DESERT RESEARCH INSTITUTE
CULTURAL RESOURCES PROJECT NO. 2211023

REPORT SERIES: FINDING OF EFFECT, AND MITIGATION DOCUMENTATION FOR BUILDING 23-620, MERCURY, AREA 23, NEVADA NATIONAL SECURITY SITE, NYE COUNTY, NEVADA

This report series includes the following reports and mitigation documentation:

DOE/NV/89233122CNA000255-4-FOE, LR052422-3-FOE

Finding of Adverse Effect and Proposed Mitigation for the Demolition of Building 23-620, Mercury, Area 23, Nevada National Security Site, Nye County, Nevada

DOE/NV/89233122CNA000255-4-MIT, LR052422-3-MIT

Submission of Mitigation Documentation Related to the Demolition of Building 23-620, Mercury, Area 23, Nevada National Security Site, Nye County, Nevada

Mitigation Documentation

ARA forms B15283 (update and original)

High-quality digital images of Building 23-620 with index and photo key plan (on the ARA update)

For a copy of the associated National Register of Historic Places Evaluation Report referenced in the following documents, search for DOE/NV/89233122CNA000255-4 on osti.gov.

DOE/NV/89233122CNA000255-4-FOE

DESERT RESEARCH INSTITUTE
CULTURAL RESOURCES FINDING OF EFFECT
REPORT LR0252422-3-FOE
PROJECT NO. 2211023

FINDING OF ADVERSE EFFECT AND PROPOSED MITIGATION FOR THE DEMOLITION OF BUILDING 23-620, MERCURY, AREA 23, NEVADA NATIONAL SECURITY SITE, NYE COUNTY, NEVADA

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Prepared for

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Submitted by

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January 2023

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 # 89233122CNA000255.

INTRODUCTION

The U.S. Department of Energy (DOE), National Nuclear Security Administration Nevada Field Office (NNSA/NFO) plans to demolish Building 23-620 in the town of Mercury (Nevada State Historic Preservation Office [SHPO] Resource No. B15283), which is on the Nevada National Security Site (NNSS) in Nye County, Nevada (see Figure 1). The purpose of the undertaking is related to the modernization of Mercury for future mission needs.

The NNSA/NFO will implement this undertaking in accordance with the *Programmatic Agreement between the National Nuclear Security Administration Nevada Field Office and the Nevada State Historic Preservation Officer Regarding Modernization and Operational Maintenance of the Nevada National Security Site, at Mercury in Nye County, Nevada*, hereafter referred to as the Mercury PA.

Building 23-620 was built in 1968 as office space for the Los Alamos Scientific Laboratory (LASL), who worked on the design and engineering of nuclear weapons. In the 1990s, it became a maintenance facility for Reynolds Electrical & Engineering Company (REECo), and eventually, it became the Real Estate Services building in 2004. The town of Mercury and the immediate surrounding area have been formally determined eligible for listing in the National Register of Historic Places (National Register, NRHP) as the Mercury Historic District (MHD, SHPO Resource No. D230) under Criteria A and C for its importance in supporting nuclear testing and scientific research from 1951 through 1992.

Building 23-620 was identified as a contributing element to the MHD in a 2018 architectural survey of the district (Reno et al.) and recorded on a Nevada Architectural Resource Assessment (ARA) form (Reno et al. 2017). Building 23-620 was also identified in Appendix C of the Mercury PA as a Category I contributing element, indicating that it might be individually eligible for the NRHP. It is a historic property for the purposes of compliance with Section 106 of the National Historic Preservation Act (NHPA) and subject to the stipulations of the Mercury PA.

AREA OF POTENTIAL EFFECT

The Area of Potential Effect (APE) for the undertaking was defined in accordance with Stipulation II of the Mercury PA. For indirect effects, such as visual, atmospheric, and audible effects, it coincides with the boundary of the MHD per Stipulation II.B (see Figure 1). For direct effects, the APE includes the footprint of Building 23-620 plus a buffer of 25 feet from the perimeter of the footprint in accordance with Stipulation II.A.1 (see Figure 2). For cumulative effects and new construction (Stipulations II.C and II.D, respectively), the APE boundary is the same as for indirect effects.

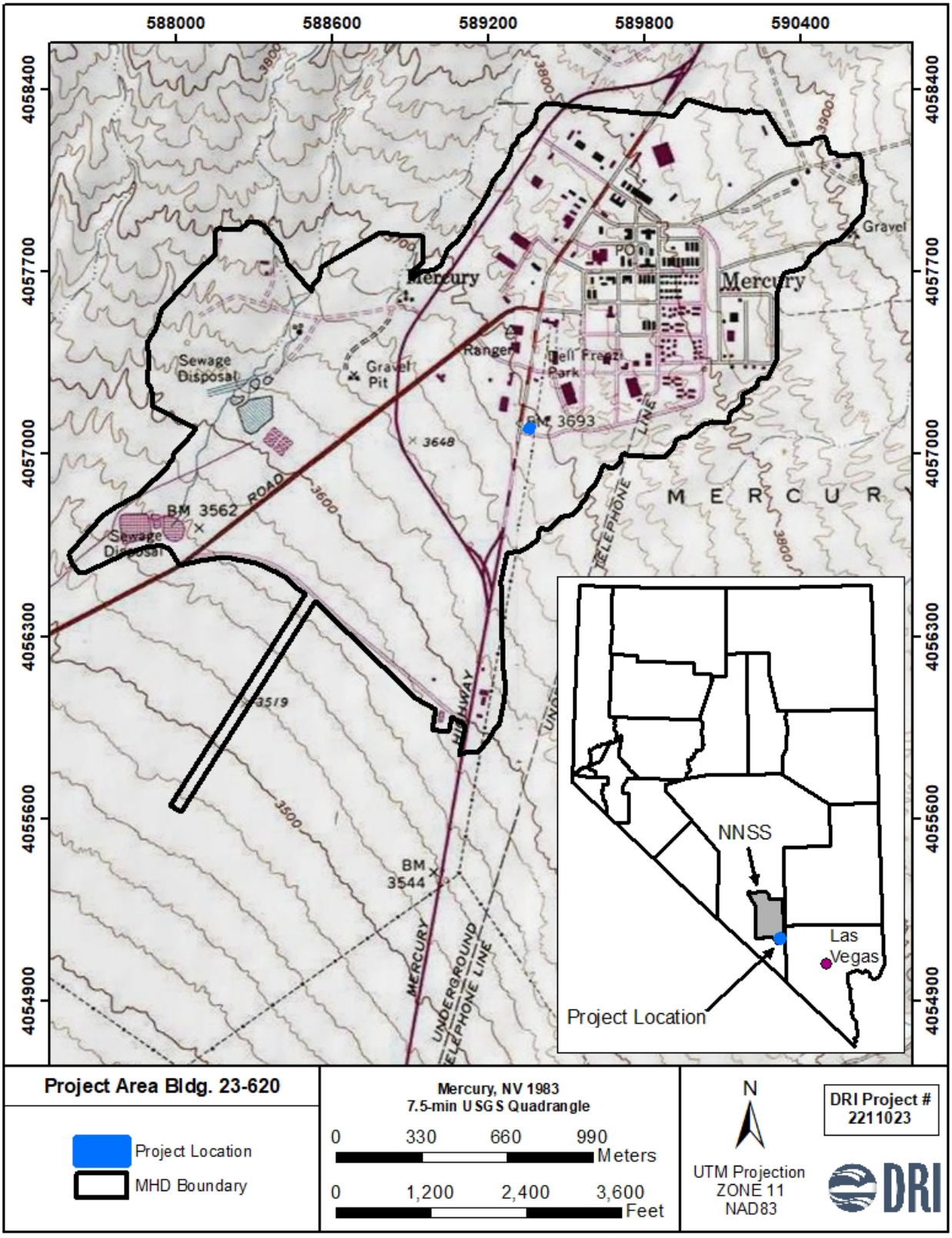

Figure 1. Area of Potential Effect. The APE coincides with the MHD boundary.

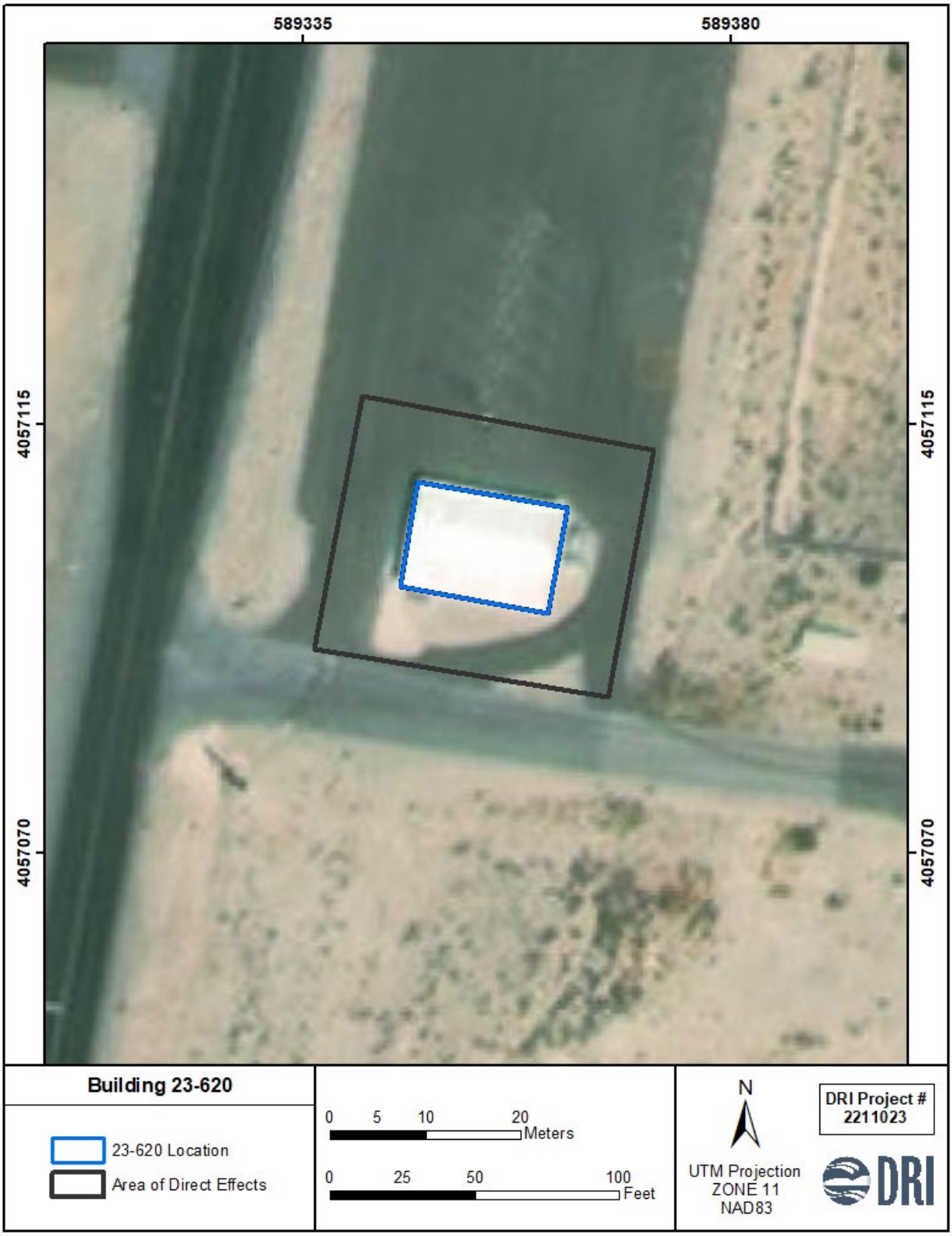

Figure 2. Direct effects area for the undertaking.

