

HISTORIC STRUCTURE ASSESSMENT

SAGUACHE COUNTY COURTHOUSE SAGUACHE, COLORADO

FOR
COUNTY OF SAGUACHE, COLORADO



FUNDING FROM
THE COLORADO HISTORICAL SOCIETY
STATE HISTORICAL FUND
P.O. #2002-HA-043

PREPARED BY
MARK M. JONES ASSOCIATES, ARCHITECTS, LLC
1085 GRAND AVENUE
DEL NORTE, COLORADO 81132
(719) 657-2070 FAX (719) 657-2072

September 2003

SAGUACHE COUNTY COURTHOUSE
501 4th STREET
SAGUACHE, COLORADO

HISTORIC STRUCTURE ASSESSMENT
State Historical Fund Project #2002-HA-043
September 11, 2003

TABLE OF CONTENTS

PREFACE: EXECUTIVE SUMMARY	4
1.0 PART I. INTRODUCTION	8
1.1 <u>RESEARCH BACKGROUND/ PARTICIPANTS</u>	8
• Research design-process taken to complete report and project purpose	
• Consultants involved in the report	
• Funding partners	
1.2 <u>BUILDING LOCATION/ SITE PLAN/ VICINITY MAP</u>	9
• Physical Location	
• Legal Description	
2.0 PART II. HISTORY AND USE	11
2.1 <u>ARCHITECTURAL SIGNIFICANCE AND CONSTRUCTION HISTORY</u>	11
2.2 <u>EXISTING SKETCH PLAN</u>	19
2.3 <u>PROPOSED USES</u>	41
3.0 STRUCTURE CONDITION ASSESSMENT	41
3.1 <u>SITE</u>	41
• Associated landscape features	
• Parking	
• Archaeology	
3.2 <u>FOUNDATIONS</u>	46
• Foundation system	
• Perimeter foundation drainage	
• Backfill	

3.3 <u>BUILDING STRUCTURAL SYSTEM</u>	46
• General structural system description	
• First floor structural system	
• Roof structural system	
3.4 <u>BUILDING ENVELOPE-EXTERIOR WALLS</u>	51
• Exterior wall construction	
• Exterior finishes	
• Exterior masonry	
• Exterior appendages: porch, stoop, portico, etc.	
3.5 <u>BUILDING ENVELOPE-ROOFING AND WATERPROOFING</u>	56
• Roofing systems	
• Sheet metal flashing	
• Drainage system, gutters, and downspouts	
3.6 <u>WINDOWS AND DOORS</u>	59
• Doors	
• Windows	
• Hardware	
• Trim	
• Finishes	
3.7 <u>INTERIOR FINISHES</u>	68
• Wall finish materials	
• Ceiling finish materials	
• Floor finish materials	
3.8 <u>MECHANICAL SYSTEMS</u>	74
• Heating and air conditioning	
• Ventilation	
• Water service, plumbing, and sewer utilities	
• Fire suppression, sprinkler systems	
3.9 <u>ELECTRICAL SYSTEMS</u>	81
• Electrical service and panels	
• Electrical distribution system	
• Lighting	
• Fire detection system	
• Security alarm system	

4.0 ANALYSIS AND COMPLIANCE	84
4.1 <u>HAZARDOUS MATERIALS</u>	84
4.2 <u>EXISTING MATERIALS ANALYSIS</u>	85
4.3 <u>ZONING CODE COMPLIANCE</u>	85
4.4 <u>BUILDING CODE COMPLIANCE</u>	85
4.5 <u>ACCESSIBILITY COMPLIANCE</u>	86
5.0 PRESERVATION PLAN	87
5.1 <u>PRIORITIZED WORK</u>	87
5.2 <u>PHASING PLAN</u>	89
5.3 <u>ESTIMATE OF PROBABLE COST OF CONSTRUCTION</u>	89
6.0 PHOTOS AND ILLUSTRATIONS	
Photos and illustrations appear where applicable within the text in each section of the report.	
7.0 BIBLIOGRAPHY	90
8.0 APPENDICES	91
8.1 <u>MEASURED DRAWINGS</u>	
Original architects' drawings and measured drawings are included in Section 2.3 and in annotated form as appropriate in the text.	
8.2 <u>CONSULTANT DOCUMENTS</u>	92
8.3 <u>HISTORIC DOCUMENTS</u>	
8.4 <u>HISTORIC NEWSPAPERS</u>	98

PREFACE: EXECUTIVE SUMMARY

The Saguache County Courthouse is a courthouse and administrative center for the county seat built in the heart of the Town of Saguache in 1910. This structure replaced the original courthouse, burned and razed two years earlier. The courthouse was designed as a three story block, and still contains county offices and a district courtroom on the top story. The courthouse was designed in brick, concrete, and stone in the Classical Revival style. Classical Revival architectural elements include pediments, pilasters, and a classical frieze. The building was designed with a near symmetrical plan and a mansard type roof. A central interior space defines the interior of the building and serves as a central gathering and circulation space.

The building is in mostly unmodified original condition, with few material flaws and very little in the way of interior space alterations. Some of the original exterior stonework has eroded, but most of the brick and concrete work is intact. The front staircase is in need of some repair, and some of the original windows and roof need attention. In the interior, most finishes are in fair to good condition. Most of the interior woodwork retains its original appearance, and has not been painted.



Saguache County Courthouse, front (east) elevation with spruce trees.



Saguache County Courthouse, side (south) elevation.



Saguache County Courthouse, back (west) elevation.



Saguache County Courthouse, side (north) elevation, partially visible through trees

The County of Saguache was listed on the State Register of Historic Properties in 1993. Funding support for this Historic Structure Assessment has been gratefully received from the Colorado Historical Society, State Historical Fund.

