

UW Anderson Hall HRA

Project Number 204675

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 Hoshide | Wanzer | Williams
architects

Table of Contents

1. Introduction	1
Background	
Research Methods	
Project Goals	
2. Historic Preservation Framework	2-4
The University Stewardship and Historic Preservation Policies	
Guidelines for Evaluating Historic Resources	
3. Historical Context	5-6
Development of the University of Washington Campus	
Historic Overview of Anderson Hall	
4. Architectural Description	7-11
Campus Setting and Site Features	
Style of Architecture	
Roof and Roofing Materials	
Current Conditions	
5. Evaluation and Recommendations	12-14
Identification of Conditions Requiring Recommendations	
Impact of Proposed Devices for Roof Access Safety	
Mitigation Recommendations	
6. Historic Drawings	15-23
7. Bibliography and Sources	24

1. Introduction



Anderson Hall, 1925

Background

The University of Washington is undertaking a series of projects to ensure a safe working environment for ongoing maintenance and repairs, including the addition of safe access and fall anchors for roof work and window washing. Anderson Hall is currently lacking in these safety features.

Anderson Hall was constructed in 1925 as the College of Forestry. This Historic Resource Addendum provides a description of the history and architectural character of Anderson Hall, as well as its historical significance as judged by the preservation policies and criteria outlined in the 2003 Seattle Campus Master Plan.

Research Methods

The research used in the preparation of this HRA for Roberts Hall included documentation of original plans and modifications from the University of Washington and its Facilities Records, research of historic photographs in the UW Libraries Special Collections, and on-site investigations and documentation of current conditions.

Project Goals

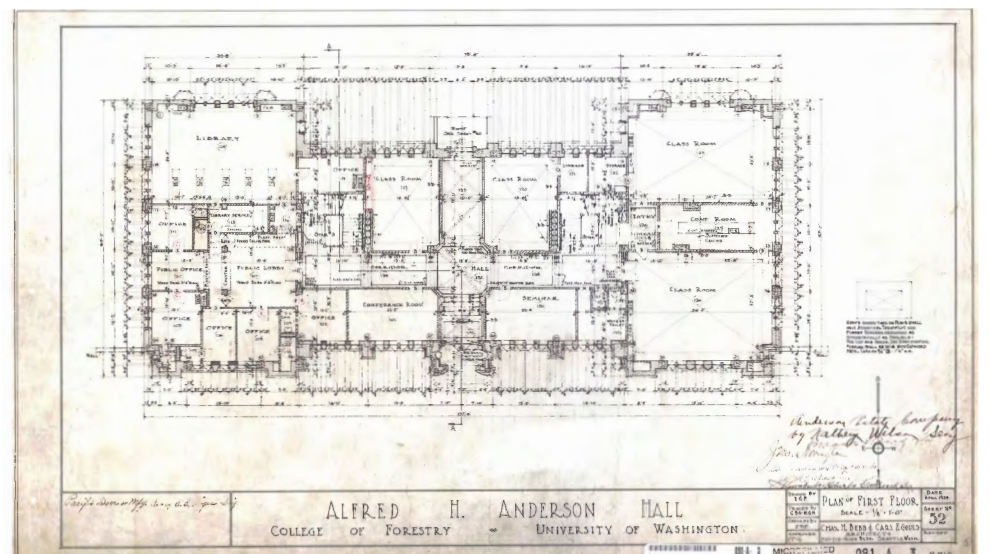
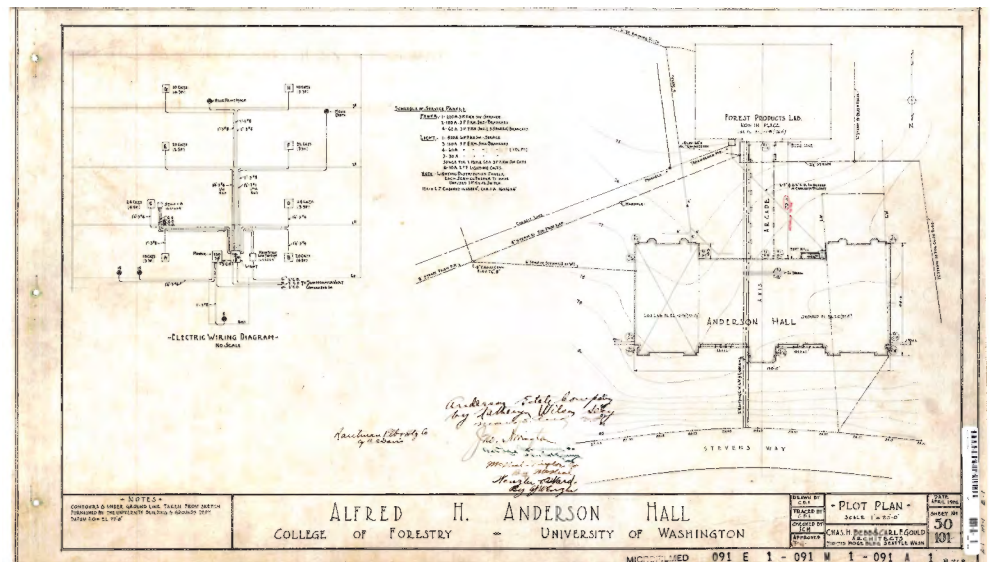
As part of the University's initiative to provide a safe working environment for all maintenance and repair work, safe access and fall anchors are needed on Anderson Hall in order to maintain the roof and gutters, carry out future roof repairs, and wash the windows. The goal of this HRA is to analyze the proposed modifications and determine if they can be accomplished without negatively impacting the historic character of the building and to suggest mitigation measures if needed.

2. Historic Preservation Framework

The University Stewardship and Historic Preservation Policies

The University of Washington Campus Master Plan approved in 2003 sets forth the project review process to ensure historic context. Excerpted language from the Campus Master Plan:

- "To further ensure that historic resources are considered, the University will prepare an Historic Resources Addendum (HRA) for any project that makes exterior alterations to a building of over 50 years old. The HRA will be an attachment to all project documentation and be considered by the appropriate decision maker.
- The information and analysis provided in the HRA provides a framework and context to ensure that important elements of the campus, its historic character and value, environmental considerations and landscape context are preserved, enhanced, and valued. The HRA further ensures that improvements, changes and modifications to the physical environment may be clearly analyzed and documented."



Guidelines for Evaluating Historic Resources

General guidelines are outlined in the Campus Master Plan for use in evaluating historic structures and proposed changes. The following is a summary of each guideline that applies to Anderson Hall. A more detailed description is provided in the Historic Context and the Architectural Description sections of this HRA.



- **Age of project building, adjacent buildings and open spaces.**

The first building on the site was the Forest Research Laboratory, constructed in 1921. It was followed in 1925 by Anderson Hall, built in front of the Forest Research Laboratory and fronting on Stevens Way. The plans for Anderson Hall show a connecting arcade between the two buildings, but it is unclear if the arcade was constructed.

As the College grew, two additional buildings were added to support the research and teaching needs of the forestry program. Winkenwerder Hall was constructed in 1963, and the original Forest Research Laboratory was demolished in 1968 to make way for Bloedel Hall. Anderson Hall faces Stevens Way to the north and serves as the primary entrance and face of the College. The later buildings form a shared courtyard south of Anderson Hall. The complex became the School of Environmental and Forest Sciences in 2012.

- **Information regarding the architect of the original building.**

Carl F. Gould, a partner in the prominent Seattle architectural firm of Bebb and Gould, had an immense impact on the University of Washington. He founded the University degree program in architecture, developed the "Revised General Plan of the University of Washington" in 1915 which reinforced the quadrangle concept and unified upper and lower campus, and designed key academic buildings including Suzallo Library. In the 1920's, Gould began designing many of the buildings in the science and engineering complexes and lower campus, including the Forest Research Laboratory and Anderson Hall.

- **Description of interior and exterior, and site surroundings of the building or campus feature, including the traditional views of the site, if any.**

Anderson Hall is an "H" shape composition in plan with the primary axis parallel to Stevens Way and perpendicular flanking wings at each end which housed the large classrooms and reading room. The building is four stories, including a ground floor accessed from the south with a large, steeply sloped slate shingled roof and cross gable roofs at each end wing. The elevations are divided into bays defined by vertical buttresses in the Collegiate Gothic style. Large, ornate leaded windows emphasize the importance of the large spaces in the gable ends. The brick walls, door and window treatments, and roof elements are all similar to other building by Carl F. Gould on campus.

The major interior spaces are the Auditorium and the Club Room, located in the two wings of the building. These both feature double-height spaces with timber vaulting and large twenty-foot high windows facing north.