ELEMENT CATEGORY IDENTIFICATION

Building 23-620 was identified in Appendix C of the Mercury PA as a Category I contributing element to the MHD. When an undertaking has the potential to affect Category I elements, Stipulation VI of the Mercury PA requires that Category I elements be evaluated for individual eligibility for listing in the NRHP prior to initiating any work that might affect the elements. In compliance with Stipulation VI, Desert Research Institute (DRI), on behalf of the NNSA/NFO, evaluated Building 23-620 in Cultural Resources Report SR052422-3: *Evaluation of the Building 23-620, Los Alamos Scientific Laboratory J-3 Office, Nevada National Security Site, Nye County, Nevada* (Brannan 2022). In accordance with DRI's recommendation, the NNSA/NFO found that Building 23-620 does not appear to be individually eligible for listing in the NRHP under any of the Secretary of the Interior's (SOI) Significance Criteria. On December 30, 2022, the SHPO concurred with these findings (Reed 2022).

APPLICATION OF THE CRITERIA OF ADVERSE EFFECT

After informal consultation with the DRI subject matter expert and applying the criteria of adverse effect, the NNSA/NFO has determined that the planned demolition of Building 23-620 will result in the physical destruction of the building. This will constitute an **Adverse Effect** to historic properties as defined in Title 36 of the Code of Federal Regulations (36 CFR) Part 800.5(a)(2)(i)). The undertaking will directly affect a historic property that is a contributing element of the MHD. It will, therefore, directly alter the physical characteristics that qualify as a contributing element of the MHD for inclusion in the NRHP.

As required by Mercury PA Stipulation VII.C, the NNSA/NFO is submitting this finding of Adverse Effect for the proposed undertaking. The NNSA/NFO is also submitting mitigation as required per Stipulation VIII.C.

MITIGATION PLAN FOR BUILDING 23-620

The NNSA/NFO has determined that Building 23-620 is not individually eligible for the NRHP at the national, state, or local level. Therefore, Building 23-620 is addressed as a Category II element of the MHD. Mercury PA Stipulation VIII.C outlines anticipated mitigation for Category II contributing elements. Such mitigation includes: 1) an ARA form; 2) high-quality digital images; 3) current annotated sketch plan, which indicates room layout and use with photograph views keyed to the plan; and 4) a brief letter report describing mitigation contents and summarizing the element's historic significance in the context of the MHD.

Building 23-620 was recorded on an ARA form in 2017 (Reno et al.). Therefore, an ARA Update form will be prepared to satisfy Stipulation VIII.C.1.a. It will provide additional information about the historic property, an individual evaluation for NRHP eligibility, historic photographs, and historic architectural drawings. Current high-quality digital images keyed to an annotated sketch plan will be added to the ARA Update to satisfy Stipulations VIII.C.1.b and c. The high-quality digital images will include overviews, elevations, interior views, and unique and significant details. A brief letter report describing the element class and its historic significance in the context of MHD will be prepared to fulfill Stipulation VIII.C.1.d.

REFERENCES

Brannan, Nicole

2022 *Evaluation of Building 23-620, Los Alamos Scientific Laboratory J-3 Office, Nevada National Security Site, Nye County, Nevada*. Desert Research Institute Cultural Resources Report SR052422-3, Desert Research Institute, Las Vegas.

Reed, Robin K.
2022 Letter to Betty L. Huck, Assistant Manager for Mission and Infrastructure, NNSA Re: *National Register of Historic Places Evaluation for Building 23-620, Mercury, Area 23, Nevada National Security Site, Nye County, Nevada.* AMMI:CES-22003; ADM 16.1.5.A; SR0524422-3; SHPO UT 2018-5212; 29862). December 30.

Reno, Ron L., Tatianna Menocal, and Carol Shimer
2017 Architectural Resource Assessment form for SHPO Resource No. B15283 (LASL J-3 Office) 21 June.

Reno, Ron L., Cheryl M. Collins, and Maureen L. King
2018 *The Architecture of Mercury – Nevada's Boom Town: An Architectural Survey of Mercury, Area 23, Nevada National Security Site, Nye County, Nevada*, Desert Research Institute Technical Report TR 115, DOE/NV/0003590-09, Desert Research Institute, Las Vegas.

PREPARERS' QUALIFICATIONS

Nicole Brannan meets the Secretary of Interior's Professional Qualifications Standards for Architectural History. Ms. Brannan has over 18 years working in the cultural resources field, both in archaeology and historic preservation. She holds a Bachelor of Arts Degree in Anthropology/ Archaeology from Mercyhurst College in Erie, PA, and a Master of Arts in Historic Preservation from Goucher College in Baltimore, MD. Ms. Brannan served as the primary author of this report.

Laura O'Neill meets the Secretary of Interior's Professional Qualifications Standards for Architectural History and Historic Architecture. She has been professionally involved in the field of historic preservation since 2006. She holds a Bachelor of Arts degree in Political Science from Lehigh University in Bethlehem, PA, and a Master of Architecture degree from California State Polytechnic University in Pomona, CA. Ms. O'Neill was responsible for managing the production of this report.

DOE/NV/89233122CNA000255-4-MIT

DESERT RESEARCH INSTITUTE
CULTURAL RESOURCES MITIGATION SUBMISSION
LETTER REPORT LR052422-3-MIT
PROJECT NO. 2211023

SUBMISSION OF MITIGATION DOCUMENTATION RELATED TO THE DEMOLITION OF BUILDING 23-620, MERCURY, AREA 23, NEVADA NATIONAL SECURITY SITE, NYE COUNTY, NEVADA

Prepared by

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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 #89233122CNA000255.

Nevada System of Higher Education

INTRODUCTION

The purpose of this letter report is to submit documentation related to the mitigation of the demolition of Building 23-620 (Nevada State Historic Preservation Office [SHPO] Resource No. B15283) in the Mercury Historic District (MHD, SHPO Resource No. D230). This submission is intended to comply with the stipulations in the *Programmatic Agreement between the National Nuclear Security Administration Nevada Field Office and the Nevada State Historic Preservation Officer Regarding Modernization and Operational Maintenance of the Nevada National Security Site, at Mercury in Nye County, Nevada*, hereafter referred to as the Mercury PA.

MITIGATION FOR BUILDING 23-620

The National Nuclear Security Administration Nevada Field Office (NNSA/NFO), in consultation with the SHPO, defined Building 23-620 as a Category I element. When an undertaking has the potential to affect Category I elements, Stipulation VI of the Mercury PA requires that Category I elements be evaluated for individual eligibility for listing in the National Register of Historic Places (NRHP) prior to initiating any work that might affect the elements. In compliance with Stipulation VI, Desert Research Institute (DRI), on behalf of the NNSA/NFO, evaluated Building 23-620 in Cultural Resources Report SR052422-3: *Evaluation of the Building 23-620, Los Alamos Scientific Laboratory J-3 Office, Nevada National Security Site, Nye County, Nevada* (Brannan 2022). In accordance with DRI's recommendation, the NNSA/NFO found that Building 23-620 does not appear to be individually eligible for listing in the NRHP under any of the Secretary of the Interior's (SOI) Significance Criteria. On December 30, 2022, the SHPO concurred with these findings (Reed 2022). Therefore, Building 23-620 is addressed as a Category II contributing element of the MHD for the purpose of mitigation (Stipulation IV.B.2). Mercury PA Stipulation VIII.C outlines anticipated mitigation for Category II contributing elements. Such mitigation includes: 1) an ARA form; 2) high-quality digital images; 3) current annotated sketch plan, which indicates room layout and use with photograph view keyed to the plan; and 4) a brief letter report describing mitigation contents and summarizing the element's historic significance in the context of the MHD.

Mitigation for Building 23-620 was completed in accordance with Stipulation VIII.C. Because Building 23-620 was recorded on an Architectural Resource Assessment (ARA) form in 2017, an ARA Update form was prepared to satisfy Stipulation VIII.C.1.a. It provides additional information about the historic property, an individual evaluation for NRHP eligibility, and additional current and historic photographs, as well as copies of historic architectural drawings. High-quality digital images (Stipulation VIII.C.1.b) were taken on May 24, 2022, and include overviews, elevations, interior views, and unique and significant details. The photographs are keyed to an aerial and a plan view of the building to satisfy Stipulation VIII.C.1.c. This letter report fulfills Stipulation VIII.C.1.d. Note that a detailed historic context, description, and NRHP evaluation for the building were included in the NRHP evaluation report (Brannan 2022) and are included on the attached ARA Update form. They are not repeated herein.

Review of Standard Mitigation

The size of the files for the ARA Update form and related photography are not compatible with an electronic submission per Stipulation VIII.D.1. Therefore, documents are being submitted in hard copy.