Mark M. Jones, Associates, Architects LLC was retained by the County of Saguache to prepare the Historic Structure Assessment which is documented in this report.

Exhaustive research efforts were made by officials at Saguache County to locate documentation and photographs of the building in local newspaper archives, articles from the Adams State College library, and records from the courthouse itself.

The structure is highly significant to the community of Saguache and to the elected officials of the county. Architecturally, it is an important structure as well. The building is the principal location for administrative and legal affairs in the county, drawing forth county citizens from as far as fifty miles away. As the county seat, the building is a focal point in the town. The building draws business for local merchants during court trials and other county business, and for some visitors, is the main reason for their presence in Saguache. These facts, alongside with the sizable amount of historical fabric remaining reasonable intact over nearly the last century, makes the courthouse an excellent candidate for stabilization and historic preservation.



Main floor central space, showing main (east) entry and vestibule, and entries to county offices.

The treatment approach to be utilized for the project is *rehabilitation*, making possible a compatible use while preserving as much of the historic fabric as possible in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties. Specific features, spaces, and materials have been determined to be saved at all costs. These include the form and detailing of the building exterior, the interior central space and the interior offices, and any remaining original interior details, furnishings, and fixtures. Enough information and fabric is present to restore these elements to their original 1910 condition. Other areas need to be altered from original in order to meet code and accessibility requirements, and in order to meet the needs of a twenty first century courthouse. Most notably, the courtroom requires new fixtures, finishes, and furnishings. Every attempt will be made to design these in harmony with the remaining original historic elements in the room, while creating a clear distinction between original and new elements.

1.0 INTRODUCTION

1.1 RESEARCH BACKGROUND/PARTICIPANTS

This Historic Structure Assessment follows the current format of the State Historical Fund and is based on *The Secretary of the Interior's Guidelines for the Treatment of Historic Properties*. The work is developed using several sources: historic archival information, including newspaper clippings, letters, early photographs, and photographic copies of the original architect's plans were used as source material for the early history of the property. Physical investigation, including a thorough review of items in the attic of the structure, contributed to the later history of the property.

Consulting professional services in preparation of this Historic Structure Assessment have been provided by Mark M. Jones Associates, Architects, LLC, of Del Norte, Colorado. The project team includes Mark M. Jones, AIA, a Colorado Registered Architect with more than 30 years of professional experience, and Christopher Lobas, an architectural designer with nearly a decade of experience, and involvement in historic preservation projects in Colorado, California, and Ohio. The Jones firm has prepared numerous Historic Structure Assessments for the SHF, and has served as architect for several successful restoration projects supported by the SHF, including the winner of the 2001 Stephen H. Hart Award from the CHS. The firm also serves as architect for the Southern Colorado region for the Colorado Community Revitalization Association *Main Street* program, providing architectural guidance for façade restoration/renovation in a number of cities.

Mark Burggraaf, P.E., of Burggraaf Associates of Pagosa Springs, is a Colorado Registered Mechanical and Electrical Engineer with extensive experience in historic buildings. He has provided field evaluation and recommendations on mechanical and electrical systems of the Saguache County Courthouse.

Carolyn Hunter, a registered architect with Context Architecture in Durango, has provided code review using the Uniform Building Code and a code compliance synopsis for the building.

Funding partners

This assessment has been funded through a grant from the Colorado Historical Society State Historical Fund, under Purchase Order #2002-HA-043, which is gratefully acknowledged. Saguache County has provided matching funds totaling \$ 1000.

1.2 BUILDING LOCATION/SITE PLAN/VICINITY MAP

Physical Location:



