had 75 & 300KVA transformers on concrete slab, replaced with newer units. Elec. Boxes are mounted on vertical steel panels. Steel 16x20' overhead shelter with nearly flat shed roof was added in 1989. Photo NSTec DSC3197 facing NE.	
CONSTRUCTION DATE:	1983
CONTRIBUTING	YES:X NO:
INTEGRITY:	
ORIGINAL INTACT ALTERED X MOVED	
IF MOVED, LIST DATES AND DESCRIPTION ABOVE:	
CONDITION:	
EXCELLENT X GOOD FAIR POOR	
OTHER DESCRIBE:	

7. RECORDED BY: Reno, King, Beck, Carragher, 2016 AGENCY REPORT NUMBER: DOE/NV/0000939-33

1. ***SHPO Resource Number:*** **B14490**
Other ID Number: **06-CP-1**

NEVADA STATE HISTORIC PRESERVATION OFFICE
ARCHITECTURAL RESOURCE ASSESSMENT **(ARA)**
ACCESSORY RESOURCES FORM

IF INVENTORY INVOLVES ACCESSORY RESOURCES, PLEASE INCLUDE THIS FORM WITH THE CORRESPONDING ARA FORM.

2. District Summary

OF **CONTRIBUTING** RESOURCES: N/A
NON-CONTRIBUTING RESOURCES: N/A
TOTAL # OF RESOURCES: N/A

3. Photo

4. Resource

NAME: AR3	
RESOURCE TYPE: DNA Playback Building 06-CP-20	
DESCRIBE SUBORDINATE NATURE OF RESOURCE: AR3 is a 20x60' one-story rectangular-plan Butler prefabricated corrugated metal building on a concrete slab foundation. Interior remodel in 1989. Off-white roof with tan steel corners and fascia. Nearly flat gable roof. (photo NSTec DSC3203 facing N) (continued)	
CONSTRUCTION DATE:	1983
CONTRIBUTING	YES: X NO:
INTEGRITY:	
ORIGINAL INTACT ALTERED X MOVED	
IF MOVED, LIST DATES AND DESCRIPTION ABOVE:	
CONDITION:	
EXCELLENT X GOOD FAIR POOR	
OTHER DESCRIBE:	

5. Photo

6. Resource

NAME: AR4	
RESOURCE TYPE: Uninterruptable Power Source (UPS)	
DESCRIBE SUBORDINATE NATURE OF RESOURCE: AR4 is an 18x21' rectangular-plan one-story building set on a concrete slab foundation. Sides and roof are yellow corrugated steel and the steel fascia of the nearly flat shed roof is tan. (photo NSTec DSC3293 facing NE) (continued)	
CONSTRUCTION DATE:	1972
CONTRIBUTING	YES: X NO:
INTEGRITY:	
ORIGINAL INTACT ALTERED X MOVED	
IF MOVED, LIST DATES AND DESCRIPTION ABOVE:	
CONDITION:	
EXCELLENT X GOOD FAIR POOR	
OTHER DESCRIBE:	

7. RECORDED BY: Reno, King, Beck, Carragher, 2016 AGENCY REPORT NUMBER: DOE/NV/0000939-33

1. ***SHPO Resource Number:*** **B14490**
Other ID Number: **06-CP-1**

NEVADA STATE HISTORIC PRESERVATION OFFICE
ARCHITECTURAL RESOURCE ASSESSMENT **(ARA)**
ACCESSORY RESOURCES FORM

IF INVENTORY INVOLVES ACCESSORY RESOURCES, PLEASE INCLUDE THIS FORM WITH THE CORRESPONDING ARA FORM.

2. District Summary

OF **CONTRIBUTING** RESOURCES: N/A
NON-CONTRIBUTING RESOURCES: N/A
TOTAL # OF RESOURCES: N/A

3. Photo

4. Resource

NAME: AR5	
RESOURCE TYPE: Transformer	
DESCRIBE SUBORDINATE NATURE OF RESOURCE: AR5 is a Square D 500/560KVA 4,160V transformer flanked by two large electrical boxes. All three units rest on a concrete slab protected by bollards. (photo NSTec DSC3318)	
CONSTRUCTION DATE:	Ca. 1970s
CONTRIBUTING	YES: X NO:
INTEGRITY:	
ORIGINAL X INTACT ALTERED MOVED	
IF MOVED, LIST DATES AND DESCRIPTION ABOVE:	
CONDITION:	
EXCELLENT X GOOD FAIR POOR	
OTHER DESCRIBE:	

5. Photo

6. Resource

NAME: AR6	
RESOURCE TYPE: Standby Generator	
DESCRIBE SUBORDINATE NATURE OF RESOURCE: AR6 is a Detroit Diesel generator with Westinghouse components on a concrete slab. 15x20' flat corrugated steel roof added in 1979 is supported by 4" square steel posts and U-section steel beams and rafters, all painted gray, as is the casing for the generator. Fuel was provided by a portable steel tank (now removed) on adjacent concrete slab. (photo DRI 049)	
CONSTRUCTION DATE:	Ca. 1970s
CONTRIBUTING	YES: X NO:
INTEGRITY:	
ORIGINAL INTACT ALTERED X MOVED	
IF MOVED, LIST DATES AND DESCRIPTION ABOVE:	
CONDITION:	
EXCELLENT X GOOD FAIR POOR	
OTHER DESCRIBE:	

7. RECORDED BY: Reno, King, Beck, Carragher, 2016 AGENCY REPORT NUMBER: DOE/NV/0000939-33

1. ***SHPO Resource Number:*** **B14490**
Other ID Number: **06-CP-1**

NEVADA STATE HISTORIC PRESERVATION OFFICE
ARCHITECTURAL RESOURCE ASSESSMENT **(ARA)**
ACCESSORY RESOURCES FORM

IF INVENTORY INVOLVES ACCESSORY RESOURCES, PLEASE INCLUDE THIS FORM WITH THE CORRESPONDING ARA FORM.

2. District Summary

OF **CONTRIBUTING** RESOURCES: N/A
NON-CONTRIBUTING RESOURCES: N/A
TOTAL # OF RESOURCES: N/A

3. Photo

4. Resource

NAME: AR7	
RESOURCE TYPE: Garbage Locker	
DESCRIBE SUBORDINATE NATURE OF RESOURCE: A 9x9 ft single-story one-room building with walls and roof of corrugated metal exactly matching that used for the DNA Playback Building in materials and finish. It is built on a concrete slab with low sills. The flush door is centered in the east façade. (photo DRI CMB_1825 facing W)	
CONSTRUCTION DATE:	1972
CONTRIBUTING	YES: X NO:
INTEGRITY: Good	
ORIGINAL X INTACT ALTERED MOVED	
IF MOVED, LIST DATES AND DESCRIPTION ABOVE:	
CONDITION:	
EXCELLENT X GOOD FAIR POOR	
OTHER DESCRIBE:	

5. Photo

6. Resource

NAME: AR8	
RESOURCE TYPE: Diesel Fuel Tank	
DESCRIBE SUBORDINATE NATURE OF RESOURCE: white rectangular steel fuel tank resting on a concrete slab and surrounded by portable concrete barriers. It is a Hoover Vault Tank made by Hoover Containment Systems, Inc. It has a capacity for 5,021 gallons, has integrated secondary containment, and is ballistic resistant. A ladder leads to the top of the tank. (photo DRI CMB_1832 facing NW)	
CONSTRUCTION DATE:	c.1998
CONTRIBUTING	YES: NO: X
INTEGRITY:	
ORIGINAL X INTACT ALTERED MOVED	
IF MOVED, LIST DATES AND DESCRIPTION ABOVE:	
CONDITION:	
EXCELLENT X GOOD FAIR POOR	
OTHER DESCRIBE:	

7. RECORDED BY: Reno, King, Beck, Carragher, 2016 AGENCY REPORT NUMBER: DOE/NV/0000939-33

APPENDIX B

INTRODUCTION

Appendix B consists of CP-1 interior room forms. These provide a detailed description of the present condition of all 126 rooms in CP-1 along with NSTec room photographs. Room descriptions and photography were completed during two field sessions: April 18-22 and May 2-5, 2016. Ron Reno (DRI) recorded each room on field forms. Steven Carragher (NSTec) photographed the rooms and Maureen King (DRI) maintained a photo log. Utilities were not on in the building and alternate portable lighting had to be used to accomplish recording and photography. James Treppicione (NSTec) and George Robinson (NSTec) assisted with lighting and logisitics for working in the building.

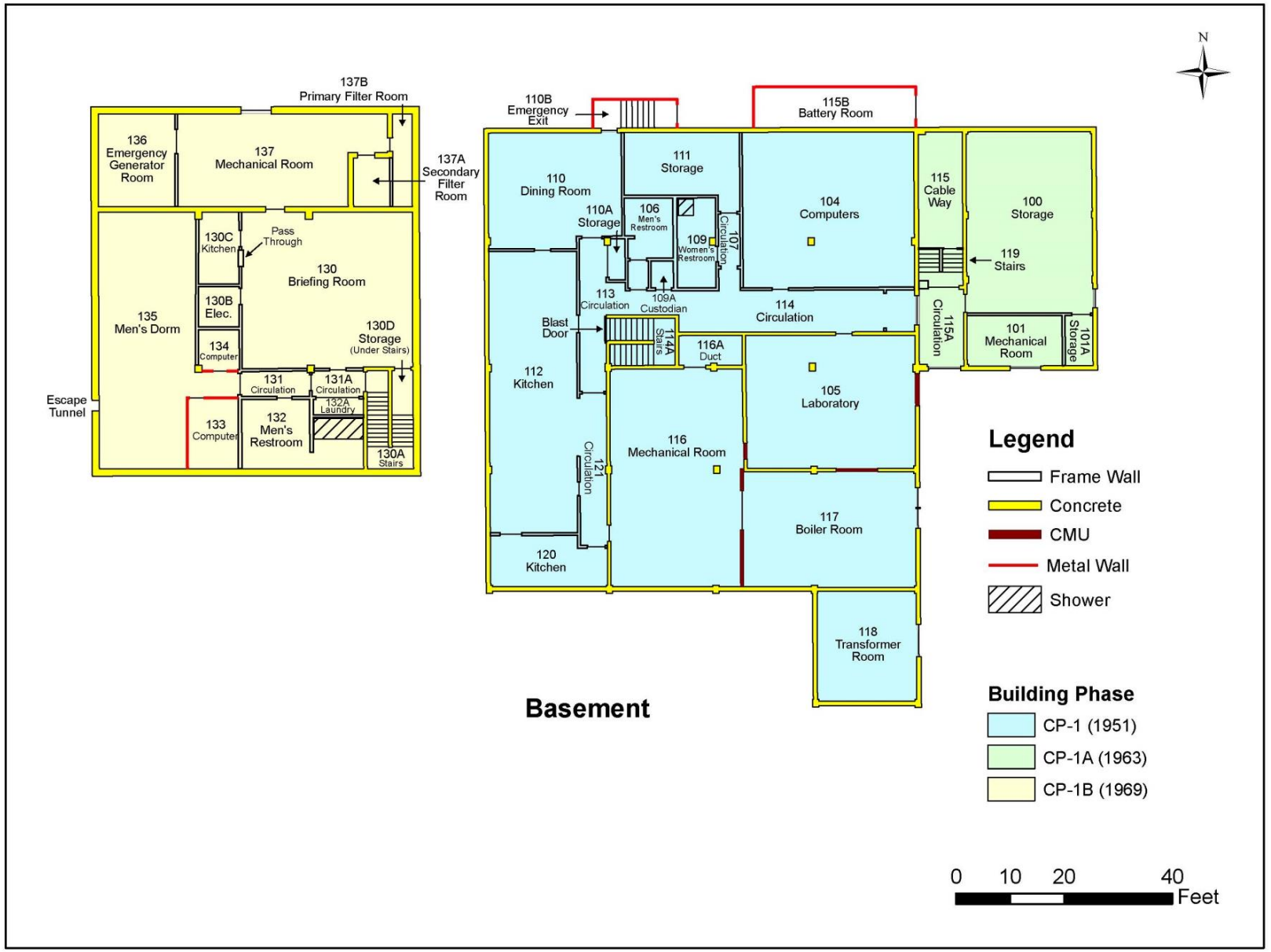
This appendix includes three sections: general observations relevant to rooms in CP-1; maps of the present plan of the first floor and mezzanine, and the basement; and individual room forms.

GENERAL OBSERVATIONS

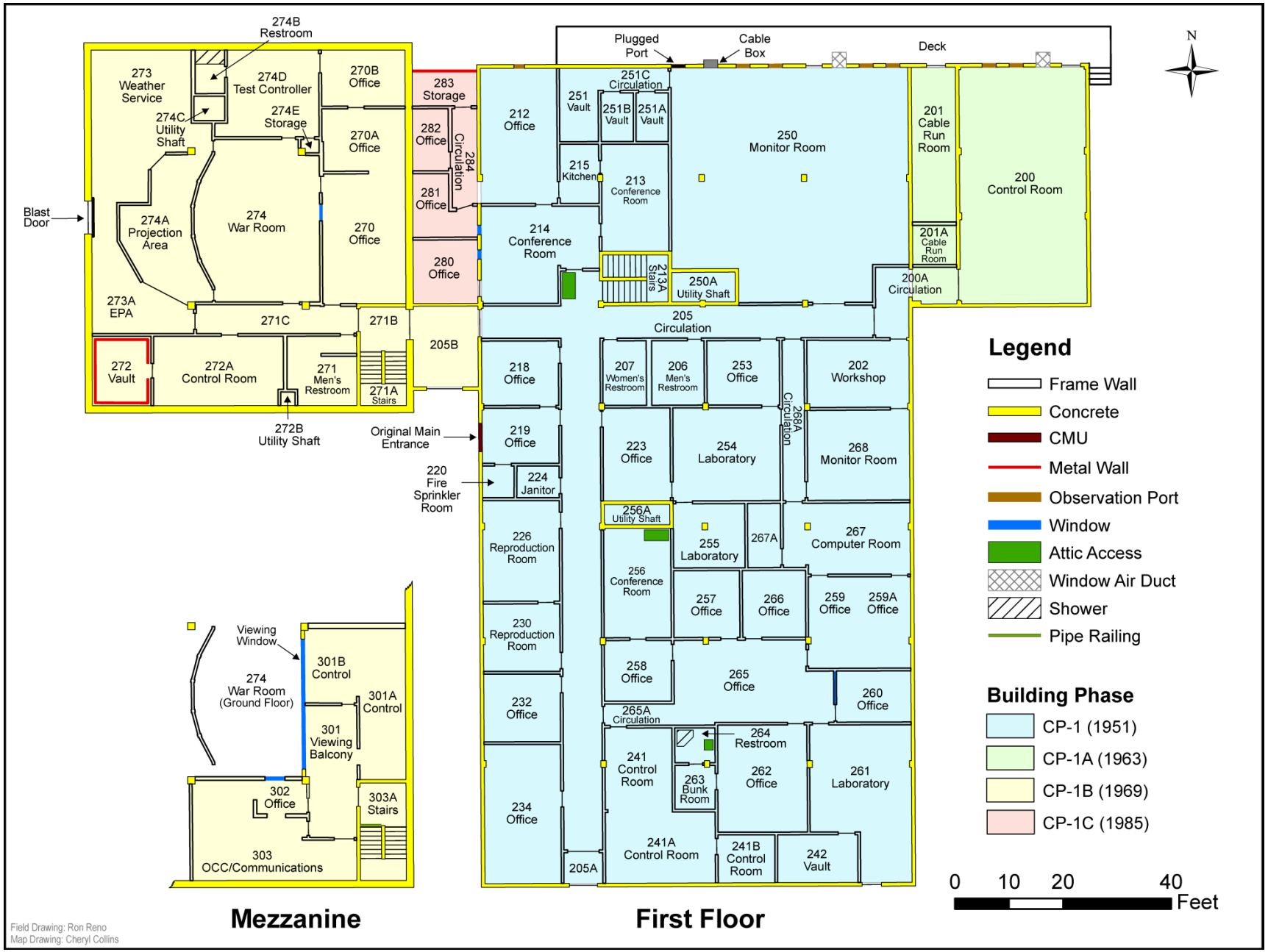
The following observations apply to many of the rooms, most concern doors:

- Doors are wood or pressboard unless noted otherwise.
- All exterior doors with access to main interior spaces are alarmed. All are numbered.
- Most doors on the first floor of CP-1 have plain painted 2 ½ in. wood door surrounds.
- Doors in CP-1B have steel frames unless otherwise noted.
- Most recent paint is slightly pinkish tan unless otherwise noted. Previous coat was true tan.
- Ceilings are equipped with air vents and fire suppression sprays throughout.
- Plastic cove base has replaced original wood base in most places.
- It is typical throughout the building for concrete pillars to be incorporated into walls. The pillars are usually painted but not sheathed in drywall or other wall covering.

PLAN MAPS


N
137B
Primary Filter Room
136
Emergency
Generator
Room
137
Mechanical Room
137A
Secondary
Filter
Room
130C
Kitchen
Pass
Through
130
Briefing Room
130B
Elec.
135
Men's Dorm
134
Computer
130D
Storage
(Under Stairs)
131
Circulation
131A
Circulation
132A
Laundry
Escape
Tunnel
133
Computer
132
Men's
Restroom
130A
Stairs
110B
Emergency
Exit
115B
Battery Room
110
Dining Room
111
Storage
110A
Storage
106
Men's
Restroom
109
Women's
Restroom
107
Circulation
104
Computers
115
Cable
Way
100
Storage
119
Stairs
113
Circulation
109A
Custodian
114
Circulation
115A
Circulation
101
Mechanical
Room
101A
Storage
Blast
Door
114A
Stairs
116A
Duct
112
Kitchen
105
Laboratory
116
Mechanical Room
121
Circulation
117
Boiler Room
120
Kitchen
118
Transformer
Room
Basement
Legend
Frame Wall
Concrete
CMU
Metal Wall
Shower
Building Phase
CP-1 (1951)
CP-1A (1963)
CP-1B (1969)
0
10
20
40
Feet

PLAN MAPS


274B Restroom
273 Weather Service
274D Test Controller
270B Office
274C Utility Shaft
274E Storage
270A Office
283 Storage
282 Office
Circulation 284
281 Office
280 Office
Blast Door
274A Projection Area
274 War Room
270 Office
273A EPA
271C
271B
205B
272 Vault
272A Control Room
271 Men's Restroom
271A Stairs
272B Utility Shaft
Original Main Entrance
220 Fire Sprinkler Room
Plugged Port
Cable Box
Deck
251C Circulation
212 Office
251 Vault
251B Vault
251A Vault
250 Monitor Room
201 Cable Run Room
200 Control Room
215 Kitchen
213 Conference Room
214 Conference Room
213A Stairs
250A Utility Shaft
201A Cable Run Room
200A Circulation
205 Circulation
218 Office
207 Women's Restroom
206 Men's Restroom
253 Office
202 Workshop
219 Office
223 Office
254 Laboratory
268A Circulation
268 Monitor Room
224 Janitor
256A Utility Shaft
226 Reproduction Room
255 Laboratory
267A
267 Computer Room
256 Conference Room
257 Office
266 Office
259 Office
259A Office
230 Reproduction Room
258 Office
265 Office
260 Office
232 Office
265A Circulation
264 Restroom
241 Control Room
263 Bunk Room
262 Office
261 Laboratory
234 Office
241A Control Room
241B Control Room
242 Vault
205A
Viewing Window
274 War Room (Ground Floor)
301B Control
301A Control
301 Viewing Balcony
302 Office
303A Stairs
303 OCC/Communications
Mezzanine
First Floor
N
Legend
Frame Wall
Concrete
CMU
Metal Wall
Observation Port
Window
Attic Access
Window Air Duct
Shower
Pipe Railing
Building Phase
CP-1 (1951)
CP-1A (1963)
CP-1B (1969)
CP-1C (1985)
0 10 20 40
Feet
Field Drawing: Ron Reno
Map Drawing: Cheryl Collins

ROOM FORMS

ROOM #: 100	**PHASE:** A	**LEVEL:** Basement	**AREA:** 812 sq. ft.	**DATE:** 5/3/16
FUNCTION(S): Storage				

Interior from the room entrance, view northeast (DSC2821).

Southern portion of the room, showing stained wood divided shelf on the south wall and exterior door on the east wall, view southeast (DSC2827).

ELEMENT	DESCRIPTION	CONDITION
North wall	Concrete pilasters are in both corners.	
South wall	Drywall, emergency light	
East wall	Painted concrete with 2 pilasters and electric box	
West wall	Painted concrete with 2 pilasters, 2 wood shelves	
All walls	Light gray, many surface-mounted rectangular conduits and outlet strips	
Ceiling	Panels measuring 2 x 4 ft. These are dropped an additional foot along south and west edges of the room, 5 ft. from walls.	Water damage
Floor	Gray carpet, 4 in. black plastic base	
Doors	West door: gray (originally pale yellow) flush steel with light East door: flush steel labeled CP1-7	
Windows	None	
Lighting	Recessed 1 x 4 ft. lighting with diffusers, most are in continuous strips	
Built-ins	Stained wood divided shelf on the south wall.	