Enclosed Documentation

The following documentation is attached for SHPO review and comment to meet standard mitigation requirements for the Category II element (Stipulation VIII.D):

- An updated ARA form for Building 23-620 (VIII.D.1)
    - Updated descriptive and historical information
    - Individual NRHP evaluation
    - Historic architectural drawings
    - Historic photographs
    - Current digital images with index and image key plan maps

REFERENCES

Brannan, Nicole

2022 *Evaluation of Building 23-620, Los Alamos Scientific Laboratory J-3 Office, Nevada National Security Site, Nye County, Nevada*. Desert Research Institute Cultural Resources Report SR052422-3, Desert Research Institute, Las Vegas.

Reed, Robin K.

2022 Letter to Betty L. Huck, Assistant Manager for Mission and Infrastructure, NNSA Re: *National Register of Historic Places Evaluation for Building 23-620, Mercury, Area 23, Nevada National Security Site, Nye County, Nevada.* AMMI:CES-22003; ADM 16.1.5.A; SR0524422-3; SHPO UT 2018-5212; 29862). December 30.

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Laura O'Neill meets the Secretary of Interior's Professional Qualifications Standards for Architectural History and Historic Architecture. She has been professionally involved in the field of historic preservation since 2006. She holds a Bachelor of Arts degree in Political Science from Lehigh University in Bethlehem, PA, and a Master of Architecture degree from California State Polytechnic University in Pomona, CA. Ms. O'Neill was responsible for managing the production of this report and the attached documentation.

NEVADA STATE HISTORIC PRESERVATION OFFICE

Architectural Resource Assessment (ARA) Form

For SHPO Use Only	SHPO Concurrence?: Y / N		Date:		
Survey Date	May 24, 2022	Recorded By	Brannan and Menocal	Agency Report #	SR052422-3

The purpose of this update is to mitigate the demolition of the Building 23-620 (State Historic Preservation Officer [SHPO] Resource No. (B15283) in Mercury on the Nevada National Security Site (NNSS) in accordance with the 2018 *Programmatic Agreement between the National Nuclear Security Administration Nevada Field Office and the Nevada State Historic Preservation Officer regarding Modernization and Operational Maintenance of the Nevada National Security Site, at Mercury in Nye County, Nevada* (Mercury PA). As part of the Mercury PA, the U.S. Department of Energy (DOE), in consultation with the SHPO, developed standard mitigation measures for resolving adverse effects to contributing buildings and structures within the Mercury Historic District (MHD). The MHD is eligible for listing in the National Register of Historic Places (NRHP) under the Secretary of the Interior's Significance Criteria A and C, as defined in 36 CFR Part 60.4, as a significant concentration of buildings and structures with a direct, important association with Cold War-era nuclear testing from 1951 through 1992. Building 23-620 is a contributing element of the MHD per the architectural survey of the district completed in 2018 (Reno et al. 2018). The building was identified as a Category I element in Appendix C of the Mercury PA and, therefore must be mitigated according to Mercury PA Stipulation VIII.A.

Per Stipulation VIII.A.2, Building 23-620 was evaluated for individual significance (see Brannan 2022) and was found to not be individually significant at any level under the Secretary of Interior's Significance Criteria. Therefore, for the purposes of mitigation, Building 23-620 is considered a Category II element of the MHD.

In accordance with the standard mitigation for Category II elements (Stipulation VIII.C.1) in the Mercury PA, this updated ARA form includes:

- Updated descriptive and historical information
- Individual NRHP evaluation of the Building 23-620 as an individual historic property using the Secretary of the Interior's criteria for evaluation
- Current digital images with an index and keyed to a current annotated sketch plan
- Historic photographs
- Historic architectural drawings

5. NRHP Evaluation

If not already listed, complete the information below:

Eligible Under:	Criterion A ☐	Criterion B ☐	Criterion C ☐	Criterion D ☐
	Not Eligible ☒	Unevaluated ☐		
Area(s) of Significance	Nuclear Testing, Townsite Development			
Period of Significance	1968-1992			

Integrity – Does the resource possess integrity in all or some of the 7 aspects?						
Location ☒	Design ☒	Materials ☒	Workmanship ☒	Setting ☒	Feeling ☒	Association ☒

General Integrity:	Intact ☒	Altered ☐	Moved ☐	Date(s):
Threats to Resource:	Demolition			
Historic Name	LASL J-3 Office/Maintenance Office			
Current/Common Name	Mercury Support Facility			
Historic/Original Owner	U.S. Atomic Energy Commission			
Current Owner	U.S. Department of Energy Nevada National Security Administration Nevada Field Office			
Current Owner Address	Nevada National Security Site			
Historic Building Use	Office			
Current Building Use	Office			
Architect/Engineer/Designer	Beckler & Associates, North Hollywood, CA (NTS News 1967)			
Builder/Contractor	Holmes & Narver			

6. Narrative Eligibility Justification

Provide a detailed explanation of the resource's eligibility for the National Register, including supporting historic information, methods for evaluation under the four criteria, discussion of the seven aspects of integrity, and conclusions about eligibility.

National Register of Historic Places Eligibility

Building 23-620 was originally recorded as SHPO Resource No. B15283 in 2017 during an architectural survey of the townsite of Mercury (Reno et al 2017 and Reno et al 2018). It was only evaluated as a contributing element to the Mercury Historic District (MHD). The following provides a detailed individual evaluation of the building against the four Significance Criteria and analyzes its physical integrity.

Nuclear Testing on the NNSS

The text for this section was compiled using existing historic contexts presented in *Architecture of Mercury* (Reno et al. 2018) and *Draft Cultural Resource Management Plan* (Rhode et al. 2020). Relevant text from each document was excerpted, compiled, and adapted to suit the purposes of this report with references to Building 23-620 added as appropriate.

The continental nuclear test site, now known as the NNSS, has gone through several name changes over time, from South Site, Alternate Test Site B, Site Mercury, and Nevada Test Site (NTS) in 1950-51 to Nevada Proving Ground in 1952 and back to NTS in January 1955 (AEC 1952). Its name remained NTS for the rest of the Cold War. The facility was renamed in 2010 and is currently managed as the NNSS.

Nuclear testing has been a major and important part of the history of Nevada and the United States (Tlachac 1991a, 1991b). Much of this activity revolved around the NNSS, where most of the developments and experiments in nuclear weapons were tested both above and below ground. The consequences of these activities have been felt worldwide, played a vital role in the national defense of our country, and helped shape world politics.

In the late 1940s, prior to establishing the NNSS, both low- and high-yield nuclear tests were conducted at the Pacific Proving Grounds in the vicinity of the Marshall Islands. Transporting personnel and equipment back and forth between the test area and the scientific laboratories 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 (Fehner and Gosling 2000:36). The Korean War, which began in 1950, escalated security concerns at the Pacific Proving Grounds providing further motivation for the continental search (DTRA 2002:77; Friesen 1995:4).

The ideal continental test site would have favorable and predictable weather and terrain conditions for year-round testing, the land would be under federal control, and it would have an infrastructure already in place (Lay 1950; Tlachac 1991a). Other important factors included security, remoteness from populated areas, and relative proximity to the scientific laboratories in New Mexico. The Las Vegas Bombing and Gunnery Range in southern Nevada was selected as the place that best met these criteria (Fehner and Gosling 2006:43). The range also had large, flat terrain to conduct tests, westerly 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 the LASL (which later became the Los Alamos National Laboratory [LANL] in 1980) the Atomic Energy Commission (AEC), and the National Security Council, President Truman approved the new test site location on December 18, 1950.

McKee Construction Company and Reynolds Electrical & Engineering Company (REECo) were hired to begin preparing for the first tests, focusing most of their work 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 LASL in New Mexico and were familiar with the proposed tasks. The Ranger nuclear test series in Frenchman Flat began on January 27, 1951, with the Able test and ended with the Fox test on February 6, 1951 (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 north from Frenchman Flat to Yucca Flat for the next series of tests in the fall of 1951.

The town of Mercury quickly became the administrative and residential hub of the NNSS in the 1950s. Initially named Base Camp Mercury, it was planned to provide minimum facilities for two or three test series a year, with a six-week time frame for each series. Holmes & Narver and Silas Mason Company, two prominent government contractors during the Cold War, shared in the design of Mercury, which initially included barracks, a mess hall, and administrative buildings. The camp was designed to accommodate 412 persons at peak periods of use for only 18 weeks a year. By late 1951, these expectations were already obsolete because the camp overflowed with 1,100 residents (Fehner and Gosling 2000:81).

In response, a $6.7 million construction project was approved to meet the needs of the growing testing program and population in Mercury (NNSA/NFO 2013). The AEC expanded the base camp, adding more barracks, a second mess hall, a recreational facility, a warehouse, offices, and laboratory space (Fehner and Gosling 2000).

In 1958, both the United States and the former Soviet Union ceased nuclear testing by self-imposed moratoria at the urging of internal and external forces (Ogle 1985:30-31). By 1961, however, both superpowers were once again conducting tests. In 1963, the United States, Soviet Union, and Great Britain ratified the Limited Test Ban Treaty, sending all weapons-related tests underground and prohibiting tests in the air, at the surface, and underwater (Friesen 1995:6).

Although atmospheric testing ended, underground testing activities at the NNSS steadily expanded, and testing occurred on a year-round basis in the 1960s. In addition, the Plowshare Program and the Nuclear Rocket Development Station (NRDS) brought increased activity to the site (Fehner and Gosling 2000:83; NNSA/NFO 2013). This required additional construction to meet demands for a wide range of new facilities.

In 1962, an AEC supplemental appropriations bill provided funds to add to or replace most of the earlier temporary buildings at the site and included a $15 million request for permanent NNSS construction (NNSA/NFO 2013). By June, the AEC contracted Arthur Benedict Associates (ABA) of Los Angeles, California, to develop a long-range comprehensive master plan for the coordinated development of Mercury.

The Mercury Master Plan (ABA 1962) proposed an expansion of all facilities to create a permanent site. Facilities programmed for construction during fiscal years 1963 and 1964 were support facilities, the cafeteria and food handling areas, administrative and office buildings, laboratories, maintenance shops, warehouses, communications, the Civil Effects Test Organization building, resident-oriented facilities such as the dormitories, recreation hall, swimming pool, bowling alley, chapel, and health, medical, and safety building, circulation facilities like the Camp Desert Rock airstrip, U.S. 95 improvements, the Mercury Bypass, and primary and secondary streets, and utilities, a new power transmission line and sewage treatment plant.