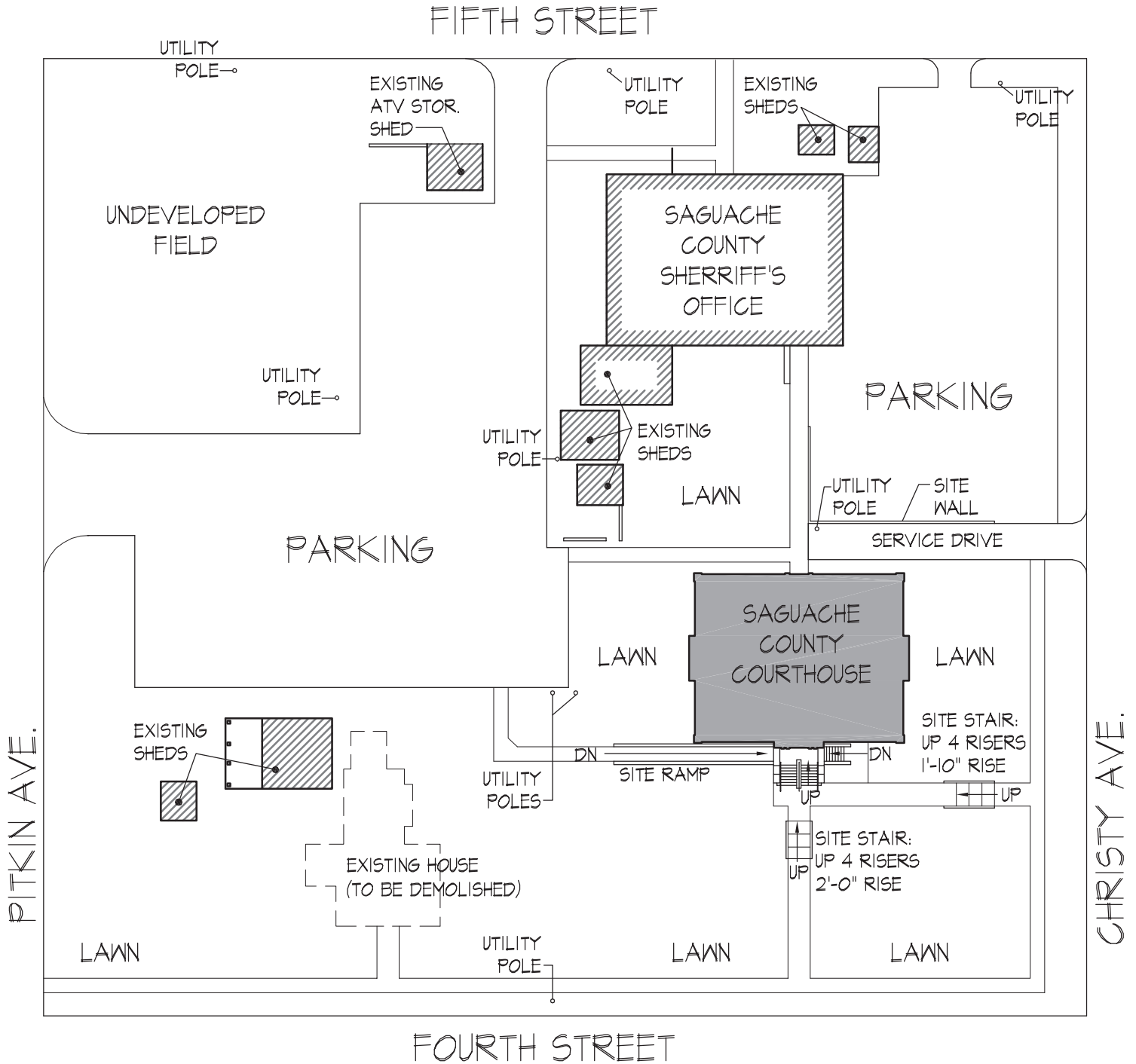
TOWN OF SAGUACHE

Map courtesy: www.mapquest.com

Legal Description:

The courthouse occupies a city block, which it shares with a modern sheriff's building.

Upon USGS Quad: Saguache County 1967, Block One, Mears Addition, Township: 44N, Range: 8E, Section 7NW.



MEASURED SITE PLAN
 Scale : 1" = 50'-0"
 MJA, LLC © 2003



2.0 HISTORY AND USE

2.1 ARCHITECTURAL SIGNIFICANCE AND CONSTRUCTION HISTORY

Architectural Significance:

Some of the material for this study was adapted from nomination forms for the State Register of Historical Properties, containing a 1993 building analysis. The building is a fine example of the Classical Revival Style. Although many elements of this style descend from ancient sources, this style was actually more directly derived from the Beaux-Arts tradition than ancient Greek or Roman architecture. Arguably, the style entailed the culmination of detailing and proportional refinements sought by the classically trained Beaux-Arts architects. The Classical Revival Style gained popularity during the early part of the century in federal, state, and local public buildings throughout the country.



Early photograph, c. 1915, Saguache County Courthouse. Note decorative picket wood fence.

The building itself is a detached square in plan, with rectangular indentations serving as entrances to the front and rear. The building consists of two and one half stories visible from the exterior, with a usable attic storage space and a finished basement. The building is composed of brick with stone accents, and concrete. The exterior masonry is laid in common bond. The wall design includes, from bottom to top, a base stone plinth, a base of several courses of purple brick with a stone cornerstone, a cast-in place concrete horizontal coping band, and corner engaged pilasters. Some classical ornamentation is formed from galvanized iron; including column capitals, the name plate, cornices, raised cornices and frieze, hooded dormers, and roof crest detail. The front façade contains a pedimented entry with three window bays on each side. The windows vary on each floor. The basement clerestory windows are three over one, and are

devoid of ornament. Windows on the upper stories are nine over one. The first story windows feature flat brick lintels plastered with cement. The upper story windows are of a jack arch brick design, with cement plastered keystone. Upper story windows above the entry pediment contain true divided lites in a diagonal pattern. The roof is a truncated hip and is composed of asphalt composition shingles.

The main door is located in the center of the front (east) façade. The door is flanked with double pilasters. The architrave is an embrasure type, having no side panels. The door itself is a double leaf, with one recessed door panel. The transom contains nine lite glass panels in a diagonal design. The main entry doors are accessed by a grand stairway, beneath which are twin stairs descending to the basement. The grand stairway is bulwarked by solid cement coped stepped walls on each side. A non-original iron railing divides the stair in half.

The building's interior displays fine original wood moldings and trim throughout. Other pertinent interior finishes include well-preserved wood flooring and detailed tin ceilings.

The building's importance to the townspeople of Saguache, its unified adherence in form and detail to the Classical Revival style, and its large amount of intact historic fabric make it an excellent candidate for stabilization and restoration.

Construction History:

The very first court cases in the Town of Saguache were held in the 1870s in a building rented to the County from early Colorado pioneer Otto Mears. This building was probably the current Museum building. It was conveyed to the County by the Saguache Town and Land Company in 1875. A new brick two-story building located at San Juan and 11th Street was constructed for approximately \$13,000 in 1892. This structure contained county offices on the first floor and a court room on the second floor, and was in constant use by the county until its untimely destruction by fire in 1910.

This event necessitated the construction of the present courthouse, at 4th Street and Christy Avenue. No evidence exists as to why a different site was chosen than that of the original courthouse building. County Commissioners wisely called upon John Huddart of Denver as architect for the new courthouse. More will be said regarding Mr. Huddart on ensuing pages. The present courthouse was constructed by contractor J.Y. Parker of Sterling, Colorado at a cost of \$36,110. Masons from the Olive Branch Lodge laid the cornerstone on July 16th of 1910 and the building was completed in five months time. After construction was complete, a small adobe house belonging to Mr. Mears adjacent to the courthouse site was demolished.

The Saguache County Courthouse is the only true example of Classical Revival architecture in Saguache. Some surrounding buildings are larger, but few match the courthouse in style, or are as well-preserved. The courthouse is a central community node of activity, and is a visual focus in the town.



