



**Municipality of Anchorage  
Historic Preservation Commission**

**A G E N D A**

**Thursday, November 30, 2023  
5:30 – 7:00 p.m.**

**Regular Meeting  
(Hybrid format)**

**In-Person Physical Location**

Planning Conference Room 170  
Planning and Development Center  
4700 Elmore Road  
Anchorage, Alaska

or

**via Microsoft Teams**

**[Click here to join the meeting](#)  
[Download Teams | Join on the web:](#)**

**Meeting ID: 260 406 069 618, Passcode: AcfoJ4**

**Or Join by Conference Call:**

**Dial-in Number: 907-519-0237**

**Conference ID: 622 059 381#**

**I. CALL TO ORDER**

- A. Establishment of Quorum/Roll Call
- B. Land Acknowledgement (*p. 2*)
- C. Introductions -- Guests
- D. Disclosures (*p. 3*)

**II. APPROVAL OF AGENDA**

**III. APPROVAL OF THE MINUTES (*postponed to December*)**

- A. October 26, 2023

**IV. UNFINISHED BUSINESS**

- A. Government Hill Wireless Station (*p. 5*)
- B. Historic Preservation Plan (HPP) Subcommittee (*p. 105*)

**V. NEW BUSINESS**

- A. Discussion of HPC Priorities in 2024 (*p. 107*)
- B. New CLG Grant Opportunity (*p. 109*)
- C. HPC Regular Meeting Dates in 2024 (*p. 131*)

**VI. PERSONS TO BE HEARD (3-minute limit)**

**VII. OTHER BUSINESS / STAFF REPORTS**

**VIII. ADJOURNMENT**

**Next Regular Meeting—December 21, 2023**

### Land Acknowledgement:

*The Historic Preservation Commission would like to acknowledge that we gather today on the traditional lands of the Dena'ina Athabascans. For thousands of years the Dena'ina have been and continue to be the stewards of this land. It is with gratefulness and respect that we recognize the contributions, innovations, and contemporary perspectives of the upper Cook Inlet Dena'ina.*

### Public Hearing Procedure:

The procedure by which the public may speak to the Commission at its meeting is:

1. After the staff presentation is completed on public hearing items, the Chair will ask for public testimony on the issue.
2. Persons who wish to testify will follow the time limits established in the Commission Rules of Procedure.
  - a. Petitioners (including all his/her representatives) - 10 minutes. (Part of this time may be reserved for rebuttal.)
  - b. Representatives of groups (community councils, PTA's etc.) - 5 minutes.
  - c. Individuals - 3 minutes.
3. When your testimony is complete you may be asked questions by the Commission. You may only testify once on any issue unless questioned by the Commission.
4. After there is no further public testimony, the chair declares the public hearing is closed.

### Commenters or Persons to Be Heard:

If possible, please email [tom.davis@anchorageak.gov](mailto:tom.davis@anchorageak.gov) prior to the meeting.

### Procedure for Disclosures:

1. The chair asks for disclosures.
2. The member makes a disclosure regarding one or more specific items on the agenda.<sup>1</sup>
3. For each agenda item that the member has made a disclosure, the chair (or acting chair) asks, and the commissioner responds to, the following questions:<sup>2</sup>

*Does the member have a substantial financial interest or substantial private interest in the business item before the body and is that interest:<sup>3</sup>*

- *A substantial part of the present action of the commission on this item?*
  - *One that varies directly and substantially with the outcome of the commission's action?*
  - *Immediate and known or inconclusive (conjectural) and dependent on factors beyond the commission's action?*
  - *Significant monetarily?*
  - *Generally possessed by a large group, or only by the individual member? (If there is an interest, is it by a large group or by an individual? If you have a large interest, then specify that limited interest is of a general nature.)*
4. The chair will ask for a motion from another commissioner to direct that the member to participate in the business item.<sup>4</sup>
    - Motion: *I move to direct \_\_\_\_\_ to participate in business item \_\_\_\_\_.*
    - Second the motion.
    - Commissioners (not including the member) vote, yes or no.
  5. If the member has made a disclosure on more than one agenda item, repeat steps 3 and 4 for each additional agenda item for which the member has made a disclosure. **Repeat the procedure for each member who makes a disclosure.**

---

<sup>1</sup> If the chair has a disclosure to make, the chair first gives the other commissioners the opportunity to make any disclosures. The chair discloses last, after the commission has addressed disclosures from other members. After making the disclosure, the chair gives control of the meeting over to the vice-chair. The vice-chair becomes the acting chair for the purpose of carrying out the disclosure procedure to determine if the chair can participate in discussions and actions for that item. Once the vice-chair has completed the procedure to determine if the chair has a conflict or not, the vice-chair returns control of the meeting to the chair.

<sup>2</sup> In practice, as an alternative to step 3, upon listening to the disclosure by the member, if the chair believes there is no direct conflict, the chair may state that they think there is no direct conflict and unless there are any objections from other members can direct the member to participate in discussions of the agenda item, without asking the bulleted questions in 3 or undergoing a motion and vote.

<sup>3</sup> The chair asks each bulleted question individually and has the member respond before moving on to the next bulleted question.

<sup>4</sup> The motion in step 4 is always stated in the positive, to direct the member to participate. This motion enables the commission to vote on the matter. A "no" vote excuses the member from participating in the agenda item.

*This page intentionally left blank.*

**Historic Structure Report (HSR) for the Government Hill Wireless Station  
(ANC-00306)**

Prepared for:  
Municipality of Anchorage  
Historic Preservation Commission

Prepared by:  
Robert Meinhardt, MA  
Casey Woster, MA  
Joan Bayles Burgett, MA, RPA  
True North Sustainable Development Solutions, LLC

In Cooperation With:  
  
Connor Scher, Vice-Chair  
Bryce Klug, Chair  
Kristine Bunnell, HPO  
Tom Davis, Municipality of Anchorage Senior Planner and HPO  
Bill Lyle, Municipality of Anchorage Facilities Maintenance Department Manager  
Municipality of Anchorage Historic Preservation Commission

And:  
  
Michael Anderson, PE, SE, Structural Engineer

November 2023

## Table of Contents

<b><i>Acronyms</i></b> .....	<b>4</b>
<b><i>Introduction</i></b> .....	<b>5</b>
<b>Purpose of the Report</b> .....	<b>5</b>
<b>Preservation Objectives</b> .....	<b>5</b>
<b>Inspection Team</b> .....	<b>6</b>
<b>Property Location</b> .....	<b>6</b>
<b><i>Brief History of the Property</i></b> .....	<b>6</b>
<b>Historic Overview of the Government Hill Wireless Station</b> .....	<b>7</b>
A Station is Born.....	7
Growth and Change .....	8
Military Repurpose, & Decommissioning .....	8
Municipal Ownership.....	9
<b>Architectural Description of Building at Time of its Historic Significance</b> .....	<b>9</b>
<b>Architectural Description of Present Appearance</b> .....	<b>10</b>
<b><i>Evaluation and Assessment</i></b> .....	<b>10</b>
<b>Site</b> .....	<b>10</b>
Site Plan .....	11
Walkways .....	11
Parking .....	11
Landscaping Plan.....	12
Utility services .....	13
<b>Exterior Envelope</b> .....	<b>13</b>
Foundation .....	13
Exterior Walls .....	15
Fenestration (doors and windows) .....	17
Porches and Arctic Entrances .....	22
Cupola.....	23
Chimneys .....	23
Roofing .....	26
<b>Interior Envelope</b> .....	<b>27</b>
Interior Wall Finishes .....	28
Interior Doors and Windows.....	28
Ceilings .....	29
Flooring.....	29
Stairs .....	29
<b>Fire and Life Safety</b> .....	<b>30</b>
<b>ADA Accessibility</b> .....	<b>30</b>
<b>Public Health</b> .....	<b>31</b>

<b>Heating, Ventilation and Air Conditioning .....</b>	<b>31</b>
<b>Plumbing.....</b>	<b>31</b>
<b>Electrical.....</b>	<b>31</b>
<b>Structural.....</b>	<b>31</b>
Engineering Report on Safety Considerations and Load-Bearing Limits .....	31
Building A .....	32
Building B.....	33
Building C.....	34
<b><i>Photographic and Drawing Documentation of Present Appearance .....</i></b>	<b><i>35</i></b>
<b>Photographs.....</b>	<b>35</b>
<b>Architectural Drawings.....</b>	<b>93</b>
<b><i>Recommendations .....</i></b>	<b><i>93</i></b>
<b>Evaluation of Appropriate Uses for the Building.....</b>	<b>93</b>
<b>Estimated Restoration/Rehabilitation Costs to Address Deficiencies .....</b>	<b>94</b>
<b>Conceptual Drawings of Restored/Rehabilitated Building .....</b>	<b>94</b>
<b>Evaluation of Potential Impacts on Building Resulting from Proposed Uses .....</b>	<b>94</b>
<b>Recommendations for Further Study .....</b>	<b>94</b>
<b><i>Summary of Study Results.....</i></b>	<b><i>94</i></b>
<b><i>Appendix A: Identification of Archival Sources.....</i></b>	<b><i>96</i></b>
<b><i>Appendix B: Copies of Pertinent Correspondence.....</i></b>	<b><i>97</i></b>
<b><i>Appendix C: Measured Drawings .....</i></b>	<b><i>98</i></b>
<b><i>Appendix D: Summary of Agreements.....</i></b>	<b><i>99</i></b>
<b><i>Appendix E: Structural Engineering Report.....</i></b>	<b><i>100</i></b>

## Acronyms

ACS	Alaska Communications System
AEC	Alaska Engineering Commission
AHRS	Alaska Heritage Resource Survey
GHCC	Government Hill Community Council
GSA	General Services Administration
HPC	Historic Preservation Commission
HPO	Historic Preservation Officer
HUD	Department of Housing and Urban Development
MOA	Municipality of Anchorage
NRHP	National Register of Historic Places
OHA	Alaska Office of History and Archaeology
PVC	Polyvinyl chloride
RFP	Request for Proposals
SHPO	State Historic Preservation Officer
TNSDS	True North Sustainable Development Solutions, LLC
USGS	United States Geological Survey
WAMCATS	Washington-Alaska Military Cable and Telegraph Systems
Wireless Station	Government Hill Wireless Station

## Introduction

### Purpose of the Report

The Government Hill Wireless Station (Wireless Station) is a cluster of three buildings located on Government Hill just to the north of Ship Creek and downtown Anchorage, Alaska. Government Hill is currently a mostly residential neighborhood north of the city center. The three buildings range in dates of construction and alterations from 1917 at the earliest to 1950 at latest. Recent outreach and planning efforts within the neighborhood have renewed interest in rehabilitating the site and buildings for community benefit.

The Municipality of Anchorage, on behalf of the Anchorage Historic Preservation Commission (HPC), retained True North Sustainable Development Solutions, LLC, (TNSDS) for professional services to prepare this condition report to assess the structural and physical condition of the buildings and recommend appropriate preservation actions and treatments. The intent of the conditions and structural report is to better understand which historic preservation treatment would be most appropriate for future development of the property that will comply with the recommended treatment standards from *The Secretary of Interior's Standards for the Treatment of Historic Properties*.

### Preservation Objectives

In 2016, a Municipality of Anchorage (MOA) Historic Preservation Officer (HPO) outreach effort began with the Government Hill Community Council (GHCC) to develop a request for proposals (RFP) for rehabilitation of the site. The community meetings included brainstorming for future uses of the site including library, community center, art studio, and housing. The RFP expired without any proposals and interest in the project waned. In 2018, Connor Scher (currently a member of the Anchorage Historic Preservation Commission) finished a Thesis for his Master of Architecture degree that recommended converting the site into an elder care home and community archive.

During a municipal parks plan development project for Government Hill in 2022, community members voiced interest in incorporating the property and buildings into the neighborhood park master plan. Although the park plan does not make any specific recommendations for the site, it does have goals for highlighting Government Hill history through placards and signs. The municipal HPO heard from some residents that they had interest in relocating the 1917 portion of one of the buildings to a different parcel. One public comment included in the plan hopes the site could be a community center. In 2022 and 2023, meetings of the HPC the HPO mentioned she believed the Municipality could leverage Department of Housing and Urban Development (HUD) funds to redevelop the site into housing while preserving the 1917 portion of one of the buildings.

With these myriad suggestions for rehabilitation of the property, the HPC desired this report to support the preservation objectives of the community, namely, to preserve the site, buildings, or portion thereof for community use. First, it was intended to determine if all or some of the buildings are structurally sound enough for rehabilitation, restoration, or relocation. Second, based on this information, to clarify the preservation objectives and potential range of reuse options as a community asset.

The treatment options and recommendations outlined in the report adhere to *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, & Reconstructing Historic Buildings* as published by the US Department of the Interior in 2017.<sup>1</sup>

---

<sup>1</sup> Anne E. Grimmer, *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, & Reconstructing Historic Buildings* (Washington, DC: US Department of the Interior, 2017).

## Inspection Team

The TNSDS team collected data on the site during the summer of 2023. The TNSDS team included:

- Rob Meinhardt, Principal, TNSDS
- Joan Bayles Burgett, Cultural Resources Manager, TNSDS
- Casey Woster, Architectural Historian, TNSDS
- Michael N. Anderson, PE, SE, Structural Engineer

The Municipal team included:

- Connor Scher, Vice-Chair, Anchorage Historic Preservation Commission,
- Bryce Klug, Chair, Anchorage Historic Preservation Commission,
- Other members of the Anchorage Historic Preservation Commission
- Kristine Bunnell, Municipality of Anchorage HPO (through July 2023)
- Tom Davis, Municipality of Anchorage Senior Planner and (beginning in August 2023) HPO
- Bill Lyle, Municipality of Anchorage Facilities Maintenance Department Manager

The inspection team visited the site on the following dates:

- July 14, 2023
- August 16, 2023

The report analysis was compiled by the teams in August, September, and October of 2023.

## Property Location

The site is in the Government Hill neighborhood in Anchorage. This neighborhood is an upland tableland north of Ship Creek, the original townsite. The neighborhood is familiarly called the first neighborhood in Anchorage and began with housing for the Alaska Engineering Commission during the construction of the Alaska Railroad, and in 1917, a dedicated wireless station. The Wireless Station site comprises three 50-foot by 140-foot lots with primary frontage on East Manor Avenue with one parcel having secondary frontage on Boyd Street. The lots all have access off an alley that parallels East Manor Ave. Surrounding the site are residential properties with either single- or two-family dwellings. One parcel kitty-corner from the site is vacant but zoned residential. To the north of the site (across East Manor) is two blocks of residential properties and a neighborhood park, then the Port of Alaska beyond. To the south of the site is half a block of residential properties, then a park with the Alaska Railroad yard and Ship Creek in the lowland basin beyond. This park includes the Government Hill water tower, which although no longer in service is a characteristic feature of the neighborhood. A straight line extending along A Street north from Downtown Anchorage would pass through the site.

The parcels were platted after the site was developed (ca. 1954) and two of the buildings cross property lines. The address of the lots are 124, 132, and 140 East Manor Avenue. The legal description of the property is North Addition #4 Block K, Lots 1, 2, and 3. The property identifications are 002-04-222-000, 002-04-223-000, and 002-04-224-000.