Underground testing on the NNSS continued at a steady pace until 1992 when the United States established a second self-imposed moratorium on nuclear testing. In the 1970s and 1980s, buildings and structures were added throughout the site to meet mission demands and improvements in technology. However, many of the earlier buildings remained in use until 1992 and beyond, including Building 23-620.

After 1992, the DOE began conducting subcritical experiments at the NNSS to maintain the safety and reliability of the national nuclear stockpile without conducting full-scale tests. Main activities on the NNSS through the present day include subcritical experiments and other Stockpile Stewardship programs, along with planning, experimentation, and training to prevent and counter global and homeland security threats.

Building 23-620 was constructed in 1968 and fits within the 1951-1992 period of significance for the NNSS and is associated with Cold War-era nuclear testing. Designed by Ben Beckler and Associates and constructed by Holmes & Narver, Building 23-620 was used as an office building for the LASL/LANL from its construction in 1968 until at least 1990 when it was used by REECo as a maintenance facility and eventually in 2004, as the Real Estate Services office building

The Work of LASL/LANL on the NNSS

The LASL was established in 1947 as part of the AEC after nuclear weapons were used to end WWII (NNSA/NFO 2015; Reno et al. 2018). The AEC took over the research and production facilities built by the Manhattan Engineer District during WWII and these facilities became the LASL (Reno et al. 2018). The LASL, along with other laboratories such as the Lawrence Radiation Laboratory (now Lawrence Livermore National Laboratory), were involved in the development and construction of nuclear technology used for testing on the NNSS. The work by

LASL on NNSS began in 1951 with the testing of nuclear weapons, both for atmospheric and underground tests.

Between 1951 and 1992 there were 1,021 nuclear detonations among 928 tests on the NNSS. During this time period, the LASL was the sponsor of 487 of these tests, some in conjunction with the Department of Defense, joint tests with the United Kingdom, and the Sandia National Laboratory. The majority of the tests conducted by the LASL were "weapons related." These types of detonations were conducted to test nuclear devices intended for a specific type of weapons system. Other nuclear tests conducted by the LASL include weapons effects, which were designed to evaluate the impact of a nuclear detonation on targets such as military hardware, and safety experiments, which were conducted to confirm that a nuclear explosion would not occur with the accidental detonation of the chemical explosive associated with a device. These tests were conducted in a variety of locations on the NNSS including Frenchman Flat, Pahute Mesa, and Yucca Flat (DOE 2015).

Due to the dispersed nature of the testing, the LASL staff was correspondingly dispersed throughout the site and used the equipment, buildings, and structures necessary to conduct the tests and to gather the data at those locations. The types of resources they used included the towers, shafts, and tunnels where the devices were detonated, trailers, diagnostic stations, laboratory buildings, office buildings, dormitories, and centralized facilities like the Control Point in Area 6 which was the command center for the nuclear detonations (Drollinger et al 2003).
In addition to weapons, effects, and safety tests, the LASL was also involved in the engineering of reactors and engines for the Nuclear Engine for Rocket Vehicle Applications (NERVA) nuclear thermal rocket propulsion program. The program, which began in 1961, was created to design an efficient and reliable system to boost both piloted and autonomous rockets to the moon, Mars, and beyond (Reno et al. 2022). The NRDS was developed as part of the program and was in use for the next 16 years supporting the nuclear rocket program. The LASL personnel pushed for the NRDS to be built on the NNSS as they were familiar with the site because of their involvement in the nuclear weapons testing (Reno et al. 2022).

The primary mission of the NRDS at the NNSS was to support the Rover program in developing and field-testing nuclear rocket reactors and engines for the space program (AEC 1961; Miller 1984). The first stage involved developing and testing reactor materials capable of withstanding high temperatures and generating new concepts for converting nuclear energy into useful propulsion forms (AEC 1960). The second stage was to design and test a nuclear engine for actual flight, and the third stage, performed by NASA, was to incorporate the engine into a Saturn V launch vehicle for flight testing (AEC 1964). All these tasks were done in coordination with LASL and private industry contractors participating in the original Rover program.

Building 23-620 was constructed for the LASL J-3 group, who were the "Administration and Operations Support Group" for the LASL (SNPO 1969). Before the construction of Building 23-620, the administration for LASL was scattered throughout Mercury and other parts of the NNSS.

Holmes & Narver

Holmes & Narver was active from the initial construction of what is now the NNSS through the end of the Cold War. This work was part of Contract 20, which was the longest-running single contract ever administered by the U.S. government. James T. Holmes and D. Lee Narver started the firm in 1933 in Los Angeles to repair earthquake damage to a large number of buildings. The firm entered the realm of government-based design in 1940 with the designs of Camp Roberts and Camp Nacimiento for the Army, followed by a number of wartime military bases. Design of the nuclear test facility at Enewetak in 1947 foreshadowed its role in designing the new base camp of Mercury in 1951. The firm was extremely active during the Cold War with projects including facilities at Naval Air Weapons Station China Lake, Douglas Aircraft, and overseas military bases. Much of the work Holmes & Narver did at Mercury as well as the rest of the NTS was the unglamorous job of perpetually altering buildings to keep pace with changing mission requirements (Reno et al. 2018).

Although the military-related contracts were central to the work performed by Holmes & Narver, the firm also had significant civilian commissions, such as the 1958 TWA terminal at Los Angeles International Airport. Holmes & Narver ceased to exist as an independent firm in 2001. It was acquired by DMJM, which was in turn acquired by AECOM (Reno et al. 2018).

Ben Beckler and Associates

The firm of Ben Beckler and Associates was originally established as Kewell, Kocher & Benedict. in 1950. The firm went through a series of changes as the principals in the firm changed. Ben Beckler joined the firm in 1953 and circa

1962 the firm changed its name to Ben Beckler and Associates (Reno et. al 2018). The firm in all its iterations designed many structures for the military, including the Air Force and the Navy. The firm designed numerous buildings including a large number of the Capehart Wherry Housing popular during this era (Moore et al. 2010).

The architect on record for Building 23-620 was Helmut Steve Sander. Sander was educated in Germany and is first noted in the AIA directory in 1956 working for the California firm of Kannery-Mayer Architects. He joined Ben Becker and Associates in 1960 and was still employed there in 1970 (AIA 1970). Sander designed a variety of structures, including portable classrooms for the Los Angeles Board of Education, modifications for a hospital on Norton Air Force Base, and a passenger and freight terminal in Lake View, California.

National Register Evaluation of Building 23-620

As previously noted, Building 23-620 is a contributing element to the NRHP-eligible MHD. The following section details the evaluation of its individual eligibility for listing in the NRHP. Based on this evaluation Building 23-620 is not recommended as individually eligible for listing in the NRHP.

Secretary of Interior's Significance Criteria

Criterion A

To be significant under Criterion A, a property must be directly associated with events that have made a significant contribution to the broad patterns of our history. Although Building 23-620 was constructed to support the activities of the LASL, it was not directly associated with nuclear testing activities. It housed administrative and operations staff, rather than the scientists and engineers responsible for testing and experimentation. Nuclear detonations were conducted outside of Mercury and in areas such as Frenchman Flat, Yucca Flat, and Pahute Mesa. It is in these locations where buildings and structures were used by the LASL to design, engineer, and test nuclear devices. They include such important places as the Control Point in Area 6, the complex of buildings and structures located at the NRDS, and other testing sites. Building 23-620, by contrast, was constructed as an administrative office building. While many LASL employees and others may have used or visited Building 23-620 in the course of their LASL employment, the building's function as an administrative office building does not have a direct association with nuclear testing or the scientific work of the LASL. As such, there is no evidence to suggest that it was directly associated with important events or trends as an individual resource during the period of significance considered for this evaluation, 1968 through 1992. Building 23-620 does not appear to be significant under Criterion A.

Criterion B

To be significant under Criterion B, a property must be directly associated with the productive life of a significant person. There is no evidence to suggest Building 23-620 has a direct association with any significant person. Although Building 23-620 provided needed office space for the LASL and their administrative needs, there is no indication that any significant person was connected with the work in Building 23-620. It is likely that any such person would have been more closely associated with locations where the LASL conducted important testing and experimentation on the NNSS. Building 23-620 is not significant under Criterion B.

Criterion C

Properties significant under Criterion C must embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction. Building 23-620 was constructed as an office building for the LASL in 1968. Its architecture does not embody the distinctive characteristics of any particular type, period, or method of construction because it does not contain enough design elements to represent a certain type, period, or method of construction. Building 23-620 is a Category I building in the MHD because it was the only building of its exact type constructed in the district. However, the design and construction methods are not distinctly different than other buildings built in Mercury at that time. It is a simple one-story, rectangular plan building with limited defining architectural features. Building 23-620 is also not the work of a master architect, nor does it possess high artistic values. Building 23-620 was designed by Beckler and Associates and constructed by Holmes & Narver. Beckler and Associates was an architecture firm from North Hollywood, and the architect on record for 23-620 was Helmut Steve Sander. Sander, while having a successful career in architecture, is not recognized as a great in the field. The design of 23-620 does not express a particular phase in the career of Sander or a particular idea or theme. Building 23-620 is not significant under Criterion C.

Criterion D

Properties significant under Criterion D must have the potential to yield further information about human history that can only be answered by the actual physical material of the resources. There are two requirements for a resource to be found significant under Criterion D: the property must have or have had information to contribute to our understanding of human history or prehistory, and the information must be considered important. Building 23-620 has been subject to research on its history in the community of Mercury and its architecture, both of which are known. It is unlikely that the building could yield any more information that would be considered important. Building 23-620 does not appear to be significant under Criterion D.

Integrity Analysis

To be eligible for listing in the NRHP, a property must possess both significance and physical integrity. It does not appear that Building 23-620 possesses significance. However, it does still retain aspects of its integrity. Building 23-620 retains its aspect of location, as it is still in the location where it was constructed. Building 23-620 retains some design integrity. Changes to its design include the addition of windows on the east and west elevations, the replacement of an original exterior door, and the original windows. In addition, the removal of the trim that framed the doors and windows was removed, leaving almost no original style elements on the exterior of the building. On the interior, the only major design modification was the conversion of the locker room into offices. Building 23-620 has had a minor change in the immediate vicinity of its setting due to the construction of the new fire station to the southeast in 2010. Further to the north and the northeast, there is more of a loss of integrity due to the removal of a number of original Mercury buildings and structures. While those buildings are not directly adjacent to Building 23-620, the setting of Mercury itself has changed and therefore diminishes the integrity of Building 23-620. The integrity of materials has been diminished with the replacement of the windows, original bronze glazing, and one of the exterior doors. It does retain the integrity of workmanship, feeling, and association. Although the building has been modified, it still shows the workmanship of a one-story, rectangular plan, metal-paneled building, the feeling of a support building in the town of Mercury, and its association with Cold War-era activities on the NNSS.