ROOM #: 101	**PHASE:** A	**LEVEL:** Basement	**AREA:** 176 sq. ft.	**DATE:** 5/4/16
FUNCTION(S): Mechanical				

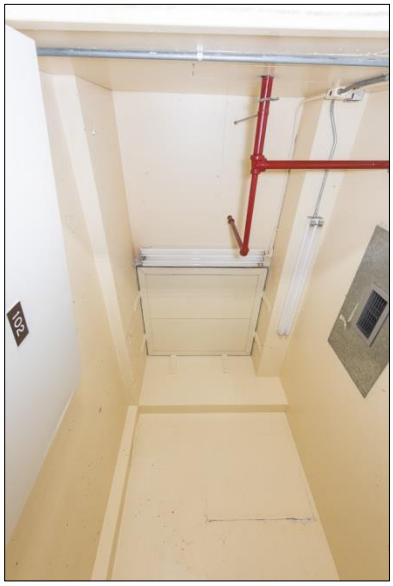
Mechanical Room viewed from the exterior of the building, view north (DSC2582).

View into Mechanical Room from the door, showing Trane Climate Changer, view northwest (DSC2583).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall faced with fire-resistant pressboard panels	
South wall	Concrete, hole plugged with CMU	
East wall	Drywall, unpainted	
West wall	Concrete	
Concrete walls	Concrete walls are not chamfered and retain remnants of chalk line grid from forms. Form tie divots are plugged.	
All walls		
Ceiling	Unpainted concrete floor underside and beams	
Floor	Concrete with floor drain	
Doors	The south door is flush steel in steel frame. It is gray outside and green inside. Door is not alarmed.	
Windows	None	
Lighting	Suspended incandescent	
Built-ins	Most of the room occupied by Trane Climate Changer. Ducts through the south and west south walls. Electrical boxes and controls on the south and north walls. Controls include: AC Motor Speed Control and Flow Economizer by Parametrics, Orange, Connecticut.	

ROOM #: 102/101A	**PHASE:** A	**LEVEL:** Basement	**AREA:** 56 sq. ft.	**DATE:** 5/3/16
FUNCTION(S): Storage, Circular Stair (removed)				

Interior view from the door, view south (DSC2832).



View of ceiling, showing steel-framed patch where circular stair was removed, view south (DSC2833).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall	
South wall	Concrete with pilaster in southeast corner. Door labeled 102 but identified as Room 101A on Space Management Plan.	Cracks
East wall	Concrete rectangular CMU wall patch surrounded by cracks which extend to corner of building.	Cracks
West wall	Drywall	
All walls	Pale yellow	
Ceiling	The north half of the ceiling is concrete. South is steel-framed patch where circular stair was removed. Concrete floor beam exposed above west wall.	
Floor	Tan 1 ft. square linoleum tiles with brown plastic 4 in. base	
Doors	Flush steel	
Windows		
Lighting	Surface-mount neon 2 and 3-tube without diffuser	
Built-ins		

ROOM #: 104	**PHASE:** 1	**LEVEL:** Basement	**AREA:** 931 sq. ft.	**DATE:** 5/3/16
FUNCTION(S): Sandia Computer Room (formerly General and Electronics Shops 103 and 104)				

Interior of Computer Room, showing power distribution system next to the south wall, view southeast (DSC2662).

Raised floor with panel removed, showing original floor of light green tile (DSC2666).

ELEMENT	DESCRIPTION	CONDITION
North wall	Concrete with electrical box	
South wall	Drywall with electrical boxes and stained wood shelf	
East wall	Concrete with junction/relay boxes for communication computer cables	
West wall	Drywall with stained wood shelf	
All walls	Off white	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	The floor was originally light green 1 ft. square tiles. The floor is now raised 6 in. Steel frame for floor is supported by screw jacks. Floor is 2 x 2 ft. white/silver panels with dark edges. Many louvered AC vents in the floor. Entire void served for air handling without ducting. Void also served as cableway. Ramp at doorway of same 2 x 2 ft. panels has been covered with carpet.	
Doors	Flush with wire-reinforced light. Door labeled: SANDIA LABORATORIES / REMOTE EXPERIMENT MONITOR SYSTEM / PEP-11 COMPUTER FACILITY. The door is steel frame with weather strip and has a combination lock with hasp.	
Windows	None	
Lighting	Inset 2 x 4 ft. with diffusers	
Built-ins	Six motion sensors are at tops of walls. Several computer racks still present (most removed). Large power distribution system unit next to south wall with mass of cables out of back leading into subfloor. The room contains two large Liebert System 3 air handling units and controls for heating, cooling, humidifying, and dehumidifying.	

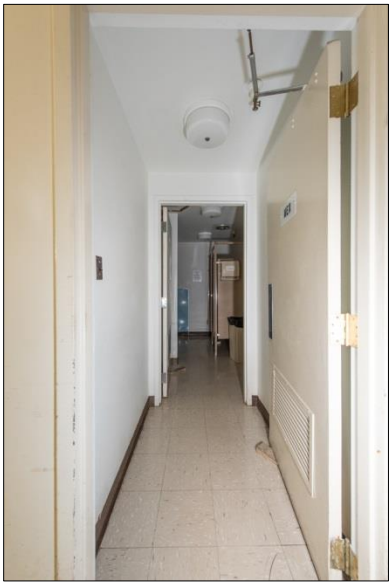
ROOM #: 105	**PHASE:** 1	**LEVEL:** Basement	**AREA:** 769 sq. ft.	**DATE:** 5/3/16
FUNCTION(S): Laboratory (originally Boiler Room 117)				

Overview of the western section of the room, door on the north wall has a non-skid ramp and is the only entrance/exit, view west (DSC2807).

View showing communication cable/relay boxes and air handler on the south wall, view southeast (DSC2808).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall	Air handler and communication cable/relay boxes. Blocked double door barely visible as cracks. The door is CMU covered with plaster and painted.	
East wall	North end of the wall is plywood, the rest is drywall furred over concrete. A communications rack is attached to plywood.	
West wall	Air handler	
All walls	The walls are 8 in. thick concrete. Most blocked doors are not visible from inside room.	
Ceiling	The ceiling is 2 x 4 ft. suspended panels. Original ceiling is visible through removed panels and is gray painted concrete with remnants of light fixtures and conduit.	
Floor	Raised 6 in. with dark blue carpet and 4 in. gray plastic base. Nonskid ramp. Parapet rail next to ramp is drywall with metal trim.	
Doors	The door is flush steel with steel frame, louver vent, and keypad lock. The door is off white, formerly light green.	
Windows	None	
Lighting	2 x 4 ft. inset with diffusers	
Built-ins	Cubicle offices are still present.	

ROOM #: 106	**PHASE:** 1	**LEVEL:** Basement	**AREA:** 30 sq. ft.	**DATE:** 5/3/16
FUNCTION(S): Men's Restroom (formerly part of Women's Dormitory 104)				



Flush louver with metal frame door off 114 Circulation, view north (DSC2622).

View of steel stall partitions and sinks, the blue panel wainscot behind the urinals is visible, view north-northeast (DSC2624).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall	Steel stall partitions match Room 109. White Formica drainboard with plastic sinks and a stainless steel-framed mirror above. Above the sinks are surface-mount incandescent globe lights and emergency light. Stainless steel wainscot is behind commodes.	
West wall	Blue melamine panel wainscot is behind urinals.	
All walls	White drywall	
Ceiling	Drywall	
Floor	Tan 1 ft. square linoleum tiles	
Doors	The two doors are flush louver with metal frame.	
Windows	None	
Lighting	Surface-mounted circular incandescent	
Built-ins		

ROOM #: 107	**PHASE:** 1	**LEVEL:** Basement	**AREA:** 46 sq. ft.	**DATE:** 5/3/16
FUNCTION(S): Circulation				

Circulation, view north (DSC2636).

Doors to Rooms 109 (Women's Restroom) and 111 (Storage) off circulation, view northeast (DSC2638).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall	Emergency light	
West wall		
All walls	Off-white drywall	Many cart scrapes
Ceiling	Off-white drywall	
Floor	Tan 1 ft. square linoleum tiles with 4 in. brown plastic base	
Doors	Doors in the circulation have been removed. Steel frame remains in partition.	
Windows		
Lighting	Surface-mount circular incandescent	
Built-ins		

ROOM #: 109	**PHASE:** 1	**LEVEL:** Basement	**AREA:** 131 sq. ft.	**DATE:** 5/3/16
FUNCTION(S): "Ladies" Restroom (formerly part of Women's Dormitory Room 104)				

White Formica drain board with plastic sinks, view northwest (DSC2643).

Metal swinging door to shower, view north (DSC2644).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall		
West wall	White Formica drain board with plastic sinks, chrome-framed mirror; wall mounted glass light globes over sinks; and emergency light.	
All walls	Off-white drywall	
Ceiling	Off-white drywall	
Floor	Tan 1 ft. square linoleum tiles with brown 4 in. plastic base	
Doors	Flush with louver vent	
Windows		
Lighting	Surface-mounted circular incandescent	
Built-ins	Built-ins consist of steel stall partitions, a shower at the north end of restroom, and a drywall shower room partition with metal swinging door. The shower is a plastic enclosure with surface-mounted glass-globe incandescent light. The entry area has a wood bench seat attached to wall. The enclosure is metal-framed white melamine panel wainscot.	

ROOM #: 109A	**PHASE:** 1	**LEVEL:** Basement	**AREA:** 25 sq. ft.	**DATE:** 5/3/16
FUNCTION(S): Custodian Storage (formerly part of Women's Dormitory Room 104)				

Entrance to Custodian Storage off 114 Circulation, view northeast (DSC2626).

View of Custodian Storage, showing blue melamine wainscot, view north (DSC2627).

ELEMENT	DESCRIPTION	CONDITION
North wall	Blue melamine wainscot, gray-painted plywood shelves	
South wall		
East wall	The same wainscot is behind porcelain sink with stainless rim.	Severe water/wear damage
West wall		
All walls	Off-white drywall	
Ceiling	Unpainted bottom of concrete floor	
Floor	Tan 1 ft. square linoleum tiles with 4 in. brown plastic base	
Doors	Flush with louver in steel frame	
Windows		
Lighting	Bare bulb	
Built-ins	Water de-ionizer is mounted on east wall above sink.	

ROOM #: 110	**PHASE:** 1	**LEVEL:** Basement	**AREA:** 526 sq. ft.	**DATE:** 5/4/16
FUNCTION(S): Dining Room (formerly part of Men's Dormitory Room 110)				

Overview from the southwest corner of the room, showing mural on the north wall, air duct, and emergency exit, view northeast (DSC2873).

Southwest corner of the room, showing door to the kitchen with top-rail suspension and galvanized base and stainless steel service bench, view south (DSC2878).

ELEMENT	DESCRIPTION	CONDITION
North wall	The wall is concrete and covered with a large woodland mural.	Insects
South wall	Drywall	
East wall	Drywall	
West wall	Concrete with pilaster	
All walls	Gloss off-white	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	The floor is tan 1 ft. square linoleum with 6 in. dark brown base.	
Doors	The 4 ft. wide circulation door is flush with louver and light. The door from the kitchen is flush sliding with top-rail suspension and galvanized base.	
Windows	None	
Lighting	Recessed 2 x 4 ft. lighting with projecting diffusers.	
Built-ins	Stainless steel service bench with water/ice dispenser on the south wall.	

MISCELLANEOUS ROOM NOTES
Room is now dominated by an 18 in. diameter air duct with many vents. It originates outside north wall at a temporary air handler (now removed) which was installed after failure of the building's chiller (in Room 116). The duct enters metal wall of the exit addition (Room 110B), enters through top of the doorway, and follows the north and west walls to the kitchen. Several louver vents are spaced along the duct. Return air flow exited the north door, permanently kept open by the duct, and exited via another vent in the metal wall of the exit stairway.

ROOM #: 110A	**PHASE:** 1	**LEVEL:** Basement	**AREA:** 29 sq. ft.	**DATE:** 5/4/16
FUNCTION(S): Storage (formerly part of Women's Dormitory Room 104)				

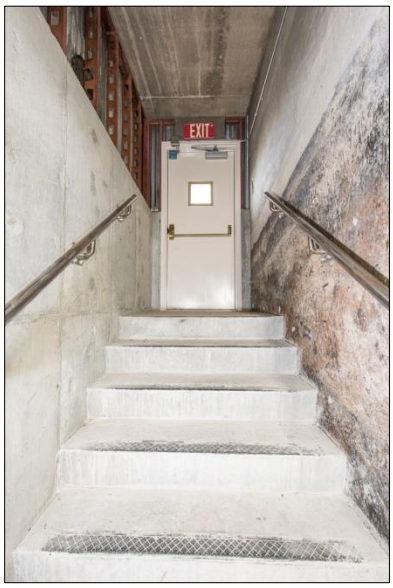
Plastic accordion door to Storage, view northeast (DSC2863).

Storage, showing bare bulb light and pillar in the northwest corner, view northeast (DSC2864).

ELEMENT	DESCRIPTION	CONDITION
North wall	Pillar in northwest corner	
South wall		
East wall		
West wall		
All walls	White melamine panels with metal trim strips	
Ceiling	Off-white drywall	
Floor	Tan 1 ft. square linoleum tiles with 4 in. brown plastic base	
Doors	Plastic accordion	
Windows	None	
Lighting	Bare bulb	
Built-ins	None	

ROOM #: 110B	**PHASE:** 1989 Addition	**LEVEL:** Basement	**AREA:** 52 sq. ft.	**DATE:** 5/4/16
FUNCTION(S): Emergency Exit				

Emergency exit door from Dining Room, showing duct that originates outside the north wall, view northeast (DSC2874).

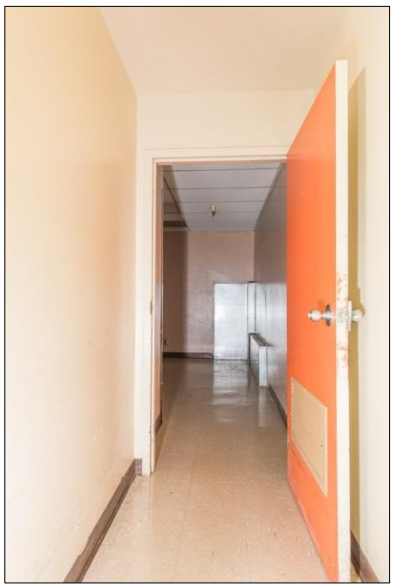


Concrete steps with steel nonskid nosing inserts, steps lead to building exterior, view east (DSC2877).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall	Existing concrete. Asphalt waterproofing on original CP-1 north wall is visible below former ground level.	
East wall		
West wall		
All walls	Precast concrete 2 x 4 ft. panels to mid-height; steel studs and unlined corrugated galvanized siding above.	
Ceiling	Ceiling is bottom surface of existing concrete deck.	
Floor	Concrete floor and steps with steel nonskid nosing inserts and steel pipe railings.	
Doors	Outer door is tan flush steel with one light, alarmed. Inner doorway cut w/o chamfer through north wall of CP-1.	
Windows	None	
Lighting	None	
Built-ins	See Room 110 for description of air conditioner duct.	

MISCELLANEOUS ROOM NOTES
Built in 1989 (Drawing 190991)

ROOM #: 111	**PHASE:** 1	**LEVEL:** Basement	**AREA:** 272 sq. ft.	**DATE:** 5/3/16
FUNCTION(S): Storage (formerly part of Men's Dormitory Room 110)				



Entry into Storage from 107 Circulation, galvanized boxes are in the northeast corner, view north (DSC2650).

Orange drywall on west wall, view west-northwest (DSC2651)

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	Concrete, pinkish tan	
South wall	Drywall, pinkish tan with stainless corner protector by entry.	Severely damaged
East wall	Drywall, pinkish tan	Damaged
West wall	Drywall, orange	Badly damaged
All walls		
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Tan 1 ft. square linoleum tiles	
Doors	Flush with louver. Off-white outside, orange inside.	
Windows		
Lighting	Recessed 2 x 4 ft. lights with diffusers	
Built-ins	Galvanized boxes without outlets are in northeast corner. These likely block former vents.	

MISCELLANEOUS ROOM NOTES
The door is labeled 108.

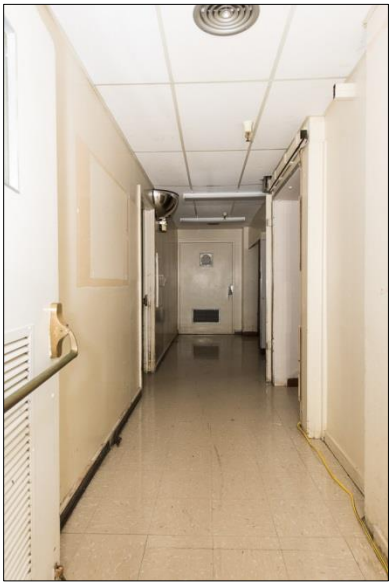
ROOM #: 112	**PHASE:** 1	**LEVEL:** Basement	**AREA:** 773 sq. ft.	**DATE:** 5/4/16
FUNCTION(S): Kitchen (south portion formerly Instrument Shop Room 120)				

Eastern side of the room, wood pattern Formica checkout counter is in the northeast corner, exit is to 113 Circulation, view southeast (DSC2885).

Overview showing grill area, sinks, and service counter, view southwest (DSC2889).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall with a mid-height painted wood rounded 2 ½ in. rail, matching door surrounds.	
South wall	Drywall	
East wall	Drywall with the same mid-height painted wood rail as on the north wall, north of the door.	
West wall	Concrete. Full height stainless behind grills, shorter behind sinks and service counter.	
All walls	Gloss off-white	
Ceiling	Drywall ceiling matching walls. The ceiling is dropped 6 in. to base of a beam across the ceiling, marking the north end of former Instrument Shop (Room 120). Ceiling and lighting in Instrument Shop area at the south end of the room is identical to that in Room 110 (Dining Room). Instrument Shop ceiling originally was underside of concrete floor with spray insulation painted white (visible through displaced ceiling panels).	
Floor	Tan 1 ft. square linoleum tiles, many have been replaced.	Heavy damage
Doors	The door on the east wall is flush Dutch.	
Windows	None	
Lighting	Continuous surface-mount 2-tube lighting without diffusers. Two surface-mount 2-tube with diffusers just north of the beam.	
Built-ins	Stainless service serving counter down center of room. Stainless sinks, counter, and hood all along west wall. Grills removed. A wood pattern Formica checkout counter is in northeast corner.	

ROOM #: 113	**PHASE:** 1	**LEVEL:** Basement	**AREA:** 140 sq. ft.	**DATE:** 5/4/16
FUNCTION(S): Circulation (formerly 101)				



From the door with 121 Circulation south of 113 Circulation, view north (DSC2991).

Door to Room 110 (Dining Room) at the north end of circulation, view northwest (DSC2865).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall	Concrete at stairwell with stainless guard at corner.	
West wall	Stainless wainscot (crash panel) opposite Circulation 114. Handout pocket mounted on wood panel, emergency light, convex mirror opposite Circulation 114.	
All walls	Off-white drywall	
Ceiling	Suspended 2 x 2 ft. panels	
Floor	Tan 1 ft. square linoleum tiles with 2 ½ in. brown plastic base. Plastic installed over original 3 ½ in. wood base.	
Doors		
Windows		
Lighting	Surface-mounted 2-tube with diffusers	
Built-ins		

MISCELLANEOUS ROOM NOTES
Hallway continues into Circulation 114 without a break. These halls would share the same number if consistent with the numbering of the first floor hallways.

ROOM #: 114	**PHASE:** 1	**LEVEL:** Basement	**AREA:** 446 sq. ft.	**DATE:** 5/3/16
FUNCTION(S): Circulation (formerly 102)				

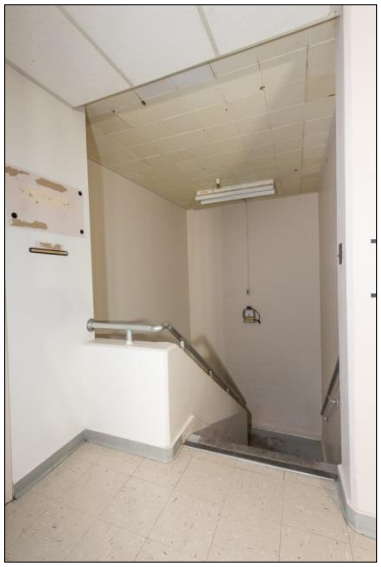
Circulation, view east (DSC2620).

Entrance to 114 Circulation, formerly an outside door, view east (DSC2816).