## Brief History of the Property

This statement of significance is excerpted from the National Register of Historic Places (NRHP) nomination form for the Wireless Station, prepared by Sarah Wilson in 2015. The station was determined eligible for the NRHP in 2006<sup>2</sup> and accepted by the Keeper in December 2015.<sup>3</sup>

<sup>2</sup> Alaska Heritage Resources Survey (AHRS) Card, “ANC-00306: Government Hill Wireless Station,” on file at the Alaska Office of History and Archaeology, 2023.

<sup>3</sup>

The federal Alaska Engineering Commission constructed a building in 1917 in Anchorage for radio communications, known as the Wireless Station, to facilitate building the government's Alaska Railroad. Anchorage had been selected in 1915 to be one of the AEC's major construction camps. The Wireless Station's radio receiving and transmitting system initially had a 500-mile radius, but soon was upgraded to connect with Seattle and the rest of the world. In 1921, the government allowed private citizens access to the system to send messages. The federal government's Washington-Alaska Military Cable and Telegraph System (WAMCATS), of which the Wireless Station in Anchorage became a part in 1923 after the railroad was completed, became the Alaska Communication System in 1936. The Anchorage Wireless Station could reach ships at sea. In the late 1940s, ACS did its last upgrading of the station's buildings. A few years later it closed the station. The three buildings of the Wireless Station stand as an excellent example of a federal government agency's complex that provided essential communication service for a major construction project and later for the residents of Anchorage from 1917 to 1939.

### **Historic Overview of the Government Hill Wireless Station**

This history is excerpted from the thesis *Unsung: An Architectural Allegory on the Government Hill Wireless Station*, written by Connor Scher in partial fulfillment of a Master of Architecture degree in 2018.<sup>4</sup> The story of the Wireless Station begins as with most U.S. Federal development in Southcentral Alaska with the arrival of the Alaska Engineering Commission (AEC), charged with building a rail route from Seward to the gold fields of the Interior. However, the history of the site stretches back far earlier as Dena'ina peoples travelled between Dgheyaytnu (Ship Creek) and Dgheyay Kaq' and Tak'at (Cairn Point), as well as area villages over Government Hill. This route became a branch of the Iditarod Trail as prospectors during the 1890s traveled north from Cook Inlet. In 1914, the steamer Digirow out of Seattle landed at the marshy mouth of Ship Creek and the AEC began surveying prospective routes. They decided that this "anchorage" was the best place out of which to center the construction of the railroad and started building a work center below the bluffs of "Ship Creek Summit", later called Government Hill.

The AEC needed radio communication between their sections to facilitate the construction. Originally, there was a small communications room in the Power Plant on the shore of Ship Creek but the noise from the generators made communication very difficult. Additionally, America's entrance into World War I in 1917 limited ground to ship communication. As a result, the AEC moved the radio operators to the steamer Omineca, anchored off-shore and plying to Kroto Creek, up the Susitna River. However, this was only a temporary solution and ground clearing on Government Hill began in July.

### **A Station is Born**

Building A was the first building constructed at the Wireless Station site. The building originally consisted of a square plan with short walls and low-slung, deep-eaved roof. The appearance makes the building one of the few Italianate style buildings in Alaska. The AEC was less concerned with appearance, however, and finished it with standard windows and board-and-batten siding. The building was painted green with white trim, the available and inexpensive colors at the time. There was only one door at the time that faced west, towards the officer cottages near the site. The building sat at the center of a dipole array, with large masts north and south of the building holding the aerial antennae. A construction photo from 1917 shows the installation of the copper wires stretching north and south from the building that served as the grounding field. In October 1917, the radio set moved from the steamer to the building, and the following month the

---

<sup>4</sup> Connor William Scher, *Unsung: An Architectural Allegory on the Government Hill Wireless Station* (Portland, OR: Portland State University, 2018).

control panels moved from the Power Plant. By December 11, 1917, the station was “practically completed, with the exception of a few minor details.”

The building was square and had only a few rooms. The plan generally was divided into four sections and included a waiting room for residents and small toilet room for operators. The doors were stile and rail wood and the windows were wood framed with one large bottom light under three small lights separated with wood muntins; they originally had storm windows to match. The windows were grouped in two- or three-wide arrangements. Roofing may have only been tar paper, as seen in a December 1917 photograph, as the winter weather may have prevented installation of a different roofing material. The main roof had a finished soffit whereas the cupola had exposed rafters. The tall mast extending from the top of the cupola could have been a flagpole, but there are no photographs showing anything attached to it. Nevertheless, it made a striking appearance. The site included tents and assortments of gear but was a large, cleared field. It is interesting that the arrangement of the building is square to the cardinal directions.

### ***Growth and Change***

The Wireless Station was a significant feature of the early town. In 1921, the AEC started allowing local residents to send and receive messages and for ten years it remained the only radiotelephonic and telegraphic hub to the outside world, until 1931. Until the railroad was completed in 1923, the operators coordinated the construction efforts and communicated with the world. When WAMCATS acquired the station in 1924 they already ran an extensive network of stations across the state. The station’s operators played a major role in organizing the response to the diphtheria outbreak in Nome in 1925. By 1933, the Anchorage station outpaced its Southcentral rival of Cordova, setting the stage for the growth and dominance of young town.

The WAMCATS constructed Building C in 1934, originally to the east of the original building. The WAMCATS also expanded the original building with a room over a basement on the south side. This addition included removing most of the south wall and expanding the entry room. This expansion also added a door on the east side of the building and very likely the current south-facing door was part of this project. The roof was extended southward with a hip roof. Building C had a simple gable over a small rectangular plan. By this time the aerial array had been taken down and a new larger one built to the east of Anchorage. Other buildings in Downtown Anchorage housed additional operators, although most of the main communication apparatus remained. The addition corresponded with the installation of new siding as well. WAMCATS evolved into the Alaska Communications System (ACS) in 1936.

### ***Military Repurpose, & Decommissioning***

In 1939, the Federal Government created Elmendorf Air Field and Fort Richardson to the north of Government Hill. Development of the street block pattern on Government Hill forced the relocation of Building C to the north of the original building, again expanded in the 1950s. By this time ACS had moved its communications hub to Point Campbell, southwest of Downtown, and the Wireless Station was only a supporting property. The move away had started in the 1940s, with the construction of the T-Shaped building, Building B, to the east along Boyd Street in 1943. Not characterizing a particular style, Building B had a repair garage, accessory rooms, and possibly a bunkroom. It was a long, wood-framed gabled building with a short stem of an entry perpendicular to the main axis.

During the 1940s, the site became known as the ACS Storage Annex and two Quonset Huts were built on the site (and removed in 1949). 1950 marks the end of the period of significance. During the 1950s, the ACS added to the north of Building A and closed access to the original west-facing door. The addition

included two rooms and extended the roof north, causing the cupola to again be roughly centered. They also extended the stem of Building B closer to Building A.

After 1952, the site changed hands between military branches for the next two decades and it hosted a variety of uses including repair shop and health clinic. The US Geological Survey (USGS) used the site for nine years starting in 1976 before converting it to rock core storage. The rechristened Alaska Core Library was at the site until 1994 when the lack of space and degrading building materials caused the USGS to relocate the Core Library. It has remained unused and vacant since and the USGS and the US General Services Administration (GSA) (who took over ownership) conducted site cleanup during the late 1990s and early 2000s.

### ***Municipal Ownership***

In 2012, the GSA transferred ownership of the property to the Municipality of Anchorage as mitigation for its disposal. A NRHP listing followed soon thereafter in 2015 that designated a period of significance of 1917–1950 with significant dates of 1917 and 1936 for the entire site. Over the subsequent years, starting in earnest in 2017, Municipal-led efforts for rehabilitation have occurred.

### **Architectural Description of Building at Time of its Historic Significance**

These descriptions are adapted from the NRHP nomination prepared by Sarah Wilson and Summer Rickman in 2015.<sup>5</sup>

The original building constructed in 1917, referred to as Building A (Figures 1 through 3), was one story, with dimensions of 28' by 28' and a pyramidal roof crowned by a central cupola supporting a mast. The building had an operating room, generating room, and living quarters for two men. A six-wire aerial with a spread of 30' by 400' was above the building set on two, three-section 200' fir masts. The aerial provided a normal operating radius of 300 miles, and an extended operating radius of 500 miles under specific conditions.

The original building was clad in board-and-batten siding and painted a dark green. White corner boards, window frames and sashes provided contrast. The casement windows were set in pairs or triples. Each window had a narrow row of three panes over one large pane. The cupola had three-pane fixed windows on each side. The roof had a deep three-foot boxed eave and was sheathed in standing-seam metal.

In 1934, an addition was added to the south end and a partial concrete basement dug. On the east elevation, a portion of the boxed eave was enclosed to provide access to the basement. The addition was clad in shiplap siding and the roof was extended to make a hipped roof to cover the addition. The ridge of the roof rose slightly from the height of the cupola.

The 1934 building, now referred to as Building C (Figures 9 and 10), was a one-story 34'-5" by 24'-3" gabled building with open eaves. The building was originally built to the east of the 1917 building and was relocated to its present location and rotated roughly 90 degrees. It had a wood foundation and 7"-wide shiplap siding. The roofing was corrugated metal. It had small fixed three-light windows with a two-light storm windows. The other windows were six-light fixed windows or three-over-one-light casement

---

<sup>5</sup> Sarah Wilson and Summer Rickman, *National Register of Historic Places Registration (Form 10-900): The Wireless Station* (Washington, DC: National Park Service, 2015).

windows. The building had metal doors, one on the short-gabled end and the other on the north (now west) elevation.

The 1943 building, now referred to as Building B (Figures 4 through 8), was a long building with a single gable with a short entry vestibule perpendicular to the main axis. The main building is 82' by 21'. The foundation was cast-in-place concrete and wood-framed walls with shiplap siding above. The windows were paired single-pane casement windows and two fixed nine-light windows. The roofing was corrugated metal. A portion of the building was used for vehicle repair and the building had 10'-wide doors at each end. The building may have originally had a slab-on-grade floor and portions of the building had a raised "sleeper" floor.

See the historical overview subsection above for more details regarding the architectural appearance of the buildings as they evolved during the period of 1917 through 1950.

### Architectural Description of Present Appearance

In 1950, the period of significance ended as a second enlargement expanded the building to the north of Building A. This addition nearly doubled the building in size to overall dimensions of 28' by 60'. An enclosed arctic entrance was added under the east elevation eave for access to the new addition. This addition sits on a shallow crawl space. The hipped roof was continued over the addition with the ridge line continuing from the height of the cupola and the roof inset slightly from the original roof.

Today, the three buildings appear as they did in the 1950s. The additions to the 1917 building maintained the hip-roof with deep eaves and the walls were at the same height as the original portion. Many of the doors and windows are blocked or damaged. Most of the windows on Building A are wood framed, double-hung sash windows and were replaced at some point. They likely are contemporary to the additions and have a three-by-three muntin pattern. Ground settlement below and around the buildings has resulted in Building A appearing to be very low to the ground. Years of no maintenance, earthquakes, and heavy snows, have resulted in a significant slumping of the west wall and floors have collapsed inside all the buildings. Buildings A and C appear to retain their original windows and doors but have sustained similar damage to the Building A. The roofing material, which is a type of polycarbonate or polyvinyl chloride (PVC) plastic that resembles onion corrugated metal except on close inspection, is installed on all the buildings and may have contributed to their continued survival through the past half-century.

### Evaluation and Assessment

#### Site

The site contains three buildings with connecting walkways, as well as dirt and gravel driveways and parking areas. The main building is on a roughly north-south orientation on the southern portion of the site. Just north is Building B, which is the closest to East Manor Avenue. Building C creates a long barrier on the northeast along Boyd Street with a path connecting the stem to the main building.

The concrete paths on the site are mostly overgrown but generally connect the entrances of all the buildings. There is one path that juts east from the main building and ends in the grass. There is a small parking area off E Manor Ave at the north side of Building B; this has room for one vehicle. The area west of Building A is unimproved and functions as a driveway and parking area for the neighboring property and for the site.

The buildings have been disconnected from utility services and the condition of these is unknown.

### *Site Plan*

The plan of the Government Hill Wireless Station is organic in nature as buildings were added to the site, altered, or moved over time. The original layout of the site consisted of the original 28' by 28' portion of Building A connected to a six-wire aerial array set on two 200' fir masts. The array had a physical spread of 30' by 400' and could reach an operating radius of 500 miles. Building C was added to the north of Building A in 1934, and Building B was constructed to the east in 1949.<sup>6</sup>

At present, the site is anchored on the south by Building A, oriented north to south along the hipped gable peak. Buildings B and C are both oriented northwest to southeast; Building B is located to the northeast of Building A with its longest façade (northeast façade) parallel to Boyd Street. Building C is located due north of Building A, with its entrance facing the interior courtyard formed by the three buildings.

### *Treatment Options*

At present, the site plan reflects the layout of 1950, the end of the period of significance for the Wireless Station. In addition, historic site maps for the Wireless Station could not be located, so the original placements of the buildings as detailed by Connor Scher could not be verified. The layout of the site should be preserved, as, at present, the layout does not pose any threat to the surrounding neighborhood or to life safety. The relationship between the buildings, joined by walkways, with an interior courtyard, helps to create the feeling of unity of purpose at the site, especially in the absence of the original antenna arrays.

### *Walkways*

There are several walkways that connect the three buildings to one another and the surrounding roadways. Like the site plan, the walkway grew organically as the buildings were constructed and added on to over time. At present, the walkway leading from the entrance in the southeast façade of Building C leads southeast to the entrances in the east façade of Building A and the entrance in the southwest façade of the T-shaped addition in Building B. Another walkway leads from the east façade of Building A to the east-northeast, connecting with the now in-filled southeast façade of Building B.

The walkways are in poor shape. Disuse has led to vegetation overgrowth, causing the concrete to break down over time. Because of this, the walkways are visibly obscured or no longer existent in most areas (Figure 11).

### *Treatment Options*

The recommended treatment for the walkways is replacement. Under the restoration option for the treatment of historic properties, it is appropriate to replace “in kind an entire restoration-period feature that is too deteriorated to repair using the physical evidence as a model to reproduce the feature.”<sup>7</sup> The walkways can be located and laid out by on-the-ground survey, after which any existing damaged concrete can be removed. New walkways can then be installed, using modern concrete. Modern concrete is considered an appropriate in-kind replacement materials for this type of work.

### *Parking*

There is no formal designated parking lot for the Wireless Station. There are two vehicular driveways present on the site, although one driveway has been overgrown from disuse (Figure 12). The main driveway

<sup>6</sup> Wilson and Rickman, *National Register of Historic Places Registration (Form 10-900): The Wireless Station*, 4-5.

<sup>7</sup> Grimmer, *The Secretary of the Interior's Standards for the Treatment of Historic Properties*, 212.

at the site runs roughly north to south from East Manor Avenue to the alley between Boyd and Anderson Streets, running along the west façade of Building A. The driveway is a shared access route for both the Wireless Station and the neighboring property at 116 East Manor Avenue. The overgrown driveway leads from East Manor Avenue at the intersection with Boyd Street to the northwest façade of Building B. The driveway once provided access to Building B, which served as a vehicular repair shop. The vehicular overhead door in the northwest façade of Building B has been infilled and now only contains a double metal man door. During survey work, street parking on either Boyd Street or East Manor Avenue was utilized rather than the driveways.