Conclusion

Building 23-620 does not appear to be individually eligible for listing in the NRHP. Although it retains some aspects of integrity, it does not possess individual significance under any of the established Significance Criteria. It remains eligible for the NRHP as a contributing element to the MHD.

7. Narrative Architectural Description

Provide a detailed description of the resource, including all character defining features, potential construction methods, potential alterations (both historic and non-historic), and any accessory resources.

History and Evolution of Building 23-620

Building 23-620 was constructed in 1968 as the LASL J-3 office building to support LASL administration activities. The J-division was created as part of LASL to "diagnose and execute integrated dynamic experiments in support of national security objectives" (Burns 2017). The building was first mentioned in a 1967 *NTS News* article about contractors bidding to build a new office building for the LASL's J-3 Division. The article states the office was "to be a single-story, insulated metal, about 1,500 sq ft" building (NTS News 1967). Ben Beckler and Associates were the architects, and Holmes and Narver were the engineers and constructors. The original floor plan of 23-620 shows a rectangular building, consisting mostly of offices, in addition to a utility room, a storage room, and a locker room.

Building 23-620 was constructed as a one-story, metal building on a concrete foundation. It was 48 feet × 32.6 feet and 12.6 feet in height with a low-sloping, side-gabled roof, with a 2-foot overhang, and a wide fascia. The gabled ends had exposed purlins and an internal gutter system within the roof included downspouts on each corner of the building

As constructed, the primary elevation was the north elevation. It had two entry doors, both hollow metal with one bronze, plate-glass, off-center, heat-reflecting window. The exterior walls were insulated metal panels, with exposed columns on the north and south elevations. The exposed columns framed the two doors and two windows on the north elevation and the two windows on the south elevation. The doors were unevenly spaced on the north elevation, with the eastern door closer to the northeast corner of the building, and the western door set further in from the northwestern corner. Between the two doors were two identical, fixed, bronze plate-glass windows. Due to the irregularly spaced doors, the western window is much closer to the western door than the eastern window is to the eastern door.

The south elevation lacked doors but mimicked the north elevation with identical windows and exposed columns. Both the east and west elevations had no windows or doors. The only break in the wall on the east elevation was for a duct to the heat pump located on the exterior wall. The wall panels on the exterior of the building were painted a cream beige color, with the fascia and gutters a dark brown. On the north and south elevations, where the exposed columns created a framing of the doors and windows, this area, including the doors themselves, was painted blue.

The main entryway was the eastern door on the north elevation, and it opened into the foyer. In the foyer, there were two doorways: one to the south that led into a locker room and one to the west that entered into the general office area. The locker room, from the foyer, encompassed the rest of the eastern wall of the building. The general office area through the second doorway in the foyer was an open space. In the northwestern corner of the building was a small room that functioned as a storage and a janitorial room. Directly south of the janitorial room was a utility room with cabinets and a sink. The last space along the western wall was the restroom area that encompassed the southwestern corner of the building. The restroom space was divided into men's and women's restrooms. There was a vestibule leading into the restrooms that had a wall-mounted, electric water cooler. Adjacent to the eastern wall of the women's restroom were two offices, which ran the length of the southern wall to the wall of the locker room.

There is limited information regarding alterations made to Building 23-620 post-construction until the early 1990s. In 1994, portions of Building 23-620 were re-carpeted, and two rooms had carpet installed for the first time. This was likely due to the administration of the J-3 Division administration being moved to Building 23-550 (Beck et al. 1996). The utility room in the northwest corner, and what was originally the locker room had carpet newly installed. The drawing showing this installation does not identify any other work occurring in the building; however, it is likely the use of the locker room changed with the installation of carpet. This is also when the NTS Building Inventory lists Building 23-620 as a maintenance facility (NTS 1994). The room and door configuration are the same as in the original drawings in 1969. This drawing also does not show windows on the west or east elevations. Based on photos, it appears the windows were added sometime between 1974 and 1991

In 1996, Building 23-620 was renovated to remove one wall between the foyer and the original locker room and to add carpet to the newly opened space, including recarpeting what was the original locker room. The locker room was also divided by a wall to form two separate offices. The northern end of the room had an exterior entrance door that opened directly into it. The southern end of the wall had an entry door leading into the central office space. The door

off the foyer that opened into the general office space is in its same location; however, with this renovation, the direction the door opened was reversed. The rest of the building remains in its original configuration.

Current Description

Building 23-620 is currently not in use. It is not clear when the building was abandoned, but it is listed as operational in an NNSS 2014 buildings report (NTS 1994).

The most recent space management plan produced in 2015 by the NNSS management and operating contractor shows the interior configuration remains as it was in 1996 while several exterior doors and windows have been altered or added. On the north elevation, the eastern door and the bronze glass in the fixed windows have been replaced. The windows on the south elevation have been replaced with fixed windows and are now one-over-one, aluminum-framed windows. A window added to the west elevation sometime between 1974 and 1991 is centrally located and is a one-by-one, horizontal sliding, aluminum window. Two other windows added to the east elevation are one-by-one, horizontal sliding windows with the southern window aluminum, and the northern window vinyl. A solar water heater is currently off of the south elevation and a newer HVAC unit, surrounded by yellow pipe bollards, is adjacent to the east elevation.

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Building 23-620 remains in its original location along the eastern side of Mercury Highway, as do most of the buildings that surrounded it when originally constructed. On the west side of the highway, both the Maintenance Shop (23-700) and the Crafts Shop (23-710) remain with little alteration. To the north of Building 23-620, the Administration Building (23-630) is in its original location, with a building addition the only major change. To the northwest, the large “Blue Box” building (23-600) and the smaller Dosimetry Lab (23-610) also remain, with little to no changes since the period of significance. The only change in the vicinity of Building 23-620 is a new fire station, constructed in 2010, located 315 feet to the southeast, where the golf driving range was formerly located

Alterations Summary

Building 23-620 has been modified since its construction in 1968. Windows were added to both the east and west elevations, and the windows have all been replaced along with the entry door on the eastern side of the north elevation. In addition, the trim that surrounded the doors and window has been removed. The building shape, size, and roofline remain in their original configuration. The interior of the building has only minor changes, most of which are cosmetic. This includes paint and the installation of new carpet. The biggest modification was the conversion of the original locker room into two separate offices. This change included removing the south wall of the original foyer and adding a new wall. With this change, the east entryway door opened directly into the new office, making the southern entryway door the likely main entrance. It is not clear when the wall separating the two offices was constructed. It is not shown on the 1994 drawing for the carpet installation, but it is shown as existing on the 1996 renovation drawing.

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11. Photographs

Index to Digital Images

Building 23-620 DRI Project No. 2211023
Nevada State Historic Preservation Officer Resources No. B15283
Mercury Historic District (D230)
Mercury, Area 23
Nevada National Security Site
Nye County, Nevada

Nicole Brannan (Desert Research Institute), May 24, 2022

DIGITAL IMAGE KEY PLAN (EXTERIOR)

DIGITAL IMAGE KEY PLAN (INTERIOR)

Photograph 1. North elevation of 23-620, (22110_3930, DRI 2022).
Elevation: North Direction facing: South Photographer: Brannan Date: 05/24/2022

Photograph 2. Oblique view of 23-620, (22110_3933).
Elevation: North and east Direction facing: Southeast Photographer: Brannan Date: 05/24/2022

Photograph 3. West elevation of 23-620, (22110_3934).
Elevation: West Direction facing: East Photographer: Brannan Date: 05/24/2022

Photograph 4. Oblique view of the southwest corner of 23-620, (22110_3935).
Elevation: West and south Direction facing: Northeast Photographer: Brannan Date: 05/24/2022

Photograph 5. South elevation of 23-620, (22110_3936).
Elevation: South Direction facing: North Photographer: Brannan Date: 05/24/2022

Photograph 6. Oblique view of 23-620 (22110_3938).
Elevation: South and east Direction facing: Northwest Photographer: Brannan Date: 05/24/2022

Photograph 7. East elevation of 23-620 (22110_3938).
Elevation: East Direction facing: West Photographer: Brannan Date: 05/24/2022

Photograph 8. Oblique view of the southeast corner of 23-620 (22110_3940).
Elevation: East and north Direction facing: Southwest Photographer: Brannan Date: 05/24/2022

Photograph 9. Close-up of roof detail on eastern elevation (22110_3941).
Elevation: East Direction facing: N/A Photographer: Brannan Date: 05/24/2022

Photograph 10. Close-up of solar water heater (22110_3937).
Elevation: South Direction facing: North Photographer: Brannan Date: 05/24/2022

Photograph 11. Close-up of light fixture, north elevation (22110_3979).
Elevation: North Direction facing: N/A Photographer: Brannan Date: 05/24/2022

Photograph 12. Main circulation area, view to the south/southeast (22110_3942).

Photograph 13. Equipment room, view to the west (22110_3944).

Photograph 14. Circulation area, view to the east (22110_3945).

Photograph 15. Office on west side of building, view to the west/northwest (22110_3946).

Photograph 16. Office on west side of building, view to the north/northeast (22110_3947).

Photograph 17. Sink located outside restrooms in the southwest area of the building (22110_3948).

Photograph 18. Facing into the eastern restroom, view to the south (22110_3949).

Photograph 19. Sign on women's restroom, facing south (22110_3975).

Photograph 20. Sign on men's restroom, facing west (22110_3976).

Photograph 21. View into office south-central part of the building, facing south/southeast (22110_3950).

Photograph 22. View into office 106, southcentral portion of the building (22110_3951).

Photograph 23. View into office 107 to the south/southwest, southcentral portion of the building (22110_3953).

Photograph 24. View into office 107, facing southeast (22110_3954).

Photograph 25. View into office 108, southeast corner of the building (22110_3956).

Photograph 26. Office 108, view to the northeast (22110_3957).