Anderson Hall and Roberts Hall were symmetrically located on each side of Rainier Vista fronting Stevens Way with prominent front facades directly on axis with Frosh Pond and Drumheller Fountain. However, the view toward Anderson Hall is obscured due to the dense and mature trees flanking Rainier Vista. Garfield Lane NE is a well-used pedestrian route between the central campus and the footbridge spanning NE Pacific Street to the Magnuson Health Sciences Center. From this route, the west side of Anderson Hall is prominent. The shared courtyard between Anderson Hall, Winkenwerder Hall and Bloedel Hall offers a close-up view of the south elevation of Anderson Hall. The building is not visible from the Burke-Gilman Trail or NE Pacific Street to the south and southwest.

- **Information regarding the distinctive visible characteristics of an architectural style, or period, or of a method of construction, if any.** Collegiate Gothic was the architectural form favored in the “Revised General Plan of the University of Washington” due to associations of the Gothic style to English universities of Oxford and Cambridge. Characteristics of this style include arched window and door openings, buttresses, and masonry exterior walls to convey a sense of permanence. Anderson Hall exhibits all of these elements.
- **Potential mitigation measures, such as facade treatment, street treatment and design treatment sympathetic to the historic significance of the development site or adjacent campus feature, if any.**
Mitigation measures that reduce the impact of the proposed safe access and fall anchors are discussed in the Evaluation and Recommendations section.

3. Historical Context

Development of the University of Washington Campus

The City of Seattle was one of several settlements in the mid- to late-19th century vying for primacy in the newly formed Washington Territory. In 1854, territorial governor Isaac Stevens recommended the establishment of a university in Washington.

In 1861, scouting began for an appropriate 10 acres (4 ha) site in Seattle to serve as the campus for a new university. Denny, along with fellow pioneers Edward Lander and Charlie Terry, donated a site on “Denny’s Knoll” in downtown Seattle. This tract was bounded by 4th and 6th Avenues on the west and east and Union and Seneca Streets on the north and south.

UW officially opened on November 4, 1861, as the Territorial University of Washington. The following year, the legislature passed articles formally incorporating the University and establishing a Board of Regents. By the time Washington entered the Union in 1889, both Seattle and the University had grown substantially. Enrollment had increased from an initial 30 students to nearly 300, and the relative isolation of the campus had given way to encroaching development.

A special legislative committee headed by UW graduate Edmond Meany was created for the purpose of finding a new campus better able to serve the growing student population. The committee selected a site on Union Bay northeast of downtown, and the legislature appropriated funds for its purchase and subsequent construction. The University relocated from downtown to the new campus in 1895, moving into the newly built Denny Hall.

Organizers of the 1909 Alaska-Yukon-Pacific Exposition eyed the still largely undeveloped campus as a prime setting for their world’s fair. They came to an agreement with the Board of Regents that allowed them to use the campus grounds for the exposition. In exchange, the University would be able to take advantage of the development of the campus for the fair after its conclusion. This included a detailed site plan and several buildings. The plan for the A-Y-P Exposition prepared by John Charles Olmsted was later incorporated into the overall campus master plan and permanently affected the layout of the campus.



The original University of Washington building on Denny’s Knoll, c. 1870



Alaska-Yukon-Pacific Exposition on the UW campus toward Mount Rainier in 1909



1925



Forest Research Laboratory

Historical Overview of Anderson Hall

The southeastern portion of the Central Campus was developed as a complex of specialized engineering facilities, including the prominent Anderson Hall. The following description by Norman Johnston summarizes the building:

“Opposite Island Lane is Anderson Hall, one of the more elaborate examples of Collegiate Gothic on lower campus. Perhaps Agnes H. Anderson, who funded the building as a memorial to her late husband, pioneer lumberman Alfred Anderson, was eager that it be architecturally celebratory for that purpose.”¹

Alfred H. Anderson was a prominent lumberman in Mason County, Washington and represented that county in the state legislature in 1891. He was instrumental, along with his colleague Edmond S. Meany, in advocating for the full 350 acres for the University of Washington campus. After Anderson’s death, his wife Agnes, presented a gift of \$250,000 to the Board of Regents and wrote *“It gives me great pleasure to advance his ideas by doing what I am to assist in the up-building of the lumber industry of Washington through the medium of his favorite state institution.”²*

Anderson hall was constructed in 1925 in front of the existing Forest Research Laboratory building. As the College of Forestry grew, new facilities were needed and in 1963, Winkenwerder Hall was constructed just southeast of the original building. Finally, in 1971 Bloedel Hall was added to the south to provide research and teaching space. Unfortunately, the construction of Bloedel Hall necessitated the demolition of the original Forest Research Laboratory. Throughout this history of expansion, the intent has always been to keep the visual prominence of Anderson Hall as the identity of the College of Forestry.

Anderson Hall underwent a renovation in 1968 which included minor exterior repairs, interior modifications and converting the existing attic space into a large mechanical room. This project was done by Grant Copeland Chervenak & Associates, Architects.

1 Norman J. Johnston, *The Fountain & the Mountain, The University of Washington Campus 1895-1995* (Documentary Book Publishers Corporation and The University of Washington, 1995), 140.

2 “Gets Quarter Million”, *Seattle Times*, December 1, 1923.

4. Architectural Description

Campus Setting and Site Features

The Bebb & Gould Revised General Plan for the University of Washington in 1915 depicted several subordinate quadrangles to accommodate future growth. One of these was an engineering quadrangle in the southeast portion of the central campus, anchored by Anderson Hall and the Mines Building (now Roberts Hall). These two major structures were symmetrically located on each side of Rainier Vista fronting Stevens Way, with their centerline axes directly aligned with Frosh Pond and Drumheller Fountain. Unfortunately, these relationships are currently obscured by recent buildings and now mature major trees.

Anderson Hall (along with the Forest Research Laboratory) stood as an isolated structure in an open field until 1930 when the surrounding landscape work began. Butler Sturtevant became the University Landscape Architect and directed nearly 900 Works Progress Administration (WPA) workers on the campus, primarily planting around Anderson Hall, a Medicinal Herb Garden, reconstruction of Rainier Vista, renovation of Drumheller Fountain, and planting cedars along Stevens Way.³

The front elevation of Anderson Hall is prominent from Stevens Way, especially when approaching from the west near the bus stop and from the east at the Rainier Vista crossing. Besides Stevens Way, the main pedestrian route is along Garfield Lane NE and Garfield Place NE which connects the central campus to the Magnuson Health Sciences Center. This route forms the west edge of the School of Environmental and Forestry Sciences, and there is a partial view of the west side of Anderson Hall through the trees. Island Lane NE is a secondary pedestrian pathway that threads through the dense trees from Drumheller Fountain to Stevens Way directly across from the Anderson Hall entry porch. Again, partial views of Anderson Hall can be seen through the trees.

Anderson Hall is not visible from the central campus or Drumheller Fountain due to large, mature trees and landscaping flanking Rainier Vista. The building is also blocked from view from the Burke-Gilman Trail and Montlake Boulevard NE by Bloedel Hall.



1948 Aerial

3 Duane Dietz, "Butler Sturtevant", in Jeffrey Karl Oschner, ed., *Shaping Seattle Architecture: A Historical Guide to the Architects* (Seattle: UW Press in association with AIA Seattle, 1994), 234-239.

Style of Architecture

Anderson Hall was designed by Bebb & Gould in the Collegiate Gothic style which was the architectural form extensively used on the upper campus quadrangle. The Collegiate Gothic Revival style is an early 20th century adaptation of the 19th century Gothic Revival style that served a specific function, educational buildings. The Gothic Revival style, which flourished from the period of 1830 through 1890 in the United States, was often chosen for churches and institutional buildings due to its impressive, mediievally-inspired form. In the early 20th century, the Gothic Revival style reappeared as an appropriate choice for both university and secondary school buildings. Prominent universities such as Boston College, Yale, Duke and Princeton employed the Collegiate Gothic Revival style in this period to create an atmosphere of respected antiquity.⁴



Historic Exterior



Gable End Windows



Auditorium



Forest Club Room

At the University of Washington, Anderson Hall was Bebb & Gould's seventh building on campus. Each of these buildings were designed in the Collegiate Gothic style with the strong support of Henry Suzzalo, the University President. The typical characteristics of this style were all included in the exterior treatment of Anderson Hall, including Gothic arched window and door openings, buttresses, masonry walls and tracery windows. Gould also believed the style, with its expanses of windows, maximized natural light in the generally overcast Seattle climate.⁵

Exterior Features

The elevations of Anderson hall are symmetrical around the vertical centerline with tall, pointed gables and pointed arch windows on either end. The windows use stone tracery with buttressed pilasters that create a series of strong and richly decorated vertical elements. Anderson Hall is constructed as a load-bearing concrete frame with masonry infill and brick and cast stone facing at the exterior walls. The roof material is slate shingles. Operable windows are steel-sash; fixed windows within the stone tracery have leaded lights.⁶

Interior Features

The most important interior spaces in Anderson Hall are on the second floor in each end wing. The Classroom (now named Auditorium, Room 223) is located at the west end and features a tiered floor with fixed seating and a high-peaked ceiling with timber trusses at a spacing of 10'-11". Acoustical ceiling panels were added between every other pair of rafters in the 1978 Renovation-Room 223 plans.