Above and below: *Original brick two-story courthouse, c. 1890 photographs.*





*Two photos showing the placement of the cornerstone, July 16, 1910.
The home of Mr. Otto Mears is shown in the background.*



Cornerstone, east face.



Cornerstone, north face.



Masons at groundbreaking.



Start of foundation of new courthouse. Otto Mears' residence to right.



Courthouse near completion, 1910.



Courthouse after completion. Note gas lamp and wooden fence. c. 1910.

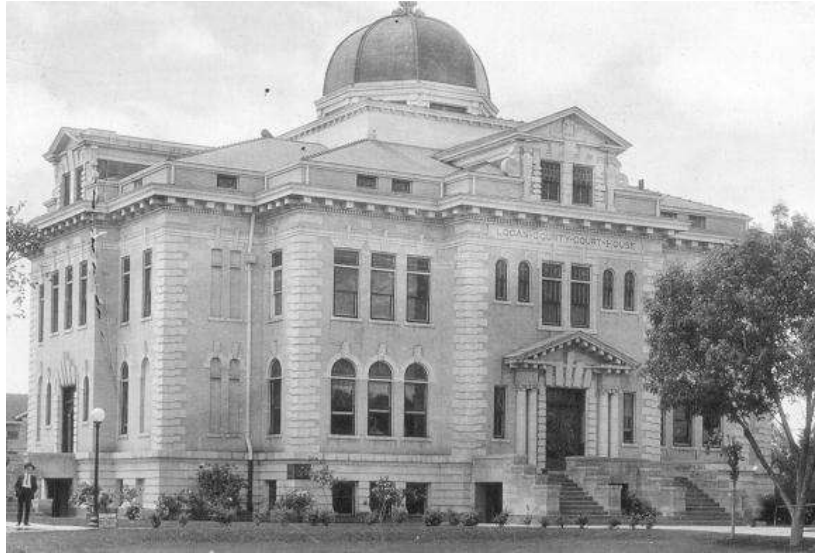
John James Huddart was among a select few outstanding pioneer Colorado architects. He was born on August 25th of 1856 in Lancashire, England. He received his architectural and engineering training at Alston College in London, graduating at age 19. From here, he went on to Belfast, Ireland to work as a shipyards engineer. Afterwards, he went to Pernambuco, Brazil to build a sugar refinery. His travels henceforth led him north, first to Jacksonville, Florida, and within a year directly to Denver. Huddart served the offices of Denver architect Frank Edbroke as chief draftsman for nearly six years, and established his own practice in 1887.

Most of Huddart's 19th Century buildings have been demolished. Among these include his additions and alterations to the old Albany hotel. Huddart also designed the Charles Boettcher residence at 12th and Grant Streets. Some still extant structures designed by Huddart include the Adams County Courthouse, the Logan County Courthouse, and six other prominent courthouses in the region. Huddart claimed a commission for a standard armory design, and twelve such facilities were built throughout Colorado. He also designed a number of libraries and elementary and high schools, many now placed on state and national historic registers.



1888 Boettcher Residence, 1201 Grant Street, Denver, Colorado

Huddart was learned in architectural history, and was able to design with great facility in a variety of architectural styles. An early example of Huddart's work is the 16 room 1888 Boettcher residence shown above. This building was a Queen Anne style Victorian mansion. Its Queen Anne Victorian features included its multiple decorative gable ends, its wraparound porch, and its round turret. Inside the residence was oak flooring, walnut and oak paneling, heavy oak timber beams, and a fireplace carved from a single piece of granite. The building was dismantled brick by brick for salvage in 1953. Over 90,000 bricks were saved.



1910 Logan County Courthouse, Sterling, Colorado

The Logan County Courthouse, shown above, was designed and built at approximately the same time period as the Saguache County Courthouse. The two buildings share the Classical Revival Style and many formal and detailing elements. These include the Palladian symmetrical plan arrangement with unifying central gathering space, the Palladian grouping of three windows, the foundation plinths, the entry pediments, the cornices with dentils, and the mansard roofs.

A number of differences are apparent between the two buildings as well. The Logan County Courthouse clearly was a larger, more expensive, and more highly detailed building. The Logan building was built of stone and included pedimented dormers at each main elevation and a copper dome. The Saguache building was built of brick and included two small dormers and decorative cresting at its peak. The Logan County Courthouse utilizes stone quoins at the corners, whereas the Saguache County Courthouse uses brick pilasters. The differences between the buildings resulted from the distinct needs and budgets of the counties and their constituencies.