Photograph 27. View of the circulation area, facing northwest (22110_3959).

Photograph 28. Office 105, view to the southeast (22110_3961).

Photograph 29. Office 105, view to the northeast, (22110_3963).

Photograph 30. Office 105, view to the north, (22110_3964).

Photograph 31. View of workstation along northern edge of the building, facing west (22110_3966).

Photograph 32. Circulation area, view to the south (22110_3968).

Photograph 33. Circulation area, view to the southwest (22110_3970).

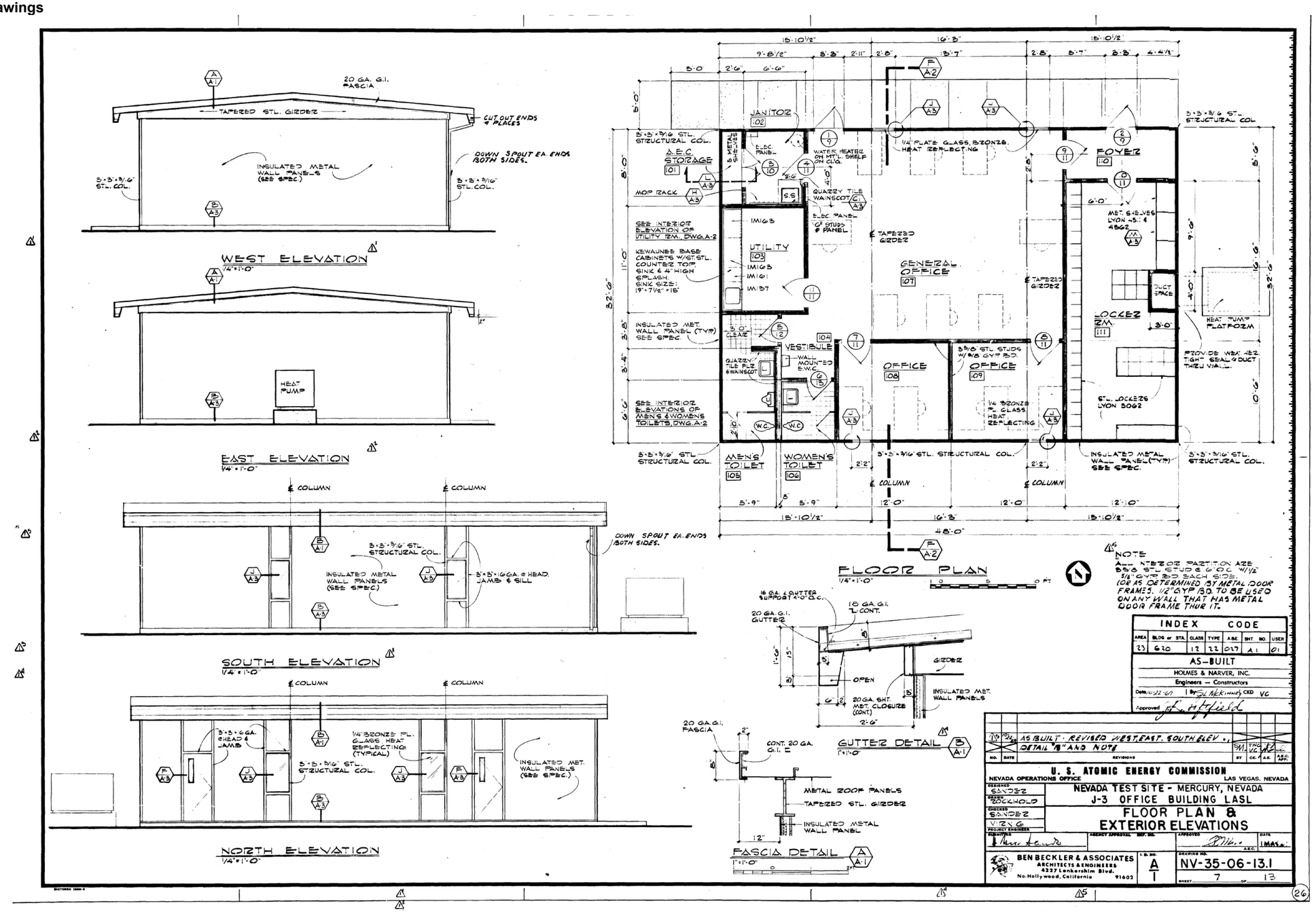
HISTORIC PHOTOGRAPHS

Building 23-620 approximately three years after construction.
Elevation: North Direction facing: South Photographer: REECo Date: 03/04/1971

Aerial of Building 23-620 in Mercury with recreation area in foreground (NF-74).
Elevation: N/A Direction facing: South/southwest Photographer: NTS/NTA Date: Between 1970-1982

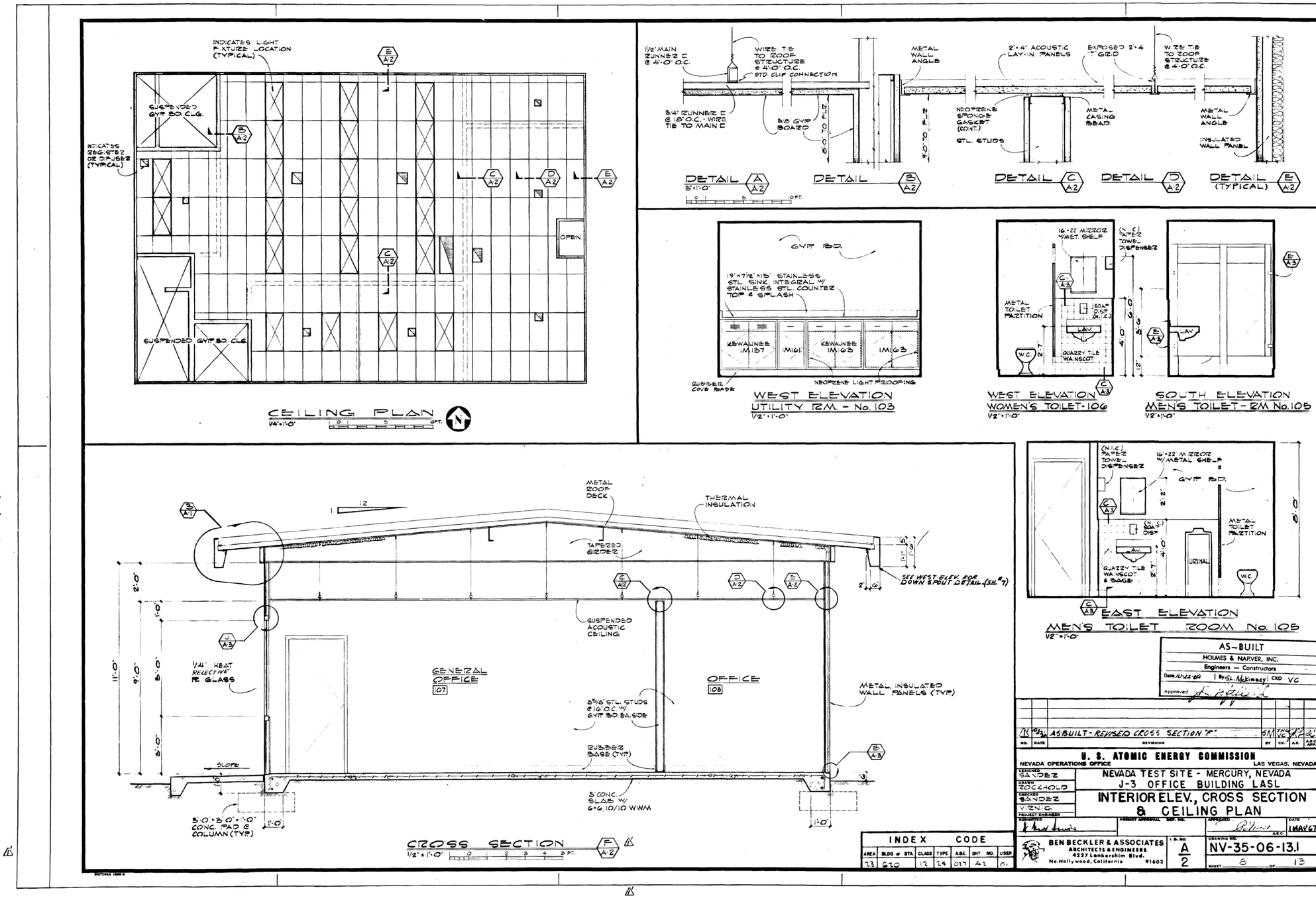
Close-up from aerial of Building 23-620's location in Mercury (NF-74).
Elevation: N/A Direction facing: South/southwest Photographer: NTS/NTA Date: Between 1970-1982

13. Engineering Drawings

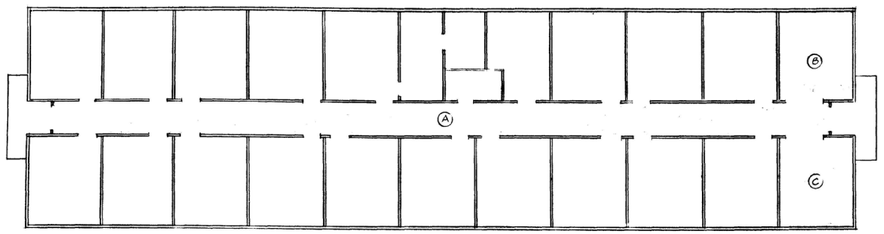


Building 23-620 floor plan and exterior elevations 1969. Drawing number NV-35-06-13.1 A01.1_34636, drawn May 1, 1967.

Rev. 2017

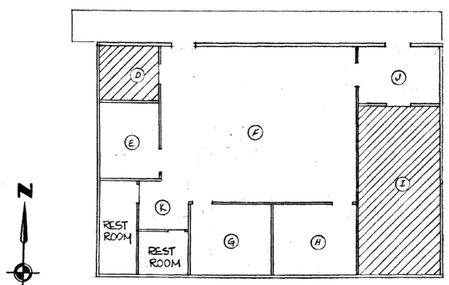


Building 23-620, Interior elevation, cross section and ceiling plan. Drawing No. NV-35-06-13 A02.1_34637. Drawn May 1, 1967.