The Reading Room (now named Forest Club Room, Room 207) is located at the east end and features a fireplace with a balcony above, and a double-height wood timber ceiling. Both rooms retain their historic character with large, leaded windows and elaborate woodwork throughout. The light fixtures are not original (they do not match historic photographs), but they are appropriate to the historic character of the rooms. Unfortunately, the Reading Room has had new fluorescent light fixtures added to the underside of the main beams.

4 Pennsylvania Historical and Museum Commission, *Collegiate Gothic Style 1890-1940*.

5 T. William Booth and William H. Wilson, *Carl F. Gould, A Life in Architecture and the Arts* (Seattle: University of Washington Press, 1995), 86.7

6 Peter Meijer Architect PC, *Cultural Resource Inventory for Anderson Hall*, (2011), 2.



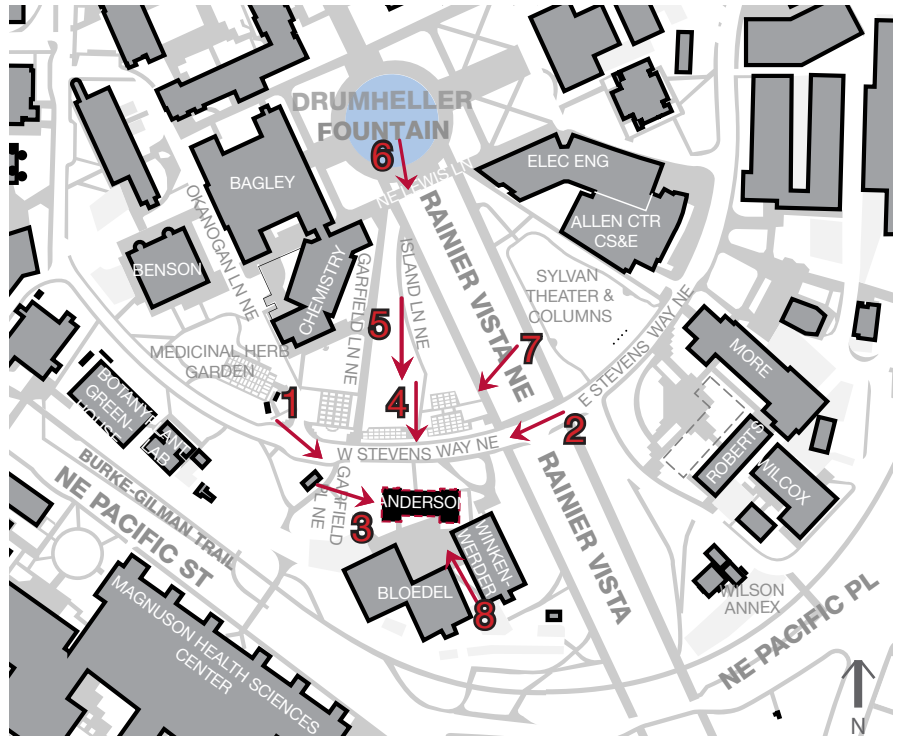
1. View from W Stevens Way NE



6. View from Drumheller Fountain



2. View from E Stevens Way NE



Vicinity Map
scale: n/a



3. View from Garfield Pl NE



4. View from Island Lane NE



5. Partial View from Island Way NE



7. View from Rainier Vista



8. View from Courtyard

Roof and Roofing Materials

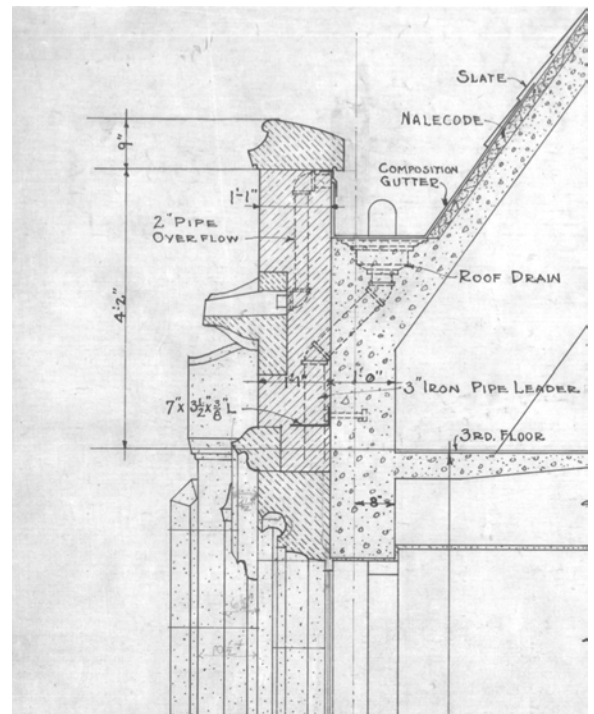
The roof structure is constructed of steel beams encased in concrete, and is basically a steep gable roof at a slope of approximately 12 : 8½. The roofing is slate shingles with copper cresting at the ridge. The original plans show a ridge skylight over the main east-west ridge, but this skylight was removed and replaced with wood framing and composition roofing with a slight slope toward the north and south (it is unclear when the skylight was removed). There are roof hatches at each end and steel pipe guardrails have been added. Scuppers are built into the copper cresting to allow water to drain onto the sloped slate roof.

A lower gutter at the base of the sloped roof is approximately 16 inches wide with a parapet height of approximately 20 inches (varies with the slope). This gutter is lined with a membrane and flashing and is accessed by the roof hatches on the upper roof.

Current Conditions

Anderson Hall is well maintained and the slate roof, gutters and upper roof appear to be in good condition. There is currently some evidence of water penetration through the roof gutter or parapet wall on the west wall. Access to investigate this issue is difficult and has required a lift.

Of primary concern, however, is the currently unsafe situation for accessing the sloped roof and gutter areas from the roof hatches on the upper roof for maintenance and repair work. Additionally, it is difficult to wash the windows due to large, mature trees that are very close to the exterior walls, making access with a lift impossible.

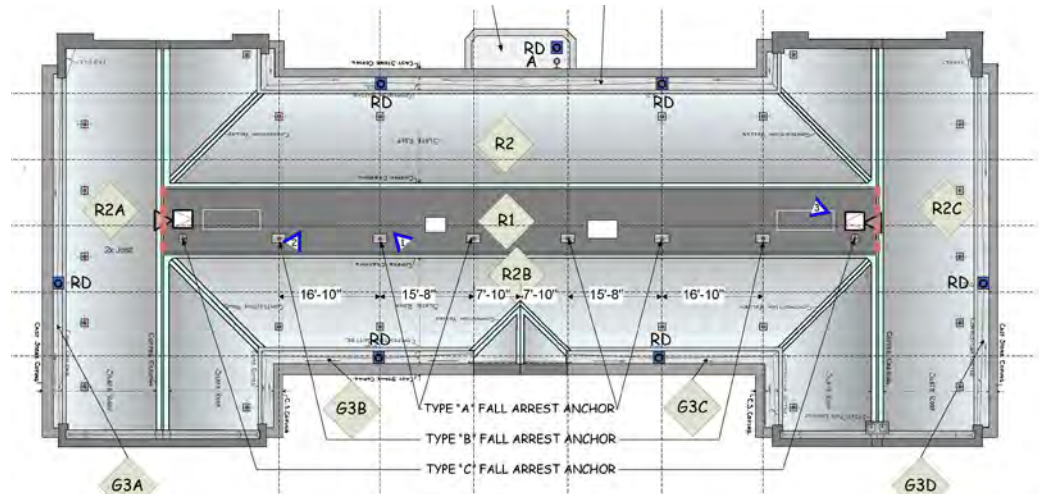


Detail, North Porch



Water Penetration Investigation

5. Evaluation and Recommendations



Roof plan with fall arrest anchors

Identification of Conditions Requiring Recommendations

Recommendations will be made for the exterior of the building where the proposed safe access and roof anchor system will require additional elements to be added to the roof. Primary consideration will be given to the visibility of these changes to the public view of the structure from the main approach on Stevens Way as well as the pedestrian pathways along Garfield Lane NE and Island Lane NE. Additionally, recommendations will be made for the interior of the building where the proposed roof anchor system requires fasteners through the concrete structure which will be visible to the building users.