### *Treatment Options*

The recommended treatment option for the parking situation at the Government Hill Wireless Station site is a combination of options. The only planned parking in evidence at the site is the paved and curbed driveway that leads into the northwest end of Building B. Similar to the treatment option for the walkways, it is recommended that the driveway be replaced per the restoration treatment option. There is enough of the original driveway remaining that the new driveway can be constructed to match the original. Modern concrete is considered an appropriate in-kind replacement materials for this type of work. Any modern safety regulations related to the construction of driveways and curbs should be observed, however.

### *Landscaping Plan*

There is no planned landscaping in evidence on the site. Clusters of trees native to the area have grown up against all three buildings (Figure 13). There is a small rail fence along the west property line, and a small concrete curb and bollards at the north end of Building B. There is a post at the southwest corner of the main building, seemingly to prevent impacts from a snow plow. There are no other significant site features.

### *Treatment Options*

The only recommended treatment option for the vegetation that dominates the landscaping of the Wireless Station is the removal of all trees and shrubs from the entire site. This treatment option is recommended as the only viable option under the *Secretary of the Interior's Standards for Preservation*. The preservation recommendation for a building site as defined by the *Secretary of the Interior's Standards* state that the building site will retain “the historic relationship between the buildings and the landscape.”<sup>8</sup>

Historic photographs of the Wireless Station taken during the period of significance show no vegetation at the site taller than grass. The land would have been cleared at the site for two reasons. First, as a Wireless Station, the site would need to be cleared of any vegetation or obstacles that could potentially block wireless signals into and out of the station. Second, the development of Anchorage from a tent city to a railroad town would have required vast amounts of lumber, thus necessitating the use of all available trees. As such, the historic relationship between the Wireless Station buildings and the surrounding landscape would have been denuded of all vegetation taller than grass, leaving clear views from the site to the surrounding Government Hill area, Ship Creek, and the Cook Inlet.

Additionally, clusters of native trees and shrubs are growing up against all three buildings. Vegetative growth to the extent observed at the site has likely and will lead to further deterioration of the structural integrity of the buildings (Figure 20). Removing the vegetation from the site will not only return the original relationship of the buildings to the landscape but halt further deterioration of the buildings from vegetative growth.

---

<sup>8</sup> Grimmer, *The Secretary of the Interior's Standards for the Treatment of Historic Properties*, 63.

### *Utility services*

All of the utility services for the Government Hill Wireless Station have been disconnected for an unknown period of time. The conditions of these services is unknown and could not be discovered during the site visits. As the site has been disconnected from all services for an unknown amount of time and it could not be discovered when they were last updated, it is likely that the utilities at the site will all need to be replaced.

## **Exterior Envelope**

### *Foundation*

All three buildings have poured-in-place concrete foundations. The concrete that is visible still bears the imprints of the wood boards that made up the forms. The concrete material is uniform, with medium-sized aggregate. Building A also has a section of post-on-pad foundation below the original portion of the building constructed in 1917.

### *Building A*

The foundation of Building A reflects the original building and two additions. The original building has a continuous perimeter concrete foundation supporting exterior walls. This concrete perimeter foundation is approximately 8" wide and extends approximately 2' below grade. On the interior of the original portion of the building, the foundation is a type of post-on-pad construction consisting of pyramid shaped, concrete pier blocks resting on a gravel pad. The piers support the floor framing (Figure 14).

The southern end of the building, added to the original building in 1934, has a full concrete basement (Figure 15). The basement area includes a boiler room with an approximate 20' square area. The basement walls are poured-in-place concrete and the floor is a concrete slab. The walls and slab appeared in fair condition with some cracks. The concrete walls appeared plumb with no bowing or distress observed. The slab appeared level, but not troweled smooth, and no sections appeared to be settling. The framing for the floor above consists of with 2' by 10' joists and clad with decking. The framing is sagging and showed significant signs of decay at the time of inspection.

The north portion of the building, constructed in 1952, has a poured-in-place concrete foundation with crawlspace. The crawlspace is approximately 12" to 16" deep, leaving little space between the floor and the ground. The foundation appeared in fair condition with no noticeable signs of distress or settling. The site soils are generally good and are a granular gravel material.

### *Treatment Recommendations*

The recommended approach to the existing concrete portions of the foundations of Building A is preservation. The concrete basement and crawl spaces on the north and south ends of the building appear to be stable and in good structural condition; only one large crack in the exterior stairs on the east façade requires repair work. The crack should be probed to determine the cause; as it parallels the slope of the stair treads, it is likely that the crack resulted from settling of the ground below the stairs. The crack should be mapped to document the current extends of the damage and patched with concrete that matches the existing historic concrete material. Patching the crack will prevent infiltration by moisture, vegetation, and insects, thereby preventing further deterioration unrelated to the original cause of the crack.

The observable pyramidal concrete piers that support the original portion of the building appear to be later replacements for any original foundational supports. The foundation appears to be failing, however, as is

evidenced by the dramatic difference in settling levels between the original portion of the building and the additions on the north and south ends. The increased settling of the original portion of the building creates a saddle-bow appearance to the building, with the central portion sagging at a lower level than the concrete-supported additions. To correct this, the piers should be adjusted using hydraulics to lift the building, allowing for the piers to be stabilized, repaired, replaced, and/or adjusted as needed to provide increased support for the building above. This treatment option falls within the category of restoration work, and care should be taken to retain those structural elements that are in serviceable condition. Replacement in kind is appropriate for “large portions or entire features of the structural system from the restoration period that are either extensively damaged or deteriorated... the new work may be unobtrusively dated to guide future research and treatment.”<sup>9</sup>

Although there is no observable damage to the exterior perimeter of the foundations, vegetation was observed growing against the side of the building including against the concrete foundation. The vegetation should be removed and either a curtain drain or gravel border installed around the base of the building. This will not only help with drainage at the site but also protect the concrete foundations from damage caused by vegetation growth and standing water.

### *Building B*

There is a continuous perimeter concrete foundation supporting exterior walls and is approximately 8” wide. The foundation extends several feet above grade along the main wing to form a foundation wall while the foundation ends at the ground level on the addition extending to the southwest. The foundation appears to extend 2’ below grade. The exterior foundation appeared plumb with no signs of settlement. The foundation is formed by poured-in-place concrete painted white where exposed above the ground level. Imprints of the wood planks that made up the concrete form are still visible on the exterior (Figure 16).

### *Treatment Recommendations*

The recommended treatment approach for the foundation is Building B is preservation. The foundation is in good structural shape and does not show any signs of structural failure. There is evidence of minor spalling at the corners of building and in some areas directly below the skirtboard; this spalling is likely caused by infiltration of moisture. There are also small vertical cracks in several locations that correspond with the window framing; it is unclear what caused these cracks but the cause should be investigated.

The extent of the spalling and cracking should be mapped and monitored. The spalling and cracking can be patched with concrete that matches the existing historic concrete material to prevent further damage from moisture, vegetation, and/or insect infiltration. The areas should be monitored over time to ensure that the damage does not spread to surrounding areas.

Minor vegetation growth was observed on the foundation particularly on the northwest façade and the intersection between the main portion of the building and the addition that extends southwest from the center of the main building. The vegetation should be removed from the surface of the concrete as well as from the perimeter of the building, after which a gravel border or curtain drain should be installed to prevent further vegetation growth or damage from standing water.

---

<sup>9</sup> Grimmer, *The Secretary of the Interior’s Standards for the Treatment of Historic Properties*, 200.

### *Building C*

There is a continuous perimeter concrete foundation supporting exterior walls. The foundation is approximately 8" wide and extends 2' below grade. The interior of the building is supported by a form of post-on-pad foundation with wood cribbing resting on a gravel pad that supports the floor framing. The resulting crawlspace below the interior of the building is no greater than 12" deep. The exterior foundation appeared in fair condition with no noticeable signs of distress or settling.

### *Treatment Recommendations*

The recommended approach to the existing concrete perimeter foundation of Building C is preservation. At the time of inspection, no structural deficiencies were observed. Vegetation growth around the perimeter of the building should be removed, after which a gravel border or curtain drain should be installed to prevent further vegetation growth or damage from standing water.

Settling of the building appears to have happened unevenly, with the concrete perimeter foundation appearing to be lower than the foundation level of the interior post-on-pad foundation. The uneven settling is evident in the way that the center of the building is domed upwards on the interior. The recommended treatment for the settling is to replace the cribbing below the interior of the building, adjusting the cribbing height so that the floor above is level.

### *Exterior Walls*

#### *Building A*

The exterior of Building A is clad in a combination of wood lap and wood shiplap siding, painted white. The differences in the wood siding form roughly corresponds with the addition added in 1952: the north addition has wood shiplap siding while the other sections of the building have wood lap siding. The siding is not original to the building; as noted in Connor Scher's thesis, the building originally had board-and-batten siding painted a dark green with white corner boards and fenestration trim. A rectangular opening in the exterior wall on the west façade exposes several layers below the current siding (Figure 17). The current siding is attached to a layer of rigid fiberboard insulation panels, which are affixed to an interior framing system. Below the framing system is a layer of horizontally-placed, red painted, channel grove wood siding. All the trim on the building is wood; the corner boards are painted orange-brown while the fenestration trim is painted green.

Interior and exterior walls are framed with studs and the exterior walls are clad with decking. Interior walls are supported by the floor joists. The exterior walls appear plumb and no distress was noted. Interior walls all appeared to be in bearing due to how the roof rafters were supported by the ceiling joists and then by the walls.

### *Treatment Recommendations*

The current exterior siding is in serviceable shape, although not original to the building. The paint shows signs of crazing, a deterioration condition characterized by excessive cracking in the paint. Crazing is caused by thick paint that has become brittle and inflexible, no longer expanding and contracting with the wood underneath. The paint also shows signs of peeling caused by the crazing as well as environmental grim, particularly on the east façade. Following the guidance for preservation, it is recommended that the exterior paint be removed by hand-scraping or sanding, and a new layer of paint applied.<sup>10</sup> Paint helps to protect the wood siding from environmental factors like moisture, which can cause rapid deterioration of the wood siding material.

---

<sup>10</sup> Grimmer, *The Secretary of the Interior's Standards for the Treatment of Historic Properties*, 39.

It is also recommended that the underlying layers of insulation and siding be investigated to determine material makeup and purpose. Determining the insulation material in particular is helpful when trying to decide on future use, as it may need to be replaced in order to increase the R-Value to the point that the building is economical to heat. It would also be beneficial to determine if the channel groove siding visible inside the framing is the base for the interior wall finishes.

### *Building B*

The exterior walls of Building B are clad in wood shiplap siding painted white (Figure 16). The siding is uniform across the long, main body of the building and covers approximately the top two-thirds of the wall. The lower third of the wall is the white painted exterior wall of the concrete foundation. The bottom wood board is angled outward to create a skirtboard over the top of the concrete foundation wall. The corners boards and trim around all the fenestration are painted orange-brown for contrast, matching the color scheme on Building A. The addition that extends southwest also has wood shiplap siding; the siding on the southwestern most end of the addition and the southwest façade is wood drop siding.

Interior and exterior walls are framed with studs and the exterior walls are clad with decking. Interior walls are supported by the floor joists and transfer roof load to the floor. Exterior walls were not bowing or deformed and appeared to be in serviceable condition.

### *Treatment Recommendations*

The siding on Building B is in good condition and should be treated with preservation practices only. No immediate areas of failure were observed, and thus, the recommended treatment for the exterior siding is preservation. The paint on the skirtboard is deteriorating, likely eroded by water over time. The paint is also peeling in some locations, especially the southwest façade of the addition, and other areas show cracking and crazing as well. The paint across the entire building, including the wood siding, trim, and the paint on the exposed concrete foundation wall, should be hand scraped and sanded to remove any loose or deteriorated paint and then repainted to protect the siding underneath. Additionally, it may be appropriate to install a gutter system along the edge of the roof to prevent further deterioration of the siding materials. If installed, however, the gutter should be sympathetic to the historic appearance of the building so as to not impact the integrity of the building.

### *Building C*

Building C is clad in wood plank siding oriented horizontally and painted white. The corner boards and fenestration trim are painted orange-brown and the color scheme matches the rest of the Government Hill Wireless Station complex. One opening in the building that may have held utilities shows that below the current siding are more horizontal wood planks (Figure 21). The interior planks also show signs of having been painted, although whether the paint remnants are from the inner planks being previously exposed or from a repainting of the current siding is unclear.

Interior and exterior walls are framed with studs and the exterior walls are clad with decking. Interior walls are supported by the floor joists. Exterior walls appear sound with no distress nor out of plane deformation noted.

### *Treatment Recommendations*

The wood plank siding on Building C appears to be in serviceable condition, with few signs of deterioration. The paint, however, is beginning to show signs of cracking and crazing, and has eroded from the boards

near the base of the exterior walls. This leaves the wood below more vulnerable to moisture and animal infiltration. There is evidence that the paint has been removed and reapplied in the past, with crack and crazing sections surrounded by smooth, newer paint (Figure 22).

It is important that the paint should be hand scraped and sanded to remove any loose or deteriorated paint and then repainted to protect the siding underneath. The vegetation surrounding the building should be removed, especially where it has built up along the southwest façade. The vegetation at this location has built up to the point that it is pushing the door inward and is likely exerting the same pressure on the lower walls. It may be appropriate that a gutter system or curtain drain should be installed around Building C to prevent further deterioration; if installed, it is important that the systems be sympathetic to the historic appearance of the building.

### ***Fenestration (doors and windows)***

#### ***Building A***

The windows and doors on the exterior of Building A do not match and reflect the upgrades and changes to the building that have happened over time. All the windows have wood frames and are covered with chicken wire set in heavy wood frames locked to the siding to prevent break-ins. There are three window pairs on the west façade. The two northern most pair of windows are both one-over-one casement windows (Figure 23). The northern most window is centered in the west façade of the northern addition while the other two windows are located in the original portion of the building. The southernmost window consists of paired, three-over-one casement windows (Figure 27). The door in the west façade is a five-panel solid core wood door (Figure 24). The south façade of the building has one hollow core flush panel door flanked by three-over-one casement windows; the set centered in the façade of the building (Figure 28). The north façade of the building has two pairs of one-over-one casement windows, spaced evenly across the façade (Figure 29). A concrete formed opening at the ground level at one time provided access to the crawl space in the foundation.

The east façade of Building A has a mixture of window and door types. At the south end of the façade is a small, three-light window of unknown operation (Figure 30). The window is set high in the façade. A similarly sized opening just to the north of the window has been infilled with siding. There is one window in the addition that houses the stairwell which consists of one, three-over-three, fixed window that provides illumination for the stairwell (Figure 31). Between the two addition projections on the east façade is a recessed area that was part of the original building. The recessed area contains one set of paired, six-over-one, double-hung, sash windows (Figure 25). The northern most window in the façade, centered in the east façade of the northern addition, consists of a single one-over-one, casement window (Figure 26).

On the north end of the stairwell addition is an opening for a doorway that used to lead to the top landing of the stairwell; this opening has been infilled on both the interior and the exterior with plywood (Figure 32). The arctic entry on the northern end of the façade has no exterior door, the door having been removed at some point in the past. Only the hinges remain. The door leading into the interior of the building is a three-panel solid core door with a single light that has been covered with plywood (Figure 33).

#### ***Treatment Options***

The glazing in all the windows has been damaged due to vandalism over time. The framed chicken wire panels were installed to prevent entrance through the broken windows, but it may not be adequate to prevent further breakage. The wooden muntins and mullions all appear to be intact, however, escaping the damage caused to the glass. The paint is failing on all the window frames, leaving sections with little paint

remaining. The last paint application, however, was somewhat careless, as the edges of the glazing were also painted over.