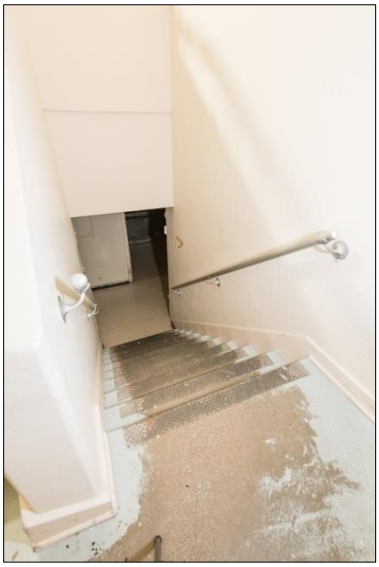
ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall	
South wall	Concrete. Electrical panel is at east end of stairwell. Metal louvered air vent into Room 105. Outlets and conduit are surface mounted.	
East wall	Concrete	
West wall	None – merges into Circulation 113 without change.	
All walls	Off-white with some earlier gray paint visible. In addition to the protector at the stairs, stainless corner protectors are at corners leading into Rooms 107/111. There is extreme wall wear from carts in narrowed west end of hall despite the corner protectors.	Extreme wear
Ceiling	Suspended 2 x 2 ft. panels	
Floor	Tan 1 ft. square linoleum tiles with 2 ½ in. brown plastic base. Modern base is laid over original 3 ½ in. wood base. Throughout building, the original quarter-round shoe was removed prior to installing the plastic base if the wood base itself was retained in place.	
Doors	East opening into 115A was formerly an outside door.	
Windows	None	
Lighting	Surface-mounted 2-tube with diffusers	
Built-ins		

MISCELLANEOUS ROOM NOTES
White melamine panels line the small indentation at the west end of the north wall. These panels match those in 110A. A small rectangular appliance occupied this place, identified on a 1959 plan as a “D. F.” [drinking fountain] (REECo Drawing 15533, 1959).

ROOM #: 114A/213A	**PHASE:** 1	**LEVEL:** Basement	**AREA:** 134 sq. ft.	**DATE:** 5/3/16
FUNCTION(S): Stairs (continuous stairwell between the basement and first floor)				



Stairwell from 205 Circulation to the basement, view east to landing (DSC2611).



View west from the landing to the basement (DSC2612).

Bottom of the stairs at the entrance to 113 Circulation, showing steel-frame, top rail, and end stops for a blast door, the door has been removed, view southeast (DSC2614).

Close-up of end stop for blast door (DSC2615).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall		
West wall		
All walls	Pink/tan concrete	
Ceiling	Acoustic tiles, 1 ft. square	
Floor	Landing and steps are painted gray concrete. Cross-hatch steel non-skid panels embedded in each step. A 1 in. thick wood baseboard extends 6 in. above edges and steps transition into typical 4 in. wood baseboard with typical quarter-round shoe.	Paint is mostly worn off
Doors	None	
Windows	None	
Lighting	Surface mount 3-tube with no diffusers	
Built-ins	None	

MISCELLANEOUS ROOM NOTES
The 114A/213 Stairs are a continuous stairwell with a dogleg or half space landing. Therefore, the descriptions of the 114A stairs and the 213 Stairs are the same. Top rail and end stops are in place for a sliding 1 ¾ in. thick steel-framed blast door at the entrance to Circulation 113 at the bottom of the stairs. The steel blast door has been removed. Silver-painted aluminum pipe rails are on concrete parapets.

ROOM #: 115	**PHASE:** A	**LEVEL:** Basement	**AREA:** 88 sq. ft.	**DATE:** 5/3/16
FUNCTION(S): Cable Way (hyphen connecting main CP1A block to original building)				

Lower level of Cable Way, view north (DSC2857).

Mezzanine level of Cable Way, view northwest (DSC2860).

ELEMENT	DESCRIPTION	CONDITION
North wall	Concrete exterior with pilaster in northwest corner. Numerous cableways lead outside.	Open 4 in. hole to outside
South wall	None	
East wall	Concrete	
West wall	Concrete. Tar waterproofing is visible below original grade.	
All walls	Covered with electrical and signal boxes and cables.	
Ceiling	Exposed lower surface of 201/201A floor, same construction as mezzanine floor.	
Floor	Concrete floor, 4 ft below general basement floor level. Mezzanine floor is steel grid covered with plywood and ribbed rubber.	
Doors		
Windows	None	
Lighting	Lower level: suspended large incandescent Upper level: suspended 2-tube w/o diffusers	
Built-ins		

MISCELLANEOUS ROOM NOTES
The lower level continues below 115A as a crawlspace full of cables which continue on through the south foundation of the building via several conduits.

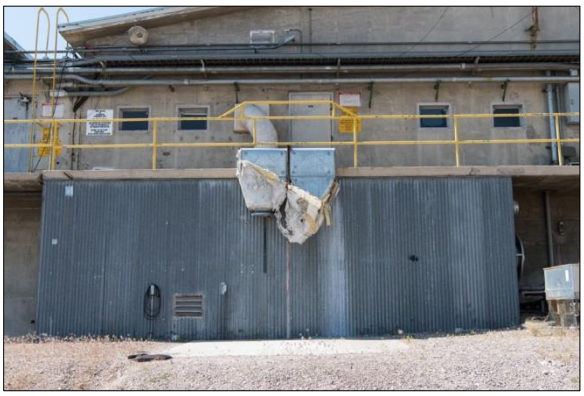
ROOM #: 115A	**PHASE:** A	**LEVEL:** Basement	**AREA:** 30 sq. ft.	**DATE:** 5/3/16
FUNCTION(S): Circulation				

Circulation 115A from 114 Circulation, electrical boxes are visible on the east wall, view east (DSC2813).

Overview of 115A Circulation from exterior door, steel nonskid plate at door threshold, view north (DSC2842).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall	Electrical boxes	
West wall		
All walls	Off-white concrete without corner bevels.	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Tan 1 ft. square linoleum tiles match Circulation 114 except for many replacements. Many broken tiles and water damage near the south entrance. The floor has a 4 in. brown plastic base. Steel nonskid plate at door threshold.	Water damage
Doors	South door is double flush steel “CP1-3” with alarm. The west door to 114 Circulation is double steel panel, each with a single light.	
Windows	None	
Lighting	2-tube surface mounted without diffusers.	
Built-ins		

ROOM #: 115B	**PHASE:** 1954 Addition	**LEVEL:** Basement	**AREA:** 155 sq. ft.	**DATE:** No Access
FUNCTION(S): Motor Generator and Battery Room				



North side of exterior, showing louver vent, view south (DSC3220).

West side of exterior, showing two large air handler vents (DSC3230).

ELEMENT	DESCRIPTION	CONDITION
North wall	Rectangular louver vent	
South wall	Existing concrete is along north wall of CP-1.	
East wall		
West wall	Two large air handler vents	
All walls	Corrugated galvanized steel panels with vinyl interior panels.	
Ceiling	Underside of existing concrete balcony	
Floor	Unknown	
Doors	Gray flush steel with louver vent	
Windows	None	
Lighting	Unknown	
Built-ins	Unknown	

MISCELLANEOUS ROOM NOTES
Door has long been blocked by slopewash. See Drawing 15537 for original design with metal-clad CMU walls, apparently not built. Converted in 1962 to air handling, see Drawing 15519.

ROOM #: 116	**PHASE:** 1	**LEVEL:** Basement	**AREA:** 850 sq. ft.	**DATE:** 5/4/16
FUNCTION(S): Mechanical (originally west half of Room 115)				

Eastern section of the room from door off 121 Circulation, view east (DSC2920).

Northern end of the room from the central area. Trane climate changer is along the west wall, view north (DSC2925).

Northwest corner of the room, showing Powerex air compressor, view northwest (DSC2928).

Intake duct and fan assembly from Room 116A duct in the northeast corner, view east (DSC2948).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall	Single door to 105 blocked with CMU. Plus CMU partition to split from 117.	
West wall		
All walls	Off-white concrete	
Ceiling	White-painted lower surface of concrete floor, originally light green. Void forming bottom of exhaust air shaft Room 256A is in southwest corner of ceiling.	
Floor	Concrete with drain	
Doors	Steel panel is green inside, off-white outside.	

ELEMENT	DESCRIPTION	CONDITION
Windows	None	
Lighting	Suspended 2-tube without diffusers	
Built-ins	Most equipment in place is shown on Drawing 75259. It includes: the Freon chiller which cooled all air in the original building and in CP1-A (which has not worked for years), model is Dollinger 200 ton separator; plate and frame water cooler; air handler water system including reverse osmosis machine; Trane Type 17 Climate Changer (Air Handler #4); Powerex air compressor for air handler controls installed in 2009 to replace Air Handler #5; fans, pumps, and control boxes (some of which have not been used in many years); and recent potable water heater.	

MISCELLANEOUS ROOM NOTES
A note on the intake duct and fan assembly from Air Intake Room 116A is as follows: BUILDING SHUTDOWN BUTTON-UP CONDITIONS – NO OUTSIDE AIR TO BUILDING SHUT OFF ALL FRESH AIR DAMPERS. (PUSH BUTTON TO CLOSE DAMPERS) ALL FRESH AIR AND EXHAUST FANS WILL AUTOMATICALLY CLOSE This shutdown control has been removed so long ago that present facilities staff has no memory of it.

ROOM #: 116A	**PHASE:** 1	**LEVEL:** Basement	**AREA:** 73 sq. ft.	**DATE:** 5/4/16
FUNCTION(S): Air Intake and Plenum (continues upward to roof as 256A)				

Steel plate door to Room 116A, view northeast (DSC2932).

View of air intake and plenum upward to the roof as 256A (DSC2942).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall	Primary filter panels where ducts pierce wall.	
East wall		
West wall		
All walls	Concrete	
Ceiling	None	
Floor	Concrete	
Doors	Steel plate	
Windows	None	
Lighting	None	
Built-ins		

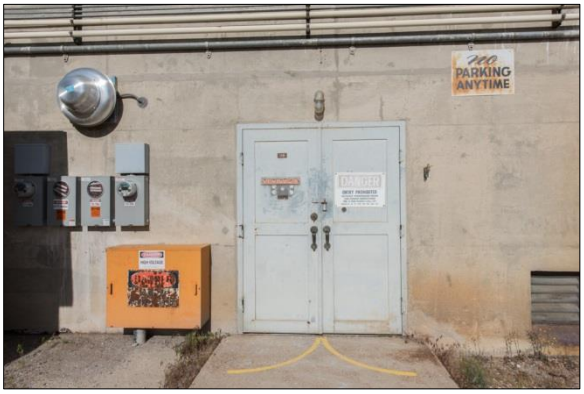
ROOM #: 117	**PHASE:** 1	**LEVEL:** Basement	**AREA:** 518 sq. ft.	**DATE:** 5/4/16
FUNCTION(S): Boiler Room (east half of former Mechanical Room 115)				

Northern portion of the room showing electric panels and boilers, CP1-4 door is in the background, view east-southeast (DSC2959).

View from the CP1-4 door of boilers in the southern section of the room. Double door to Room 116 is visible in the background, view southwest (DSC2966).

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	Concrete with pillar, double door blocked with CMU, large electric panels	
South wall	Concrete	
East wall	Concrete	
West wall	CMU partition added to separate from rest of former 115.	
All walls	Off-white, originally pale green	
Ceiling	Off-white underside of concrete floor	
Floor	Concrete with drain, boiler pedestals, curb around fuel tanks	
Doors	East door is CP1-4 and is double steel mesh. The inside is covered with plywood. West door is double steel panel. The total width is 7 ft. 7 in. The side facing Room 117 is off white, the side facing 116 is green.	
Windows	None	
Lighting	Suspended 2-tube without diffusers	
Built-ins	See plan 75259 for equipment layout. Two boilers, one of which (#1 at east side of room) is in operable. The boilers are Cleaver Brooks Low Pressure Heating Boilers, built in 1978. Two diesel fuel tanks Electrical panels Work bench with Formica top and porcelain sink Recent eye wash station Pure-Tex Multi-Stage Water Conditioner. R&M Manufacturing, Lindon, Utah Several drums of salt for the water conditioner	

ROOM #: 118	**PHASE:** A	**LEVEL:** Basement	**AREA:** 363 sq. ft.	**DATE:** 5/4/16
FUNCTION(S): Transformer Room				

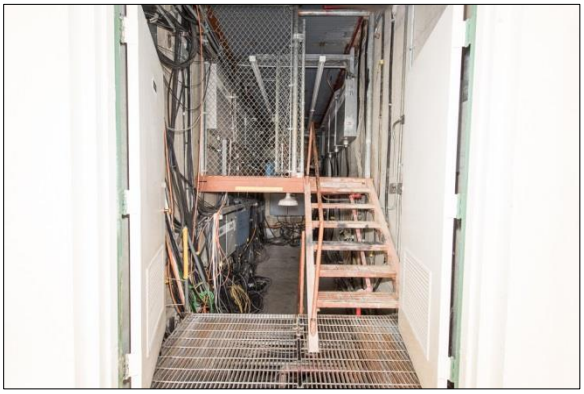


CP1-5 steel panel door to Transformer Room, view west (DSC2569).

Transformers in the northern portion of Room 118, view northwest (DSC2575).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall	Steel louver vent, circular exhaust fan near ceiling	Cracks
West wall		
All walls	Concrete, form tie divets plugged, all are unpainted. Many threaded concrete anchors that are no longer used.	
Ceiling	Underside of concrete floor and beams	
Floor	Concrete with floor drain	
Doors	East door is CP1-5. It is steel panel dark gray faded to light gray outside. The flush steel frame is alarmed.	
Windows		
Lighting	Suspended incandescent	
Built-ins	Transformers: Two are G&W model BZ-FS 5200 v. G&W Electric Co., Blue Island, Ill. (last tested 1983). Two transformers are 4160 v. One 300 KVA by Niagra Transformer Corp., Buffalo N.Y. (last tested 1985). One 300 KVA by International Transformer Corp., Pico Rivera, CA (last tested 1971). One unlabeled.	

ROOM #: 119	**PHASE:** A	**LEVEL:** Basement	**AREA:** 63 sq. ft.	**DATE:** 5/3/16
FUNCTION(S): Stairs (Cable Way stairwell)				



View up stairwell to Cable Way mezzanine, showing steel grid landing and steps, view north (DSC2845).

ELEMENT	DESCRIPTION	CONDITION
North wall	None	
South wall	Concrete	
East wall	Concrete	
West wall	Concrete	
All walls	Unpainted	
Ceiling	Plywood on steel grid	
Floor	Steel grid landing and steps	
Doors	Double flush steel with louver vents, green inside, off white outside	
Windows	None	
Lighting	Shared with Room 115	
Built-ins		

MISCELLANEOUS ROOM NOTES
Upper-level railing and entry gate at top of stairs are chain link mounted on pipe.

ROOM #: 120	**PHASE:** 1	**LEVEL:** Basement	**AREA:** 773 sq. ft.	**DATE:** 5/4/16
FUNCTION(S): Kitchen				

Western section of the room, note damage and leak from suspended ceiling, view southwest (DSC2912).

Northern area of the room, door is to Room 112 Kitchen, view north (DSC2913).

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	Drywall	
South wall	Concrete	
East wall	Concrete	
West wall	Concrete with two wood panels attached for hanging items. Grease seeping down wall from exhaust vent through outside wall above suspended ceiling.	Grease
All walls	Gloss white	
Ceiling	Same as 110 and 112	
Floor	Tan 1 ft. square linoleum tiles with 4 in. brown plastic base	
Doors	Door from Room 112 is flush steel with surface-mounted slider. Door from Room 121 is flush with louver.	
Windows	None	
Lighting	Same as Room 110 plus one 2-tube surface mounted without diffuser.	
Built-ins		

MISCELLANEOUS ROOM NOTES
As with southern end of kitchen, original instrument shop extended to underside of concrete floor. Originally the underside of concrete floor was painted white with off-white walls. Next generation with suspended ceiling higher than present had dark brown walls.

ROOM #: 121	**PHASE:** 1	**LEVEL:** Basement	**AREA:** 68 sq. ft.	**DATE:** 5/5/16
FUNCTION(S): Circulation				

Closed door to 121 Circulation from 113 Circulation, view south (DSC2988).

Circulation, view south (DSC2989).

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall		
South wall		
East wall	Pillar, emergency light	
West wall	Two sections removed for kitchen access; electrical panel	
All walls	Off-white gloss (previously antique white)	
Ceiling		
Floor	Brown, 6 in. plastic base, matching the base on the west side of the kitchen	
Doors	Flush steel with light and louver vent	
Windows	None	
Lighting	2-tube surface mounted with grid diffusers	
Built-ins		

MISCELLANEOUS ROOM NOTES
Same as 113 Circulation except as noted above.

ROOM #: 130	**PHASE:** B	**LEVEL:** Basement	**AREA:** 926 sq. ft.	**DATE:** 5/2/16
FUNCTION(S): Briefing Room (originally Room 15)				

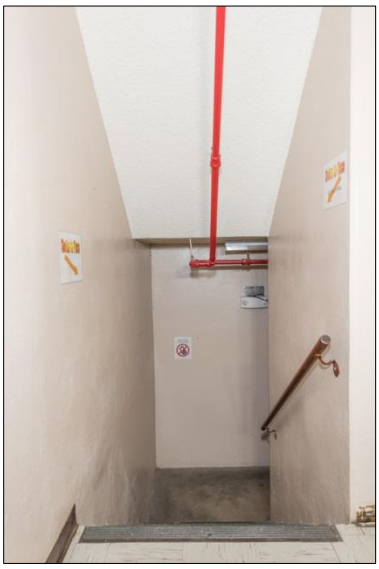
Doors to Room 130B and Room 130C, 2-step high stage and pass through on west wall, view northwest (DSC2268).

Acoustic tiles are set in 2 ft. wide vertical panels and separated by a black-painted gap trimmed with wood corner molding, view north (DSC2270).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall furred over concrete	
South wall	Concrete at stair, rest drywall, pillar, large hinged map board	
East wall	Concrete, white boards have been removed	
West wall	Drywall	
All walls	Textured off white walls were originally pale green. The upper two-thirds are surface mounted with 1 in. random pattern acoustic tiles. Lower molding for the tiles is stained wood 2-groove bullnose which doubles as a chair rail. Along the north wall acoustic tiles are set in 2 ft. wide vertical panels and separated by a black-painted gap. The gaps are trimmed with dark stained wood corner molding.	
Ceiling	Suspended 2 x 4 ft. panels.	
Floor	Tan 1 ft. square linoleum tiles with 4 in. dark brown plastic base.	
Doors	The south door is flush stained with expanded-metal vent.	
Windows	Pass-through in west wall (see 130C)	
Lighting	Continuous rows of surface-mounted 3-tube with diffusers	
Built-ins	Closet for breaker boxes and vertical duct with stained wood bi-fold doors built in on the east side of pillar in north wall. Gray-carpeted 2-step high stage has been erected all along the west wall. The stage is partly blocking doorways to 130B and 130C. A speaker is on the west wall. Emergency light is on the south wall. Stainless drinking fountain is mounted on the south wall.	

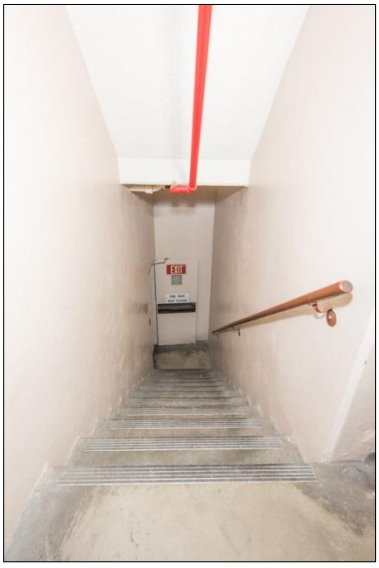
ROOM #: 130A/271A	**PHASE:** B	**LEVEL:** Basement	**AREA:** 174 sq. ft.	**DATE:** 5/2/16
FUNCTION(S): Stairs (continuous stairwell between the basement and first floor)				

Stairs to basement and mezzanine from 271B Circulation, view southwest (DSC2071).



Stairs down from the first floor to landing, fire water main suspended from the ceiling, view south (DSC2208).

Portion of the landing and stairs to basement, view northwest (DSC2209).



Stairs to basement, exit is to 131A Circulation, view north (DSC2210).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall		
West wall		
All walls	Pinkish-tan concrete	
Ceiling	White blown-in acoustic	
Floor	Bare concrete, no baseboards, non-skid steel noses First floor landing, 1 ft. square linoleum tiles	
Doors		
Windows	None	
Lighting	Surface-mounted 1-tube with diffuser; emergency light	
Built-ins	Fire water main suspended from ceiling	

MISCELLANEOUS ROOM NOTES
The 130A/271A Stairs are a continuous stairwell between the first floor and basement. The stairs have a dogleg or landing between the floors. This stairwell is below the 303A/271A Stairs between the first floor and mezzanine. Therefore, the 271A Stair designation overlaps with the 130A stairs to the basement and the 303A stairs to the mezzanine. Dark brown metal pipe rail

ROOM #: 130B	**PHASE:** B	**LEVEL:** Basement	**AREA:** 66 sq. ft.	**DATE:** 5/2/16
FUNCTION(S): Electrical and Communications (originally Storage Room 7)				

Door to Room 130B, view west (DSC2276).