- **Fall Arrest Anchor at Upper Roof**

In order to safely move on the upper roof and access the roof gutter below, a row of fall arrest anchors is proposed in the upper roof at the major structural lines. The spacing of these will vary from 15'-8" to 16'-10" for a total of eight anchors. This row is proposed to be offset from the centerline approximately 3 feet toward the south to reduce visibility from Stevens Way to the north. The proposed fall arrest system consists of a 3/4" diameter U-bar at the top of a 3" diameter galvanized steel pipe, a maximum of 1'-9" high overall, and mounted to the roof with a 1/2" x 3" x 3" steel plate with 3/4" bolts.

- **Fall Arrest Anchor at Roof Gutter**

The lower roof gutter runs around the base of the sloped roof and is 16" wide with a 20" raised parapet and coping on the outer face. The proposed fall arrest system consists of a row of anchors mounted into the bottom course of slate roofing, about 6" higher than the wall coping. The proposed system includes (4) four anchors each on the north and south slopes, (5) five each on the east and west slopes, and (1) one additional anchor at the gable ends near the valleys. The anchors consist of a forged pad eye (dark grey color) welded to a 3" diameter galvanized steel pipe; a maximum of approximately 6" extension beyond the face of the roof. The anchor is mounted to a 5/8" x 8" x 8" steel plate with 5/8" bolts.



Entry Porch



Fastener Behind Acoustic Panels

Interior view

- **Fall Arrest Wall Anchor at the Entry Porch**

There is one wall anchor proposed at the entry porch, mounted on the inside (east) face of the adjacent buttress, approximately 4" above the roof parapet. This anchor consists of an eye bolt with a galvanized steel plate.

- **Fasteners Affecting Interior Spaces**

Each of the proposed anchors at the roof gutter have four 4/8" bolts through the concrete structure, as well as washers and nuts that could be visible on the interior. On the north and south sides these fasteners will be above suspended ceilings and will not be visible. In the Reading Room the fasteners will occur behind a false beam at the top of the wall and will not penetrate the interior. The Auditorium is the only interior space where the fasteners could be visible.

Impact of Proposed Safe Access and Roof Anchors

- **Fall Arrest Anchor at Upper Roof**

From the primary view of Anderson Hall from the north, the anchors would be hidden by the roof edge from any point on grade closer than 240 feet from the front entry wall, or approximately 80 feet north of Stevens Way (accounting for the grade rising toward the north). At this point, the view of the upper roof is obscured by mature trees. The roof anchors would be visible from the west on Stevens Way NE from about the bus stop adjacent to the Medicinal Herb Garden and from the east from around the Rainier Vista crossing. At those distances the anchors will be insignificant. The roof anchors will be visible on the south side of Anderson Hall starting at a distance of about 60 feet, which is half way across the courtyard toward Bloedel Hall. However, the view of Anderson Hall from this courtyard would be considered secondary as it is not heavily used by the public.

- **Fall Arrest Anchor at Roof Gutter**

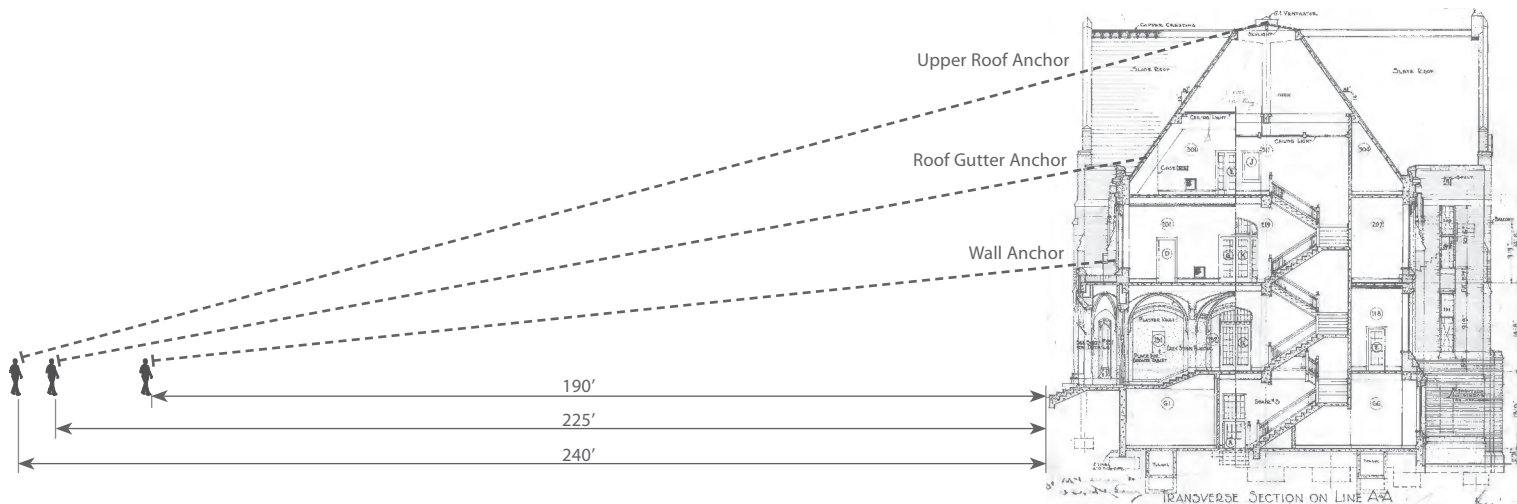
From the primary view of Anderson Hall from north of Stevens Way NE and from the west or east on Stevens Way NE, the anchors would be hidden by the parapet wall and coping from any point on grade closer than 225 feet from the face of the building. This would make the roof anchors visible from approximately the same locations as the anchors at the upper roof described above. Again, at those distances the anchors will be insignificant. Garfield Place NE is approximately 100 feet from the west face of the building so the anchors would not be visible from that pedestrian route.

- **Fall Arrest Wall Anchor at the Entry Porch Roof**

From the primary view of Anderson Hall from the north, the wall anchor above the entry porch would be hidden by the porch parapet wall and coping from any point on grade closer than 190 feet from the face of the entry. This would make the wall anchor visible from Island Lane NE about 75 feet north of Stevens Way NE and from the Garfield Lane NE crosswalk at Stevens Way NE. At this distance the wall anchor will be insignificant.

- **Fasteners Affecting Interior Spaces**

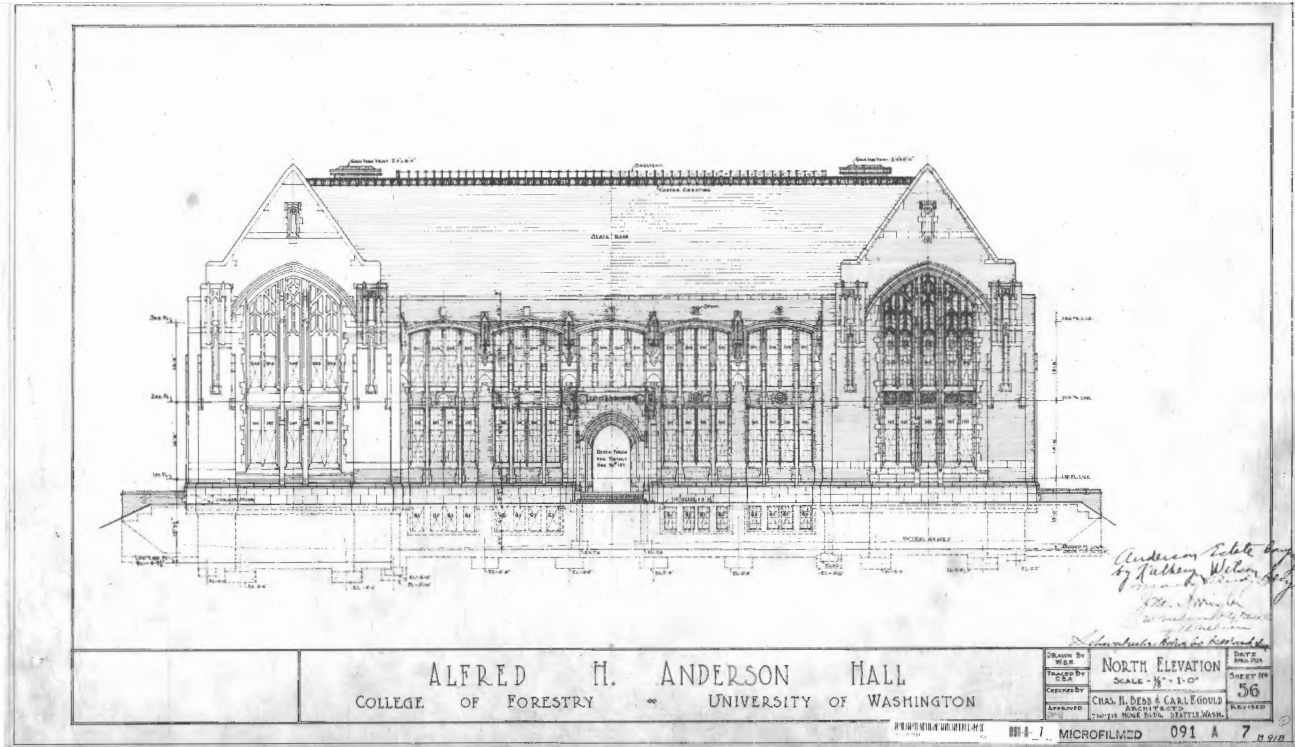
The Auditorium on the second floor is the only interior space affected by the proposed anchor fasteners. The bolts, washers and nuts would penetrate the sloped concrete ceiling at 5 locations on the west sloping ceiling, and one location each on the east sloping ceiling near the NE and SE corners. These fasteners would be about 4 feet above the break between the top of the wall and the sloping ceiling.