FLOOR PLAN OF DORM 513 & 514
SCALE 1/8"=1'-0"

ROOM DIMENSIONS		
AREA	RM. No	DIMENSIONS
*Ⓐ	HALL	3'-9" x 107'-10"
*Ⓑ	DAY ROOM	10'-2" x 12'-2"
*Ⓒ	DAY ROOM	10'-2" x 12'-2"
Ⓓ	102	7'-3" x 8'-6"
Ⓔ	103	8'-6" x 10'-4"
Ⓕ	107	21'-8" x 25'-7"
Ⓖ	108	9'-11" x 11'-0"
Ⓗ	109	9'-11" x 11'-0"
Ⓘ	111	12'-4" x 26'-7"
Ⓙ	110	4'-11" x 12'-4"
Ⓚ	104	5'-4" x 6'-10"



FLOOR PLAN BUILDING 620
SCALE 1/8"=1'-0"

LEGEND

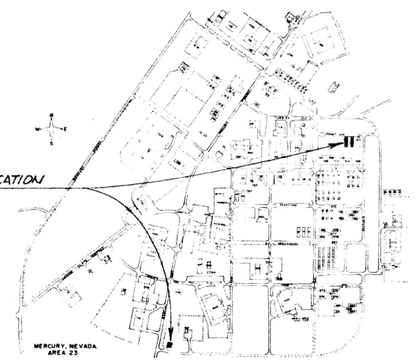
= AREA TO BE CARPETED

= REMOVE EXISTING & INSTALL NEW CARPET

NOTES

1. ALL DIMENSIONS ARE FROM INSIDE WALL TO INSIDE WALL
2. ALL DIMENSIONS ARE VERIFIED BY FIELD MEASUREMENT (±2) DOOR LOCATIONS ARE NOT VERIFIED.
3. *DORM 513 & 514 AREAS A, B & C ARE THE SAME FOR BOTH BUILDINGS.
4. THE CARPET SHALL MEET OR EXCEED D.O.E. CRITERIA

AS BUILT
REYNOLDS ELECTRICAL & ENGINEERING CO. INC.
ENGINEERING DEPT.
DATE 10/11/94 CHECKED REG



VICINITY MAP
NO SCALE

NO.	DATE	REVISIONS	BY	CK.	A.E.	DOE APP.
1	10/11/94	AS-BUILT CONDITION.	REG	RG		

U.S. DEPARTMENT OF ENERGY

NEVADA OPERATIONS OFFICE — LAS VEGAS, NEVADA

DESIGNED D.T. Mendenhall
DRAWN D.T. Mendenhall
CHECKED
PROJECT ENGR. D.T. Mendenhall

NEVADA TEST SITE — AREA 23

CARPET INSTALLATION
BUILDING 620, DORM 513, 514
FLOOR PLAN

SUBMITTED	AGENCY APPROVAL	DOE APPROVAL	DATE
[illegible] 3-17-82	[illegible] 3/17/82	[illegible]	3-19-82

Reynolds Electrical & Engineering Co., Inc.
P.O. Box 14400 • Las Vegas, Nevada 89114

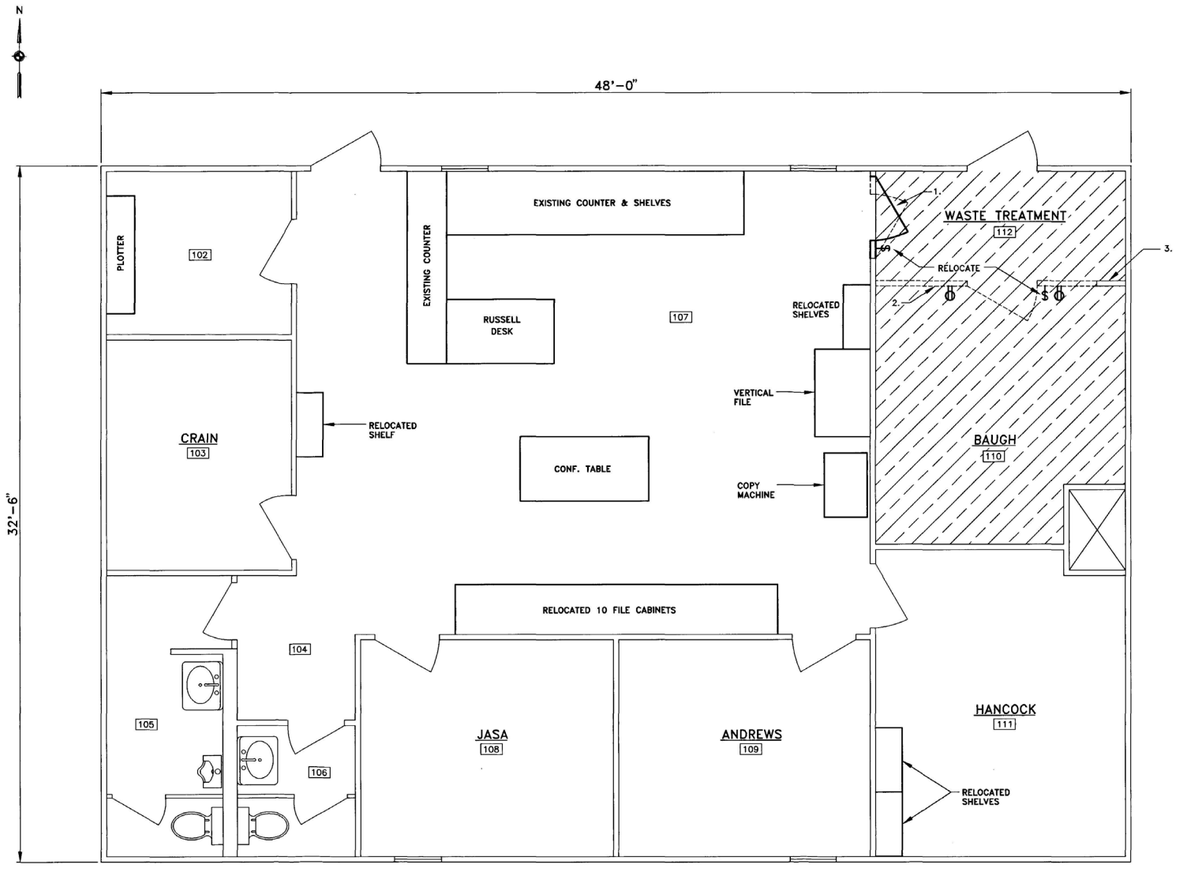
I. D. NO. NTS

DRAWING NO. 23-620-513-514-A1.1

REV. 1 SHEET 1 OF 1

RE-0806 (3/78)

Carpet installation for Building 23-620 and other buildings. Plan for 23-620 in lower left of drawing, October 11, 1994. Drawing No. 23-620-513-514-A1.1



BUILDING 620 – FLOOR PLAN
SCALE: 3/8"=1'-0"

SCOPE OF WORK
1. NEW DOOR OPPOSITE SWING, LOCATE NEXT TO WALL.
2. EXISTING WALL AND DOOR TO BE REMOVED.
3. SECTION OF WALL TO REMAIN FOR EXISTING WATER LINE.

LEGEND
EXISTING
NEW
TO BE REMOVED
NEW CARPET AREA

GENERAL NOTE:
PAINT AND PATCH NEW CONSTRUCTION TO MATCH EXISTING.

AS BUILT	
BECHTEL NEVADA	
MAINTENANCE DEPARTMENT MAINTENANCE CONTROL SECTION	
DATE 4/29/96	PROJECT ENGR. R. THOM / CHECKED S. Plumb
APP/INSP.	DOE APP
SKETCH NO. 544-SK-237	

NO. | DATE | REVISIONS | DESIGN | CHECK | SAFETY | PLT/ENG | DOE

Bechtel Nevada
P.O. BOX 3936 NORTH LAS VEGAS, NV 89036

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U. S. DEPARTMENT OF ENERGY
NEVADA FIELD OFFICE — LAS VEGAS, NEVADA

ACAD FILE NUMBER 620-6	NEVADA TEST SITE — AREA 23
DRAWN 1/8/96 R. THOM	DESIGNED R. THOM
CHECKED	DOC
PROJECT ENGR. R. THOM	ENG.

RENOVATION PLAN
BUILDING 620

SUBMITTED | AGENCY APPROVAL | APPROVAL BLOCK: DEPT. OF ENERGY APPROVAL — DATE — PROJECT ENGINEER

Reynolds Electrical & Engineering Co., Inc.
SITE MAINTENANCE DEPARTMENT
P. O. Box 98521 • Las Vegas, Nevada • 89193-8521

DRAWING NUMBER 544-SK-237
T. S. NTS | REV. 2 | SHEET 1 OF 1

Building 23-620 renovation plan, 1996. Drawn April 29, 1996. Drawing No. 544-SK-237.2_227940.

Selection of additional drawings related to Building 23-109 available from the Nuclear Testing Archive in Las Vegas, Nevada.

Index No.	Year	Drawing No.	Title
34638	1969	NV 35 06 13 C01.1	Site plan
34639	1969	NV 35 06 13 C03.1	Civil sections
34640	1969	NV 35 06 13 C04.1	Civil details
34641	1969	NV 35 06 13 E01.1	Electrical plot plan
34642	1969	NV 35 06 13 E02.1	Lighting plan
34643	1969	NV 35 06 13 E03.1	Power plan
34644	1969	NV 35 06 13 M01.1	Plumbing, heating, ventilating & air conditioning plan
34645	1969	NV 35 06 13 S01.1	Foundation plan & details
34646	1969	NV 35 06 13 A03.1	Finish details
34647	1969	NV 35 06 13 C02.1	Sewage system partial plan

NEVADA STATE HISTORIC PRESERVATION OFFICE

Architectural Resource Assessment (ARA) Form

For SHPO Use Only	SHPO Concurrence?: Y / N		Date:		
Survey Date	June 22, 2017	Recorded By	Reno, Menocal, Shimer	Agency Report #	TR 115

1. Property Type

Building ☒	Structure ☐	Object ☐	Landscape (non-archaeological site) ☐

2. Property Overview and Location

Street Address	NNSS Area 23, Block 21, South – Mercury Hwy.			
City, Zip	Mercury, 89023			
County	Nye			
Assessor's Parcel #	N/A	Subdivision Name	N/A	
UTM Location (NAD 83, UTM Zone 11 North)	Easting: 589347		Northing: 4057100	
USGS Info	Township: 15S	Range: 53E	Section: 11	USGS 7.5' Quad & Date: Mercury, Nev. 1983
Ownership	Private ☐	Public-Local ☐	Public-State ☐	Restricted-Federal ☒ / Multiple ☐
Should the property's location be kept confidential?	Yes ☐	No ☒		

3. Architectural Information

(Insert primary photograph below.)