Computer communication junction boxes on the west wall, view southwest (DSC2277).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall	Electrical box	
East wall	Electrical box	
West wall	Full sheet of bare plywood supports communication computer junction boxes. Cables through ceiling are in large conduit, running bare on the wall below.	
All walls	Off-white drywall	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Bare concrete with 4 in. black plastic base	
Doors	Stained flush with expanded metal louver	
Windows	None	
Lighting	Surface mounted incandescent	
Built-ins	Transformer, 480v Square D Co.	

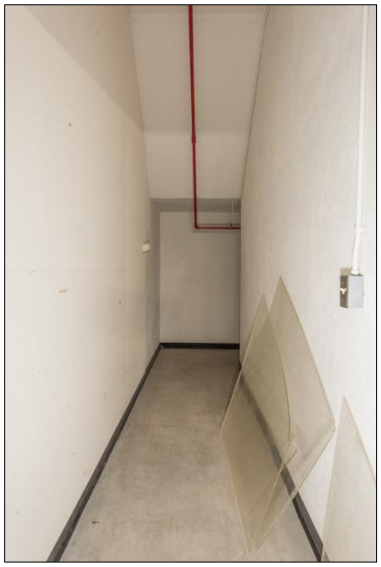
ROOM #: 130C	**PHASE:** B	**LEVEL:** Basement	**AREA:** 117 sq. ft.	**DATE:** 5/2/16
FUNCTION(S): Kitchen (originally Room 6)				

Door to Room 130C, view west (DSC2278).

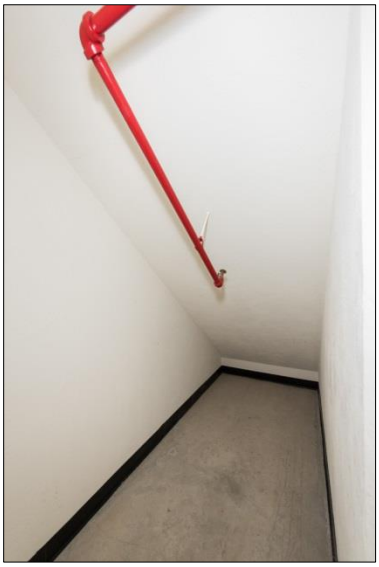
Plywood veneer cabinet along west wall and furred-in concrete pillar in northwest corner, view northwest (DSC2281).

ELEMENT	DESCRIPTION	CONDITION
North wall	Furred-in concrete pillar in northwest corner.	
South wall		
East wall	Plywood over pocket door	
West wall		
All walls	Gloss off-white drywall with no texture	
Ceiling	Suspended 2 x 4 ft. panels dropped ¾ in. below concrete floor. The ceiling is about 1 ft. lower than ceiling of Room 130.	
Floor	Tan 1 ft. square linoleum tiles	Flooding
Doors	Flush stained wood slider	
Windows	Stainless roll-up for pass-through in east wall	
Lighting	Surface-mounted circular incandescent	
Built-ins	Stained plywood veneer cabinet along entire west wall with gray Formica top and enamel sink.	

ROOM #: 130D	**PHASE:** B	**LEVEL:** Basement	**AREA:** 174 sq. ft.	**DATE:** 5/2/16
FUNCTION(S): Storage (originally Room 16)				



Storage area beneath 130A stairs, entrance is from Room 130, view south (DSC2283).



Storage beneath 130A stairs, view west (DSC2286).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall	Fiberboard panels glued on concrete	
West wall		
All walls	Off-white concrete	
Ceiling	Off-white concrete	
Floor	Unpainted concrete	
Doors	Flush steel	
Windows		
Lighting		
Built-ins		

ROOM #: 131	**PHASE:** B	**LEVEL:** Basement	**AREA:** 58 sq. ft.	**DATE:** 5/2/16
FUNCTION(S): Circulation				

Circulation, the open door at end is entrance to Room 135, door on south (left) wall is to Room 132, view west (DSC2222).

Western end of circulation, view through open door into Room 135, view west (DSC2235).

ELEMENT	DESCRIPTION	CONDITION
North wall	Fire alarm, emergency light, pillar in northeast corner	
South wall		
East wall		
West wall		
All walls	Pinkish-tan drywall	
Ceiling	Dropped 2 x 4 ft. panels	
Floor	Gray carpet continues into Room 135, 4 in. gray plastic base	
Doors	The east door is wood stained. The door is flush with expanded steel vent and steel frame.	
Windows	None	
Lighting	Recessed 2 x 2 ft. with diffusers	
Built-ins		

ROOM #: 131A	**PHASE:** B	**LEVEL:** Basement	**AREA:** 45 sq. ft.	**DATE:** 5/2/16
FUNCTION(S): Circulation				

View from door at bottom of 114A Stairwell, view west (DSC2211).

View from 131A Circulation to 131 Circulation, door labeled Shelter in Place is to Room 130, view west (DSC2219).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall	
South wall	Drywall	
East wall	Concrete	
West wall	Drywall	
All walls	Pinkish-tan	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Tan 1 ft. square linoleum tiles with evidence of removed 4 in. base	
Doors	The east door is flush steel with wire-reinforced light.	
Windows		
Lighting	Surface 1-tube mounted with diffuser	
Built-ins		

ROOM #: 132	**PHASE:** B	**LEVEL:** Basement	**AREA:** 257 sq. ft.	**DATE:** 5/2/16
FUNCTION(S): Men's Restroom				

Sinks along dividing wall with showers, background shows entrance to showers, view southeast (DSC2228).

Commode stalls and urinal along west wall, view southwest (DSC2229).

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	Drywall	
South wall	Concrete	
East wall	Drywall	
West wall	Drywall	
All walls	Off-white	
Shower Walls	Metal lath and plaster, full height ceramic tiles	Entry corner broken
Ceiling	Suspended 2 x 4 ft. panels	Water damage
Floor	Ceramic tiles are 1 in. square random brown to off-white, tile base. All wall and base tiles are 4 x 6 in. light tan ceramic.	
Doors	Flush stained, expanded metal vent, stainless kick plate.	
Windows		
Lighting	Surface-mounted circular incandescent; vertical 1-tube with diffuser between mirrors; stainless-framed mirrors with stainless shelves	
Built-ins	Wood bench by shower; porcelain commodes, urinals, and sinks; stainless-framed mirrors with stainless shelves	

MISCELLANEOUS ROOM NOTES
Center partition wall is tiled to base of mirrors behind sinks.

ROOM #: 132A	**PHASE:** B	**LEVEL:** Basement	**AREA:** 32 sq. ft.	**DATE:** 5/2/16
FUNCTION(S): Laundry				

From 131A Circulation, room has sliding wood door, view south (DSC2212).

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall		
South wall		
East wall		
West wall		
All walls	Off-white drywall	
All Walls		
Ceiling	Suspended 2 x 2 ft. panels	Water damage
Floor	Tan 1 ft. square linoleum tiles with 4 in. black plastic base	
Doors	Flush stained triple slider	
Windows		
Lighting	Surface-mounted incandescent globe	
Built-ins	Porcelain sink with stainless rim, plumbing for washer and dryer	

MISCELLANEOUS ROOM NOTES
Steel studs used throughout CP-1B are exposed in cutout.

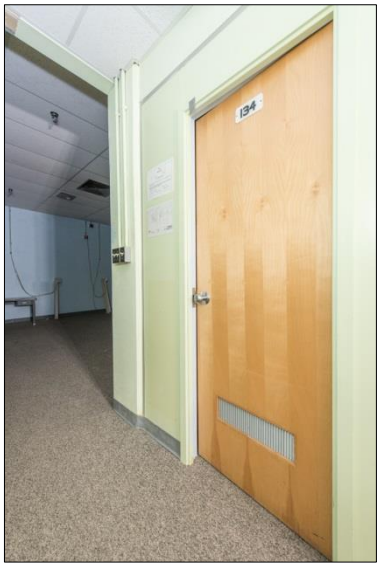
ROOM #: 133	**PHASE:** B	**LEVEL:** Basement	**AREA:** 133 sq. ft.	**DATE:** 5/2/16
FUNCTION(S): Computer Room (originally Dormitory Room 9)				

Entrance from Room 135 corridor, view southwest (DSC2241).

View from entrance, conduit with fiber optic cable, view southeast (DSC2244).

ELEMENT	DESCRIPTION	CONDITION
North wall	Steel panels inside and outside; surface-mounted light switches and conduit; fiber optic lines	
South wall	Concrete	
East wall	Drywall with cable conduit from above	
West wall	Steel panels inside and outside	
All walls	Pale blue, originally light green	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Gray carpet matching Room 135 with 4 in. gray plastic base	
Doors	Flush wood stained with expanded metal vent	
Windows		
Lighting	Recessed 1 ft. square incandescent	
Built-ins		

ROOM #: 134	**PHASE:** B	**LEVEL:** Basement	**AREA:** 65 sq. ft.	**DATE:** 5/2/16
FUNCTION(S): Computer (Originally AEC Manager's Bedroom, Room 8)				



Entrance from Room 135 corridor, view northwest (DSC2236).

View from entrance, cable conduit from ceiling, view north (DSC2239).

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	Drywall with cable conduit from ceiling and fiber optics	
South wall	Metal panels	
East wall	Drywall	
West wall	Drywall with pillar in southwest corner	
All walls	Pale blue, originally light green	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Gray carpet matching room 135 with 4 in. gray plastic base	
Doors	Flush wood stained with expanded metal vent	
Windows		
Lighting	Recessed 1 ft. square incandescent	
Built-ins		

ROOM #: 135	**PHASE:** B	**LEVEL:** Basement	**AREA:** 871 sq. ft.	**DATE:** 5/2/16
FUNCTION(S): Storage (originally Men's Dormitory, Room 5)				

Southern end of Room 135 from entrance, shows emergency exit on west wall, view southwest (DSC2245).

Northern end of Room 135 from entrance, view northwest (DSC2247).

Close-up of emergency exit (DSC2245).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall	
South wall	Concrete	
East wall	Drywall with two exposed pillars	
West wall	Concrete plywood inner door leads to escape tunnel CP1-14. As shown on Drawing 49739.	
All walls	Pale blue, originally light green	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Gray carpet matching Rooms 133 and 135, 4 in. gray plastic base	
Doors	Flush wood-stained with combination lock An alarmed plywood inner door leads to escape tunnel CP1-14. As shown on Drawing 49739, a short horizontal corrugated galvanized tunnel leads to a vertical shaft of the same material with a ladder leading to a concrete cellar with its collar at ground surface.	

ELEMENT	DESCRIPTION	CONDITION
Doors (continued)	The concrete cellar is full of sand which in an emergency was to be emptied into a sump at the bottom of the shaft, clearing the way for an exit. The sand was kept clean and dry by means of a lightweight galvanized steel gable roof.	
Windows	None	
Lighting	Recessed 1 ft. square incandescent except the ceiling is dropped lower with recessed 2 x 4 ft. lights with diffusers in the entry area matching the ceiling in Circulation 131.	
Built-ins		

ROOM #: 136 (135A)	**PHASE:** B	**LEVEL:** Basement	**AREA:** 262 sq. ft.	**DATE:** 5/3/16
FUNCTION(S): Emergency Generator Room				

View from the door showing emergency generators (n=2), compressor, blast exhaust, fire suppression, view southwest (DSC2304).

Heavy cast-iron exhaust air outlet in the northwest corner of the room (DSC2318).

ELEMENT	DESCRIPTION	CONDITION
North wall	Concrete, the base of the wall is eroding from water infiltration from outside.	Water damage
South wall	Concrete	
East wall	Drywall	
West wall	Concrete	
All walls	Off-white	
Ceiling	Pressboard panels attached to underside of floor. The panels are 2 ft. wide.	
Floor	Unpainted concrete with 4 in. black plastic base; raised concrete pedestals for generators; drain in sump	
Doors	Green flush steel with weatherstrip, 4 ft. wide; operable metal louver transom.	
Windows	None	
Lighting	Large suspended incandescent	
Built-ins	Layout shown on Drawing 49730 Equipment includes: -Cummins Model HRF-6-1P Diesel with Onan Generator No. 1 occupies the east side of the room (originally identified as Generator No. 2); -John Deere Diesel with Stamford 110 KW Generator No. 2 occupies the west side of the room; -Engine water coolant pumps, emergency water supply tank, and radiators; -Speedaire 7.5 hp air compressor for powering controls; and -Fuel pumps and fuel oil day tank. Engine exhaust is taken outside through west wall to two external stacks.	

MISCELLANEOUS ROOM NOTES
The door is labeled 136. Space Management Plan identifies the room as 135A. Near the ceiling in the northwest corner of the room is the heavy cast-iron exhaust air outlet, which leads to a 24 in. square concrete chimney outside the north wall. A small air compressor operates an emergency blast valve to shut down in case of emergency. The valve also has hand controls.

ROOM #: 137	PHASE: B	LEVEL: Basement	AREA: 622 sq. ft.	DATE: 5/3/16
FUNCTION(S): Mechanical				

Air handler in SW area of room, view southwest (DSC2295).

Power panels on the north wall, view west (DSC2322).

Electric boilers in northeastern area of room, view northeast (DSC2327).

HVAC (embossed "TRANE") in the northeast corner of the room, view northeast (DSC2328).

ELEMENT	DESCRIPTION	CONDITION
North wall	Concrete	
South wall	Concrete	
East wall	Concrete	
West wall	Drywall with many electrical boxes	
All walls	Off-white	
Ceiling	Concrete underside of floor	
Floor	Unpainted concrete with 4 in. black plastic base	Flooding under doors
Doors	North door CP1-8 is double flush green steel with alarm. South door CP1-13 is flush steel. White light is on when entry into Briefing Room is prohibited. Foam insulating panel is attached to north face of door.	
Windows	None	

ELEMENT	DESCRIPTION	CONDITION
Lighting	Large suspended incandescent	
Built-ins	Layout is shown on Drawing 49730. Equipment includes: -Two precision electric boilers made in 2012; -Air handlers 1 and 2; -Recent potable water heater by A.O. Smith Water Products; -Fresh air intake blowers and ducting; -Emergency generator electrical panel; -Chiller; and -Air compressor.	

ROOM #: 137A	**PHASE:** B	**LEVEL:** Basement	**AREA:** 74 sq. ft.	**DATE:** 5/2/16
FUNCTION(S): Secondary Filter Room				

Entrance to 137A (right) and 137B (background) from Room 137, view southeast (DSC2330).

Interior view showing air filter and duct work, view south (DSC2331).

ELEMENT	DESCRIPTION	CONDITION
North wall	Concrete	
South wall	Concrete	
East wall	Drywall with pass-through for pair of ducts	
West wall	Concrete	
All walls	Off-white	
Ceiling	Bottom of concrete floor	
Floor	Unpainted concrete with 4 in. black plastic base Bottom of door casing and the legs of the floor-mounted filter/duct units are rusted from flooding.	Flooding
Doors	Flush steel with weatherstrip	
Windows		
Lighting	Large suspended incandescent	
Built-ins	The pair of fresh air filters and duct work in place are replacements. The carbon filter was last calibrated in 1992 at 99.99% efficiency. Only one of the two ducts has had a carbon filter installed.	

MISCELLANEOUS ROOM NOTES
All interior corners of concrete in CP-1B are chamfered.

ROOM #: 137B	**PHASE:** B	**LEVEL:** Basement	**AREA:** 69 sq. ft.	**DATE:** 5/2/16
FUNCTION(S): Primary Filter Room				

Damper D2 and D3 on the west wall, view south (DSC2332).

Fresh air intake in the northeast corner of Filter Room, view northeast (DSC2335).

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	Concrete	
South wall	Concrete	
East wall	Concrete	
West wall	North half concrete; rest drywall adjacent to Room 137A. Bottom half of drywall badly dissolved by water.	Water damage
All walls	Off-white	
Ceiling	Bottom of concrete floor	
Floor	Unpainted concrete with 4 in. black plastic base. Base has fallen off south and drywall portion of west wall due to flooding.	Flooding
Doors	Flush steel with weather strip repaired with duct tape. The door is off-white inside, green outside and the bottom frame is rusted. Outside fresh air intake is at north end of east wall and is the same design as outlet with blast valve and external concrete intake chimney described in Room 136. The 24 in. blast valve has a dedicated air compressor for emergency operation. Valve is manufactured by Hanna Co., Chicago, Ill.	
Windows		
Lighting	Large suspended incandescent	
Built-ins	Outside fresh air intake at north end of east wall, same design as outlet with blast valve and external concrete	

MISCELLANEOUS ROOM NOTES
Three large filter boxes with associated dampers are mounted on the W wall leading to the Secondary Filter Room. The primary filters are pressed fiber to capture larger particulates.

ROOM #: 200	**PHASE:** A	**LEVEL:** First	**AREA:** 1,045 sq. ft.	**DATE:** 5/3/16
FUNCTION(S): Control Room (Los Alamos)				

South side of Control Room from entrance, light switch is set into raised panel on south wall, view east-southeast (DSC2042).

Northern area of the room showing control console and equipment racks on raised floor, view northwest (DSC2051).

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	Concrete	
South wall	Drywall Light switch is set into raised panel made of wood-pattern plastic flooring matching floor in 200A.	
East wall	Concrete	
West wall	Concrete, row of louvered metal air ducts near ceiling, Large louver metal return air vent into 201A.	
All Walls	Tan fabric panels. Gray fabric panel wainscot and chair rails are made of paired Colonial base with lower element mounted upside-down.	
Ceiling	Suspended 2 x 4 ft. panels with 1 ft. square impressed design.	
Floor	South half, gray carpet with 3 ½ in. wood-pattern MDF Colonial base North half, raised 2 x 2 ft. white and gold panels with dark brown edges	
Doors	Interior door is double steel with steel frames. Exterior door is white flush steel, alarmed, and shortened to allow for raised interior floor. Air duct from outside passes under exterior doorway.	
Windows	Three fixed ports with white-painted steel frames. Eastern port is replaced with air duct.	
Lighting	Recessed 2 x 4 ft. with silver grid diffusers.	
Built-ins	Four monitor brackets are suspended from ceiling in south half of east wall.	

MISCELLANEOUS ROOM NOTES
Control console and equipment racks remain in place on the raised stage. There is a raised duct and cableway furred out along the base and much of the side of the west wall. Several electrical boxes are set into the raised areas.

ROOM #: 200A	**PHASE:** A	**LEVEL:** First	**AREA:** 145 sq. ft.	**DATE:** 4/20/16
FUNCTION(S): Circulation				

Entrance to 200A Circulation showing etched double doors, view east (DSC2019).

View toward Control Room 200, framed doorway is at division between CP-1 and CP-1A, view east (DSC2037).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall		
West wall		
All walls	Blue fabric-covered panels with chair rails made of paired faux wood-stained MDF colonial baseboard same as chair rails.	
Ceiling	White drywall	
Floor	Faux wood laminate with 3 ¼ in. MDF colonial baseboard	
Doors	Double stained wood with one light The left door is light etched “LOS ALAMOS CONTROL ROOM” and the right door is etched “TIMING FIRING ARMING CONTROL.” A red strobe is above the entrance.	
Windows		
Lighting	Ceiling track lighting with spotlight fixtures	
Built-ins		

GENERAL NOTE
Old door frame through former exterior concrete wall of CP1 sheathed with stained plywood.

ROOM #: 201	**PHASE:** A	**LEVEL:** First	**AREA:** 251 sq. ft.	**DATE:** 5/4/16
FUNCTION(S): Cable Run Room				

View into room from exterior door, view south (DSC2599).

Power panels along the west wall of the Cable Room, view southwest (DSC2601).

ELEMENT	DESCRIPTION	CONDITION
North wall	Air duct from 201A to northwest corner of Room 201 runs along top of wall.	
South wall		
East wall		
West wall		
All walls	Concrete partly faced with plywood to mount equipment.	
Ceiling	Precast 2 ft. concrete panels which bridge the space between CP-1 and main block of CP-1A. Vent is in center of roof.	
Floor	Steel grid clad with plywood and ribbed rubber.	
Doors	CP1-10, flush gray steel, alarmed	
Windows		
Lighting	Continuous 2-tube w/o diffusers	
Built-ins	Cable junction panels are around all walls, cable tray above.	

MISCELLANEOUS ROOM NOTES
No access from interior of building (exterior access only). Major bundles of cables exit east and west walls, floor, and ceiling. Cables enter via several circular ports in the north wall.