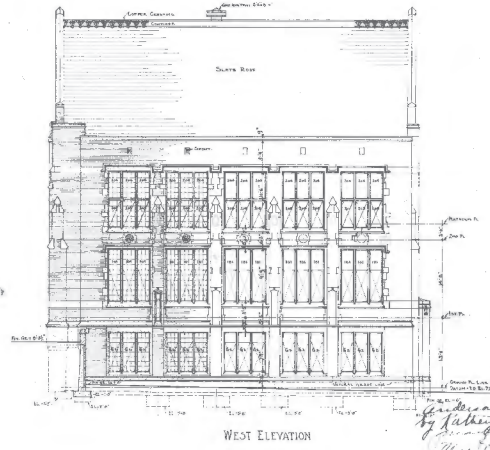
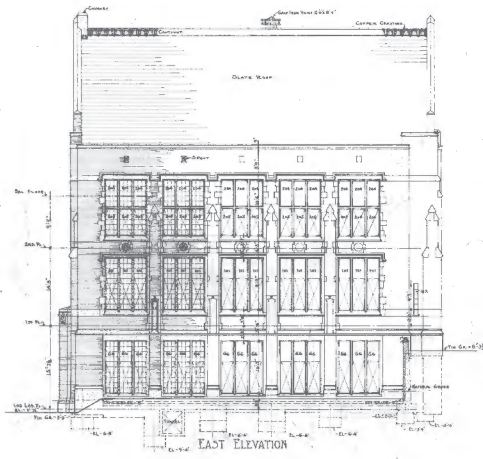


Mitigation Recommendations

- Fall Arrest Anchor at Upper Roof**
 The fall arrest system will not be visible except at a great distance (240 feet or more). No mitigation is needed.
- Fall Arrest Anchor at Roof Gutter**
 The fall arrest system will not be visible except at a great distance (225 feet or more). No mitigation is needed.
- Fall Arrest Wall Anchor at the Entry Porch**
 The fall arrest wall anchor will not be visible except at a distance (190 feet or more). No mitigation is needed.
- Fasteners Affecting Interior Spaces**
 The Auditorium was renovated in 1978 and acoustic ceiling panels were installed in every other rafter space. The locations of the anchors should be adjusted to fall within the rafter bays containing the acoustic panels. The panels should be removed, the back side hollowed out to allow a cavity for the fasteners, and replaced on the ceiling. This will allow the fasteners to be hidden from view. However, if the 1978 acoustic panels are ever removed and the ceiling restored to its original condition, these fasteners will become visible and some form of mitigation will have to be employed at that time.

6. Historic Drawings

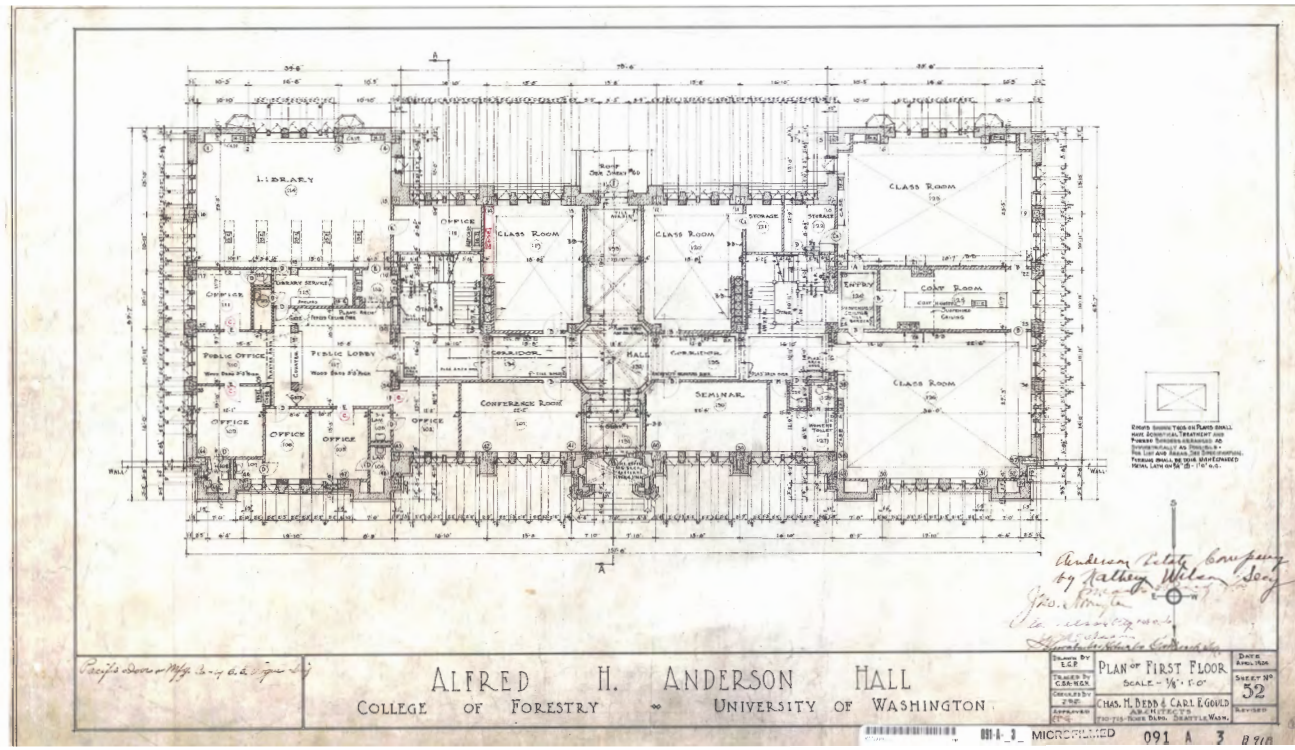
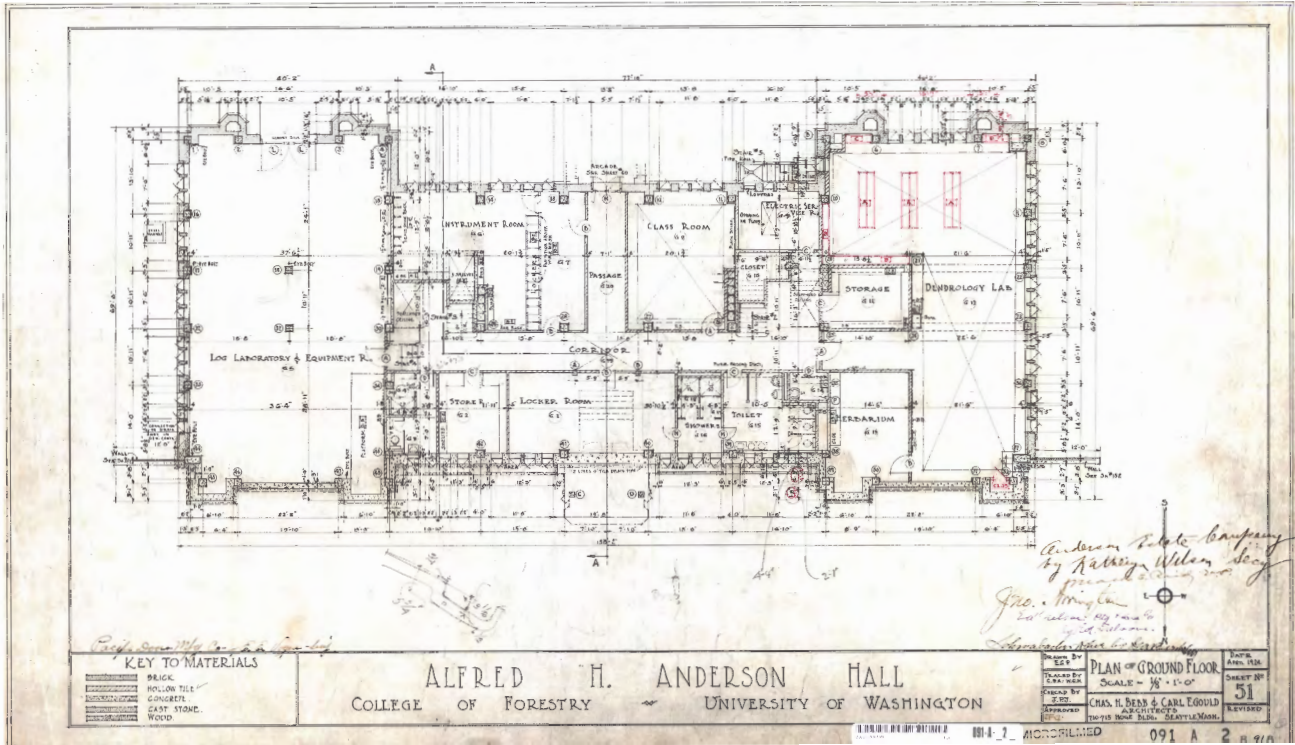