1910 Saguache Courthouse, photo c. 1915.



1885 Albany Hotel, Denver, Colorado. Photo circa 1905.

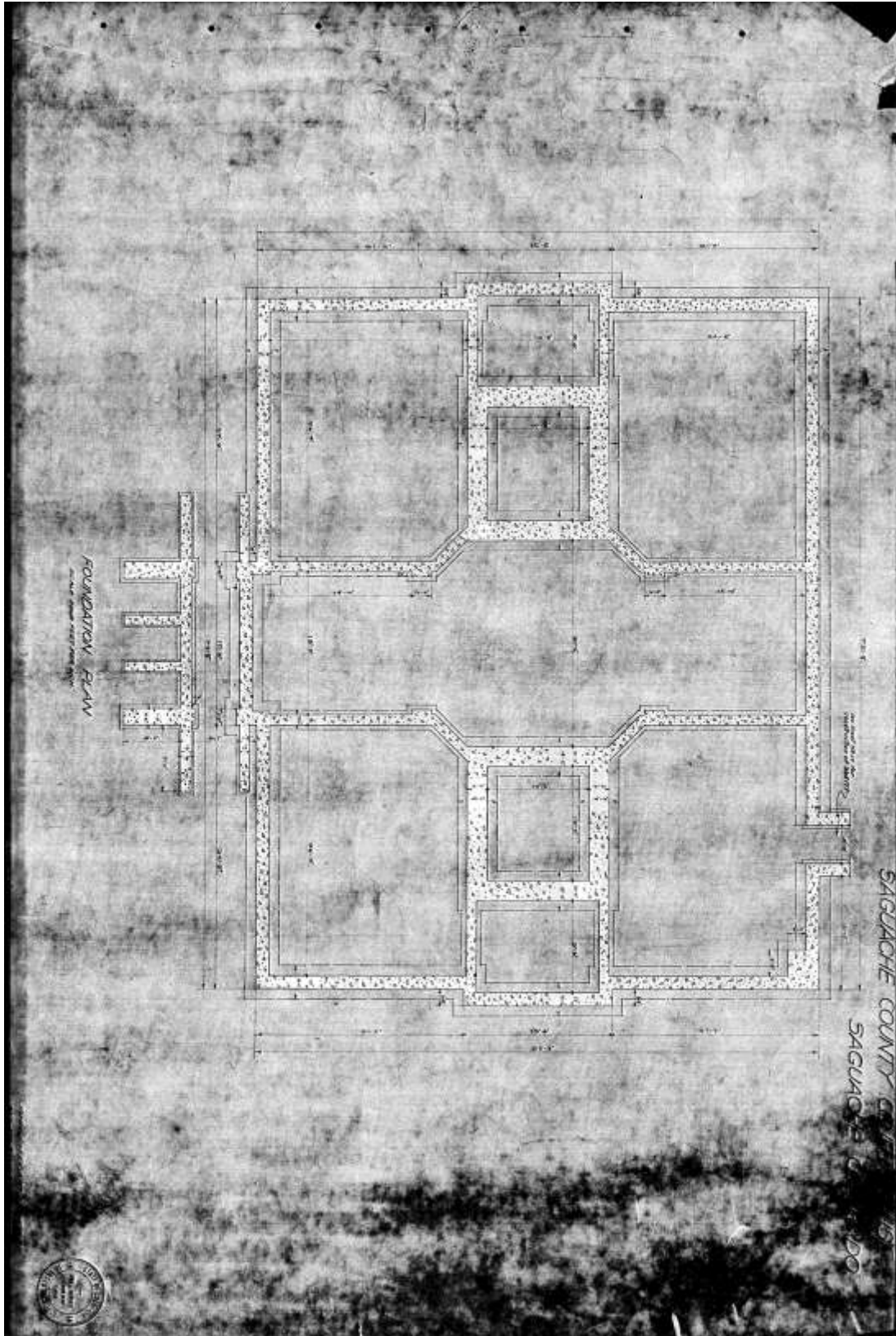
2.2 EXISTING SKETCH PLAN

The plans for the project included in this assessment document are twofold. Following are photostats of the original 17-page set produced by the office of John James Huddart. This set includes plans, elevations, sections, and details. These represent all the original drawings that exist for the building. After this set are electronically drafted plans of the entire structure produced by the office of Mark M. Jones Associates, Architects, L.L.C. These plans are based upon the original Huddart documents, but with existing conditions delineated and proposed changes included.



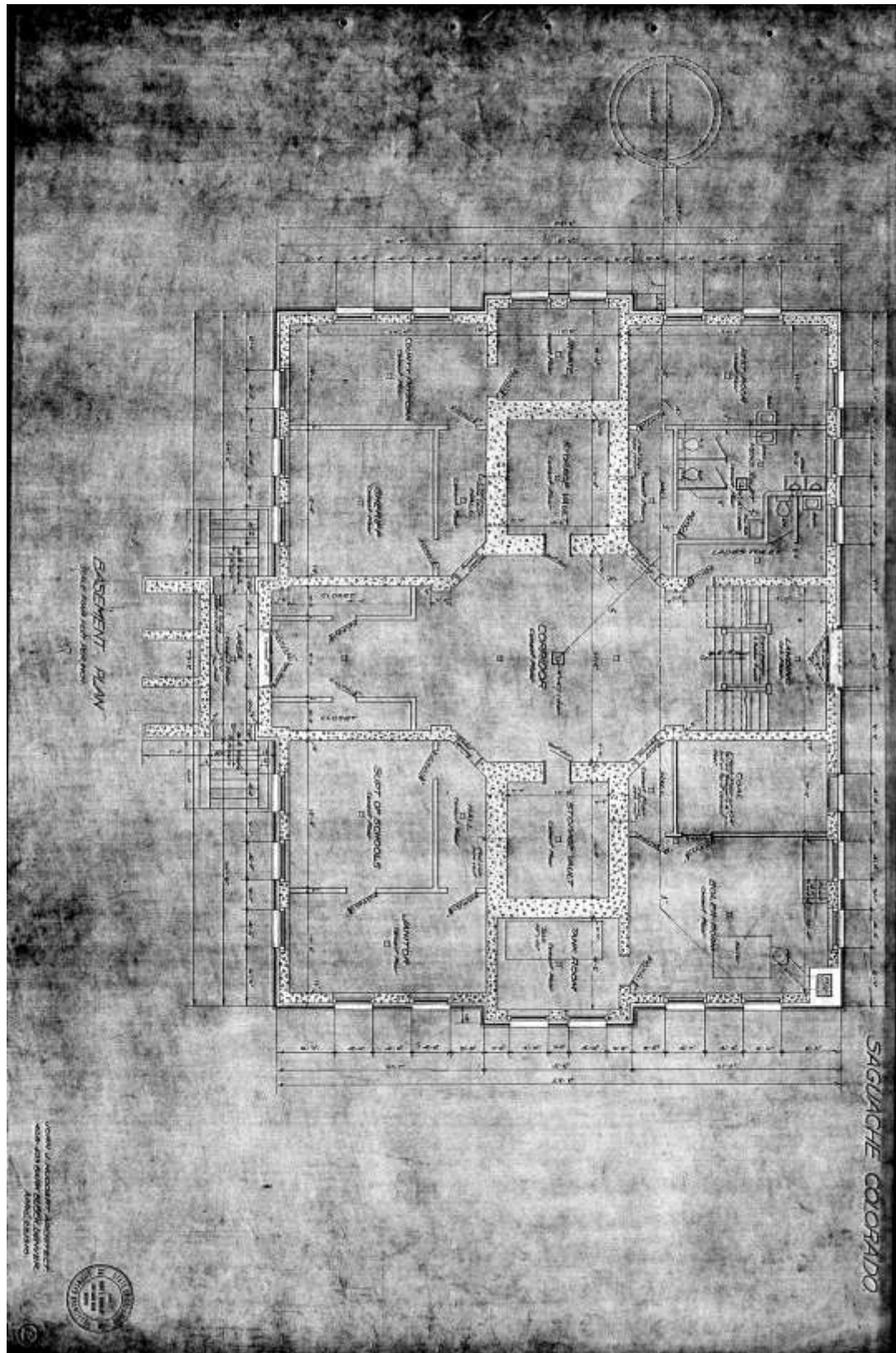
Saguache County Courthouse Logo, in use by county administration since the 1980s. Artist unknown.