Identification of the original window types is important for preservation efforts. Once it is determined which windows were installed during which period, it is possible to identify any windows that were installed outside the period of significance for documentation purposes. As the window frames appear to be in serviceable condition; the shifting of the building over time has pushed the windows out of alignment with the surrounding frames. This misalignment should be corrected when the foundation is fixed, and the building framing brought back to alignment. The glazing will need to be replaced on nearly all the windows. The recommended treatment approach for the windows on Building A is rehabilitation. Under this treatment option, as much of the historic material is retained as possible while replacing only those elements that have failed structurally (Figure 27).

For Building A, the most substantial replacement material is the glazing, much of which has broken due to vandalism. The windows should be removed and inspected. The broken glazing should be replaced with an appropriate, in-kind replacement, such as single-paned glass. As the older glazing is removed, the frames can be inspected and repaired as necessary by patching, splicing, or reinforcing the framing members. The existing paint should also be removed by hand scraping and sanding. When the new glass is installed in the frames, new putty sealant can be used to ensure a weather-tight fit. The window operation mechanisms, such as hinges and locks, should be inspected, cleaned, and oiled. After the windows are reinstalled on the building, removeable storm windows that are sympathetic in design to the building can be installed to both protect the windows and to ensure that the building is more weathertight. Any windows that are too deteriorated for continued use should be replaced in kind with wood framed windows that match the framing and operation of the original, historic window.<sup>11</sup>

The doorways on Building A are likewise mismatched, reflecting the period during which they were installed. Research should be undertaken to determine what door type was original to the building for documentation purposes. The doorways are all beginning to fail on Building A. The doors and frames all demonstrate misalignment as the frames have shifted out of plumb with the building settlement. Once the building foundation has been stabilized and corrected, the door frames should be adjusted so that they are square once again, ensuring proper door operation.

The entrance on the west façade of the building has been blocked off on the interior and is no longer operational. The door appears to be in better condition than the rest of the doors and may be due to the fact that it is likely a solid core door. The wood along the bottom of the doorway shows signs of deterioration from moisture and vegetation and has been patched at some point in the past. The door should be scraped of all paint and the doorway inspected for internal damage; all hardware should be cleaned, examined, and oiled for ease of use. If necessary, the door can be replaced in its entirety using an in-kind replacement of a five-panel, solid core, exterior door.<sup>12</sup>

The doorway in the south façade is a flush, hollow core, wood door that shows significant signs of failure. Holes have been punched in the outermost panel of the door, the paint is failing, and the lower portion of the door shows signs of deterioration from moisture (Figure 28). It is recommended that this door be removed and replaced with a period appropriate wood door. Research should be done to determine the

---

<sup>11</sup> Grimmer, *The Secretary of the Interior's Standards for the Treatment of Historic Properties*, 102-106.

<sup>12</sup> *Ibid.*, 110-112.

original door type; if that is not possible, then a five-panel wood exterior door similar to that on the west façade may be an appropriate replacement type.<sup>13</sup>

The doorways in the arctic entry should be treated in a similar fashion. The wood material of the door that leads into the interior of the building is in relatively serviceable condition; the single light window in the upper portion of the doorway, however, has been broken and boarded over with plywood. The glazing should be replaced as appropriate. The door should be scraped of all paint and the doorway inspected for internal damage; all hardware should be cleaned, examined, and oiled for ease of use. If necessary, the door can be replaced in its entirety using an in-kind replacement. Research should be done to determine the type of door that originally led into the arctic entry from the exterior; if possible, efforts should be undertaken to replace the doorway with one as close to the original as possible.<sup>14</sup>

### *Building B*

Like Building A, all of the windows are wood framed and have been covered with either plexiglass or plywood to prevent unauthorized entrance into the building. Many of the windows have missing or broken glazing. The windows whose operation could be determined are all one-by-one casement windows of uniform size and installation placement (Figure 34). The southern half of the long axis of Building B has three windows that mirror one another in placement across the southwest and northeast façades; the southwest façade has a fourth window in the southern most end of the façade that does not appear to have been present on the northeast façade. The mirroring of the fenestration pattern and number of windows indicates that the southern portion of the building was intended for human occupancy as opposed to utilitarian purposes. The northern section of the long axis of the building, by contrast, has only two windows. Both windows are located on the northeast façade; the inner of the two windows opens into the boiler room that housed the heating element for the building. There are only two window openings in evidence in the addition that extends to the southwest. The window in the northwest façade of the addition, located near the western corner of the façade, is boarded over with plywood and its operation could not be determined. The final window, located in the approximate center of the southeast façade of the addition, has been infilled with wire insulation, wire mesh, and a ventilation unit.

There are only two entrances into the building at present. The main entrance is through paired, flush, metal security doors in the northwest façade of the long axis of the building (Figure 12). The surrounding siding, concrete foundation walls, and curbed driveway that once led to the façade all indicate that the façade once held an overhead vehicular door that has been infilled, and the double metal doors are not original to the building. The second entrance is in the southwest façade of the addition and consists of a single, flush, wooden man door placed slightly north of center in the façade (Figure 36). The door was unusable at the time of inspection as it has been boarded over and secured from the interior to prevent unauthorized access.

### *Treatment Options*

The recommended treatment option for the windows in Building B is similar to those in Building A and are guided by the preservation treatment approach. The windows should be removed and inspected, and any broken glazing should be replaced with an in-kind replacement. As the older glazing is removed, the frames can be inspected and repaired as necessary by patching, splicing, or reinforcing the framing members. The existing paint should also be removed by hand scraping and sanding, and new paint applied before reglazing takes place. When new glass is installed in the frames, new sealant should be used to ensure a weather-tight

---

<sup>13</sup> Ibid.

<sup>14</sup> Ibid.

fit. The window operation mechanisms, such as hinges and locks, should be inspected, cleaned, and oiled for ease of operation. After the windows are reinstalled on the building, removeable storm windows that are sympathetic in design to the building can be installed to both protect the windows and to ensure that the building is more weathertight. The existing plexiglass covers on the windows protecting them from damage could serve this purpose. Any windows that are too deteriorated for continued use should be replaced in kind with wood framed windows that match the framing and operation of the original, historic window.<sup>15</sup>

The treatment of the doorway in the northwest façade of the long axis portion of the building is entirely dependent on the proposed future use of the building. Under the preservation treatment option, the current double metal door would remain, although the operational members of the doorway should be cleaned and oiled, and the existing vegetation cleared away from the doorway to ensure that the door is useable. The rehabilitation approach, however, recommends that should the historic feature be missing entirely, a new entrance can be designed and installed, as long as the new entrance is of a design that is compatible with the size, scale, material, and color of the historic building.<sup>16</sup> If it is determined that the building should be used for vehicular maintenance, a use it served in the past, then the rehabilitation approach would not only be appropriate but also necessary.

The entrance in the southwest façade of the addition should be treated as a failing element. The doorway shows significant deterioration. The flush door appears to be wood laminate or veneer, with the outer layers of thin wood peeling apart (Figure 36). The door should be replaced in its entirety; as a mass-produced product, finding an appropriate in-kind replacement should be relatively simple. Effort should be taken to preserve the door frame; the paint on the frame, however, is failing with evidence of cracking and peeling. The paint should be hand scraped and sanded and the frame repainted to ensure that the wood does not suffer further deterioration.

### *Building C*

The windows on Building C are similar in their nonuniformity to Building A. All the windows are wood framed and have been covered by plexiglass drilled into the frames and either chicken wire or thin wire mesh. The plexiglass and wire combination appears to have protected the glazing from destruction due to vandalism. One window, located to the west of center in the southeast façade of the building, has been boarded over with plywood (Figure 37).

There are two windows in the northeast façade. The southernmost window, located to the north of center, is a three-over-one casement window (Figure 38). The northernmost window is a three-over-three of unknown operation located near the northernmost corner. An identical window, set at the same height, is located on the eastern end of the northwest façade (Figure 39). The southwest façade contains two identical windows, both three-light windows of unknown operation. The northern most of the two windows mirrors the placement of the northernmost window in the northeast façade; the southernmost window is centrally located between the doorway in the southwest façade and the southernmost corner of the building.

There are two entrances into Building C. The main entrance is through a single light, two panel, metal door set to the east of center in the southeast façade of the building (Figure 9). The door is likely a replacement, as the surrounding trim is wood rather than metal and there is evidence of infill in the siding. The single light in the top half of the doorway has been covered with plywood on both the interior and exterior to

---

<sup>15</sup> Ibid., 102-106.

<sup>16</sup> Ibid., 112.

prevent vandalism and unauthorized access; it is unknown if the glazing in the door remains. The second entrance is located on the southwest façade of the building, just north of center. The door is an oversized, flush, metal man door with a single square light centered in the upper half of the doorway (Figure 40).

A final egress opening in Building C is in the upper gable of the southeast façade. The short, narrow opening is formed by a doorway constructed of matching siding and large T-hinges (Figure 41). The purpose and origin of this opening is unknown.

### Treatment Options

As the glazing in the windows appears to be intact and the plexiglass has protected much of the window structures from damage, it is recommended that the windows be treated with the preservation approach. Research should be done to determine the original, historic form of the windows, and to determine whether or not any of the windows currently installed post-date the period of significance for the Government Hill Wireless Station. It is possible that due to construction material limitations at the time that Building C was constructed in 1934, the windows installed were the windows that could be found for use, explaining the nonuniformity. The windows should be carefully inspected and repaired as necessary by patching, splicing, or reinforcing the framing members. The existing paint should also be removed by hand scraping and sanding, and new paint applied before reglazing takes place. The window operation mechanisms, if any, should be inspected, cleaned, and oiled for ease of operation. If the windows are fixed, then the frames should be sealed as necessary to ensure that moisture does not infiltrate through poorly fitting frames. The existing plexiglass coverings can be retained for use as removable storm windows, although care should be taken to address the holes drilled into the framing to secure the coverings.

The treatment of the doorways in Building C are entirely dependent on whether the doors are replacements. The wood trim and infill that surround the doorway on the southeast façade appear to indicate that the current metal doorway is not original. Under the preservation treatment option, the door should be removed and repaired, the glazing replaced and the paint removed and reapplied. Under this option, the doorframe would be left in place and only repaired as needed to ensure continued survival.<sup>17</sup> However, if the proposed use of the building necessitates the replacement of the door or if the original door form can be discovered, then the rehabilitation approach is more appropriate. Under these options, it is considered appropriate to design a new entrance for the building that is based on historic data of the original door. Barring the discovery of the original door form, then a new entrance can be designed that is compatible with the size, scale, material, and color of the historic building.<sup>18</sup>

The doorway in the southwest façade of the building will require more extensive repair work. The door is currently out of plumb with the door frame and is being pushed inward by a buildup of vegetation and debris against the door. The inward push has caused the metal of the doorway to warp. Additionally, moisture and vegetation infiltration have caused deterioration of the metal along the bottom of the door. The door is secured on the interior with a metal rod bolted into the door frame that prevents the door from being pushed inward (Figure 42). It is recommended that this doorway be treated with a rehabilitation approach, whereby the door should be removed, cleaned, and examined to determine if it can be repaired for use. If so, then the door should be straightened and repainted prior to reinstallation. If the door cannot be repaired, then it should be replaced with a metal door that is as similar as possible to the original.<sup>19</sup>

---

<sup>17</sup> Ibid., 49-52.

<sup>18</sup> Ibid., 112.

<sup>19</sup> Ibid., 110-112.

## *Porches and Arctic Entrances*

### *Building A*

Building A has one arctic entry located in the northern half of the east façade (Figure 33). The arctic entry was installed in 1952 when the final addition was constructed on the north end of the building. The arctic entry has light timber framing and is clad with plywood on the interior and wood lap siding on the exterior to match the rest of the building. The roof of the arctic entry is a continuation of the polycarbonate or PVC roofing material evident across the rest of the building. The exterior doorway leading into the arctic entry is missing. The flooring of the arctic entry is plywood but obscured from view by the buildup of vegetation debris inside the entry. There is no evidence on the remaining entrances that there ever any porches or entrance landings.

### *Treatment Options*

The arctic entry needs repair and is one of the few elements of the building that should be subjected to restoration treatment. Under this approach, it is appropriate to evaluate the integrity of the materials, in particular the deteriorating plywood on the interior walls, floor, and ceiling. It is likely that the wood will need to be replaced. If so, then limited replacement in kind is appropriate, so long as the new work matches the original in material, design, scale, color, and finish. If the framing below the cladding is found to be deteriorated to the point of failure, then the entire arctic entry can be replaced. The work should be undertaken in such a manner as to be “unobtrusively dated to guide future research and treatment.”<sup>20</sup>

### *Building B*

Building B has one entrance porch or stoop, located against the doorway in the northwest façade of the long axis of the building. The entrance was constructed on top of the original paved driveway that led into the vehicular overhead door. The porch or stoop is wood framed, filled with gravel, and at one point may have been covered with a plywood floor (Figure 43). The wood framing extends slightly wider than the double metal security doors and approximately 2’ northwest from the building.

### *Treatment Options*

The porch or stoop in front of the entrance in the northwest façade of the long axis of the Building B is deteriorated almost to the point of being obscured from view. Any decking that may have existed has long since vanished and the framing is filled with gravel that appears to have been deliberately piled against the façade. Trees are currently growing up through the porch or stoop.

Treatment options for the porch or stoop are dependent upon the proposed future use of the building. If it is decided that the building will serve as a vehicular service structure, then the porch or stoop should be removed as part of the restoration of the driveway. If the decision is made, however, to keep the doorway in place as a man door, then the stoop should be cleared away and reconstructed. Reconstruction of a single historic feature is guided by the rehabilitation treatment recommendations, whereby the new porch or stoop should be designed in such a way as to match the original as closely as possible or constructed in such a way as to be compatible with the original material, design, scale, color, and finish of the rest of the building.<sup>21</sup>

---

<sup>20</sup> Ibid., 192.

<sup>21</sup> Ibid., 191.

### *Building C*

Each of the two entrances to Building C has evidence of porches or stoops similar in style to the deteriorated one on Building B. Both entrances have wide landings constructed of timber framing; no decking remains in evidence. The framing of the platforms has been filled in either intentionally or unintentionally through neglect by gravel and vegetation (Figure 44).

### *Treatment Options*

The treatment options for the deteriorated porches or stoops on Building C are directed by the rehabilitation treatment options. As previously discussed, the rehabilitation option provides guidance for the replacement or reconstruction of building elements that have failed or disappeared. The remains of the original porches or stoops should be cleared away once their extents are mapped and/or documented. Using the footprint of the original structures, new timber framed porches or stoops can be constructed that match the originals in size and material.

### *Cupola*

#### *Building A*

The only building with roof adornments is Building A. Building A has a square cupola centered over the original portion of the building, with an onion corrugated polycarbonate or PVC clad pyramidal roof and tall spire. Each of the four walls of the cupola are made of up of wood framed, three-light, fixed windows, with thick corner boards. The exposed rafter tails, window framing, corner boards, and spire are all painted orange-brown to match the trim around the rest of the building (Figure 45).

### *Treatment Options*

The cupola appears to be in stable, serviceable condition and should be preserved as a high priority. As noted in the NRHP nomination for the Government Hill Wireless Station, the cupola, elevated above the building which was placed on a high bluff overlooking the Port of Anchorage, “was known to provide direction to help ships get into port”<sup>22</sup> in the dark when it was lit. This is considered a character-defining feature of Building A specifically and of the Government Hill Wireless Station more generally.