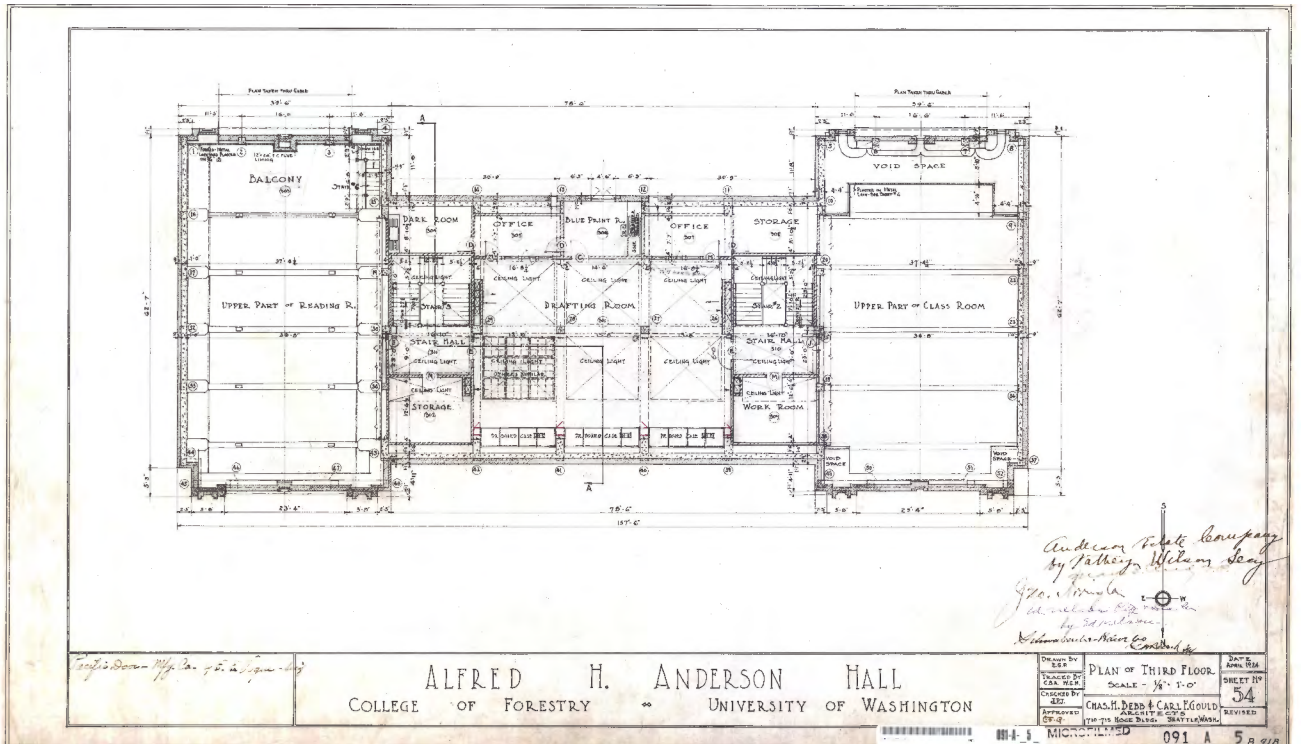
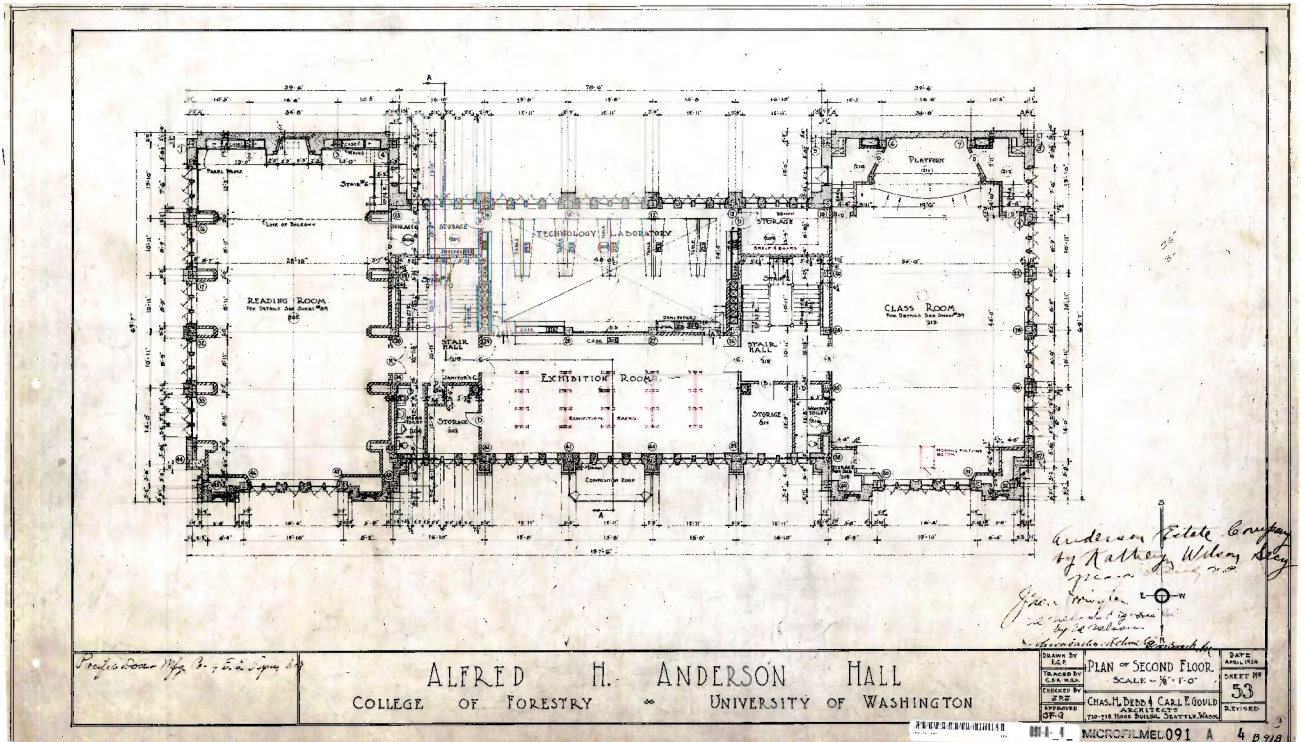