Sheet 1: FOUNDATION PLAN

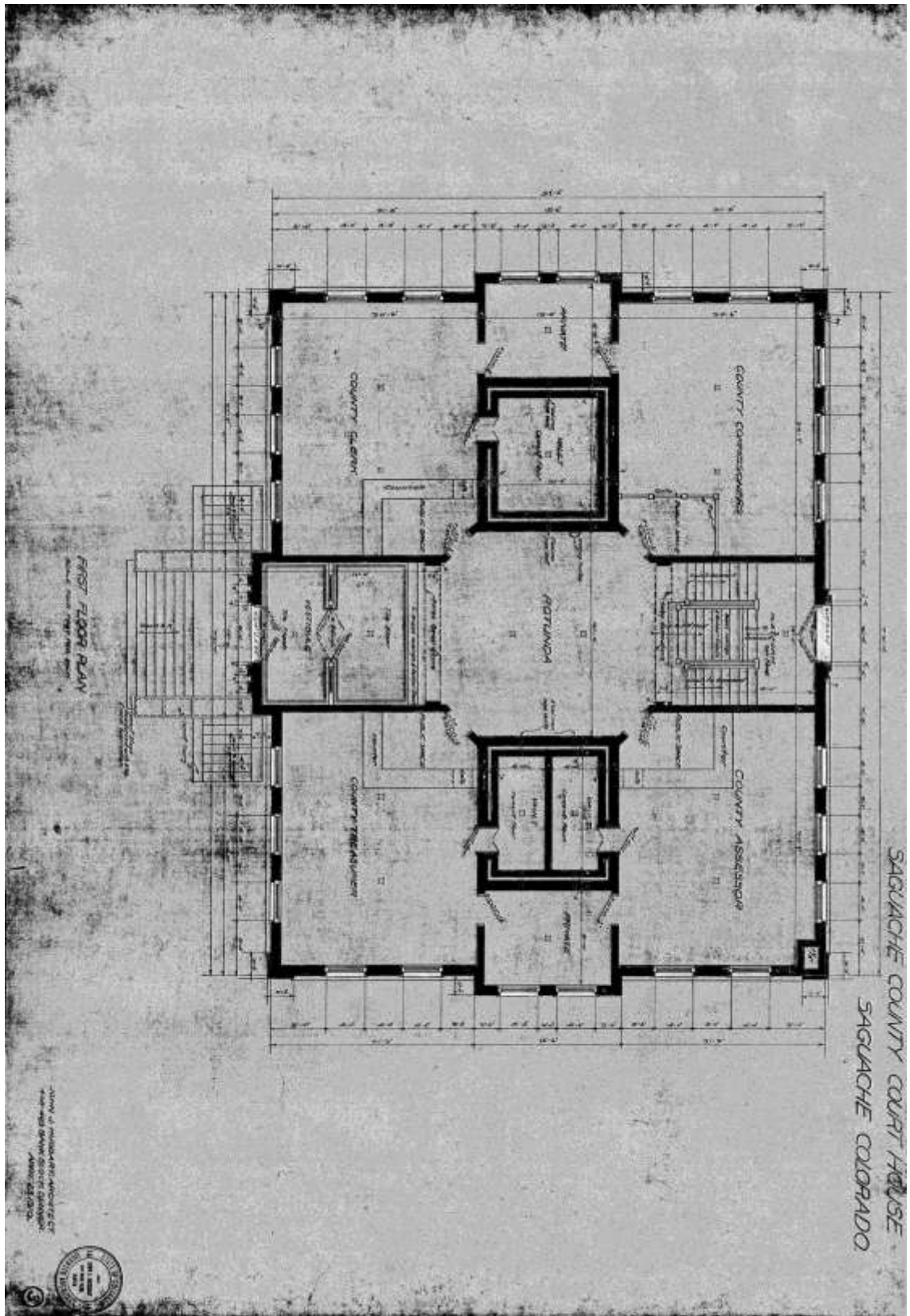


Sheet 2: BASEMENT FLOOR PLAN

Architect: John James Huddart, 1910