ROOM #: 201A	**PHASE:** A	**LEVEL:** First	**AREA:** 68 sq. ft.	**DATE:** No Access
FUNCTION(S): Cable Run Room (duct)				

NO ACCESS – NO PHOTOGRAPHS

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall		
West wall		
All walls	Concrete	
Ceiling		
Floor		
Doors		
Windows		
Lighting		
Built-ins		

MISCELLANEOUS ROOM NOTES
Access only appears possible by removing large return air panel in Room 200.

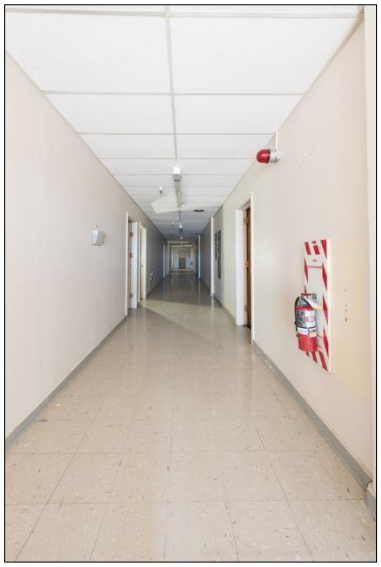
ROOM #: 202	**PHASE:** 1	**LEVEL:** First	**AREA:** 244 sq. ft.	**DATE:** 4/19/16
FUNCTION(S): Workshop				

Room 202, view west-northwest (DSC1586).

Overview, door is to 200A Circulation, view north (DSC1589).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall with wood shelves and power strips	
South wall	Drywall with wood shelves and power strips	
East wall	Concrete with pilaster	
West wall	Drywall with pillar in southwest corner	
All walls	Tan	
Ceiling	Suspended 2 x 4 ft. panels with impressed 1 ft. square pattern	
Floor	Blue carpet with 4 in. dark gray plastic baseboard	
Doors	North flush with louver and steel frame	
Windows		
Lighting	Recessed 2 x 4 ft.	
Built-ins		

ROOM #: 205	PHASE: 1	LEVEL: First	AREA: 1,361 sq. ft.	DATE: 4/18/16
FUNCTION(S): Circulation				



North-south 205 Circulation from outside Room 234, view north (DSC1246).

Access to attic at the north end of north-south 205 Circulation, view north (DSC1698).

East-west 205 Circulation, exit sign is at the intersection with north-south 205 Circulation, telephone cabinet is visible on the south wall, view east (DSC2994).

Service boxes on the south wall of east-west 205 Circulation east of the intersection with north-south 205 Circulation (DSC1748).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall		
West wall		
All walls	Slightly textured pinkish-tan drywall Occasional chamfered concrete pillars embedded in walls. Concrete usually painted but drywall is glued to concrete in some areas.	

ELEMENT	DESCRIPTION	CONDITION
Ceiling	Suspended 2 x 4 ft. panels Circular and rectangular louvered vents in ceiling are common throughout entire building. Access to attic at the north end or north-south circulation.	
Floor	Tan 1 ft. square linoleum tiles with 3 in. gray plastic baseboard over original wood ½ x 3 ¼ in.	
Doors	South door is double flush composite. West door has been removed.	
Windows		
Lighting	Surface mount two tube, diffusers removed	
Built-ins	Fire extinguishers, alarm, service boxes, telephone line cabinet	

ROOM #: 205A	**PHASE:** 1	**LEVEL:** First	**AREA:** 38 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): South Entry Foyer				

From south building entrance, 205 Circulation is beyond the open doors, view north (DSC1225).

Brass Cap “BM. C.P. H&N 1957” (DRI 2016).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall		
West wall		
All walls	Same as 205 Circulation with plain 1 ¾ in. trim around inside corners.	
Ceiling		
Floor	Concrete with brass cap “BM. C.P. H&N 1957” set inside entrance, 3 ¼ in. baseboard with quarter-round shoe	
Doors		
Windows		
Lighting	Round incandescent, surface mount.	
Built-ins	Electrical box, security system, notice placards,	

ROOM #: 205B	**PHASE:** 1	**LEVEL:** First	**AREA:** 140 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Main Entry Foyer				

Main Entrance Foyer, view southeast, (DSC2999).

Tile covering drain in Main Entrance Foyer, view southwest (DSC3007).

Decontamination shower head (DSC3001).

Hand-held sprayer mounted in box along west wall (DSC3011).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall		
West wall		
All walls	Concrete	
Ceiling	Suspended 2 ft. square tiles Decontamination shower head.	Water damage
Floor	Tan 1 ft. square linoleum tile with shower drain. Cracking is concentrated around edges, particularly at junction with original CP1 wall. Baseboard - 6 in. dark brown plastic	Tiles cracked
Doors	Double flush metal with metal surrounds.	
Windows		

ELEMENT	DESCRIPTION	CONDITION
Lighting	Double tube with diffusers removed	
Built-ins	Electrical boxes, security system, placards	

MISCELLANEOUS ROOM NOTES
This foyer is the hyphen connecting the CP1B addition to CP1. East door opening is cut through 8 in. CP1 wall and has chamfers matching rest of concrete edges. CP1A walls are 16 in. thick.

ROOM #: 206	**PHASE:** 1	**LEVEL:** First	**AREA:** 128 sq. ft.	**DATE:** 4/19/16
FUNCTION(S): Men's Restroom				

Western side of restroom, view southwest (DSC1777).

Eastern side of restroom, view southeast (DSC1778).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall	Pillar in the southeast corner trimmed with 1 ¾ in. flat and bevel.	
East wall	Urinals mounted on painted plywood panel.	
West wall	Stained wood-framed mirror is over sinks.	
All walls	Drywall, gloss off-white	
Ceiling	Ceiling is covered with sprayed glitter acoustic. Acoustic material also covers 2 in. plain trim around perimeter.	
Floor	Tan 1 ft. square tile with 4 in. dark brown plastic base over full-cut 1 x 5 ½ in. baseboard	
Doors	Flush with louver vent	
Windows		
Lighting	Surface mount 2-tube without diffusers	
Built-ins	Porcelain sinks, urinals, commodes; steel partitions	

ROOM #: 207	**PHASE:** 1	**LEVEL:** First	**AREA:** 109 sq. ft.	**DATE:** 4/19/16
FUNCTION(S): Women's Restroom				

Interior from the entrance, view south (DSC1733).

Sinks along the east wall in the northeast corner of the room, view northeast (DSC1735).

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	Locking wood cabinet	
South wall	Pillar in southwest wall Mismatched trim as in Room 206	
East wall	Metal framed mirrors with adjacent vertical 2-tube lights with diffusers	
West wall	Wall almost covered by very large stained wood-frame mirror.	
All Walls		
Ceiling	Drywall with same edge molding as Room 206.	
Floor		
Doors		
Windows		
Lighting	Surface-mount circular incandescent	
Built-ins	Wood shelf over sinks in east wall continues onto north wall.	

MISCELLANEOUS ROOM NOTES
Same as 206 Men's Restroom except as noted.

ROOM #: 212	**PHASE:** 1	**LEVEL:** First	**AREA:** 368 sq. ft.	**DATE:** 4/19/16
FUNCTION(S): Office				

Northern end of Office, window (covered with paper) is on north wall, view north (DSC1833).

Corner map case with three corkboard leaves, view southeast (DSC1844).

ELEMENT	DESCRIPTION	CONDITION
North wall	Brown fabric panels Full-length curtain rod and valence at ceiling.	
South wall	Pink/tan drywall (original off-white paint visible in places)	
East wall	Pink/tan drywall	
West wall	Brown fabric panels along top and both sides These panels frame the entrance to Circulation 284. Central portion of wall has plastic off-white panels matching Room 280 above former chair rail (removed to allow installation of cubicle brackets). Below chair rail is a wainscot shorter than that in Room 214 of grooved faux wood plank pattern paneling.	
All walls		
Ceiling	Suspended 2 x 4 ft.	
Floor	Blue carpet, 4 in. gray plastic base	
Doors	No door at entry from Room 214. Opening cased with stained wood and stained ogee molding.	
Windows	Single fixed light viewing port, alarmed, replacement two-layer glass. Moisture is present between inner and outer layers of glass. Window is 18 x 24 in.	Moisture
Lighting	Recessed 2 x 4 ft.	
Built-ins	Stained wood corner map case with three corkboard leaves, cubicle.	

ROOM #: 213	**PHASE:** 1	**LEVEL:** First	**AREA:** 255 sq. ft.	**DATE:** 4/19/16
FUNCTION(S): Conference				

Conference room from the entrance, view northeast (DSC1887).

View from the southeast corner of the room, exit is to 214 Conference Room (DSC1888).

ELEMENT	DESCRIPTION	CONDITION
North wall	Credenza standards	
South wall		
East wall		
West wall	Pillar	
All walls	Adhesive tan fabric “wallpaper.” Fabric also covers pillar.	Some peeling
Ceiling	Suspended 2 x 4 ft. and 2 x 2 ft.	
Floor	Blue carpet with 4 in. gray plastic base	
Doors	Off-white flush steel with steel frame	
Windows		
Lighting	Inset 2 x 4 ft. with diffusers	
Built-ins		

ROOM #: 213A/114A	**PHASE:** 1	**LEVEL:** First	**AREA:** 134 sq. ft.	**DATE:** 4/20/16
FUNCTION(S): Stairs (continuous stairwell between the first floor and basement)				

SEE 114A FOR PHOTOGRAPHS

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	See Form 114A for description.	
South wall		
East wall		
West wall		
All walls		
Ceiling		
Floor		
Doors		
Windows		
Lighting		
Built-ins		

MISCELLANEOUS ROOM NOTES
The 114A/213 Stairs are a continuous stairwell with a dogleg or half space landing. Therefore, the descriptions of the 114A stairs and the 213 Stairs are the same. Top rail and end stops are in place for a sliding 1 ¾ in. thick steel-framed blast door at the entrance to Circulation 113 at the bottom of the stairs. The steel blast door has been removed. Silver-painted aluminum pipe rails are on concrete parapets.

ROOM #: 214	**PHASE:** 1	**LEVEL:** First	**AREA:** 359 sq. ft.	**DATE:** 4/19/16
FUNCTION(S): Conference				

Overview south from the north wall of the room, exit is to 205 Circulation (8015774).

Overview north, door is to Room 212 Office (DSC1825).

ELEMENT	DESCRIPTION	CONDITION
North wall	Tan fabric panels above faux wood-grain pressboard panel wainscot Stained wood ogee chair rail	
South wall	Pink/tan, off white, and tan drywall Relic divider wall is stub capped with stained board and ogee molding.	
East wall	Same as south wall	
West wall	Same as north wall with attached bookcase. Originally CP1 external concrete wall.	
All walls		
Ceiling	Suspended 2 x 4 ft. ceiling with one panel broken at circular cutout.	Break
Floor	Blue carpet, 4 in. gray plastic base	
Doors	South door, flush Dutch with counter and louver vent, painted ogee surround.	
Windows	Two small 16 x 21 in. with horizontal sliding glass lights Stained wood trim with molding matching chair rail	
Lighting	Recessed 2 x 4 ft. with diffusers.	
Built-ins		

ROOM #: 215	**PHASE:** 1	**LEVEL:** First	**AREA:** 85 sq. ft.	**DATE:** 4/19/16
FUNCTION(S): Kitchen				

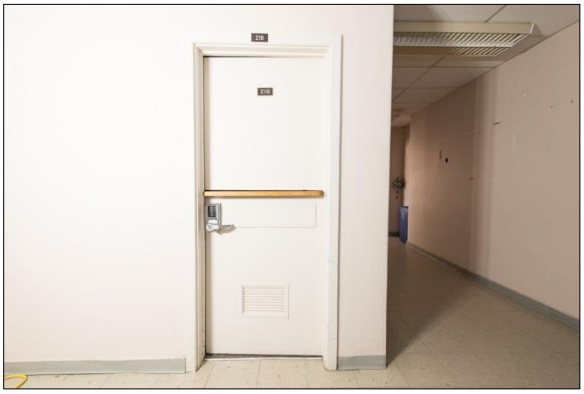
North end of room, showing communications relay and map file, view north-northwest (DSC1871).

Faux wood sideboard along the south wall, view south (DSC1875).

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	Metal lock box in center of wall, plywood rolled map file in northeast corner	
South wall		
East wall		
West wall		
All walls	Off-white drywall	
Ceiling	Suspended 2 x 4 ft.	
Floor	Tan 1 ft. square ceramic tile with 4 in. gray plastic base	
Doors	The door from Room 214 is flush off-white with matching wood trim and louver.	
Windows		
Lighting		
Built-ins	Entire south wall is faux wood pressboard sideboard.	

MISCELLANEOUS ROOM NOTES
Major communications relay in northwest corner with bundled lines through ceiling without conduit.

ROOM #: 218	**PHASE:** 1	**LEVEL:** First	**AREA:** 181 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Office				



Dutch door with counter to Room 218 off 205 Circulation, view west (DSC1688).

View from door in northeast corner of the room, view west (DSC1875).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall	
South wall	Drywall with 2 ½ in. chair rail	
East wall	Same	
West wall	External concrete Utility or ventilation chase in northwest corner	
All Walls	Painted tan	
Ceiling	Acoustic tiles, 1 ft. square	
Floor	Carpet, 4 in. gray plastic baseboard over wood baseboard	
Doors	East door, flush Dutch with counter, combination lock, louver vent South door, flush Both doors have plain wood surrounds.	
Windows		
Lighting	Florescent 2-tube, no diffuser	
Built-ins		

ROOM #: 219	**PHASE:** 1	**LEVEL:** First	**AREA:** 153 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Office (originally the main entrance foyer)				

Overview from the southeast corner of Room 219. The original main entrance on the west wall is not visible, view west (DSC1679).

Overview northwest, the door is to 205 Circulation (DSC1681).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall	
South wall	Drywall	
East wall	Drywall	
West wall	Concrete West wall contains original main double-door entrance. Blocked with CMU and visible from outside building. Interior is surface smooth mortar and painted to be barely visible.	
All walls	Painted tan with typical chair rail	
Ceiling	Suspended 2 x 4 ft.	
Floor	Carpet	
Doors	Flush, louver vent, plain wood surrounds	
Windows		
Lighting	Recessed 4-tube florescent with grid	
Built-ins		

ROOM #: 220	**PHASE:** 1	**LEVEL:** First	**AREA:** 39 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Fire Sprinkler				

Accordion door to Room 220, view south (DSC1682).

Fire main and valves in Room 220, view southwest (DSC1684).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall	
South wall	Drywall	
East wall	Drywall	
West wall	Concrete	
All walls	Painted tan	
Ceiling	Drywall	
Floor	Concrete	
Doors	Plastic accordion replacement Wood door frame with typical plain surround has repaired marks from removed standard door.	
Windows		
Lighting		
Built-ins	Fire mains and valves	

ROOM #: 223	**PHASE:** 1	**LEVEL:** First	**AREA:** 223 sq. ft.	**DATE:** 9/19/16
FUNCTION(S): Office				

Overview from the southeast corner, marked exit is to 205 Circulation, view northwest (DSC1620).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall	Staining from ceiling leaks	Much water staining
East wall		
West wall		
All walls	Tan drywall The tan is same color as in Rooms 205 and 254 before these areas were repainted pink/tan.	
Ceiling	Suspended 2 x 4 ft. panels	Heavy water damage
Floor	Tan 1 ft. square linoleum tile; brown 4 in. plastic base	
Doors	Flush with louver vent and wood casing	
Windows		
Lighting	Recessed 2 x 4 ft. with diffusers	
Built-ins		

ROOM #: 224	**PHASE:** 1	**LEVEL:** First	**AREA:** 53 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Janitor				

Door to Room 224 from 205 Circulation, view west (DSC1669).

Interior view from the door, view northwest (DSC1674).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall		
West wall		
All walls	Tan painted drywall	
Ceiling	Drywall with plain perimeter molding	
Floor	Concrete	
Doors	Flush; Dutch with louver and counter	
Windows		
Lighting	Circular incandescent	
Built-ins	Enamel sink; plywood storage closet	

ROOM #: 226	**PHASE:** 1	**LEVEL:** First	**AREA:** 274 sq. ft.	**DATE:** 4/28/16
FUNCTION(S): Reproduction Room				

View of southern end of room, closed door is entry to Room 230, view south-southwest (DSC1667).

Interior view from the door off 205 Circulation, view west (DSC1668).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall	
South wall	Drywall	
East wall	Drywall	
West wall	Concrete with pilaster	
All walls	Pinkish-tan	
All Walls		
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Blue carpet with gray plastic base	
Doors	East door is flush with louver and combination lock; south door is flush with one large light	
Windows		
Lighting	Recessed 2 x 4 ft. with diffusers	
Built-ins		

ROOM #: 230	**PHASE:** 1	**LEVEL:** First	**AREA:** 185 sq. ft.	**DATE:** 4/28/16
FUNCTION(S): Reproduction Room				

Interior view from the southeast corner of the room, view northwest (DSC1661).

West wall, showing concrete with pilaster and electrical boxes, view west (DSC1662).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall, entry into Room 226	
South wall	Drywall with plywood overlay	
East wall	Drywall	
West wall	Concrete with pilaster and electrical boxes	
All walls	Pinkish-tan, earlier yellow	
Ceiling	Acoustic panels glued to drywall	
Floor	Blue carpet, typical wood base with quarter-round shoe	
Doors	Flush; Dutch with counter and stainless deposit box	
Windows		
Lighting	Surface-mount 4-tube with diffusers	
Built-ins		

ROOM #: 232	**PHASE:** 1	**LEVEL:** First	**AREA:** 186 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Office				

Closed door from 205 Circulation, open door is to Room 230, view west (DSC1650).

Interior overview, view west (DSC1652).

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	Drywall, 2 ½ in. painted chair rail on north, south, and east walls	
South wall	Drywall	
East wall	Drywall	
West wall	Concrete, plain corner boards; 2 in. hole through wall has conduit removed. I put in temporary paper plug to keep out bats.	Paint flaking off
All walls		
Ceiling	Suspended 2 x 4 in. panels	
Floor	Tan 1 ft. square linoleum tiles, typical wood base and shoe, removal of former partition by unmatched tiles	
Doors	Flush, Dutch with counter and louver vent, removal of former second door in south wall indicated by seam in baseboard	
Windows		
Lighting	Surface mounted 3-tube with diffuser grid	
Built-ins		

ROOM #: 234	**PHASE:** 1	**LEVEL:** First	**AREA:** 371 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Office				

Northwestern area of Room 234, view northwest (DSC1647).

Southern area of the room, view south-southwest (DSC1644).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall with plywood applied as equipment mount	
South wall	Concrete with whiteboard	
East wall	Drywall	
West wall	Concrete with pilaster	
All walls	Pinkish-tan with painted wood chair rail	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Tan 1 ft. square linoleum tiles with typical wood baseboard	
Doors	Flush; Dutch with louver vent and combination lock	
Windows		
Lighting	Surface mounted 2- and 4-tube with diffusers	
Built-ins		

MISCELLANEOUS ROOM NOTES
The room combines two former rooms. The former south door is blocked, but visible in the drywall and baseboard. The partition between the two rooms is visible as unmatched tile and ceiling patch. Difficult to photograph – used as a temporary storage room for items not yet moved.

ROOM #: 241	**PHASE:** 1	**LEVEL:** First	**AREA:** 197 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Control Room				

Dutch door with counter and combination lock, entrance from 265A Circulation to Room 241, view south (DSC1282).

Interior of the room, view northeast (DSC1295).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall	
South wall	Recent partition between 241 and 241A has been removed; a partial drywall partition stub remains on walls and ceiling	
East wall	Drywall	
West wall	Drywall with exposed concrete pillar	
All walls	Tan, painted chair rail	
Ceiling	Acoustic tiles 1 ft. with plain trim	
Floor	Blue/green carpet with 3 ½ in. brown plastic base over the top of the wood base	
Doors	Flush wood-stained Dutch doors with counter and combination lock	
Windows		
Lighting	Surface mounted florescent with diffusers	
Built-ins		

MISCELLANEOUS ROOM NOTES
This room and 241A have been a single room during nearly all of the building's history.

ROOM #: 241A	**PHASE:** 1	**LEVEL:** First	**AREA:** 275 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Control Room (same as Room 241 except as noted)				

View of Room 241A from Room 240. The concrete pillar on the west wall marks the division, view south (DSC1297).

Overview from the northwest corner of the room. The two portable equipment racks and electrical panels are visible along the south wall. The door along east wall is to Room 241B, view southeast (DSC1300).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall	Concrete with no chair rail; electrical panels and conduit	
East wall		
West wall		
All walls		
Ceiling	Suspended 2 x 4 ft. panels	
Floor		
Doors		
Windows		
Lighting	Inset 2 x 4 ft. with diffusers	
Built-ins	Two portable equipment racks in corner	

ROOM #: 241B	**PHASE:** 1	**LEVEL:** First	**AREA:** 100 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Control Room (same as Room 241 except as noted)				

Overview from Room 241A entrance (door removed), view southeast (DSC1311).