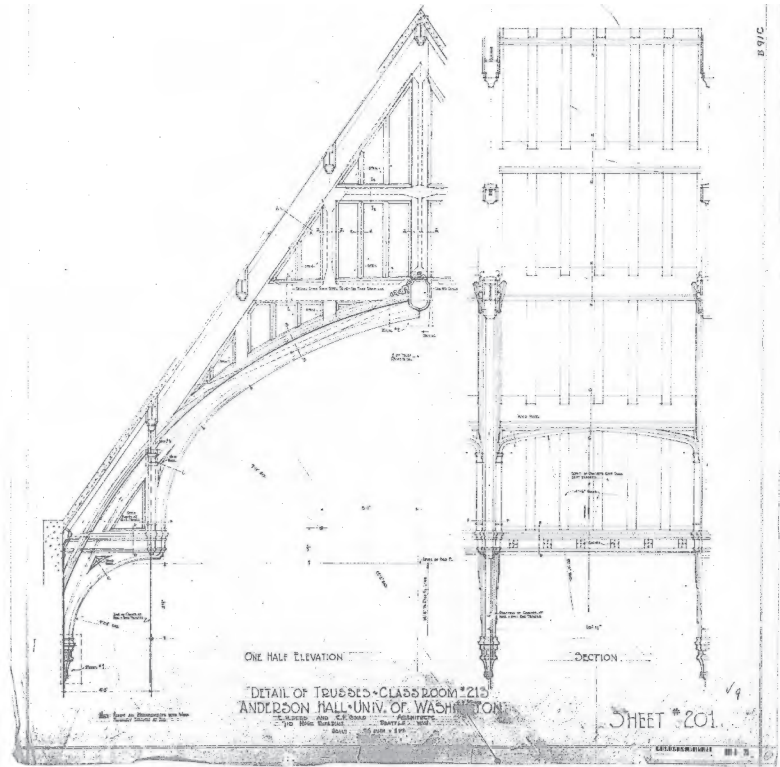
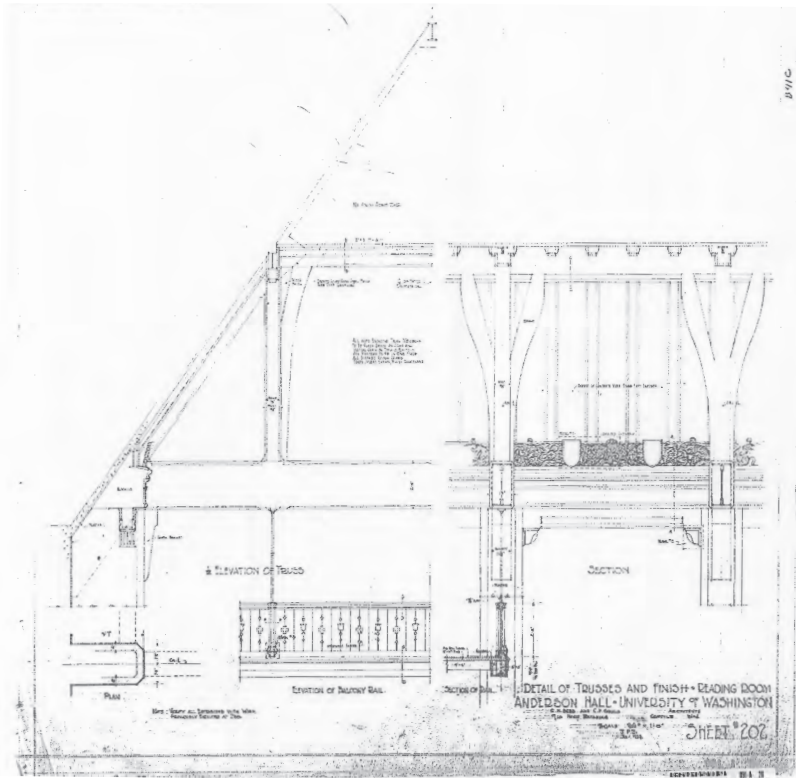
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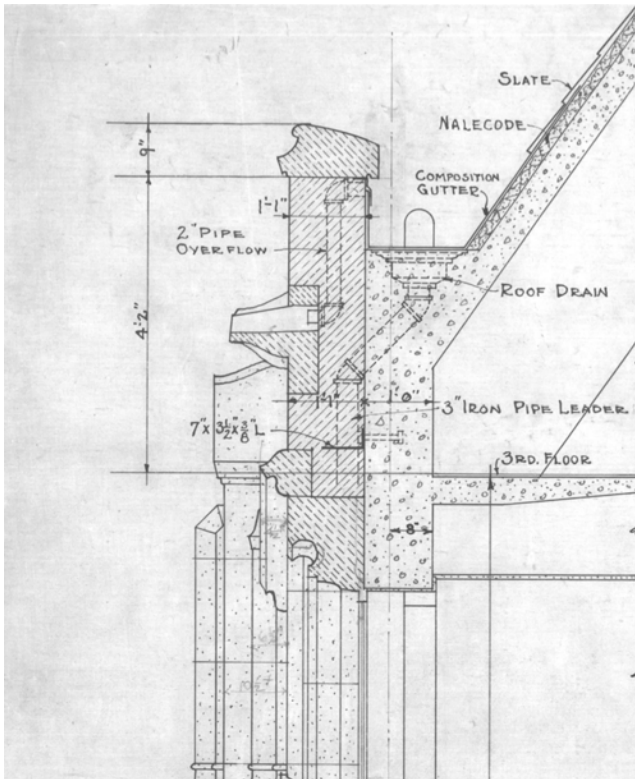
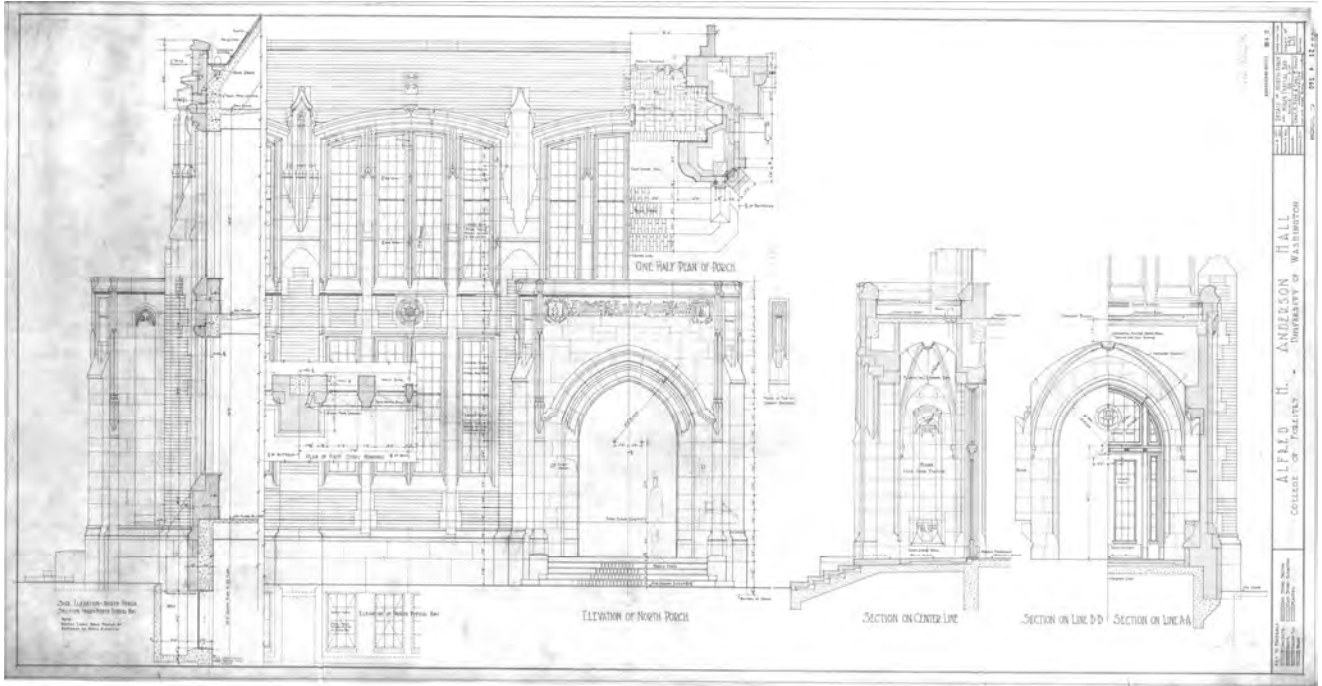
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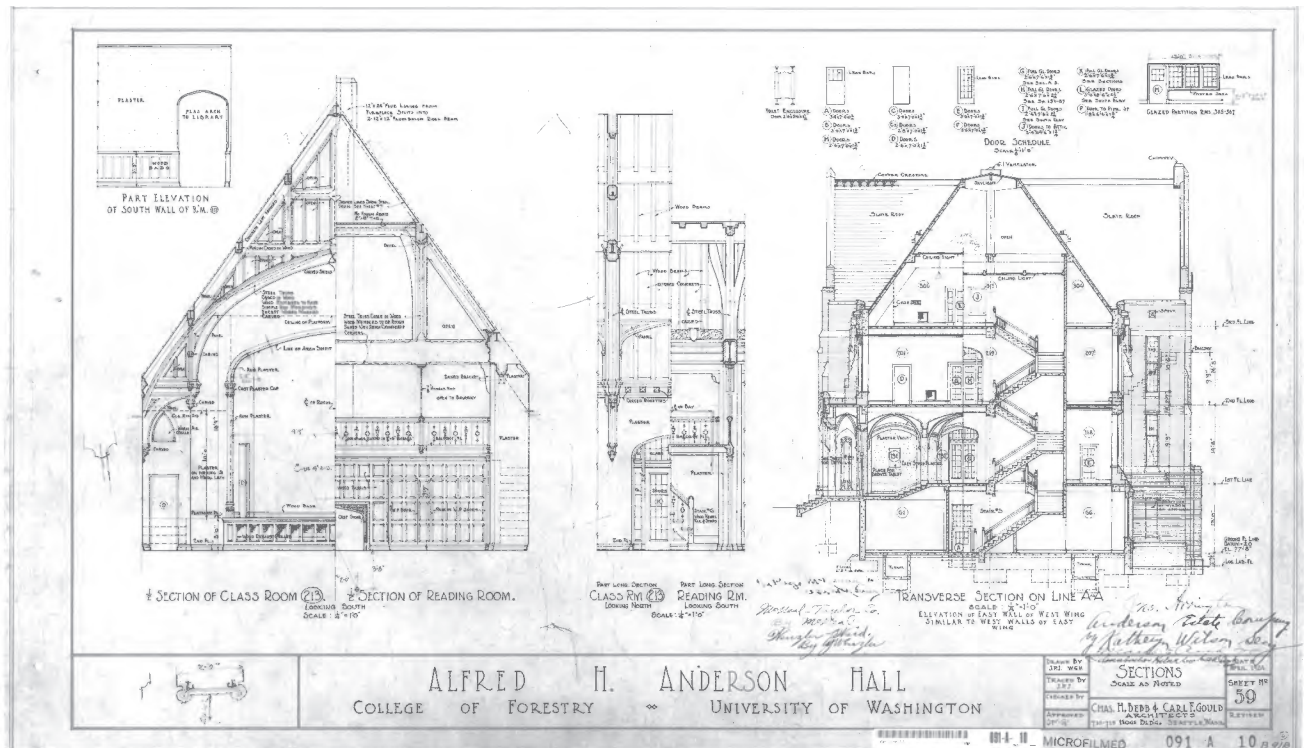