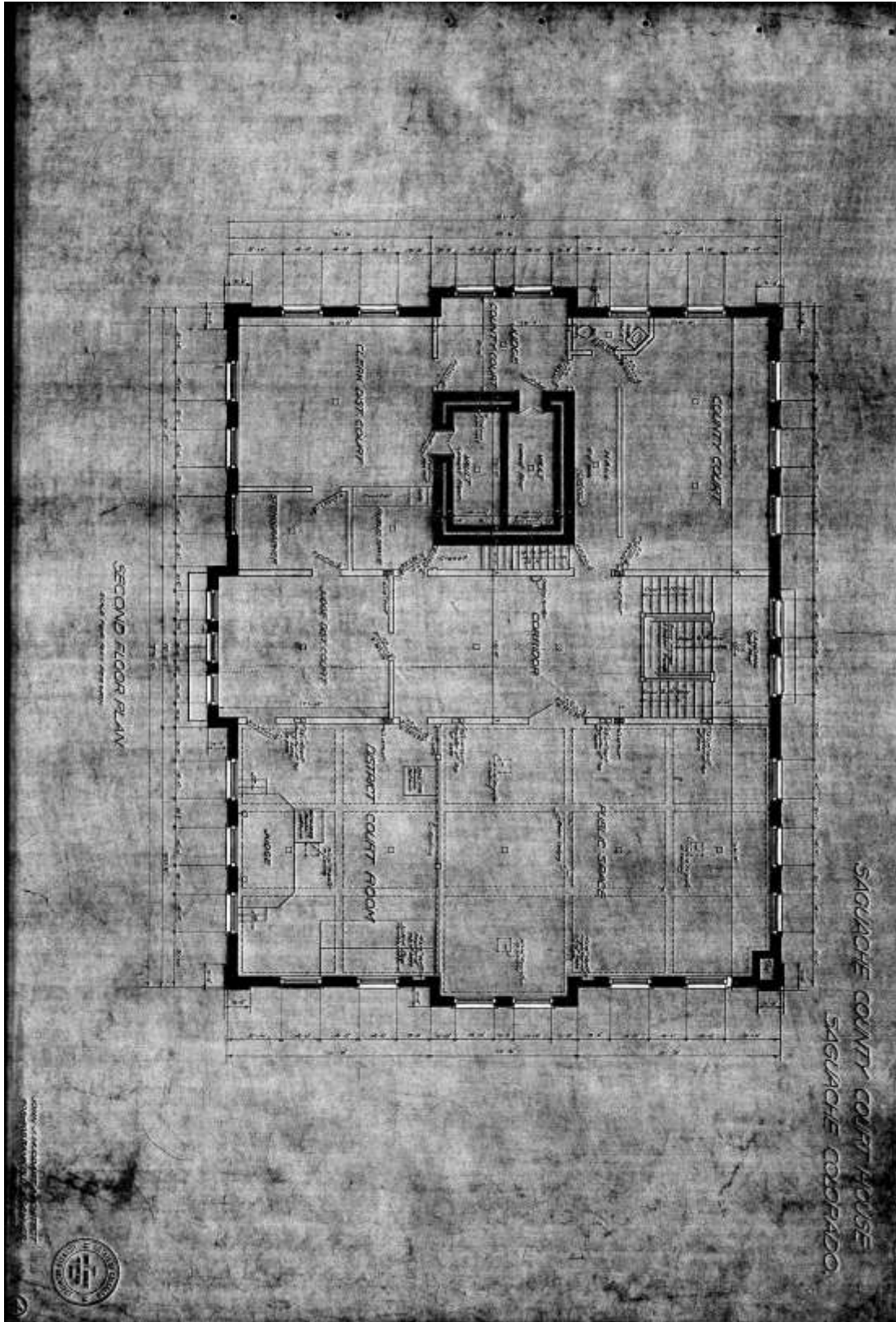
Sheet 3: FIRST FLOOR PLAN



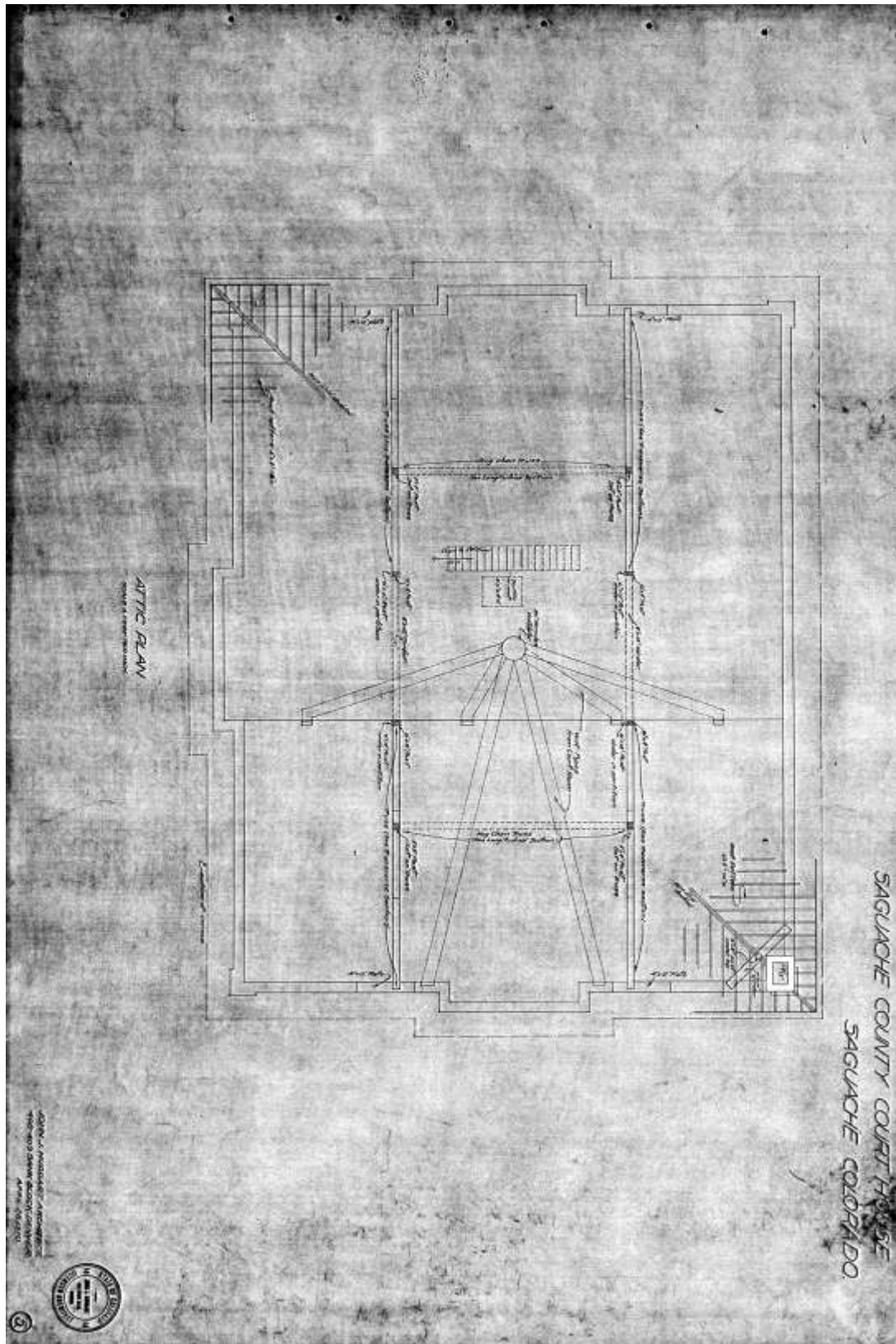
Architect: John James Huddart, 1910