Overview from the northeast corner of the room. Doorway is to Room 241A, view southwest (DSC1313).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall	Concrete	
East wall		
West wall		
All walls	No chair rails	
Ceiling	Matches Room 241A	
Floor		
Doors	Removed	
Windows		
Lighting		
Built-ins		

ROOM #: 242	**PHASE:** 1	**LEVEL:** First	**AREA:** 139 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Vault				

Entrance to the Vault, view south (DSC1314).

Overview from the southeast corner of the room, view northwest (DSC1328).

Neutron Generator Test Table along the south wall, view south-southwest (DSC1337)

Vault ceiling (DSC1495)

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall	
South wall	Concrete	
East wall	Drywall	
West wall	Drywall	
All walls	Yellow, extending to underside of roof	
Ceiling	Unpainted concrete, underside of roof	
Floor	Tan 1 ft. square linoleum tiles with 4 in. dark brown plastic base	
Doors	Flush, wood	
Windows		
Lighting	Suspended 4-tube without diffusers	
Built-ins	Steel shelves	

MISCELLANEOUS ROOM NOTES
Wood door indicates this is a fairly low-security vault. A General Electric Neutron Generator Test Table is stored in this room.

ROOM #: 250	**PHASE:** 1	**LEVEL:** First	**AREA:** 1,778 sq. ft.	**DATE:** 4/20/16
FUNCTION(S): Monitor Room (original CP-1 Control Room)				

Entrance to the Monitor Room, steel double doors with red revolving light above the door, view north (DSC1899).

Interior view of the northern portion of the room on raised floor, equipment racks, three windows, and the exterior door are visible, view north (DSC1921).

Interior view of the eastern side of the room on raised floor, view east (DSC1926).

L-plan console on raised floor, view southeast (DSC1934).

ELEMENT	DESCRIPTION	CONDITION
North wall	Four electrical panels and furred-out cableway; emergency light	
South wall	Pillar sheathing extended for cableway, security control panel, electrical breaker box, emergency light	
East wall	Four electrical panels	
West wall		
All walls	Pressboard panels 4 x 8 ft. with smooth wood-grain plastic veneer, pillars and pilasters are sheathed with the same material, concrete underlies the panels in the north and east walls and around Ventilation Shaft 250A	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Tan 1 ft. square linoleum tiles (removed under raised floor), brown 4 in. plastic base at entry and rear stepdown, computer platform is removable 2 x 2 ft. white panels with dark brown edges on a screw-jack frame. The front step onto platform is chromed non-skid steel. The stepdown is the same materials as the platform. Rectangular-section aluminum railing runs along front (south) edge of platform.	
Doors	Interior door is flush steel double doors brown inside, pinkish-tan outside. Each door has a wire-reinforced light. There is a red revolving light over door in hallway and a plaque labeled “Monitor Room.” Exterior door CP1-11 is flush brown steel with matching frame and alarm. Door has been cut down to 6 ft. tall to match top of inside platform. Air duct passes under threshold.	
Windows	Four fixed observation ports in the north wall remain. One is used for AC unit, another is blocked with concrete.	
Lighting	Recessed 2 x 4 ft. with diffusers	
Built-ins	L-plan console, some equipment racks remain in place. Window glazing is held in place between heavy L-section steel moldings.	

ROOM #: 250A	**PHASE:** 1	**LEVEL:** First	**AREA:** 83 sq. ft.	**DATE:** No access
FUNCTION(S): Utility Shaft (above 116A)				

NO ACCESS FROM FIRST FLOOR – NO PHOTOGRAPHS

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall		
South wall		
East wall		
West wall		
All walls	Concrete	
Ceiling		
Floor		
Doors		
Windows		
Lighting		
Built-ins		

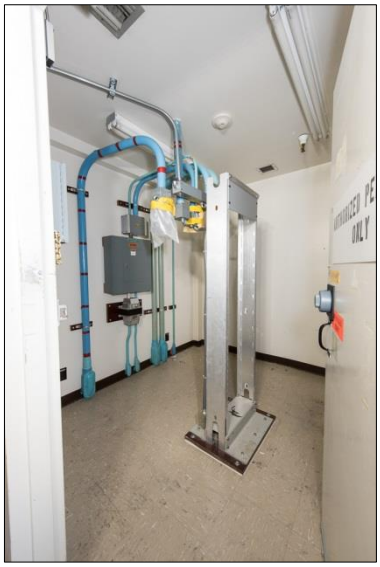
MISCELLANEOUS ROOM NOTES
Access to the Utility Shaft is from 116A Duct off 116 Mechanical Room

ROOM #: 251	**PHASE:** 1	**LEVEL:** First	**AREA:** 104 sq. ft.	**DATE:** 4/20/16
FUNCTION(S): Vault (storage)				

Overview of Storage from 251C Circulation. The storage area does not have a separate door, view south (DSC1991).

ELEMENT	DESCRIPTION	CONDITION
North wall	Concrete	
South wall	Drywall	
East wall	Drywall	
West wall	Drywall	
All walls	Off-white	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Tan 1 ft. square linoleum tiles with 4 in. dark brown plastic base	
Doors		
Windows		
Lighting	Inset 2 x 4 ft. with diffusers	
Built-ins		

ROOM #: 251A	**PHASE:** 1	**LEVEL:** First	**AREA:** 61 sq. ft.	**DATE:** 4/20/16
FUNCTION(S): Vault				

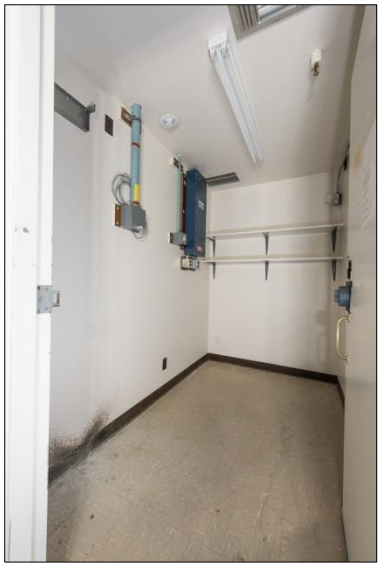


Interior view from entrance, Crypto Panel is mounted on the east wall, several cable conduits lead to the equipment rack, view southeast (DSC1978).

Close-up of Crypto Panel label, view east (DSC1295).

ELEMENT	DESCRIPTION	CONDITION
North wall	Security alarm panel	
South wall		
East wall	Crypto Panel and several cable conduits leading to equipment rack in center of room	
West wall		
All walls	Off-white drywall	
Ceiling	Drywall	
Floor	Tan 1 ft. square linoleum tile with 4 in. dark brown plastic base	
Doors	Flush white steel with matching frame, combination lock, and security alarm; placards: “Authorized Personnel Only” and “Have you called Security?”	
Windows		
Lighting	Surface mounted 2-tube without diffusers	
Built-ins		

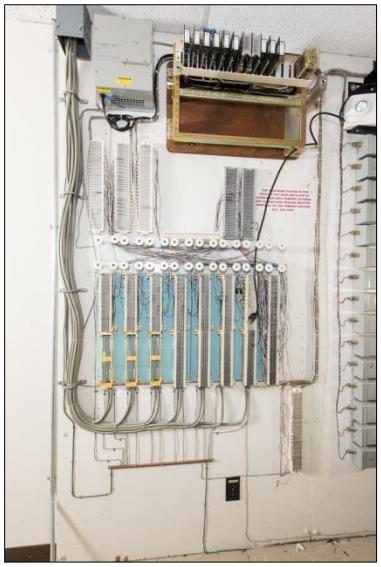
ROOM #: 251B	**PHASE:** 1	**LEVEL:** First	**AREA:** 61 sq. ft.	**DATE:** 4/20/16
FUNCTION(S): Vault				



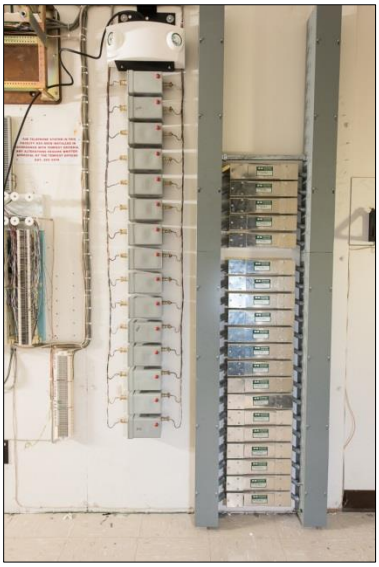
Interior view from 251C Circulation, computer conduit and powerline interference filter are visible on the east wall view south (DSC1986).

ELEMENT	DESCRIPTION	CONDITION
North wall	Conduit for security system	
South wall	Built-in wood shelves	
East wall	Computer conduit; powerline interference filter.	
West wall		
All walls	Off-white drywall	
Ceiling	Drywall	
Floor	Tan 1 ft. square linoleum tile with 4 in. dark brown plastic base	
Doors	Flush white steel with matching frame, combination lock, and security alarm	
Windows		
Lighting	Surface mounted 2-tube without diffusers	
Built-ins		

ROOM #: 251C	**PHASE:** 1	**LEVEL:** First	**AREA:** 56 sq. ft.	**DATE:** 4/20/16
FUNCTION(S): Circulation				



Communications relays on north wall west side of Circulation, view north (DSC1995).



Crypto, RFI filters on the north wall east side, view north (DSC2001).

ELEMENT	DESCRIPTION	CONDITION
North wall	Concrete, recently covered with telephone relays and filters	
South wall	Drywall	
East wall	Drywall, alarm horn over door	
West wall	Drywall	
All walls	Off-white	
Ceiling	Drywall	
Floor	Tan 1 ft. square linoleum tile with 4 in. dark brown plastic base	
Doors	Flush white steel with matching frame	
Windows		
Lighting	Surface mounted 2-tube without diffusers	
Built-ins		

ROOM #: 253	**PHASE:** 1	**LEVEL:** First	**AREA:** 172 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Office				

Interior view from door off 205 Circulation. The door in the background is to Room 254, view south (DSC1790).

Interior view from the southeast corner, view west-northwest (DSC1599).

ELEMENT	DESCRIPTION	CONDITION
North wall	Cable conduits in both corners	
South wall	Pillar in southwest corner	
East wall		
West wall		
All walls	Off-white drywall	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Tan 1 ft. square linoleum tiles with 4 in. brown plastic base	
Doors	The north door is flush, painted tan with steel frame. The south door is flush, stained wood with wood frame.	
Windows		
Lighting	Recessed 2 x 4 ft. with protruding diffusers	
Built-ins		

MISCELLANEOUS ROOM NOTES
LANL [Los Alamos] calendar and organizational chart are on the wall.

ROOM #: 254	**PHASE:** 1	**LEVEL:** First	**AREA:** 355 sq. ft.	**DATE:** 4/19/16
FUNCTION(S): Laboratory				

Interior view, doors are to Rooms 255 (left) and 223 (right), view southwest (DSC1607).

Lab tables in the southeast corner of Room 254, view east (DSC1608).

ELEMENT	DESCRIPTION	CONDITION
North wall	The concrete pillar not chamfered on this side only. This is an unintentional construction error when assembling the form.	
South wall		
East wall		
West wall		
All walls	Tan drywall	
Ceiling	Suspended 2 x 4 ft. panels	One panel is broken
Floor	Tan 1 ft. square linoleum tiles with 4 in. brown plastic base	
Doors	The west and east doors are flush, and the wood is stained with painted steel frames.	
Windows	None	
Lighting	Recessed 2 x 4 ft. with diffusers	
Built-ins		

ROOM #: 255	**PHASE:** 1	**LEVEL:** First	**AREA:** 249 sq. ft.	**DATE:** 5/5/16
FUNCTION(S): Laboratory				

Interior view from entrance 254 Laboratory, view south (DSC1610).

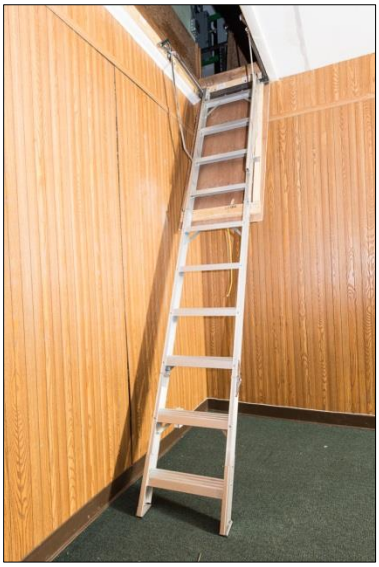
Interior view, showing pillar near the center of room, view southeast (DSC1611).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall		
West wall		Water damage from above
All walls	Off-white drywall	
Ceiling	Suspended 2 x 4 ft. panels	Water damage
Floor	Tan 1 ft. square linoleum tiles with 4 in. brown base	Water damage
Doors	Flush; stained wood	
Windows		
Lighting	Inset 2 x 4 ft. with diffusers	
Built-ins		

MISCELLANEOUS ROOM NOTES
Pillar near center of room

ROOM #: 256	**PHASE:** 1	**LEVEL:** First	**AREA:** 259 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Conference Room				

Overview of interior from entrance frm 258 Office, view north (DSC1414).



Access to attic in the northeast corner of the room, view northeast (DSC1427).

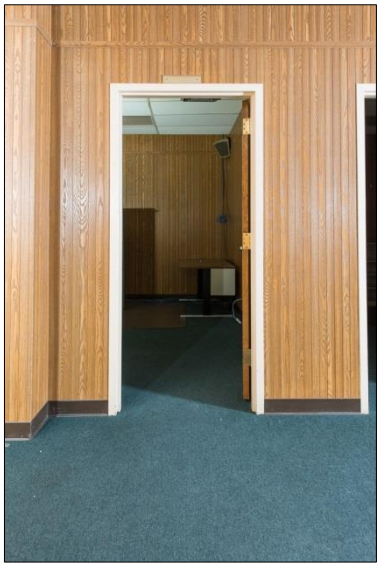
ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	Concrete (utility shaft), former return air vent covered by paneling	
South wall	Drywall	
East wall	Drywall	
West wall	Drywall	
All walls	Covered with oak veneer pressboard panels	
Ceiling	Suspended 2 x 4 ft. panels, access to attic in northeast corner	Water damage
Floor	Blue carpet with 4 in. brown plastic base	
Doors	Flush, stained wood with off-white steel surround and louver vent	
Windows		
Lighting	Inset with diffusers	
Built-ins		

ROOM #: 256A	**PHASE:** 1	**LEVEL:** First	**AREA:** 68 sq. ft.	**DATE:** No access
FUNCTION(S): Utility Shaft (exhaust air shaft)				

NO ACCESS FROM FIRST FLOOR – NO PHOTOGRAPHS

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall		
South wall		
East wall		
West wall		
All walls	Concrete	
Ceiling	Concrete	
Floor	There is no floor. Access is via open bottom in southwest corner of the ceiling of Mechanical Room 116. The shaft continues upward to a rectangular exhaust vent in roof.	
Doors		
Windows		
Lighting		
Built-ins		

ROOM #: 257	**PHASE:** 1	**LEVEL:** First	**AREA:** 163 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Office				



Interior view from entrance from 265 Office, view north (DSC1509).

Interior view from the southwest corner, view northeast (DSC1514).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall		
West wall		
All walls	Drywall with oak veneer pressboard panels	
Ceiling	Suspended 2 x 4 ft. panels	Water damage
Floor	Blue carpet with 4 in. brown plastic base	
Doors	Flush, stained wood with off-white steel surround, louver vent, and combination lock	
Windows		
Lighting	Inset with diffusers	
Built-ins		

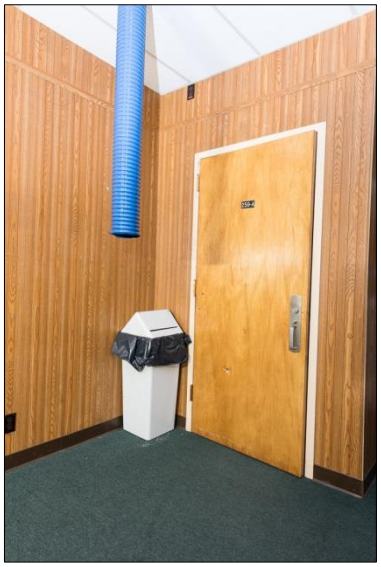
ROOM #: 258	**PHASE:** 1	**LEVEL:** First	**AREA:** 149 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Office				

Entrance from 265 Office, view west (DSC1406).

Interior view from the northeast corner, view southwest (DSC1409).

ELEMENT	DESCRIPTION	CONDITION
North wall	Sheathed pillar in northwest corner	
South wall		
East wall		
West wall		
All walls	Drywall with oak veneer pressboard panels	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Blue carpet with 4 in. brown plastic base	
Doors	Flush, stained wood with off-white steel surround and louver vent	
Windows		
Lighting	Inset with diffusers	
Built-ins		

ROOM #: 259/259A	**PHASE:** 1	**LEVEL:** First	**AREA:** 193 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Office				



Door to Room 259/259A from 265 Office, view northeast (DSC1528).

Interior view from the southeast corner. Both doors exit to 267 Computer Room, view northwest (DSC1535).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall	
South wall	Drywall	
East wall	Concrete with pilaster	
West wall	Drywall with pillar	
All walls	White	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Gray carpet with 4 in. gray plastic base	
Doors	The west door is stained wood, mounted flush into the Sandia area. The other two doors are steel with steel frames, mounted flush, and painted white.	
Windows		
Lighting		
Built-ins		

MISCELLANEOUS ROOM NOTES
This room was at one time divided into two offices. No evidence remains of former partition between 259 and 259A.

ROOM #: 260	**PHASE:** 1	**LEVEL:** First	**AREA:** 138 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Office				

Window and door to 260 Office off 265 Office, view east (DSC1353).

Overview of interior from the southeast corner, view west-northwest (DSC1368).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall	
South wall	Drywall	
East wall	Concrete	
West wall	Plain aluminum frame for two fixed lights above flush tan panels	
All walls	All except the west wall are clad with oak veneer pressboard panels.	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Blue carpet with 4 in. brown plastic base	
Doors	Flush, tan with aluminum surround and combination lock	
Windows	The two windows in the west wall are fitted with wood slat roller blinds.	
Lighting	Inset with diffusers	
Built-ins		

ROOM #: 261	**PHASE:** 1	**LEVEL:** First	**AREA:** 467 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Laboratory				

Door to 261 Laboratory from 265 Office, view south (DSC1345).

Interior view from the northeast corner. The exit to the outside on the south wall is door CP1-6 and 242 Vault is in the southwest corner, view southwest (DSC1350).

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	Drywall	
South wall	Concrete	
East wall	Concrete with pilaster	
West wall	Drywall with exposed pillar	
All walls	Pale yellow	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Tan 1 ft. square linoleum tiles with 4 in. dark brown base	Insects
Doors	Both steel, mounted flush, exterior door (CP1-6) is alarmed.	
Windows		
Lighting	Inset 2 x 4 ft. with diffusers	
Built-ins		

MISCELLANEOUS ROOM NOTES
Placard indicates a moderate radiological hazard.

ROOM #: 262	**PHASE:** 1	**LEVEL:** First	**AREA:** 339 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Office				

Overview of the southern portion of the room. The door on the west wall is to 263 Bunk Room, view southwest (DSC1392).

Cubicle in the northwest corner, view northwest (DSC1388).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall		
West wall		
All walls	Drywall with oak veneer pressboard panels	
Ceiling	Suspended 2 x 4 ft. suspended	
Floor	Blue carpet with 4 in. brown plastic base	
Doors	Flush, tan steel with off-white steel surround and combination lock	
Windows		
Lighting	Inset with diffusers	
Built-ins	Cubicles still in place	

ROOM #: 263	**PHASE:** 1	**LEVEL:** First	**AREA:** 68 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Bunk Room				

Door to 263 Bunk Room from 262 Office, view west (DSC1394).

Interior view, west (DSC1400).

ELEMENT	DESCRIPTION	CONDITION
North wall	Sheathed pillar	
South wall		
East wall		
West wall		
All walls	Drywall with oak veneer pressboard panels	
Ceiling	Composite single panel	
Floor	Blue carpet with 4 in. brown plastic base	
Doors	Flush; tan steel with off-white steel surround and louver vent	
Windows		
Lighting	Surface mount 2-tube with diffuser	
Built-ins	One set of gray steel frame bunks, air handler	

ROOM #: 264	**PHASE:** 1	**LEVEL:** First	**AREA:** 54 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Restroom				

Door to 264 Restroom from 263 Bunk Room, view north (DSC1404).