The elevated nature of the cupola has protected it from vandalism. It retains all its glazing and framing members. It is recommended under the preservation treatment guidelines that the framing be inspected more thoroughly to ensure structural integrity, then the exterior cleaned. Any areas of deteriorated paint should be hand scraped or sanded and reapplied. The glazing in particular requires cleaning, as the edges of the glass have been painted during previous work sessions. Special attention should be given to the windows, with removeable storm windows installed to prevent any breakage. The windows, once cleaned, and the storm windows should provide sufficient transparency so that should the cupola be lit from within as it was during the period of significance, the light can be seen from ships approaching the Port of Anchorage.<sup>23</sup>

### *Chimneys*

Each of the three buildings at the Government Hill Wireless Station site have chimneys rising through the roofing to vent interior heating sources. All these chimneys are showing signs of deterioration but are mass-produced, ensuring that they can be replaced in kind with relative ease.

<sup>22</sup> Wilson and Rickman, *National Register of Historic Places Registration (Form 10-900): The Wireless Station*, 4.

<sup>23</sup> Grimmer, *The Secretary of the Interior's Standards for the Treatment of Historic Properties*, 46-48.

### *Building A*

The main chimney on Building A is located on the eastern side of the south addition. The chimney is made of welded sheet metal, and is cylindrical with a cone cap. The chimney is supported by a pyramidal base (Figure 46). Two exhaust vents rise through the east side of the roof as well, one located near the cupola and the second over the north addition. The exhaust vents are simple, unpainted, metal pipes. It is unknown what utilities these exhaust vents were once connected to. A final roof protrusion, a metal pipe that once held and directed utilities into the building, is located at the southeast corner of the building.

### *Treatment Options*

The chimney on Building A appears to be in good condition and should be retained and preserved if possible. Staining on the metal indicates that it be suffering from minor deterioration due to moisture concerns. The recommended treatment option is preservation, which would involve cleaning the chimney and inspecting it for structural deficiencies. If necessary, the chimney can be supported by additional bracing or framing on the interior. Flashing should be installed around the base of the chimney to prevent precipitation from leaking into the roof structure. It is recommended that snow stops or directional flashing should be installed on the roof above the chimney; these measures will ensure that melting or sliding snow will not destroy the chimney as it slides towards the ground.

The exhaust vents and utility pipe, however, should be investigated. If these roof protrusions are not connected to any utilities and their installation post-dates the period of significance or pose concerns over moisture infiltration into the roof, the vents should be removed and the roofing repaired. If they were installed during the period of significance or their retention does not pose a threat to the underlying roof structure, then the vents and utility pipe can remain in place with no recommended treatment other than cleaning. The opening in the roof eaves that allows for passage of the utility pipe should be sealed to prevent deterioration of the roof decking due to moisture infiltration.

### *Building B*

Building B has one chimney of identical style to Building A. It is located near the center of the northeast façade of the long axis over the building, over the utility room. It is still tangentially attached to the remains of the boiler system on the interior of the utility room. The building also has one metal, exhaust vent pipe located near the southern corner of the addition that extends to the southwest; another metal pipe rises through the southeast façade of the main building. At one point, this second metal pipe supported and directed wiring and utilities that connected to the building.

### *Treatment Options*

The main chimney on Building B has collapsed (Figure 47). While the upper, cylindrical portion of the chimney and the conical chimney cap appear to be in good condition, the pyramidal chimney base shows extensive rusting that contributed to the chimney collapse. Given the angle that the chimney has fallen, it is possible that recent snow loads pushed against the deteriorated pyramidal chimney base and caused it to fail structurally. The collapse has left an opening in the roof structure and precipitation falls freely into the interior of the building. The exhaust pipe located in the addition has likewise collapsed, although given the thickness of the pipe and lack of base, it is probable that the source of the collapse is moisture infiltration on the interior of the building.

The recommended treatment for the collapsed chimney and exhaust vent is directed by rehabilitation treatment options. At the very least, the pyramidal base of the collapsed chimney should be replaced in kind and the undamaged chimney structure reinstalled on the vertical. The installation of new flashing and either

snow stops or directional flashing is recommended to prevent another collapse caused by sliding snow. The roof structure below the chimney should be investigated and repaired as necessary to ensure future structural integrity; it is likely that the infiltration of precipitation into the building through the hole in the roof left by the collapse has created further structural concerns.

In addition, the collapsed exhaust vent in the addition extending southwest should be investigated to determine if it dates from the period of significance. If the vent is not connected to any utilities and its installation post-dates the period of significance or poses concerns over moisture infiltration into the roof, the vent should be removed and the roofing repaired. If the exhaust vent was installed during the period of significance, then it should be set upright and flashing installed around its base to prevent further moisture infiltration into the roof structure.

The utility pipe that rises through the roof eaves on the southeast façade appears to be in good, serviceable condition. Research should be undertaken to determine if this feature dates to the period of significance; if it post-dates this period, then the utility pipe can be removed if necessary. If the utility pipe is to remain installed on the building, care should be taken to install weather proofing inside the hold cut in the roof decking to accommodate the pipe to prevent damage to the roofing structure from moisture infiltration.

### *Building C*

Building C has one metal chimney located on the southwest side of the gable roof near the southern most corner of the southeast façade. The chimney consists of a cylindrical metal stove pipe that has been wrapped with thick wire for reinforcement, a conical cap, and a cylindrical metal base (Figure 48). A second pipe rises through the southeast façade and once held and directed utilities into the interior of the building.

### *Treatment Options*

The chimney on Building C is in poor shape, although it remains upright. The stove pipe has been reinforced with metal wiring but shows signs of rust, particularly near the bottom. The flashing installed to protect the joint between the base of the stove pipe and the cylindrical base for the chimney has shifted out of alignment and appears to direct precipitation towards the upslope of the roof. The cylindrical base has likewise shifted out of alignment, with bowing and buckling of the sheet metal readily visible.

The chimney should be treated with a rehabilitation approach. Under this treatment option, the replacement of failing features of the building is allowed, provided that the feature is replaced in kind. Efforts should also be made to retain any of the chimney structure that remains in serviceable condition. The mass-produced nature of the chimney, however, means that an in-kind replacement is economical and likely readily available. The installation of new flashing and either snow stops or directional flashing around the base of the chimney is recommended regardless of repair or replacement to prevent collapse caused by sliding snow.

The utility pipe installed at the southern corner of the southeast façade appears to be in good, serviceable condition. Research should be undertaken to determine if this feature dates to the period of significance; if it post-dates this period, then the utility pipe can be removed if necessary. If the utility pipe is to remain installed on the building, care should be taken to install weather proofing inside the hold cut in the roof decking to accommodate the pipe to prevent damage to the roofing structure from moisture infiltration.

## **Roofing**

### *Building A*

The roof of Building A consists of onion corrugated polycarbonate or PVC clad roofing (Figure 1) and is framed with 2' by 6' rafters set at 24" on-center spacing. Some rafters appeared to have been supplemented with collar ties, but this was infrequent and seemingly random. There is no ridge beam and only a small squash block ridge member. The rafters are supported several feet back from the exterior wall with studs that bear on ceiling joists below. The ceiling joists are supported by interior and exterior walls.

### *Treatment Recommendations*

The most important structural aspect in need of attention on Building A is the framing. The onion corrugated roofing appears to be in serviceable condition, although it should be thoroughly cleaned of all grime and any vegetative growth that could not be observed from the ground. The roof framing was generally sagging and some of the framing members were patched where they had cracked/split previously. There was much roof shoring by use of wood posts and temporary metal posts. This approach is appropriate under the preservation treatment guidance for structural systems, which allows for the repair or augmentation of compromised structural components by sistering, bracing, or otherwise supplementing and/or reinforcing the failing structural member.<sup>24</sup>

These measures, however, have been used so extensively across the building that there is a risk of roof collapse. The structural engineering report completed as part of the current project noted that the roof framing is deficient and that the rafters are not restrained from wind uplift. The estimated allowable snow loads are approximately 15lbs per square foot, significantly less than the required 40lbs per square foot required by MOA building codes. The rehabilitation treatment option allows for the in-kind replacement of structural systems that are damaged, deteriorated, or missing; the substitute material, however, should be "physically compatible with the rest of the system, and, where visible, must have the same form, design, and appearance as the historic feature."<sup>25</sup> This indicates that the failing roof framing can be replaced with new framing members, provided that they are made of wood and have the same form as the original members.

### *Building B*

The roof of Building B is like Building A in both framing and covering. The roof is clad in onion corrugated polycarbonate or PVC roofing (Figure 49) and supported by framing with rafters set at 24" on center spacing. Some rafters appeared to have been supplemented with collar ties and patching but this was not uniform. There is no ridge beam, only a squash block type member in which the rafters are connected. The rafters are supported several feet back from the exterior wall with studs that are carried on ceiling joists below. The ceiling joists then are underpinned by a few interior walls and many wood posts. The roof on the addition that extends to the southwest was framed into the main wing roof near the main wing center.

### *Treatment Recommendations*

Like Building A, the roof framing was generally sagging and showed signs of over stress while the polycarbonate or PVC cladding appears to be in serviceable condition. The roof cladding should be cleaned and cleared of all grime and vegetative growth, with special attention paid to the roof junction between the long axis of the building and the addition. Due to the presence of tall trees against the building, leaves, and debris has built up in the junction valley and has begun to sprout vegetative growth of its own. While the

---

<sup>24</sup> Ibid., 55-57.

<sup>25</sup> Ibid., 123.

plastic nature of the cladding material is less vulnerable to deterioration from biological forces, it is still important to keep the roof clean of growth to protect the building structure below.

The structural report notes that the roof framing on Building B has deteriorated to the point where the estimated snow load is limited to 15lbs per square foot. This is significantly less than the required 40lbs per square foot required by MOA building codes. As previously discussed, the framing can be replaced new framing members, provided that they are made of wood and have the same form as the original members. It is recommended that this approach be taken to ensure that the roof and the building both survive.

### *Building C*

The roof of Building C is identical in cladding and framing to the other buildings at the Government Hill Wireless Station. The roof is clad in onion corrugated polycarbonate or PVC roofing over light timber framing (Figure 50). The rafters are set at 24" on center spacing. Some rafters appeared to have been supplemented with collar ties, more so than the other buildings. There is still no ridge beam, nor are there rafter ties at every set of rafters. The rafters are supported several feet back from the exterior wall with studs that bear on ceiling joists below. The ceiling joists are supported by a few interior walls. Building C has a steeper roof pitch and shorter spans, meaning that it sheds snow at a greater rate. Because of this, the roof framing is in noticeably better condition than the other buildings.

### *Treatment Recommendations*

As with the other two buildings, it is recommended that the roof cladding be treated with preservation efforts. At the present time, the preservation efforts required are minimal, as the materials appears to be in serviceable condition. The roof should be cleaned of all built up grime, including vegetative grown and debris. The roof framing, although in better condition than the other two buildings at the site, is still estimated to support only a 25lbs per square foot snow load. Additionally, similar to Building A, the roof has no restraint against wind uplift. The approach required to strengthen the roof framing is preservation, which calls for the strengthening of the roof framing through sistering, bracing, or otherwise supplementing and reinforcing the existing structural members.<sup>26</sup>

### **Interior Envelope**

The interiors of the three buildings at the Government Hill Wireless Station site are utilitarian by design but deteriorating from lack of maintenance and environmental influences. Due to the limited access of the interiors for life and safety concerns, the interior features of the buildings are generalized and based on what was safely observable.

It is important to note that under accepted cultural resource practices, building interiors are generally not governed by the same guidance as exteriors per *The Secretary of the Interior Standards for the Treatment of Historic Properties*. The reasoning behind this is because the interiors of most buildings are inaccessible to the general public (i.e., a private residence listed to the NRHP or a secure building such a bank or military structure). The exception to this practice is if one or more of the interior features contribute to the historic integrity of the building. These features can include pressed tin ceilings in an area where they are not commonly found, the circulation pattern of a former church, or the layout of interior rooms in a Federalist-period building.

---

<sup>26</sup> Ibid., 57.

The interiors of the three buildings at the Government Hill Wireless Station were not evaluated at the time of determination of eligibility in 2006 or at the time of listing in 2015. This may be due to the inaccessibility of the buildings due to life and safety concerns. As a result, the interiors of the three buildings are not considered to contribute to the historic integrity of the site. The treatment recommendations included in this section are generalized but are largely dependent on the proposed future uses of the building for which they can be adapted.

Additionally, there is evidence that the interiors of the buildings have been remodeled over time as the purposes for which the buildings were used changed. Should a proposed future use require it, research can be undertaken to determine the original layouts and finishes of the interiors of the buildings, at which time the interiors can be returned to their original appearance. However, this is not required, and the interiors can be reconfigured to adapt to a proposed future use as needed.

### ***Interior Wall Finishes***

The interior walls all three buildings appear to be finished drywall and/or painted plywood. Most of the observable walls have wood trim. The materials that could be seen are almost all in a state of disrepair. In addition to paint peeling and flaking away from the walls, there is significant cracking in the drywall and the painted plywood has warped away from the wall backing. These conditions are being caused by a variety of concerns acting at once. Moisture infiltration has impacted all the materials, with water staining visible on the finished drywall and causing plywood to warp and deteriorate (Figure 51 and Figure 52).

### ***Treatment Recommendations***

The treatment recommendations for the interior walls of all buildings are aggressive by necessity and falls under the restoration treatment guidelines. If possible, more research should be undertaken to determine what finish materials were present during the period of significance, and all other post-period materials should be removed. All deteriorated finish materials should be removed as well, which will expose nearly all the interior framing for inspection and repair as necessary. The replacement finish materials should follow the same types of materials as were originally installed in the building, even though this may mean replacing plywood panels with more permanent finish materials. All replacement materials should be modeled after original finishes.<sup>27</sup>

It should be noted that the extent of interior wall repair will be dictated by the proposed future use of the buildings. Reconfiguration of the interior spaces to adapt to a new use is allowed under *The Secretary of the Interior Standards for the Treatment of Historic Properties*, as the existing spaces do not contribute to the historic integrity of the buildings.

### ***Interior Doors and Windows***

The interior doors of all three buildings consist of hollow core wood doors of various ages. Building A has at least two five-panel doors, while the other two buildings have all flush doors. The doors are in various states of disrepair and deterioration, and some are missing entirely. The only building with windows on the interior is Building B; the southern end of the main long axis of the building was enclosed at some point to create a private office. The wall that separates the space from the rest of the open room is dominated by two large, plate glass window that afford a view of the rest of the building.

---

<sup>27</sup> Ibid., 204-208.

### **Treatment Recommendations**

The treatment recommendations for the interior windows and doors are entirely dependent on the proposed future uses for the buildings. As previously noted, the reconfiguration of the interior spaces to adapt to new use is allowed. If possible, any doors that are still serviceable and date to the period of significance should be retained for use in the new building layout; due to the deterioration of the building materials in the interiors of all the buildings, however, it is not likely that many of the interior doors can be salvaged. The windows in the interior of Building B may be salvageable, but as the office wall they are part of is not a contributing feature to the historic integrity of the building, their retention is not required.

### ***Ceilings***

Like the other interior finishes in the building, the ceilings in the three buildings are in poor condition and have failed in some locations. The ceilings consist of finished and painted drywall and plywood, similar to the interior walls. There was no evidence observable that the existing holes and deficiencies in the ceiling have been addressed in the past.