Construction Date	1968
Architectural Style	Mid-Century Modern
Architectural Type	Contemporary
Roof Form	Side-gable
Roof Materials	Unknown
Exterior Wall Materials	Masonry
Foundation Materials	Concrete
Window Materials	Metal
Window Type	Fixed 1-light
Accessory Resources?	Yes ☐ / No ☒
	Number?:

Building 23-620, view southeast (2017).

Condition of Resource(s)?		
Good ☒	Fair ☐	Poor ☐
Explanation: Building is maintained and in use. Building does not have a sprinkler system. Fairly new HVAC system.		

4. Existing Listing & Potential District

Is the property listed in the National Register?	Yes ☐	No ☒	If yes, provide:	Date Listed: / NRIS #:

Contributing to a listed historic district?	Yes ☐	No ☒	If yes, provide:	Name: / Date listed:	NRIS #:

If no, is there a potential district?	Yes ☒	No ☐	If so, is this resource contributing?	Yes ☒	No ☐
District Name: Mercury Historic District				SHPO #: D230	

5. NRHP Evaluation

If not already listed, complete the information below:

Eligible Under:	Criterion A ☐	Criterion B ☐	Criterion C ☐	Criterion D ☐
	Not Eligible ☐	Unevaluated ☐		
Area(s) of Significance	Nuclear Testing, Townsite Development			
Period of Significance	1968-1992			

Integrity – Does the resource possess integrity in all or some of the 7 aspects?						
Location ☒	Design ☒	Materials ☒	Workmanship ☒	Setting ☒	Feeling ☒	Association ☒

General Integrity:	Intact ☒	Altered ☐	Moved ☐	Date(s):

Threats to Resource:	Redevelopment
Historic Name	LASL J-3 Office
Current/Common Name	Mercury Support Facility
Historic/Original Owner	U.S. Atomic Energy Commission
Current Owner	U.S. Department of Energy Nevada National Security Administration Nevada Field Office
Current Owner Address	Nevada National Security Site
Historic Building Use	Office
Current Building Use	Office
Architect/Engineer/Designer	Bechler & Associates, North Hollywood, CA (NTS News 1967)
Builder/Contractor	Unknown

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6. Narrative Eligibility Justification

Provide a detailed explanation of the resource's eligibility for the National Register, including supporting historic information, methods for evaluation under the four criteria, discussion of the seven aspects of integrity, and conclusions about eligibility.

For purposes of the present survey, the resources in Mercury were evaluated only as they relate to the Historic District as a contributing versus non-contributing element. It is the nature of most of the individual elements of the district that they would not be individually eligible, but rather that, in the aggregate, they combine to create the unique significance of the district as a whole, which is presently recommended eligible to the National Register under Criteria A and C and unevaluated under Criteria B and D as detailed in the District form.

Since so many elements of the district have already been lost, those remaining elements from the period of significance have more comparative importance than they would have had otherwise. They are now, in many cases, rare survivors of what were formerly fairly common property types at Mercury. With this in mind, the requirements for being considered contributing elements to the district are fairly low. If a resource still retains visible elements which date to the period of significance, it is considered contributing to the significance of the district both for its historic importance in relation to nuclear testing under Criterion A and as a part of the distinctive design and construction of the district under Criterion C. The companion question asked was if that resource was to be removed would the district lose some of its overall significance. In nearly all cases, there is sufficient integrity to answer this question in the affirmative.

Due to the extensive resource level of research beyond the capabilities of the present survey, including recording and evaluations of building interiors, required to make justifiable recommendations regarding eligibility related to association with significant persons under Criterion B or potential research potential under Criterion D, this resource remains unevaluated under these criteria at this time. It is anticipated that such enhanced recording and evaluation will occur in the future as redevelopment plans mature.

This building served as a support facility in Mercury for nuclear testing at the Nevada Test Site throughout much of the Cold War. It shows how prefabricated buildings could be designed that are virtually indistinguishable from the many concrete masonry buildings that comprise most of the construction in Mercury at this time. The building has all aspects of integrity to a high degree, aside from having its metal siding covered with a thin coat of stucco. Doors and windows in the front face appear to be replacements in the original openings.

7. Narrative Architectural Description

Provide a detailed description of the resource, including all character defining features, potential construction methods, potential alterations (both historic and non-historic), and any accessory resources.

This is a 1,560 square-foot rectangular-plan one-story metal building on a concrete foundation. The flush metal panels have been covered with a thin coat of stucco. It is on a long narrow lot mostly covered by asphalt parking and driveways. Single and double galvanized steel cobras light the parking lot. It is oriented on the Mercury Highway but access is via a remnant of the old South Road, which has been improved for access to the new fire station. The building has concrete sidewalks.

The building faces northeast into its parking area. It has unmatched flush steel doors with one light each near each corner, and between them are two vertically-oriented metal framed fixed windows. Placement of the doors and windows is irregular.

At the rear are a solar water heater and two 1/1 aluminum framed windows.

The left side has an aluminum 1x1 sliding window and a replacement window of the same design. There is also a steel ladder to the roof and a large HVAC and ducts surrounded by pipe bollards. There is a single 1x1 aluminum sliding window on the right side.

The low-pitch roof has exposed metal purlins. Gable ends are exposed steel trusses with smooth web. The roof has a moderate overhang with integral rain gutters and an exceptionally wide fascia.

There are no Accessory Resources.

8. References

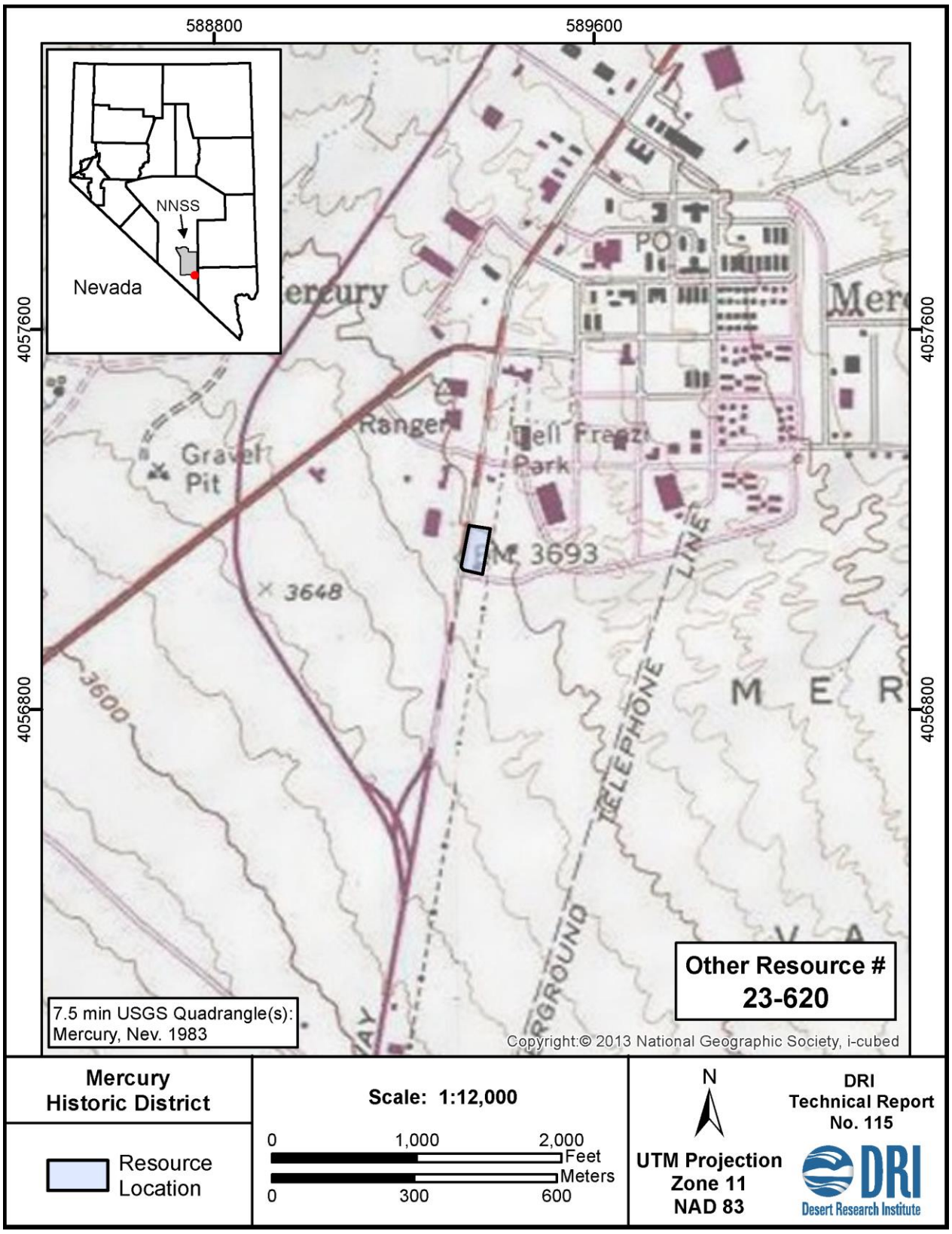
List references used to research and evaluate the individual property.

NNSS GIS Integrated Planning Database

NTS News
1967 New LASL Buildings. 26 May: 6. Retrieved from NNSA/NSO Nuclear Testing Archive, Las Vegas, Accession No. NV0112282.

9. Area Location Map

Use a USGS quadrangle map at large extent to show general area of resource.



10. Site Plan Map

Use aerial imagery, drafting software, or a hand-drawn sketch (to scale) showing, at minimum, building/structure footprints and relationship to associated features. Attach extra maps if needed.

11. Photographs

Include as many photographs as needed to accurately depict the resource.

The corner of the LASL J-3 Office (Building 23-620).
Elevation: N/A Direction facing: Northwest Photographer: Menocal Date: 06/22/2017

The front of the LASL J-3 Office (Building 23-620).
Elevation: North Direction facing: South Photographer: Menocal Date: 06/22/2017