Overview of 264 Restroom, view north (DSC1405).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall	Exposed pillar painted to match	
East wall		
West wall		
All walls	Drywall, pale yellow with metal-trimmed blue melamine wainscot	
Ceiling	Pale yellow drywall with 2 in. painted border molding; small attic access panel in ceiling	
Floor	Tan 1 ft. square linoleum tiles; 4 in. dark brown plastic base is glued over the original 1 x 5.5 in. wood base	
Doors	Flush, steel, tan on exterior, with off-white steel frame and louver vent	
Windows		
Lighting	Circular incandescent	
Built-ins	Ceramic sink and commode; plastic corner shower surround	

ROOM #: 265	**PHASE:** 1	**LEVEL:** First	**AREA:** 440 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Office				

Overview from the west side of 265 Office, view east (DSC1624).

Overview from the northeast corner, view southwest (DSC1634).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall	South half is the glass partition of Room 260	
West wall		
All walls	Drywall with oak veneer pressboard panels	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Blue carpet with 4 in. brown plastic base	
Doors	Flush; tan steel with off-white steel surround	
Windows		
Lighting	Inset with diffusers	
Built-ins		

ROOM #: 265A	**PHASE:** 1	**LEVEL:** First	**AREA:** 57 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Circulation				

Door to 265A Circulation with "Sandia Laboratories" label, from 205 Circulation, view east (DSC1270).

View of 265A Circulation, 265 Office is in the background, view east (DSC1275).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall		
West wall		
All walls	Drywall with oak veneer pressboard panels	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Blue carpet with 4 in. brown plastic base	
Doors	Flush, stained wood with off-white wood surround and combination lock, outside of door has "SANDIA LABORATORIES" label	
Windows		
Lighting	Surface mounted 2-tube with no diffusers	
Built-ins		

ROOM #: 266	**PHASE:** 1	**LEVEL:** First	**AREA:** 156 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Office				

View through door from 265 Office to 266 Office, view north (DSC1522).

Interior view, northeast (DSC1523).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall		
West wall		
All walls	Drywall with oak veneer pressboard panels	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Blue carpet with 4 in. brown plastic base	
Doors	Flush, stained wood with off-white steel surround, louver vent, and combination lock	
Windows		
Lighting	Inset with diffusers	
Built-ins		

ROOM #: 267	**PHASE:** 1	**LEVEL:** First	**AREA:** 314 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Computer				

Overview of northern side of 267 Computer, free-standing concrete pillar is in the northwest area, view north-northeast (DSC1541).

Overview from the southeast corner, view northwest (DSC1546).

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	Drywall with electrical boxes	
South wall	Drywall	
East wall	Concrete with pilaster, electrical box	
West wall	Drywall	
All walls	White	
Ceiling	Plywood or drywall, white	
Floor	Gray carpet with 4 in. gray plastic base	
Doors	The north door is flush mounted, white steel with wire-reinforced light. All three doors have wall-mounted electrical locks which are designed to keep doors open for ventilation.	
Windows		
Lighting	Surface-mounted multi-tube with diffusers	
Built-ins	Many electrical and cable fittings	

MISCELLANEOUS ROOM NOTES
Roof-mounted air handling vents are abundant for this size of room. A free-standing concrete pillar is in the room.

ROOM #: 267A	**PHASE:** 1	**LEVEL:** First	**AREA:** 108 sq. ft.	**DATE:** 4/18/16
FUNCTION(S): Computer				

Overview from the southeast corner, view northwest (DSC1556).

Overview from the northeast corner, open door is to 267 Computer Room, view southwest (DSC1557).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall with electrical boxes	
South wall	Drywall	
East wall	Concrete with pilaster, electrical box	
West wall	Drywall	
All walls	White	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Gray carpet with 4 in. gray plastic base	
Doors	The north door is flush, white steel with matching steel frame.	
Windows		
Lighting	Inset 2 x 4 ft. with diffusers	
Built-ins		

MISCELLANEOUS ROOM NOTES
Though not on any plan, the room number is written in marker on the outside door frame. Several computer/communication cables lead from ceiling.

ROOM #: 268	**PHASE:** 1	**LEVEL:** First	**AREA:** 323 sq. ft.	**DATE:** 4/19/16
FUNCTION(S): Monitor				

Overview from the southwest corner, door is to 202 Workshop, view northeast (DSC1578).

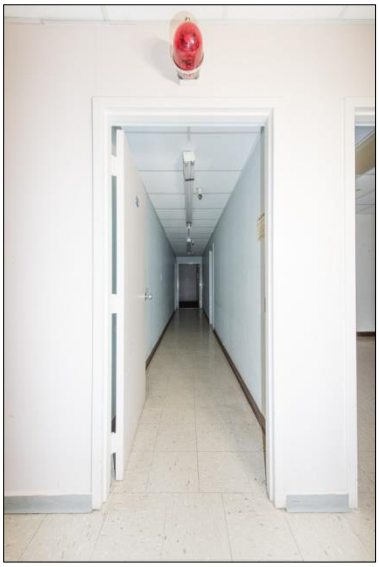
Overview from the southwest corner, open door is to 202 Workshop, view north (DSC1571).

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	Drywall with rectangular cable conduit	
South wall	Drywall with rectangular cable conduit	
East wall	Concrete with junction box and large cable conduit	
West wall	Drywall	
All walls	Dark tan	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Brown carpet with dark brown plastic base	
Doors	Both flush, stained wood in steel frames. The west door is labeled 268A and north door is labeled 268B.	
Windows		
Lighting	Recessed 2 x 4 ft. with protruding diffusers	
Built-ins		

MISCELLANEOUS ROOM NOTES
A linear mark on the carpet across the center of the room shows where a temporary divider was installed.

ROOM #: 268A	**PHASE:** 1	**LEVEL:** First	**AREA:** 136 sq. ft.	**DATE:** 4/19/16
FUNCTION(S): Circulation				

Door to 268A Circulation from 205 Circulation, view south (DSC1791).



View of 268A Circulation, view south (DSC1792).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall		
West wall		
All walls	Pale blue drywall	
Ceiling	Suspended 2 x 2 ft. panels	
Floor	Tan 1 ft. square linoleum tiles with 4 in. dark brown plastic base	
Doors	The north door is flush, steel with steel frame, pinkish tan on north surface, pinkish tan on south (interior) surface, red strobe light above the entrance	
Windows		
Lighting	Surface mount 2-tube with diffusers removed	
Built-ins		

MISCELLANEOUS ROOM NOTES
There is a Los Alamos sticker on the north door.

ROOM #: 270	**PHASE:** B	**LEVEL:** First	**AREA:** 394 sq. ft.	**DATE:** 4/21/16
FUNCTION(S): Office				

South door to 270 Office from 271C Circulation (DSC2118).

Interior from the door off 271C Circulation, showing cubicles, view northeast (DSC2123).

ELEMENT	DESCRIPTION	CONDITION
North wall	Full-height stained wood map case with four sliding leaves	
South wall	Tan fabric-covered fiber panels	
East wall	Grooved wood paneling with stained 1 x 6 in. chair rail; not original, tan-painted concrete is visible behind the panels through a cutout	
West wall	Tan fabric-covered fiber panels	
All walls		
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Purple carpet with 4 in. black plastic base	
Doors	The south door is flush; stained wood, Dutch with counter, wire-reinforced light, expanded metal vent, and combination lock. The west door is flush; wood-stained pocket door with lock and sliding barrel bolt on the east side to prevent entry from the War Room. Placards on the War Room side include instructions for the door to remain locked at all times and “NO ACCESS WITHOUT SECURITY CLEARANCE.”	
Windows	Fixed with steel frame with view into War Room	
Lighting	Recessed 2 X 4 ft. with grid diffusers	
Built-ins	Cubicles	

ROOM #: 270A	**PHASE:** B	**LEVEL:** First	**AREA:** 193 sq. ft.	**DATE:** 4/21/16
FUNCTION(S): Office				

Interior from the southeast corner, open door is to 270B office, view northwest (DSC2138).

ELEMENT	DESCRIPTION	CONDITION
North wall	Off-white drywall	
South wall	Off-white drywall	
East wall	Grooved wood paneling with stained 1 x 6 in. chair rail	
West wall	Tan fabric-covered fiber panels	
All walls		
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Purple carpet with 4 in. black plastic base	
Doors	None from 270	
Windows		
Lighting	Recessed 2 x 4 ft. with grid diffusers	
Built-ins	Cubicles	

ROOM #: 270B	**PHASE:** B	**LEVEL:** First	**AREA:** 173 sq. ft.	**DATE:** No date
FUNCTION(S): Office				

Entrance to 270B Office from270A Office, view north (DSC2141).

Interior from the southeast corner, pocket door on west wall is visible, view northwest (DSC2150).

ELEMENT	DESCRIPTION	CONDITION
North wall	Grooved wood paneling with stained 1 x 6 in. chair rail	
South wall	Off-white drywall	
East wall	Grooved wood paneling with stained 1 x 6 in. chair rail	
West wall	Tan fabric-covered fiber panels	
All walls		
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Purple carpet with 4 in. black plastic base	
Doors	The south door is flush, stained wood pocket door with matching stained ogee casing. The west door into the Test Director's Office is a pocket door identical to the one in 270 Office, also with locks and a placard.	
Windows		
Lighting	Recessed 2 x 4 ft. with grid diffusers	
Built-ins		

ROOM #: 271	**PHASE:** B	**LEVEL:** First	**AREA:** 166 sq. ft.	**DATE:** 4/21/16
FUNCTION(S): Men's Restroom				

Interior from the entrance, view south (DSC2081).

View showing partition, sink, and urinals, view southwest (DSC2086).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall	
South wall	Concrete with tan ceramic tile wainscot and loudspeaker	
East wall	Concrete	
West wall	Drywall with tan ceramic tile wainscot	
All walls	Off-white	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Random ¾ in. off-white to brown ceramic tiles; 5 in. ceramic tile base matching wainscot	
Doors	Flush, wood-stained with expanded metal vent	
Windows	None	
Lighting	Surface mounted circular incandescent	
Built-ins	Ceramic urinals, commodes, and sinks; enamel and stainless custodian sink; brown steel partitions; enamel steel towel dispenser; small chrome-framed mirror with stainless shelf above each sink; mirrors are flanked by vertical surface mounted 1-tube florescent lights with diffusers	

ROOM #: 271A/130A/303A	**PHASE:** B	**LEVEL:** First	**AREA:** 121 sq. ft.	**DATE:** 4/21/16
FUNCTION(S): Stairs(continuous stairwell with 130A to the basement and 303A to the mezzanine)				

SEE FORMS 130A AND 303A FOR PHOTOGRAPHS

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	See Forms for 130A and 303A for description of the stairwell.	
South wall		
East wall		
West wall		
All walls		
Ceiling		
Floor		
Doors		
Windows		
Lighting		
Built-ins		

MISCELLANEOUS ROOM NOTES
The 271A/130A/303A Stairs are a continuous stairwell from the basement to the mezzanine. The stairwell has landings at each floor and doglegs or half landings between floors. Therefore, the 271A Stair designation overlaps with the 130A stairs to the basement and the 303A stairs to the mezzanine.

ROOM #: 271B	**PHASE:** B	**LEVEL:** First	**AREA:** 48 sq. ft.	**DATE:** 4/21/16
FUNCTION(S): Circulation				

View west of 271B Circulation from 205B Main Entry Foyer (DSC2067).

View of stairwell to basement and mezzanine off 271B Circulation, door opens to 271C Circulation, view southwest (DSC2071).

ELEMENT	DESCRIPTION	CONDITION
North wall	Concrete	
South wall	None, opens into stairwell	
East wall	Concrete	
West wall	Concrete	
All walls	Pinkish-tan	
Ceiling	Suspended 2 x 2 ft. panels	
Floor	Tan 1 ft. square linoleum tiles with 4 in. dark plastic base	
Doors	Alarmed double steel from 205B have been removed	
Windows		
Lighting	1-tube surface mount with diffusers	
Built-ins		

ROOM #: 271C	**PHASE:** B	**LEVEL:** First	**AREA:** 112 sq. ft.	**DATE:** 4/21/16
FUNCTION(S): Circulation				

View west of 271C Circulation (DSC2074).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall; pillar and underside of concrete floor beam exposed	
South wall	Drywall	
East wall	Concrete	
West wall	Drywall	
All walls	Pinkish-tan	
Ceiling	Suspended 2 x 2 ft. panels	
Floor	Blue-green carpet with 4 in. gray plastic base	
Doors	Pinkish-tan double steel, alarmed, with small wire-reinforced lights	
Windows		
Lighting	Surface mounted 1-tube with diffusers; wall mounted emergency light	
Built-ins	Haws stainless drinking fountain and telephone booth	

ROOM #: 272	**PHASE:** B	**LEVEL:** First	**AREA:** 132 sq. ft.	**DATE:** 4/21/16
FUNCTION(S): Vault				

Entrance to 272 Vault off 272A Control Room showing steel frame door, view southwest (DSC2105).

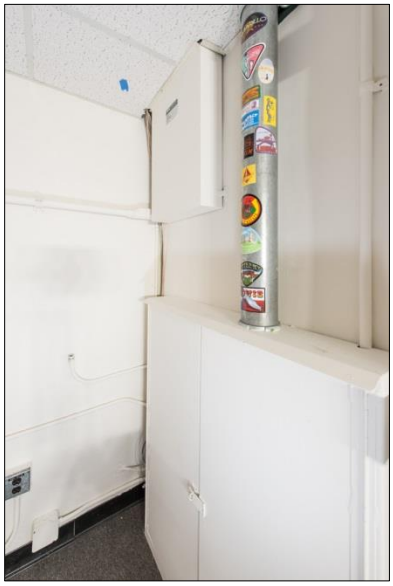
Interior from the northwest corner of the room, view southeast (DSC2113).

ELEMENT	DESCRIPTION	CONDITION
North wall	Steel with 2 in. gap between it and drywall south wall of Room 273A	
South wall	Concrete	
East wall	Steel facing drywall west wall of 272A; louver vent, cable conduit, electrical box, speaker	
West wall	Concrete	
All walls	Off-white, lower half plywood, upper half 1 ft. acoustic tiles	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Raised 6 in. above concrete floor; blue carpet with 4 in. black plastic base	
Doors	Original door removed; heavy steel frame with stainless steel trim, outward opening; the present door is flush	
Windows		
Lighting	Recessed 2 x 4 ft. with diffusers	
Built-ins		

MISCELLANEOUS ROOM NOTES
Cubicles

ROOM #: 272A	**PHASE:** B	**LEVEL:** First	**AREA:** 277 sq. ft.	**DATE:** 4/21/16
FUNCTION(S): Control Room				

Interior from the northeast corner, view southwest (DSC2098).



Cable conduits and communication relay along the west wall, view southwest (DSC2106).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall	
South wall	Concrete, large drywall chase with access hatch to fire main valve and hatch to breaker box mounted on the concrete wall. Original pale green wall color is visible through this hatch.	
East wall	Drywall	
West wall	Concrete, concrete pedestal with several cable conduits emerging from its top. Two steel doors open to communications relay and to conduit within wall. Shot stickers decorate one of the conduits.	
All walls	Off-white (originally pale green)	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Blue carpet with 4 in. black plastic base	
Doors	Flush, stained wood with combination lock	
Windows		
Lighting	Recessed 2 x 4 ft. with diffusers	
Built-ins		

MISCELLANEOUS ROOM NOTES
Cubicles

ROOM #: 272B	**PHASE:** B	**LEVEL:** First	**AREA:** 12 sq. ft.	**DATE:** No access
FUNCTION(S): Utility Shaft				

NO ACCESS – NO PHOTOGRAPHS

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	Drywall	
South wall	Concrete	
East wall	Drywall	
West wall	Drywall	
All walls		
Ceiling		
Floor		
Doors		
Windows		
Lighting		
Built-ins		

MISCELLANEOUS ROOM NOTES
No access panels found

ROOM #: 273	**PHASE:** B	**LEVEL:** First	**AREA:** 443 sq. ft.	**DATE:** 5/2/16
FUNCTION(S): Weather				

Interior from the south end of room, view north (DSC2525).

Fire main along the north wall, view northwest (DSC2540).

CP1-12 blast door along the west wall between 273 Weather Service and 273A EPA, view west (DSC2523).

Close up of CP1-12 double doors with label "Warning Door Sealed No Egress Emergency Exit Only" (DSC2524).

ELEMENT	DESCRIPTION	CONDITION
North wall	Concrete with fire mains	
South wall	Drywall and curtains	
East wall	Drywall, large pegboard attached in north end, large filtered air intake duct all along the east wall adjacent to Restroom and Utility Shaft	
West wall	Concrete, plywood panel attached for electronics boxes, much conduit, etc.	
All walls	Tan	
Ceiling	Suspended 2 x 4 ft. panels	Water damage
Floor	Bright blue 1 ft. square linoleum tiles with 4 in. tan plastic base	
Doors	No physical barrier between 273 Weather Service and 273A EPA Along west wall between the rooms, CP1-12 exterior steel blast door labeled “Warning Door Sealed No Egress Emergency Exit Only.” From 274 War Room, flush, stained wood	
Windows		
Lighting	Surface mount 3-tube with diffusers	
Built-ins		

ROOM #: 273A	**PHASE:** B	**LEVEL:** First	**AREA:** 300 sq. ft.	**DATE:** 5/2/16
FUNCTION(S): EPA				

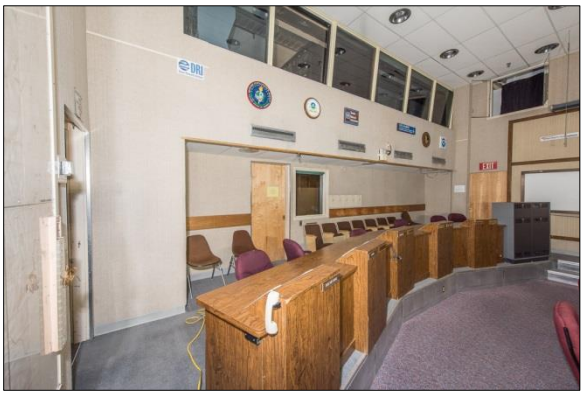
Cubicle in 273A EPA, view south-southwest (DSC2519).

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	Drywall	
South wall	Drywall and curtains	
East wall	Drywall	
West wall	Concrete	
All walls	Pale blue	
Ceiling	Suspended 2 x 4 ft. panels	Water damage
Floor	Grey/blue carpet with 4 in. black plastic base	
Doors	No physical barrier between 273 Weather Service and 273A EPA Along west wall between the rooms, CP1-12 exterior steel blast door labeled “Warning Door Sealed No Egress Emergency Exit Only.” From 271C Circulation, flush, stained wood with wire-reinforced light	
Windows	None	
Lighting	Surface mount 3-tube with diffusers	
Built-ins	Cubicle	

ROOM #: 274	**PHASE:** B	**LEVEL:** First	**AREA:** 400 sq. ft.	**DATE:** 5/2/16
FUNCTION(S): War Room (DOE Control Room, Operations)				

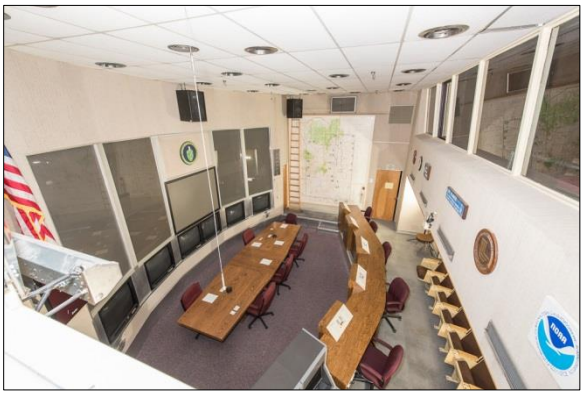
Interior showing five-part segmented arc on west wall with rear-projection panels, CRT monitors, flat-screen monitor, and digital information panels, view west (DSC2398).

Interior showing NNSS map on the north wall, view northwest (DSC2452).

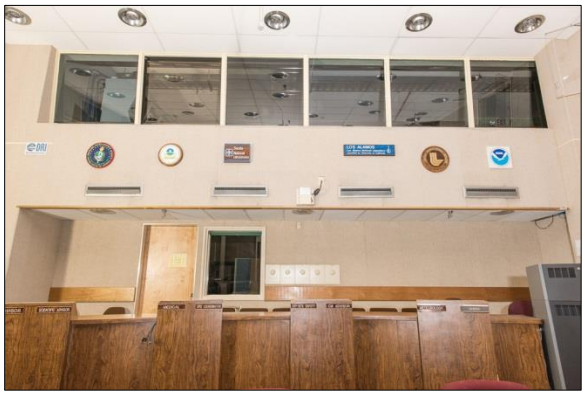


Eastern area of 274 War Room, the bottom of the east wall is inset under the Mezzanine, view southeast (DSC2428).

Southwest area of 274 War Room, view southwest (DSC2447).



Overview from the 302 Office viewing window, view north (DSC2480).