### **Treatment Recommendations**

It is recommended that the ceilings be replaced across all three buildings. The deterioration of the roofing material and rafters has led to extensive moisture infiltration, causing sections of the ceiling to collapse completely. Once the ceiling finishes are removed, the interior insulation of the buildings can be definitively determined, and upgrade as required by the recommended future use of the buildings.

### ***Flooring***

The interior flooring of the three buildings consists of plywood or wood decking overlaying 2' by 10' joists. The floor joists bear on the exterior wall and on interior pier blocks. The flooring in Building A and the addition to Building B is significantly distressed, caused by a combination of roof loads from interior bearing walls and roof shoring post, and compounded by areas of decay (Figure 54). The floor is notably soft and deforms significantly under load. There are many large areas of permanent deflection and decay. Much of the flooring in Building A and the addition on Building B was unstable for pedestrian access.

Building C and the north section of the long axis of Building B is more stable; the floor in this section of Building B is the bare concrete foundation, ensuring that it is structurally stronger than its corresponding framing members. It may not be necessary to replace the flooring in the northern section of Building B.

### **Treatment Recommendations**

The flooring on the interiors of both Buildings A and C and the addition on Building B should be removed and replaced as part of any work moving forward to reuse the buildings. Safety concerns for the flooring of Building A are paramount and should be one of the first conditions addressed. The floor of Building C, although in more stable condition, domes upward as previously noted due to the uneven settlement of the building between the concrete perimeter foundation and the post-on-pad foundation in the center of the building. Although this doming should correct itself when the foundation is fixed, the flooring materials of finished and sealed plywood may no longer conform to the corrected orientation of the floor and thus should be replaced.

### ***Stairs***

The only building with stairs is Building A. A set of poured-in-place concrete stairs lead from the interior of Building A into the full basement in the south addition of the building. The stairs were constructed on

the exterior of the building, adjacent to the exterior side of the concrete perimeter foundation wall, and enclosed with timber framing to create an interior stair well. The stairs appear to be in stable structural condition, with no cracking or spalling on the stairs themselves.

### Treatment Options

A large crack in the exterior concrete wall of the stair well extends from the top of the stairs to the bottom, paralleling the stairs before extending horizontally away from the stairs. The crack shows signs of water seepage and green mold is growing in the crack and down the wall in areas where water has seeped into the wall (Figure 56). Despite the crack, the approach to the treatment of the stairs and stairwell is preservation. The crack should be probed to determine the cause; as it parallels the slope of the stair treads, it is likely that the crack resulted from settling of the ground below the stairs. The crack should be mapped to document the current extends of the damage, the vegetative growth cleared, and the crack patched with concrete that matches the existing historic concrete material. Patching the crack will prevent infiltration by moisture, vegetation, and insects, thereby preventing further deterioration unrelated to the original cause of the crack.

Similarly, the areas of surface spalling evident on the stairs and stairwell walls should be patched and repaired as appropriate. As the spalling appears to be clustered in areas surrounding the large crack, the spalling could be related to moisture infiltration. Adding an appropriate sealant to the exposed concrete could help protect it from further deterioration, as would determining the source of the moisture infiltration. Installing systems such as a curtain drain around the foundation or gutters along the edge of the roof could help divert water away from the foundation and stairs, thereby preventing further damage.

### Fire and Life Safety

The buildings do not currently meet requirements for fire and life safety and pose significant danger to human occupants. Any proposed work will need to comply with the International Existing Building Code, and building elements will need to be upgraded to varying degrees depending on the classification of work (construction) and eventual building occupancy use. Rehabilitation of the site will likely require several variances. Two buildings cross property lines and work would likely require an abbreviated subdivision plat (aka., “short plat”) to combine the parcels. The buildings have encroachments in required property setbacks as well but may be grandfathered and have nonconforming rights. Some kinds of potential community uses would likely require a variance or conditional site plan approval as the lots have residential zoning.

Only the 1917 building has a staircase, included in the 1934 addition. Many doors and hardware are damaged or missing. There are no functioning fire detection or suppression systems, no security systems, or phone connections. It is assumed the construction complies with building practices at the time of construction for fire stopping.

### ADA Accessibility

Development of the site predates the 1968 Architectural Barriers Act and does not meet the provisions of the Americans with Disabilities Act. As a result, the site and buildings are not considered accessible. There are no accessible routes throughout the site or buildings.

### **Public Health**

The site does not have active water, sewer, or trash service. The condition of a sewer and water connection, albeit abandoned, is unknown. The last use of fixtures in the buildings was likely 1985.

### **Heating, Ventilation and Air Conditioning**

The buildings do not have functioning heating or air delivery systems. Gas and electric service was disconnected in the 1980s. The buildings relied on hydronic base board or wood- or coal-burning stoves for heat. There was no mechanical air delivery or changing systems in the buildings.

### **Plumbing**

Water service to the buildings has been disconnected since 1985. Some of the buildings have retained plumbing fixtures, but most are missing. Pipe condition is unknown.

### **Electrical**

Electrical service to the buildings has been disconnected since 1985. Some fixtures and receptacles remain, but there is significant damage to many others throughout. Conditions of wiring and circuit breakers are unknown.

### **Structural**

A structural condition study was undertaken for the Government Hill Wireless Station by Michael Anderson, a licensed structural engineer working under contract to TNSDS. In this study, the various structural systems of the three buildings were identified and a condition assessment made of each system. The assessments included structural load capacities estimates, and evaluation made for the structural stability of each building. The likelihood of collapse or compromise by preservation or rehabilitation efforts was then addressed.

On August 19, Mr. Anderson performed site visits to the Government Hill Wireless Station. Each building was observed, and a full walk around was made along each building exterior. The interior of each building was then accessed as safety concerns allowed, including crawl spaces and attics. No destructive testing was performed.

Mr. Anderson determined that the buildings generally are in very poor condition and exhibit various signs of deformation, decay, and failure. Buildings A and B have a high likelihood of partial or total collapse in the near future if structural retrofits are not completed. These buildings are not safe for human occupancy and access should be restricted. The buildings require extensive structural reinforcement prior to any historical preservation effort. Building C appears stable, but structural reinforcement will be required before any historical preservation activities to preserve the remaining stability of the building. The full structural engineering report can be found in Appendix E: Structural Engineering Report.

### ***Engineering Report on Safety Considerations and Load-Bearing Limits***

A full, comprehensive, structural analysis could not be completed for the Government Hill Wireless Station Campus buildings. This was due to a number of constraints and limitations. The first is that existing construction does not conform to current building code for similar building types, therefore based on current code, many components would have 'zero' capacity, and this would not give a helpful representation of the existing structural conditions. Some examples of this constraint include roof rafters that are typically connected to a thin ridge member with only a few collar ties to develop an opposing tension force. Without

collar ties at every set of rafters, and a weak ridge member that cannot carry vertical load, there is ‘zero’ roof capacity according to the code. However, due to membrane action and other mechanisms that cannot be considered per code for light-framed wood construction, the roof has some capacity that cannot be calculated with the current codes. Another constraint is that none of the buildings had connections to foundations. The building code requires some connection and anchorage to develop resistance against wind and seismic forces, but no foundation anchorage was observed. Yet the buildings have some capacity to resist wind and seismic forces, even though per code, no capacity could be calculated.

An important limitation is there are many areas of non-regular roof framing that have a piecework of supplemental members and repairs that are supported by a random layout of interior walls. It is not feasible to catalog each and every deviation given the scope and time constraints. Therefore, structural capacities were determined based on comparing each building primary structural system construction to current light framed construction and then estimating a safe load carrying capacity by analogy comparing to the capacity developed per current code approved construction techniques. By estimating a safe load capacity in this way, relevant information can be obtained related to the main point of this study which is the feasibility of historical preservation.

## ***Building A***

### *Structural Capacity*

Building A is a light framed building and sheathed with decking, so it has some nominal resistance but is not an engineered system. There are no tie downs, anchor bolts, or fastening, that would be evident in an approved lateral force resisting system. Light framed wood buildings generally perform well in earthquakes despite lack of proper restraint.

Given the non-regular roof framing and layout of the supporting walls and shoring, compounded by the patchwork of repairs, a complete structural analysis was not feasible given the constraints. Based on comparable light framed construction, estimates of safe load carrying capacity were made for the various structural components. It should be noted that at areas of rot and decay, the wood has no capacity and is in failure.

- Roof framing - Snow load capacity of 15lbs per square foot.
- Floor framing - Live load capacity of 15lbs per square foot (at non-decayed areas).
- Foundations - Exterior foundation allowable bearing capacity of 3,000lbs per square foot.
- Walls - Limited by roof and floor capacity.

### *Structural Deficiencies*

- Exterior foundation is uninsulated and does not extend below frost line, although no frost heaving was observed.
- Floor framing is under distress from overload due to bearing walls and roof shoring loading the joists.
- Areas of floor framing are decayed, some areas significantly decayed.
- Roof framing is deficient.
- Roof rafters are not restrained from wind uplift with hurricane ties.
- There is no rational lateral force resisting system.
- Joist are not attached at interior or exterior supports.
- Walls do not appear to be attached at foundations.

### *Structural Stability*

The building has been retrofitted evident by the amount of roof shoring by added interior posts and patched roof framing. It is likely this building has been in progressive failure and the shoring was added in an attempt to mitigate the issues. The shoring only buys time and does not address the major problems. The primary framing will continue to deform and will fail over time. The likelihood of future partial or total building collapse is high.

### *Structural Recommendations*

Historical preservation efforts are impossible under the current structural condition. The building cannot take any additional load and the floor is not safe to work upon. Structural stability must be preserved before any attempt at historical preservation is made. The problem is that the entirety of the framing is significantly deficient and the framing must be rebuilt to stabilize the building. Retrofits would need to start at the roof since the weak roof is currently shored and overloads the floor. A possible rehabilitation method would be to stick-build new trusses or a rafter-collar tie system inside the existing attic that distribute roof load from exterior wall to exterior wall. This would relieve the floor from being overloaded by roof shoring loads, then the floor could be safely retrofitted to increase the capacity and replace decayed joist. The lateral force resisting system would need to be supplemented with anchor bolts or other type of restraint.

## ***Building B***

### *Structural Capacity*

Building B is a light framed building with no rational lateral force resisting system for wind and seismic loads. It is sheathed with decking, so it has some nominal resistance but is not an engineered system. There are no tie downs, anchor bolts, or fastening, that would be evident in an approved lateral force resisting system. Light framed wood buildings generally perform well in earthquakes despite lack of proper restraint.

### *Structural Capacity*

Given the non-regular roof framing and layout of the supporting walls and shoring, with patchwork of repairs and splices, a complete structural analysis was not feasible given the constraints. Based on comparable light framed construction, estimates of safe load carrying capacity were made for the various structural components. It should be noted that at areas of rot and decay, the wood has no capacity and is in failure.

- Roof framing - Snow load capacity of 15lbs per square foot.
- Floor framing - Live load capacity of 15lbs per square foot (at non-decayed areas).
- Slab on grade - Live load capacity of 100lbs per square foot.
- Foundations - Exterior foundation allowable bearing capacity of 3,000lbs per square foot.
- Walls - Limited by roof and floor capacity.

### *Structural Deficiencies*

- Exterior foundation is uninsulated and does not extend below frost line, although no frost heaving was observed.
- Former grease pit infill floor framing is deficient.
- Areas of floor framing are decayed.
- Roof framing is deficient.
- Roof rafters are not restrained from wind uplift with hurricane ties.
- There is no rational lateral force resisting system.
- Joist are not attached at interior or exterior supports.

- Walls do not appear to be attached at foundations.

### *Structural Stability*

Like Building A, Building B has had retrofits evident by the amount of roof shoring and patched members in the roof framing. It is likely Building B has also been in progressive failure and the shoring was installed to try to stop collapse. Any shoring only slows the degradation and does not address the significant concerns. The primary framing will continue to deform and will eventually fail. The likelihood of future partial or total building collapse is high.

### *Structural Recommendations*

Historical preservation efforts for Building B would be very challenging but not as difficult as Building A. The roof cannot take additional load and the infilled grease pit wood floors have reduced capacity. The concrete slab on grade could take considerable load from additional shoring but is only in a smaller portion of the building. New foundations could also be more easily constructed in this area for new permanent supports, if desired. Structural stability must be obtained before any attempt at historical preservation is made due to the low roof capacity. Similar to Building A, a possible method could be to stick-build new trusses or a rafter-collar tie system inside the existing attic that would distribute roof load to exterior walls and off the floor. Once the roof system is strengthened, the interior shoring could be removed, and the floor retrofitted. Preservation efforts could then occur after the structural repairs are completed. The lateral force resisting system would need to be supplemented with anchor bolts or other type of restraint for a current code compliant system.

## ***Building C***

### *Structural Capacity*

Building C is a light framed building and sheathed with decking, so it has some nominal resistance but is not an engineered system. There are no tie downs, anchor bolts, or fastening, that would be evident in an approved lateral force resisting system. Light framed wood buildings generally perform well in earthquakes despite lack of proper restraint.

Given the non-regular roof framing and layout of the supporting walls, along with supplemental members and repairs, a complete structural analysis was not feasible given the constraints. Based on comparable light framed construction, estimates of safe load carrying capacity were made for the various structural components. It should be noted that at areas of rot and decay, the wood has no capacity and is in failure. Building C generally has more capacity than the other buildings.

- Roof framing - Snow load capacity of 25lbs per square foot.
- Floor framing - Live load capacity of 25lbs per square foot.
- Foundations - Exterior foundation allowable bearing capacity of 3,000lbs per square foot.
- Walls - Limited by roof and floor capacity.

### *Structural Deficiencies*

- Exterior foundation is uninsulated and does not extend below frost line, although no frost heaving was observed.
- Floor framing is deficient.
- Areas of floor framing are decayed.
- Roof framing is deficient.

- Roof rafters are not restrained from wind uplift with hurricane ties.
- There is no rational lateral force resisting system.
- Joist are not attached at interior or exterior supports.
- Walls do not appear to be attached at foundations.
- Wood cribbing is not a proper foundation.

### *Structural Stability*

Like the other buildings, Building C has been retrofitted in the past, as evident by the collar ties that appear to be newer lumber than the original roof rafters. Unlike the other buildings, there were no additional shoring posts. Building C has some floor issues, but Building C appears in much better condition than the other buildings. The likelihood of future partial or total building collapse is low.

### *Structural Recommendations*

Historical preservation efforts for Building C would be easier than the other buildings. That does not mean that no retrofits are required. The roof and floors are still deficient in capacity and would need to be strengthened to bring up to current code capacity. Work could be done more safely in Building C without immediate shoring. The framing is similar to the other buildings so the same type of retrofit is the most feasible. Roof framing could be strengthened by stick-built new trusses or a rafter-collar tie system inside the existing attic that take the load off interior supports and distribute to the exterior walls. The floor could then be strengthened by removal of the wood cribbing and replacement by concrete piers and the addition of more floor joist. Preservation efforts could then be made after structural repairs. The lateral force resisting system would need to be supplemented with anchor bolts or other type of restraint.

## **Photographic and Drawing Documentation of Present Appearance**

### **Photographs**

The Government Hill Wireless Station buildings were photographed over two separate site visits. The first site visit, on July 14, 2023, documented the exteriors of all three buildings. The interiors of Building A and C were also photographed at that time as safety restrictions allowed. The second site visit, undertaken on August 16, 2023, documented the interior of Building C, which had not been accessible at the time of the first site visit. All photographs were taken were taken digitally using a Samsung Galaxy Note20 with general photographic settings.