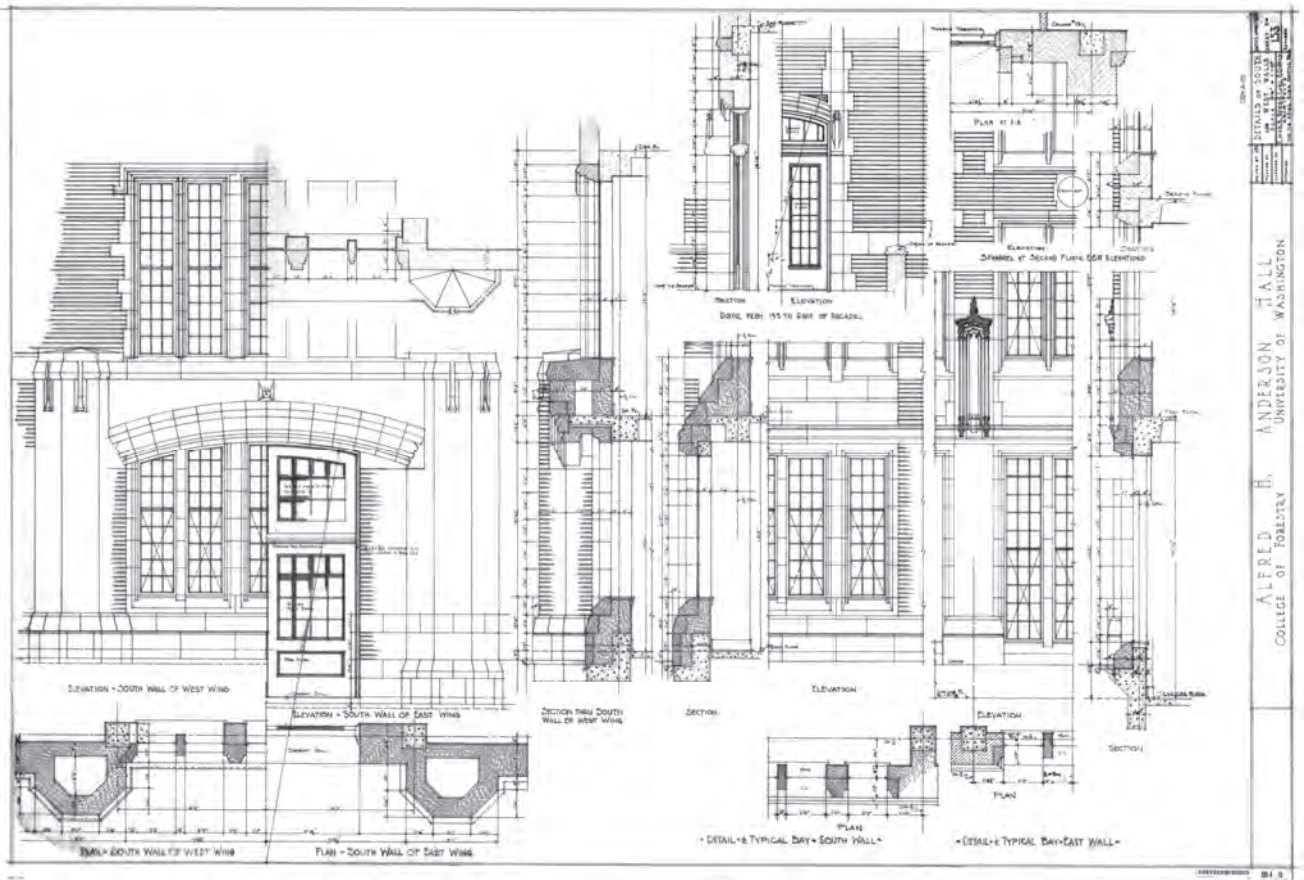
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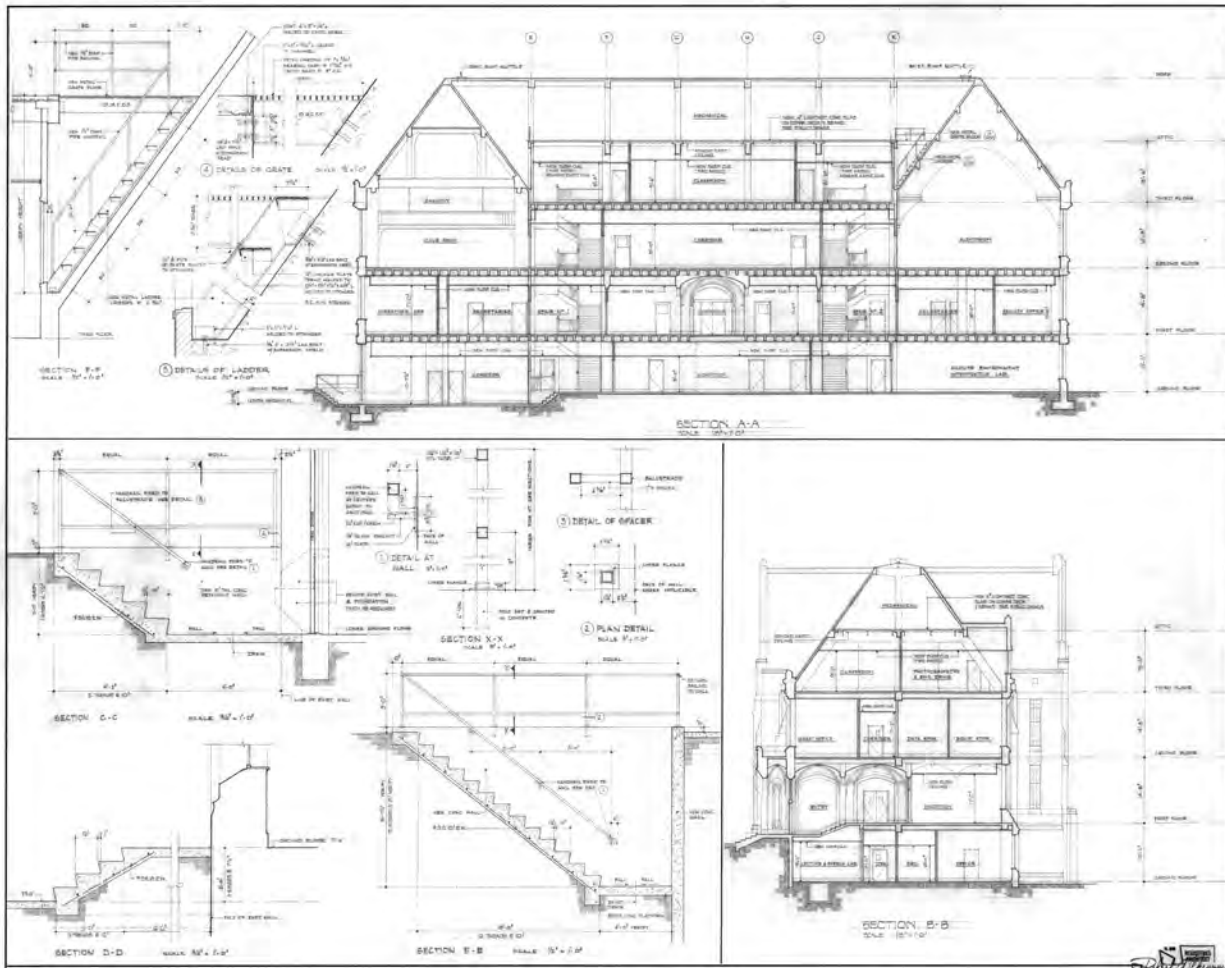












ANDERSON HALL RENOVATIONS
 UNIVERSITY OF WASHINGTON

BUILDING SECTIONS
 SCALE 1/8" = 1'-0"

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