Viewing windows on the Mezzanine, view east (DSC2434).

ELEMENT	DESCRIPTION	CONDITION
North wall	A massive NTS map behind clear plastic covers most of wall; accessed with wood rail-mounted travelling ladder	
South wall	Largely covered with tan plastic wallpaper with impressed design and dark wood trim; rolled projection screen; wall mounted Okidata Copyboard 100; operable casement window in Mezzanine	
East wall	The bottom of the wall is inset under Mezzanine with broad wood chair rail, door and window into Room 270; the center of the wall is sheathed beam with air vents along bottom and display of contractor logos; top of the wall is a ribbon of six fixed tinted windows from viewing balcony	
West wall	Five-part segmented arc with rear-projection panels, CRT monitors, flat-screen monitor, and digital information panels; three large speakers near ceiling	
All walls	Tan fabric panels which also cover pillars	
Ceiling	Suspended 2 x 4 ft. panels mounted close to sloping underside of roof	
Floor	Blue/purple carpet in sunken area, gray elsewhere; the perimeter of sunken area (two steps below general floor level) is lined with aluminum panels	
Doors	North and south doors are flush, stained sliders; west doors are flush, stained.	
Windows	All allow view from other interior spaces; see south and east wall descriptions	
Lighting	Recessed ball-mount spotlights in ceiling with rheostat controls	
Built-ins	Three microphones suspended from ceiling	

MISCELLANEOUS ROOM NOTES
Matching built-in support table with 5 dual telephone consoles is a late modification replacing a series of double desks that occupied the same position. A portable dual-monitor computer console is at one end of the support table.

ROOM #: 274A	**PHASE:** B	**LEVEL:** First	**AREA:** 200 sq. ft.	**DATE:** 5/2/16
FUNCTION(S): Projection Area				

Profile view of projection equipment, view south (DSC2516).

Projection equipment and inserts, black curtain moved for photograph, Exit door is to 271C Circulation, view east (DSC2514).

ELEMENT	DESCRIPTION	CONDITION
North wall	Combination of flat black drywall and black curtains	
South wall	Combination of flat black drywall and black curtains	
East wall	Black rear of partition, full of metal AV supports	
West wall	Combination of flat black drywall and black curtains	
All walls		
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Tan 1 ft. square linoleum tiles, many removed from concrete	
Doors		
Windows		
Lighting	Variety of flush and recessed fluorescent with diffusers	
Built-ins	Full of projection equipment and supports	

MISCELLANEOUS ROOM NOTES
Remnants of 2 interior walls, each with sliding doors. Present interior partitions steel framed with pressboard panels.

ROOM #: 274B	**PHASE:** B	**LEVEL:** First	**AREA:** 49 sq. ft.	**DATE:** 4/21/16
FUNCTION(S): Restroom				

Door to 274B Restroom from 274D Test Director, view northwest (DSC2547).

Restroom from open door, view southwest (DSC2549).

ELEMENT	DESCRIPTION	CONDITION
North wall	Concrete	
South wall	Drywall	
East wall	Drywall	
West wall	Drywall	
All walls	Pale yellow; same wainscot tiles as Room 271	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Same floor tiles as Room 271	
Doors	Flush stained wood pocket door (does not match others) with expanded metal vent; glass sliding shower door	
Windows		
Lighting	Circular incandescent; incandescent globe above shower	
Built-ins	Mirror with florescent light, ceramic sink and commode; the enamel towel dispenser matches one in Room 271	

ROOM #: 274C	**PHASE:** B	**LEVEL:** First	**AREA:** 35 sq. ft.	**DATE:** No access
FUNCTION(S): Utility Shaft				

NO ACCESS – NO PHOTOGRAPHS

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall		
West wall		
All walls	Drywall	
Ceiling		
Floor		
Doors		
Windows		
Lighting		
Built-ins		

MISCELLANEOUS ROOM NOTES
No access ports were located.

ROOM #: 274D	**PHASE:** B	**LEVEL:** First	**AREA:** 286 sq. ft.	**DATE:** 4/21/16
FUNCTION(S): DOE Test Director's (Controller's) Office				

Interior from the northeast corner of 274D, NNSS map on the west wall and Exit to 274 War Room on the south wall, view southwest (DSC2553).

Interior from the southeast corner, white board and map can be concealed behind floor length curtain, view north (DSC2544).

ELEMENT	**DESCRIPTION**	**CONDITION**
North wall	Concrete, white board and map behind full-length curtains	
South wall	Drywall	
East wall	Drywall	
West wall	Drywall	
All walls	Pinkish-tan	
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Maroon/purple carpet that does not match 270 series rooms; 4 in. gray plastic base	
Doors	Pocket flush wood-stained slider	
Windows		
Lighting	Recessed 2 x 4 ft. with grid diffusers, table lamp	
Built-ins	Southwest corner niche has black steel AV shelves	

MISCELLANEOUS ROOM NOTES
Retains furnishings; most wall art has been taken down

ROOM #: 274E	**PHASE:** B	**LEVEL:** First	**AREA:** 12 sq. ft.	**DATE:** 4/21/16
FUNCTION(S): Storage				

Door to 274E Storage (left) from 274D Test Director's Office, view south (DSC2550).

Storage area, view southeast (DSC2552).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall		
East wall		
West wall		
All walls	White drywall	
Ceiling		
Floor	Maroon/purple carpet matching 274D	
Doors	Flush stained wood with steel frame	
Windows		
Lighting		
Built-ins		

MISCELLANEOUS ROOM NOTES
Concrete column protrudes in southwest corner

ROOM #: 280	**PHASE:** C	**LEVEL:** First	**AREA:** 155 sq. ft.	**DATE:** 4/19/16
FUNCTION(S): Office				

Interior from the door on east wall, view west (DSC1892).

Interior from the southwest corner, slider window is on east wall, view northeast (DSC1894).

ELEMENT	DESCRIPTION	CONDITION
North wall	Tan 4 x 8 ft. plastic covered drywall panels with matching plastic joint moldings	
South wall	Tan 4 x 8 ft. plastic covered drywall panels with matching plastic joint moldings	
East wall	Tan 4 x 8 ft. plastic covered drywall panels with matching plastic joint moldings	
West wall	Tan fabric panels with wood-grain pressboard wainscot and stained wood ogee rail	
All walls		
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Blue carpet with 4 in. gray plastic base	
Doors	Flush, light tan steel with steel surround	
Windows	Slider in east wall with stained frame and ogee surround	
Lighting	Recessed 2 x 2 ft. with diffusers	
Built-ins		

ROOM #: 281	**PHASE:** C	**LEVEL:** First	**AREA:** 155 sq. ft.	**DATE:** 4/19/16
FUNCTION(S): Office				

Interior from the southeast corner, 284 Circulation is to the right, view northwest (DSC1850).

Interior from the southwest corner, slider window is on east wall, door from 214 Conference Room is open, view northeast (DSC1851).

ELEMENT	DESCRIPTION	CONDITION
North wall	Tan 4 x 8 ft. plastic covered drywall panels with matching plastic joint moldings	
South wall	Tan 4 x 8 ft. plastic covered drywall panels with matching plastic joint moldings	
East wall	Tan 4 x 8 ft. plastic covered drywall panels with matching plastic joint moldings	
West wall	Tan fabric panels with wood-grain pressboard wainscot and stained wood ogee rail	
All walls		
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Blue carpet with 4 in. gray plastic base	
Doors	Flush light tan steel with steel surround; the walls on each side of the door do not line up (about a 2 in. offset) so the door closes at an angle	
Windows	Slider in east wall with stained frame and ogee surround; there is a cased chase next to window so there is no trim on the north edge of the window	
Lighting	Recessed 2 x 2 ft. with diffusers	
Built-ins		

ROOM #: 282	**PHASE:** C	**LEVEL:** First	**AREA:** 90 sq. ft.	**DATE:** 4/19/16
FUNCTION(S): Office				

Interior from the door off 284 Circulation, view west (DSC1854).

Interior from the southeast corner, view north-northwest (DSC1856).

ELEMENT	DESCRIPTION	CONDITION
North wall	Tan 4 x 8 ft. plastic covered drywall panels with matching plastic joint moldings	
South wall	Tan 4 x 8 ft. plastic covered drywall panels with matching plastic joint moldings	
East wall	Tan 4 x 8 ft. plastic covered drywall panels with matching plastic joint moldings	
West wall	Tan fabric panels with wood-grain pressboard wainscot and stained wood ogee rail	
All walls		
Ceiling	Suspended 2 x 4 ft. panels	
Floor	Blue carpet with 4 in. gray plastic base	
Doors	Flush; light tan steel with steel surround	
Windows	None	
Lighting	Recessed 2 x 2 ft. with diffusers	
Built-ins		

ROOM #: 283	**PHASE:** C	**LEVEL:** First	**AREA:** 90 sq. ft.	**DATE:** 4/19/16
FUNCTION(S): Storage				

Interior through door off 284 Circulation, view north (DSC1857).

Storage from the room entrance, view west (DSC1858).

ELEMENT	DESCRIPTION	CONDITION
North wall	Tan 4 x 8 ft. plastic covered drywall panels with matching plastic joint moldings	
South wall	Tan 4 x 8 ft. plastic covered drywall panels with matching plastic joint moldings	
East wall	Tan 4 x 8 ft. plastic covered drywall panels with matching plastic joint moldings	
West wall	Tan 4 x 8 ft. plastic covered drywall panels with matching plastic joint moldings	
All walls		
Ceiling	Suspended 2 x 4 ft. panels.	
Floor	Blue carpet with 4 in. gray plastic base	
Doors	Flush; light tan steel with steel surround	
Windows		
Lighting	Recessed 2 x 2 ft. with diffusers	
Built-ins		

ROOM #: 284	**PHASE:** C	**LEVEL:** First	**AREA:** 62 sq. ft.	**DATE:** No date
FUNCTION(S): Circulation				

Entrance to 284 Circulation from 212 Office, there is no door, view west (DSC1845).

Circulation from 281 Office, view north (DSC1852).

ELEMENT	DESCRIPTION	CONDITION
North wall	Tan 4 x 8 ft. plastic covered drywall panels with matching plastic joint	
South wall	Tan 4 x 8 ft. plastic covered drywall panels with matching plastic joint	
East wall	Tan 4 x 8 ft. plastic covered drywall panels with matching plastic joint	
West wall	Tan 4 x 8 ft. plastic covered drywall panels with matching plastic joint	
All walls		
Ceiling	Suspended 2 x 4 ft. panels	Water damage
Floor	Blue carpet with 4 in. gray plastic base	
Doors	None at entry from 212	
Windows		
Lighting	Recessed 2 x 2 ft. with diffusers	
Built-ins		

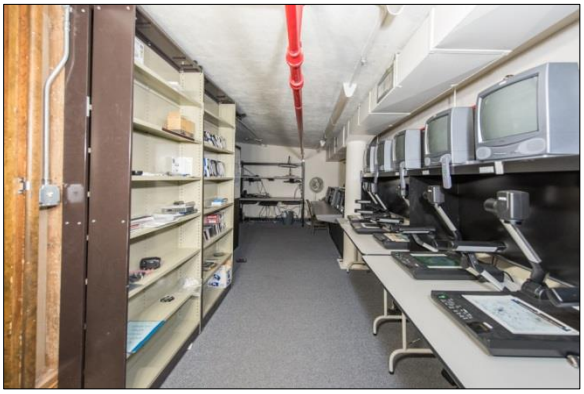
ROOM #: 301	**PHASE:** B	**LEVEL:** Mezzanine	**AREA:** 225 sq. ft.	**DATE:** 5/5/16
FUNCTION(S): Viewing Balcony				

Viewing Balcony showing two-level raised dais, the door in the background to 301B Control is blocked, view northwest (DSC2162).

Viewing Balcony, door at right is to 301A control, northeast (DSC2165).

ELEMENT	DESCRIPTION	CONDITION
North wall	Wood paneling, does not match original east wall	
South wall	Drywall	
East wall	North half: wood paneling over wood studs with continuous air vent along top; south half is concrete	
West wall	Plywood and drywall in entry area; concrete below window. Aluminum tubing rail and foot rest are mounted on the beam below the windows. It is only possible to have a good view of the War Room by standing at the windows. A continuous cabinet with speakers and lights is mounted above the windows.	
All walls	Pale green	
Ceiling	Square 1 ft. acoustic tiles applied to underside of concrete roof; a cable tray runs down the center of the ceiling	
Floor	Green carpet, two-level raised dais behind windows; 3 ½ in. black plastic base in entry area only	
Doors	Flush pale green steel with combination lock	
Windows	Ribbon of three fixed steel-frame tinted windows; interrupted by north wall which intercepts the end window in mid-pane	
Lighting	Recessed incandescent	
Built-ins	Two rows of chairs with folding desks	

ROOM #: 301A	**PHASE:** B	**LEVEL:** Mezzanine	**AREA:** 236 sq. ft.	**DATE:** 5/5/16
FUNCTION(S): Control Video Support				



Interior view from the entrance off 301 Viewing Balcony, compact shelving along the west wall and computer equipment and monitors along the east wall, view north (DSC2166).

Northeast corner of 301A Control, view northeast (DSC2169).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall	
South wall	Concrete	
East wall	Concrete	
West wall	Sliding compact shelving for VCR tapes built into wood stud partition. Original extension of the west wall to the north wall has been removed. There is no physical barrier between 301A and 301B.	
All walls	Off-white, originally pale green	
Ceiling	Off-white painted concrete underside of roof	
Floor	Blue carpet with 3 ½ in. black plastic base	
Doors	Flush stained with wood frame	
Windows		
Lighting	Surface-mounted 1-tube with diffusers	
Built-ins		

MISCELLANEOUS ROOM NOTES
Air duct runs along ceiling near east wall. Row of overhead projectors in south end of room, tape editing equipment in north end.

ROOM #: 301B	**PHASE:** B	**LEVEL:** Mezzanine	**AREA:** 153 sq. ft.	**DATE:** None
FUNCTION(S): Control Video Support (originally north half of viewing balcony)				

View of 301B Control from 301A Control, there is no physical barrier between the control rooms, viewing window to the 274 War Room is in the background, view northwest (DSC2171).

Racks along the south wall of 301B Control, the racks block access to the door with 301 Viewing Balcony, view southwest (DSC2173).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall	
South wall	Partition wall built on top of stage	
East wall	Stub remains of vertical wood panel wall, most removed	
West wall	All taken up by window; hand rail remains, foot rail removed	
All walls	Off-white, originally pale green	
Ceiling	Acoustical 1 ft. tile glued to underside of concrete roof; tile ends at line where partition was removed; cable tray and light/speaker/diffuser cabinet continue from 301	
Floor	Blue carpet with 3 ½ in. black plastic base; stage has been removed	
Doors	Flush; stained wood with expanded metal vent; inoperable due to equipment installed inside door	
Windows	Continuation of ribbon from 301; center window has been replaced with a tinted slider with black anodized metal frame	
Lighting		
Built-ins	Racks with video monitors, VCR machines, VCR duplicator, and tape editing equipment; several video feeds are for security perimeter locations	

ROOM #: 302	**PHASE:** B	**LEVEL:** Mezzanine	**AREA:** 62 SQ. FT.	**DATE:** 5/5/16
FUNCTION(S): Office				

Entrance to 302 Office from 301 Viewing Balcony, view west (DSC2189).

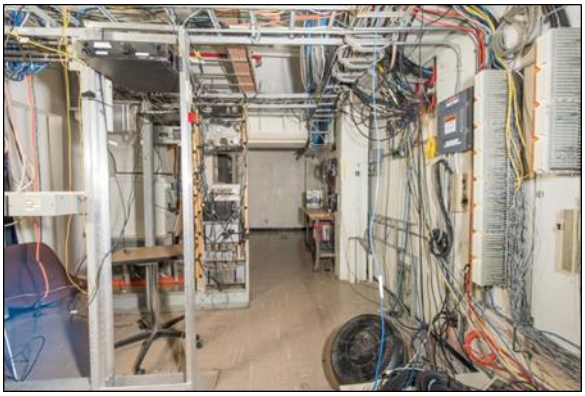
Interior view from door, viewing window to 274 War Room on the north wall, view northwest (DSC2193).

ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall, window	
South wall	Drywall with large cutout for entry closed with curtain	
East wall	Plywood forming pocket for door	
West wall	Drywall with entry cutout but no door	
All walls	Gloss white, earlier tan	
Ceiling	Concrete underside of roof, gloss white	
Floor	Tan 1 ft. square linoleum tiles with 4 in. black plastic base	
Doors	Flush, stained wood slider	
Windows	Clear plastic casement with steel frame opening to war room	
Lighting	Surface mounted and suspended 1-tube florescent with diffusers	
Built-ins		

MISCELLANEOUS ROOM NOTES
Many of the classic War Room photos were taken through this window.

ROOM #: 303	**PHASE:** B	**LEVEL:** Mezzanine	**AREA:** 408 sq. ft.	**DATE:** 5/5/16
FUNCTION(S): Telephone/OCC Room (still has plaque for OCC on the door)				

Racks in the northern end of room, view northwest (DSC2195).

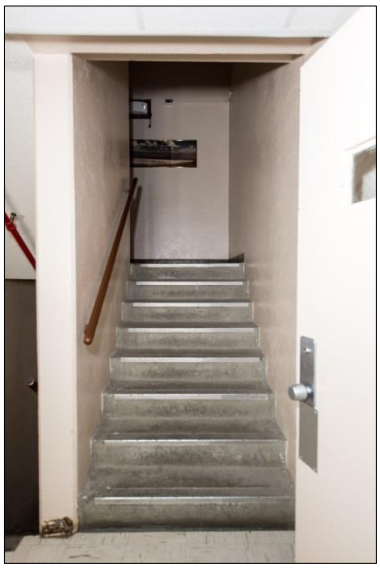


View from the west wall, communication line relay units, view east (DSC2197)

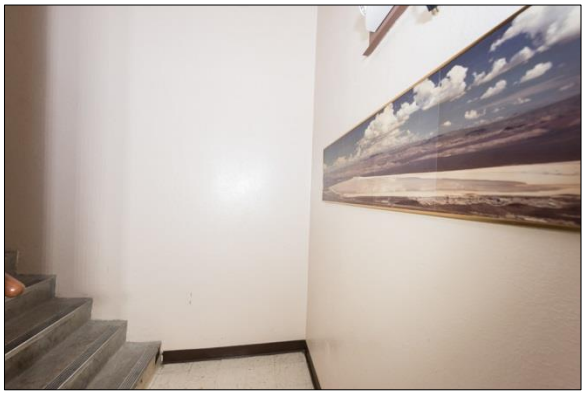
ELEMENT	DESCRIPTION	CONDITION
North wall	Drywall	
South wall	Concrete mostly covered with plywood for communications line relay units and duct	
East wall	Drywall	
West wall	Concrete mostly covered with plywood for communications line relay units and duct	
All walls	Off white, originally pale green	
Ceiling	White-painted concrete underside of roof	
Floor	Tan 1 ft. square linoleum tiles with 4 in. black plastic base	
Doors	Flush; stained wood with wire reinforced light, expanded metal vent	
Windows		
Lighting	Surface-mounted 1-tube with no diffusers supplemented with surface-mounted 1- and 2-tubes with diffusers	
Built-ins		

MISCELLANEOUS ROOM NOTES
Communication line trays are suspended from most of ceiling. Steel communications equipment racks occupy most of the floor space. A small air handler is just inside and blocking doorway to former hallway.

ROOM #: 303A/271A	**PHASE:** B	**LEVEL:** Mezzanine	**AREA:** 102 sq. ft.	**DATE:** 5/5/16
FUNCTION(S): Stairs (continuous stairwell between the mezzanine and first floor)				



Stairs from 271B Circulation to half landing, view south (DSC2153).



Half landing toward stairs to the mezzanine, view east (DSC2155).

Stairs from the half landing to the mezzanine, view north (DSC2156).

Viewing balcony on the mezzanine showing exit to 303A/271A Stair, view north (DSC2159).

ELEMENT	DESCRIPTION	CONDITION
North wall		
South wall	Open balcony opening over stair with steel pipe railing	
East wall		
West wall		
All Walls	Pinkish-tan concrete	
Ceiling	Pinkish-tan concrete	
Floor	Bare concrete, no baseboards, non-skid steel noses Green carpet matching Room 301 with 3.5 in. black plastic base at top of stairwell	
Doors		
Windows		
Lighting	Surface mounted 1-tube with diffusers	
Built-ins		

MISCELLANEOUS ROOM NOTES
The 303A/271A Stairs are a continuous stairwell between the first floor and mezzanine with a dogleg or half landing between the floors. This stairwell is above the 130A/271A Stairs between the first floor and basement. Therefore, the 271A Stair designation overlaps with the 130A stairs to the basement and the 303A stairs to the mezzanine. Dark brown metal pipe rail Several equipment lockers located on landing on mezzanine

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