*Figure 1. Building A, view to the northeast (©TNSDS 2023).*



*Figure 2. Building A, view to the northwest (©TNSDS 2023).*



*Figure 3. Building A, view to the southwest (©TNSDS 2023).*



*Figure 4. Building B, view to the west-northwest (©TNSDS 2023).*



*Figure 5. Building B, view to the south-southwest. The photograph also shows the overgrowth of vegetation against the northernmost corner of the building (©TNSDS 2023).*



*Figure 6. Interior junction of the main long axis of Building B with the addition extending to the southwest (©TNSDS 2023).*



*Figure 7. Building B, showing the addition that extends to the southwest (©TNSDS 2023).*



*Figure 8. Building B, view to the north (©TNSDS 2023).*



*Figure 9. Southeast façade of Building C, view to the northwest (©TNSDS 2023).*



*Figure 10. Building C, view to the southeast. The photograph shows the dense overgrowth of vegetation that surrounds and obscures the building (©TNSDS 2023).*



*Figure 11. Detail photograph of the most visible walkway on the site, running past the north façade of Building A towards Building B (©TNSDS 2023).*



*Figure 12. Northwest façade of the long axis of Building B. The photograph shows the remains of the paved driveway and curbs that once made up a driveway into the vehicle bay of Building B (©TNSDS 2023).*



*Figure 13. Overview of the Wireless Station, showing the vegetation that has grown up at the site (©TNSDS 2023).*



*Figure 14. Detail photograph of one of the pyramidal concrete piers below the central portion of Building A (©TNSDS 2023).*



*Figure 15. Interior of the full basement below the southern addition on Building A (©TNSDS 2023).*



*Figure 16. Detail photograph of the southeast corner of Building B. The photograph shows the concrete foundation, lap siding, and skirtboard and demonstrates the spalling happening to the foundation (©TNSDS 2023).*



Figure 17. Detail photograph showing the current siding overlaying older siding layers on Building A (©TNSDS 2023).



*Figure 18. The wrinkling, crazing, and peeling in the paint on the west façade of Building A (©TNSDS 2023).*



*Figure 19. The southwest façade of the addition to Building B, showing the cracking, crazing, and peeling of the paint on the siding (©TNSDS 2023).*



*Figure 20. Detail photograph of Building C. The photo shows how the birch tree that has grown against the southeast façade of the building has begun to displace the roofing materials (©TNSDS 2023).*



*Figure 21. Detail photograph of an opening the siding of Building C, exposing the interior wood planks (©TNSDS 2023).*



*Figure 22. Detail photograph of the utilities installed on the southwest façade of Building C. The photograph shows the deterioration of the paint along the bottom boards of the building. It also demonstrates the crazing and cracking of the older paint as well as sections where the older paint has been removed and reapplied such that no cracking or crazing is present (©TNSDS 2023).*



*Figure 23. Detail photograph of one pair of one-over-one sash windows in the west façade of Building A (©TNSDS 2023).*



Figure 24. Detail photograph of the doorway in the west façade of Building A (©TNSDS 2023).



*Figure 25. Detail photograph of the six-over-one sash windows in the east façade of Building A (©TNSDS 2023).*



*Figure 26. Detail photograph of the northernmost window in the eastern façade of Building A.*



*Figure 27. The southernmost window on the west façade of Building A. The photograph shows the broken glazing as well as the misalignment of the window framing due to the building's uneven settlement over time (©TNSDS 2023).*



*Figure 28. Entrance to Building A from the south façade (©TNSDS 2023).*



*Figure 29. North façade of Building A (©TNSDS 2023).*



*Figure 30. Southern most window in the east façade of Building A (©TNSDS 2023).*



*Figure 31. Detail photograph of the window in the stairwell of Building A (©TNSDS 2023).*



Figure 32. Detail photograph of the stairwell addition on the east façade of Building A. The awning over plywood covers the entrance that leads to the stop of the stairs from the exterior (©TNSDS 2023).



*Figure 33. Arctic entry in the east façade of Building A (©TNSDS 2023).*



Figure 34. Detail photograph of one of the windows in the northeast façade of Building B (©TNSDS 2023).



*Figure 35. Infilled window in the southeast façade of the addition on Building B (©TNSDS 2023).*



*Figure 36. Detail photograph of the door in the southwest facade of the addition of Building B. The photograph shows the significant deterioration of the door material (©TNSDS 2023).*



*Figure 37. Boarded over window in the southeast façade of Building C (©TNSDS 2023).*



*Figure 38. Three-over-one casement window in the northeast façade of Building C (©TNSDS 2023).*



*Figure 39. One of the three-over-three wood framed windows on Building C (©TNSDS 2023).*



Figure 40. The entrance to Building C from the southwest façade (©TNSDS 2023).



*Figure 41. Second story egress on the southeast façade of Building C (©TNSDS 2023).*



Figure 42. Interior view of the doorway in the southwest façade of Building C. The photograph shows the metal bar installed on the door to prevent it from being opened fully (©TNSDS 2023).



*Figure 43. Detail photograph showing the deteriorated, wood framed porch or stoop located in front of the entrance in the northwest façade of the long axis of Building B (©TNSDS 2023).*



*Figure 44. Detail photograph of the framing remains located at the entrance in the southeast façade of Building C (©TNSDS 2023).*



*Figure 45. The cupola on the center of the original portion of Building A (©TNSDS 2023).*



Figure 46. Detail photograph of the chimney on the east side of Building A (©TNSDS 2023).



*Figure 47. Detail photograph of the collapsed chimney on Building B (©TNSDS 2023).*



*Figure 48. Detail photograph of the chimney on the southwest side of Building C (©TNSDS 2023).*





Figure 49. Detail photograph of the junction of the two sections of Building B. The photograph shows the roofing material, surrounding vegetation, and the vegetative debris growing on the roof valley (©TNSDS 2023).



*Figure 50. Photograph of the northeast façade of Building C, showing the onion corrugated polycarbonate or PVC roofing material (©TNSDS 2023).*



*Figure 51. Interior of the northernmost rooms in Building A. The photograph shows the holes and cracks in the flooring and wall finishes (©TNSDS 2023).*



Figure 52. Photograph of the interior of the southern rooms in Building A (©TNSDS 2023).



*Figure 53. Bare concrete foundation serves as the floor in the northernmost section of Building B (©TNSDS 2023).*



Figure 54. Photograph of one of the collapsed floors in Building A (©TNSDS 2023).



*Figure 55. View of the interior of Building C, showing the flooring, wall finishes, and deteriorating ceiling (©TNSDS).*



*Figure 56. Detail photo of the stairs that lead from the interior of Building A to the basement in the north addition. The photograph shows the slope of the crack paralleling the stair slope as well as spalling, vegetative growth, and staining from water infiltration (©TNSDS 2023).*

## Architectural Drawings

Measured drawings were created for all three Government Hill Wireless Station buildings. Measurements and notes were taken by TNSDS Cultural Resources Manager Joan Bayles Burgett, MA, and TNSDS Project Architectural Historian Casey Woster, MA, and overlaid digitally onto photographs while in the field. The measurements, photos, and notes were then transcribed into measured drawings completed in AutoCAD by TNSDS in an office setting. The drawings are included in Appendix C: Measured Drawings.

The drawings have been plotted to architectural scales as appropriate to illustrate the details of the buildings without distorting the measurements. Included are all the facades for each building, sketch floor plans based on what was safely observable, and drawings that illustrate changes made to the buildings over time. Due to life and safety concerns related to the deteriorated state of each building, interior measurements were not possible. Building C does not have any additions to it and thus, no drawings were created to demonstrate changes to the building over time.

**PLACEHOLDER – Drawings should be inserted PDFs into the final PDF document in order to retain integrity of the architectural scale.**

## Recommendations

The three buildings at the Government Hill Wireless Station demonstrate significant structural failures as noted in the previous sections and in the full structural engineering report. Before any adaptive reuse can commence on the buildings, significant work will need to be undertaken to address structural failures in the foundations, framing of all walls and floors, and the surrounding site. Vegetation removal should be one of the first actions taken, as removing the overgrowth that engulfs the site will allow for more detailed inspection and evaluation of the buildings at their base.

The recommendations made in this report are based on treatment suggestions and guidelines put forth by *The Secretary of the Interior's Standards for the Treatment of Historic Buildings*. These guidelines cover preservation work at all levels of deterioration, but their use should be applied through the lens of the proposed future use of the buildings. The guidelines, along with other bulletins and briefs produced by the National Park Service, have suggestions for the adaptive reuse of buildings, including detailed information on the installation and upgrade of life and safety systems as well as adding ADA-compliant features. Once a future use for the buildings is selected, more detailed recommendations can be created.

## Evaluation of Appropriate Uses for the Building

The appropriate use for a historic building is not governed by any guideline, law, or rule. The best use for a historic building, however, is one that is similar to the original historic use of a building. In the case of an elementary school, an appropriate reuse would be as an adult education center, such as the former Chena Elementary School on Fort Wainwright, Alaska. Reuse of the buildings at the Government Hill Wireless Station in a way that is similar to their original purpose, however, is not possible at this juncture, due to the increases in radio and wireless technology. Building B, which was originally used for vehicular maintenance, may be returned to that use with relative ease, but may not be appropriate for the

neighborhood that has grown up around it. The most appropriate reuse option is one that protects the historic integrity of the buildings while still serving a need within the community.

### **Estimated Restoration/Rehabilitation Costs to Address Deficiencies**

Cost estimations for the proposed work on the Wireless Station buildings are generalized and estimates only. The final budget for any work at the site will be dependent on the use for the buildings that is ultimately selected. The following cost estimates are what is known as preliminary or conceptual estimates and should be used only as a starting point for the later definitive or engineer's estimates.

It is important to note, however, that demolition is not always the cheapest option. The potential presence of such hazardous materials as lead paint and asbestos throughout all three buildings will necessitate that any waste materials that result from the demolition of the site will likely need to be transported by barge to sites in Oregon specifically established for the disposal of such materials. The cost to ship the materials out of the state can be astronomical, depending on the amount of materials transported.

### **Conceptual Drawings of Restored/Rehabilitated Building**

Conceptual drawings created for proposed reuse of historic buildings can help both project personnel and the general public understand and visualize the work that needs to be accomplished in order to put the buildings to reuse. They can also help demonstrate where the funding for such projects would be spent.

### **Evaluation of Potential Impacts on Building Resulting from Proposed Uses**

Suggested reuse options for historic buildings, as detailed above, should be evaluated based on their potential impacts to the historic integrity of the Government Hill Wireless Station. As many of the original exterior character-defining features should be retained, especially the cupola on Building A. The fact that the interiors are not contributing features, however, opens many opportunities for adaptive reuse. The proposed uses are evaluated below for their potential impact to the integrity of the buildings.

### **Recommendations for Further Study**

Much is dependent on the proposed reuses for the Government Hill Wireless Station. Future research should at the very least address what reuses would suit the surrounding neighborhood. This will require direct input from Government Hill residents, who are known for having pride in their neighborhood.

More research should also be undertaken on other government-built wireless stations across the US. Most of the buildings constructed by the government and the military from the early 20<sup>th</sup> century onward was dictated by prefabricated form buildings that could be adapted to any use. It is possible that other wireless stations in the US constructed during the first two decades of the 20<sup>th</sup> century have similar forms and materials and can be used as models for preservation work.

### **Summary of Study Results**

Based on the structural engineering report and the historic structure report presented herein, it is recommended that the buildings be subjected to an intensive rehabilitation treatment. The recommended treatments, as outlined in the historic structure report, are based upon guidance published by the National Park Service in *The Secretary of the Interior's Standards for the Treatment of Historic Properties*. The recommendations were compiled by TNSDS and, like the cost estimates included above, should be used as a starting point only. Unexpected discoveries as to the types and conditions of building materials and systems are always a factor when undertaking projects on historic structures.

Rehabilitation of a historic structure is based on the idea of retaining as much of the historic material present in a given building as possible, while repairing those materials and systems that are deteriorating or at risk of failure. Some of the systems present in the Wireless Station buildings will need more intensive replacement work, which falls under the restoration treatment heading. For those systems, like the foundation on the center portion of Building A, replacing deteriorated and failing structural members is recommended, but as directed by the restoration treatment guidelines, should be replaced in such a way as to match or closely resemble the original elements being replaced.

Reconstruction is not recommended for the Wireless Station buildings at this time, nor is preservation. The buildings are deteriorating at such a rate that preserve in place treatment approaches may not ensure the continued survival of the buildings. Preservation has been used to help protect the buildings in the recent past, including the installation of the polycarbonate or PVC roofing and the plexiglass window coverings on Buildings B and C. Such measures will not enable the buildings to be put to any new uses, however, and will eventually lead to their collapse. Reconstruction of the buildings is a possible treatment option, if it is determined that demolition of the historic structures is necessary or preferred. Reconstruction, however, is often a costly endeavor and can create confusion in visitors unaware of the reconstruction history of the site. Reconstruction as a treatment approach should only be used as a last resort.

## Appendix A: Identification of Archival Sources

Alaska Heritage Resources Survey. "ANC-00306: Government Hill Wireless Station." On file at Alaska Office of History and Archaeology, Anchorage, Alaska. 2023.

Grimmer, Anne E. *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, & Reconstructing Historic Buildings*. Washington, DC: US Department of the Interior, National Park Service Technical Preservation Services, 2017.

Scher, Connor William. *Unsung: An Architectural Allegory on the Government Hill Wireless Station*. Portland, OR: Portland State University, 2018.

Wilson, Sarah, and Summer Rickman. *National Register of Historic Places Registration (Form 10-900): The Wireless Station*. Washington, DC: National Park Service, 2015.

## Appendix B: Copies of Pertinent Correspondence

## Appendix C: Measured Drawings

## Appendix D: Summary of Agreements

- Easements of use agreements
- Deeds
- Zoning
  - The current zoning of the site is R-2D: Two-family Residential District. This zoning district allows single- and two-family residential primary uses with accessory dwelling units or ADUs as accessory residential structures. Community uses such as schools and child care are also permitted in this zoning designation.

## Appendix E: Structural Engineering Report

**3-4. HISTORIC PRESERVATION PLAN****Planning Activity Description:**

This project will incorporate the All-Hazards Mitigation Plan goals, policies, and maps to create mitigation actions for historic and cultural properties throughout the Municipality of Anchorage. There are several historic and cultural properties listed on the National Register of Historic Places within our community located within seismic zones 4 and 5, avalanche areas, and flood zones. Some of these properties provide LMI and senior housing to community members. A draft plan exists and needs to be finalized with new data.

**Planning Activity Goals:**

- Identify and characterize types of historic and cultural properties located within hazardous areas.
- Inform agencies and decision makers, to support natural hazard mitigation decisions.
- Compile mitigation measure for historic and cultural properties in one adopted document.
- Public meetings or workshops will be held to update the communities on this effort and to garner community council input and support.
- Public Hearing Draft Plan to the Planning & Zoning Commission for the commission's recommendation of approval to the Anchorage Assembly. The Anchorage Assembly will hold a public hearing and adopt the plan updates.

**Planning Activity Deliverables:**

- Public Outreach Program (due March 2024).
- White Paper – Natural hazards and historic properties (due April 2024).
- Mapping updates (due August 2024).
- Internal Review draft (due September 2024).
- Public Hearing Draft for PZC and Assembly (due October 2024).
- Edits and Final Plan (due March 2025).

**Planning Activity Timeline:** February 2024-March 2025.

**Partners:** Municipality of Anchorage Property Appraisal Department, Geographic Data and Information Center (GDIC), Heritage Land Bank; Anchorage Historic Preservation Commission, State Historic Preservation Office, Native Village of Eklutna, Cook Inlet Regional Incorporation, and Native Village of Tyonek.

**Planning Activity Budget:** \$97,000.

**Budget Narrative:**

Professional services to include public outreach (\$25,000), plan revisions (\$42,000), and internal review draft, public hearing draft, and final plan edits (\$20,000), adopted plan production (\$3,000), Travel and training (\$7,000).

**List of project Staff:** Tom Davis, Senior Planner; Ryan Yelle, Planning Manager; Anchorage Historic Preservation Commissioners Bryce Klug, AIA, and Connor Scher, AIA

*This page intentionally left blank.*



**Municipality of Anchorage**  
**Planning Department**  
**Memorandum**



---

**Date:** November 28, 2023  
**To:** Historic Preservation Commission  
**From:** Tom Davis, AICP, Historic Preservation Officer  
**Subject:** November Meeting Agenda Item V.A.: Discussion of HPC Priorities in 2024

This memorandum is to assist the Commission prioritizing its activities in 2024. This conversation would continue in December. The following, for discussion, is a starter draft list of potential activities in 2024. They are arranged in the categories of the State's *Annual Certified Local Government Report*. Minimum requirements for Certified Local Governments are underlined.

**A. LOCAL PRESERVATION ORDINANCES**

1. Amend the LLO to clarify nominations criteria and approval process, per HPC Resolution 2023-01 regarding the ANHS nomination.

**B. LOCAL HISTORIC PRESERVATION COMMISSION**

1. Establish HPC bylaws/rules of procedure for conducting meetings, etc.
2. Participate in HPC training opportunities, including the NAPC Forum 2024.

**C. SURVEY AND INVENTORY OF HISTORIC PROPERTIES**

1. Establish an MOA inventory of resources compatible with the AHRs inventory.

**D. PRESERVATION PLANNING ACTIVITIES**

1. Complete the local Historic Preservation Plan (HPP).

**E. NATIONAL REGISTER PROGRAM PARTICIPATION**

1. Establish procedures, and amend the MOA historic preservation ordinance if needed, to be ready to review nominations to the National Register.
2. Review any proposed nominations to the National Register.

**F. PROTECTION OF HISTORIC PROPERTIES**

1. Complete the Government Hill Wireless Station assessment report.
2. Participate in Section 106 consultations as requested.
3. Complete the approval of the nomination of ANHS to the Local Landmark Register.

**G. PUBLIC PRESERVATION EDUCATION PROJECTS**

1. Submit an annual report of HPC activities and accomplishments to the Assembly.
2. Give out local historic preservation awards for Historic Preservation Month.

## **H. HISTORIC PRESERVATION GRANT ACTIVITIES**

1. Propose a Wireless Station rehabilitation plan.
2. Propose to supplement the HPP project funding for specific planning tasks.
3. Propose to hire GIS contractors to carry out inventory activity C.1. above.

## **I. OTHER PRESERVATION ACTIVITIES**

**Davis, Tom G.**

---

**From:** Lewis, Maria A (DNR) <maria.lewis@alaska.gov>  
**Sent:** Friday, November 17, 2023 11:22 AM  
**To:** Lewis, Maria A (DNR)  
**Cc:** Bittner, Judith E (DNR); Ringsmuth, Katie J (DNR); Tarr, Kathleen (DNR); Ayers, Jean Ayers (DNR sponsored)  
**Subject:** NEW CLG Grant Available - Applications Due January 22, 2024  
**Attachments:** CLG Grant Application Announcement Nov 2023.pdf; CLG Grant Application 2023.pdf; CLG Budget Form & Example.xlsx

**[EXTERNAL EMAIL]**

Good Morning CLGs,

We are excited to announce another round of Certified Local Government (CLG) grants. The Office of History & Archaeology is accepting grant applications from CLGs for 60-40 HPF matching grant projects. Attached are the following: CLG Grant Announcement, CLG Grant Application, and Budget Form. Applications are due January 22, 2024.

Please let me know if you have any questions about the application or a particular project.

Have a Happy Thanksgiving!

Best,  
Maria

**Maria Lewis**  
CLG Program Coordinator  
Alaska State Historic Preservation Office  
Office of History & Archaeology

550 West 7<sup>th</sup> Avenue, Suite 1310  
Anchorage, AK 99501-3561  
Direct: 907-269-8717  
[maria.lewis@alaska.gov](mailto:maria.lewis@alaska.gov)  
<http://dnr.alaska.gov/parks/oha/>

*This page intentionally left blank.*



THE STATE  
of **ALASKA**  
GOVERNOR MIKE DUNLEAVY

**Department of Natural Resources**

DIVISION OF PARKS AND OUTDOOR RECREATION  
Office of History & Archaeology  
550 West 7<sup>th</sup> Avenue, Suite 1310  
Anchorage, Alaska 99501-3561  
Main: 907.269.8700

November 16, 2023

**RE: Certified Local Government** Grant Applications

To Whom it May Concern:

The Office of History & Archaeology (OHA) is accepting grant applications from **Certified Local Governments (CLG)** for 60-40 HPF matching grant projects. All projects would need to be completed by August 31, 2025.

The CLG grant program provides up to 60 percent financial assistance with a 40 percent CLG match for the cost of a historic preservation project in one of the following categories:

- Survey
- Inventory
- National Register Nomination
- Historic Preservation Planning
- Public Preservation Education
- Predevelopment
- Development.

OHA estimates potentially \$100,000 will be available to award to eligible projects. The maximum federal share for any one project is \$50,000.

The application deadline is 3:00 p.m. on Monday, January 22, 2024. The application package is available online at <http://dnr.alaska.gov/parks/oha/index.htm>.

If you have any questions about eligible projects or would like to discuss project ideas, please contact Maria Lewis at [maria.lewis@alaska.gov](mailto:maria.lewis@alaska.gov) or by telephone at 907-269-8717.

Sincerely,

A handwritten signature in blue ink that reads "Judith E. Bittner".

Judith E. Bittner  
State Historic Preservation Officer

*This page intentionally left blank.*

# CLG GRANT APPLICATION

Office of History & Archaeology  
Alaska Department of Natural Resources  
550 West 7<sup>th</sup> Avenue, Suite 1310  
Anchorage, Alaska 99501

## FY23 Historic Preservation Fund: Grants for Certified Local Governments

**Deadline: Applications are due by 3:00 pm on Monday, January 22, 2024.**

The Certified Local Government (CLG) identified below is applying for a reimbursable 60-40 Historic Preservation Fund (HPF) matching grant through the State of Alaska, Department of Natural Resources, Office of History and Archaeology.

CLG Name: \_\_\_\_\_

Project Title: \_\_\_\_\_

Federal Tax Identification Number: \_\_\_\_\_

UEI: \_\_\_\_\_ VCUST: \_\_\_\_\_

Type of CLG Grant Project: (Check project type below, as applicable)

- |   |  |
|---|--|
| <input type="checkbox"/> Survey                         | <input type="checkbox"/> Public Preservation Education |
| <input type="checkbox"/> Inventory                      | <input type="checkbox"/> Predevelopment                |
| <input type="checkbox"/> National Register Nomination   | <input type="checkbox"/> Development                   |
| <input type="checkbox"/> Historic Preservation Planning |  |

Budget Summary. Federal Award Request: \$ \_\_\_\_\_

- |                             |          |
|-----------------------------|----------|
| a. Total Project Cost (TPC) | \$ _____ |
| b. Federal Share (60%)      | \$ _____ |
| c. Sponsor Share (40%)      | \$ _____ |

Source of applicant (sponsor) share: (Use figures from "Sources" box on budget form)

- |                               |          |
|-------------------------------|----------|
| a. Cash                       | \$ _____ |
| b. In-kind Goods and Services | \$ _____ |
| c. Donated Goods and Services | \$ _____ |

Name, title and contact information for the following:

Grant Manager: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_

Preservation Commission Chair:

Mailing Address:

Telephone:

E-mail Address:

CLG Contact:

Mailing Address:

Telephone:

E-mail Address:

Signature: Authorized Local Government Official

Date

Name and Title (Print or Type)

Community Name

## Willingness to Comply with Grant Requirements

1. I understand that this is a 60-40 matching grant application through the Historic Preservation Fund (HPF) administered by the State of Alaska Department of Natural Resources, Office of History and Archaeology.
2. If awarded an HPF grant, I understand that it is my responsibility to comply with all pertinent State and Federal regulations, the State-Local Grant Agreement, and requirements outlined in the *Historic Preservation Fund: Certified Local Government Grants Manual*. Federal requirements may include but are not limited to the following: Section 106 and Section 110, National Historic Preservation Act (54 USC 306108); Americans with Disabilities Act; Architectural Barriers Act; National Environmental Policy Act; 2 CFR 200; and Build America, Buy America (also known as the Infrastructure Investment and Jobs Act), P.L. 117-58, Section 70914.
3. Should this project be awarded, I understand that project records are subject to audit after project completion, and that if such an audit questions expenditures for which I have been reimbursed I will return an amount equal to the questioned expenditures.
4. I understand that no grant exists until the State Historic Preservation Officer (SHPO) signs the State-Local Grant Agreement, even if the Alaska Historical Commission recommends funds for my project. Any funds expended before the performance period specified on the fully executed grant agreement or before obtaining the SHPO's signature may not be reimbursed without specific approval.

---

Signature: Authorized Local Government Official

---

Date

---

Name and Title (Print or Type)

# CLG GRANT APPLICATION: FY23

**CLG:**

**Project Name:**

**PROJECT INFORMATION** See [Writing a Successful CLG Application](#) for more detail.

- 1. PROJECT DESCRIPTION** – *If needed, use continuation pages provided at the end of this document.*
  - a. Provide a brief introduction to your project including the aim, scope, and significance of the project to your community.

b. List any previous HPF grants this project has received. (*Cite HPF number and grant name*)

c. Briefly describe the relationship of this project to past, present, or future preservation work.

## 2. PRESERVATION OBJECTIVES

How does the project relate to annual CLG grant priorities established for this fiscal year? (*Cite relevant grant priorities and explain how each relates to your project.*) <https://dnr.alaska.gov/parks/oha/clg/akclg.htm>

a.

b. How does the project relate to the goals and objectives of the [State Historic Preservation Plan](#). (*Cite relevant goals and objectives and how your project would further them.*)

- c. Describe how the project meets an identified historic preservation priority of your community. Does the project contribute to the implementation of your local historic preservation plan? If so, how?

**3. PROJECT PERSONNEL-** *The Project Manager (PM) must have proven experience working on historic preservation projects. If the project is a survey, inventory, or National Register nomination, the PM must meet the professional qualification standards in 36 CFR 61. If not identified in this application, the Office of History and Archaeology must review selection of Project Manager prior to finalization of the contract with the individual.*

- a. Note who will act as Project Manager (PM). Attach the PM's résumé showing past experience working on preservation projects. List any previous HPF Projects the PM has worked on. *(If planning to contract with PM after grant is awarded, outline the job qualifications that will be required.)*

- b. Identify the local government personnel who will act as Grants Manager for the project.

- Rev: Nov 2023

4. **WORK PLAN.** *Thoroughly address all items necessary for your project type. See [Writing a Successful CLG Application](#) for more detail. Use continuation sheets if needed.*
- a. Explain how the project will be undertaken.

b. Describe the geographic area encompassed by the proposed project. For survey, inventory, and National Register nomination projects, attach maps of the project area. Include the estimated number of buildings, structures, sites, square miles, etc., to be addressed.

c. Cite any planning studies, condition assessments, design drawings, research reports, publications, or other sources of relevant information you plan to use for this project.

- d. Provide a work schedule showing months, expected activities, and benchmarks to achieve throughout the grant period of performance.

## **5. FINAL PRODUCTS**

- a. Describe publications, workshops, audio-visual materials, reports, websites, brochures, survey materials, nominations, interpretive signs, etc., that will be produced as part of the proposed project. Identify the intended audience and where the public will be able to access these materials. Describe how you will inform your community about the project.

## 6. ADDITIONAL INFORMATION

- a. Attach letters of commitment and support, as appropriate, from teachers, historical societies, museums, Native groups, and others. (*Note attachments below.*)
  
- b. Attach any other relevant information, such as copies of photographs. (*Note attachments below.*)

## 7. BUDGET: Maximum Federal Request of \$50,000

Your budget submittal shall consist of one narrative and two tables. *Use fillable Excel worksheet or submit similar budget tables, and complete the narrative portion below for this Budget section.*

- a. *Budget Summary* table identifying planned cost share of 60% and 40%
- b. *Matching Share* table showing sources of match.
- c. *Budget Narrative* explaining costs in detail and describing how costs were calculated.

**BUDGET NARRATIVE:** Describe activities to be performed under Personal Services, Contractual Services, Supplies/Materials, Travel, and Other cost categories.

- a. Personal Services: describe work each position/person will perform for the proposed project.

b. Contractual Services: List contractor name(s), if known. Describe work each will perform.

c. Supplies/Materials: Describe types of materials and/or supplies required for this project, how they relate to the project, estimated quantities, etc.

d. Travel: Identify who will be traveling, how many trips are anticipated, trip purpose, and destination.

- e. Other: Identify other costs which do not fall into one of the above categories. Explain purpose and relevance to this proposed project.

### CHECKLIST

Applicant, has your entity...

- ☐ maintained current certification under the Certified Local Government program?
- ☐ signed and dated this application?
- ☐ signed the form titled: *Willingness to Comply with Grant Requirements*?
- ☐ provided the information requested on each page of the application package?
- ☐ included a public outreach component?
- ☐ attached maps showing location of project?
- ☐ attached photographs or clear photocopies showing overall character of properties for survey, inventory, National Register nomination, pre-development and development projects?
- ☐ attached letters of support from the community and, if needed, property owners?
- ☐ attached a resolution supporting this proposal (or indicate one has been requested prior to the Alaska Historical Commission meeting to recommend awards)?
- ☐ explained historic preservation commission involvement in the project, and addressed its role in the review process?
- ☐ checked your budget for accuracy?

**Deadline: Applications are due 3:00 pm on Monday, January 22, 2024.**

Only complete, signed, dated applications will be considered.

Submit applications and questions to the CLG Program Coordinator  
at **maria.lewis@alaska.gov** or **dnr.oha@alaska.gov**







## Municipality of Anchorage

### Historic Preservation Commission

#### 2024 Regular Meeting Schedule

January 18, 2024

February 15, 2024

March 21, 2024

April 18, 2024

May 16, 2024

June 20, 2024

July 18, 2024

August 15, 2024

September 19, 2024

October 17, 2024

November 21, 2024

December 19, 2024

---

The Historic Preservation Commission (HPC) usually meets every third Thursday of the month, 5:30 to 7:00 p.m. **Meetings are conducted in person and virtually until further notice.** (Refer to [MOA Public Notice page](#) for current meeting information.)

---

Planning Department  
Long-Range Planning Division  
Planning and Development Center  
4700 Elmore Road  
Anchorage, Alaska 99507

Staff Support: Tom Davis, [tom.davis@anchorageak.gov](mailto:tom.davis@anchorageak.gov), 907-343-7916