Sheet 4: SECOND FLOOR PLAN

Architect: John James Huddart, 1910

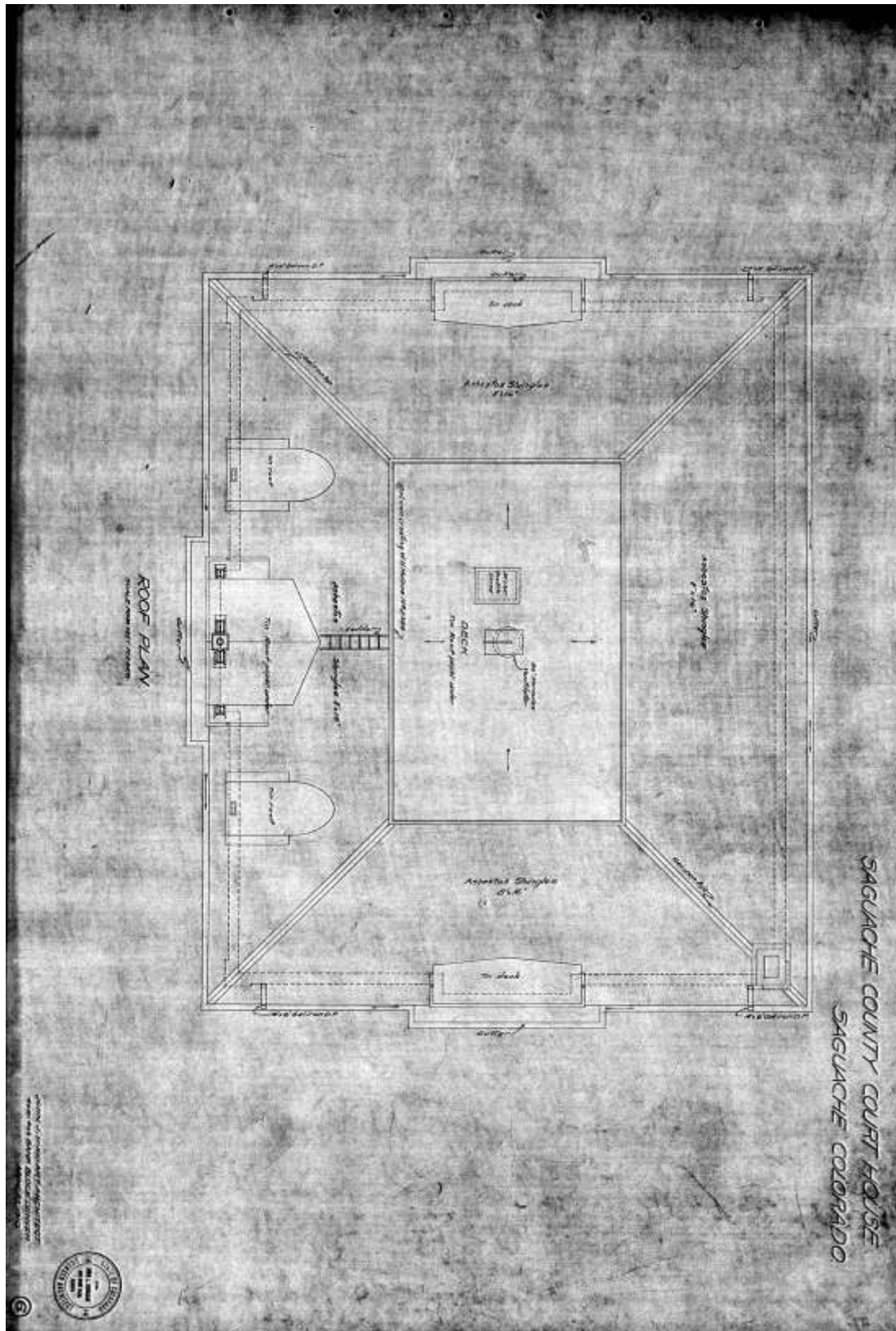


Sheet 5: ATTIC FLOOR PLAN



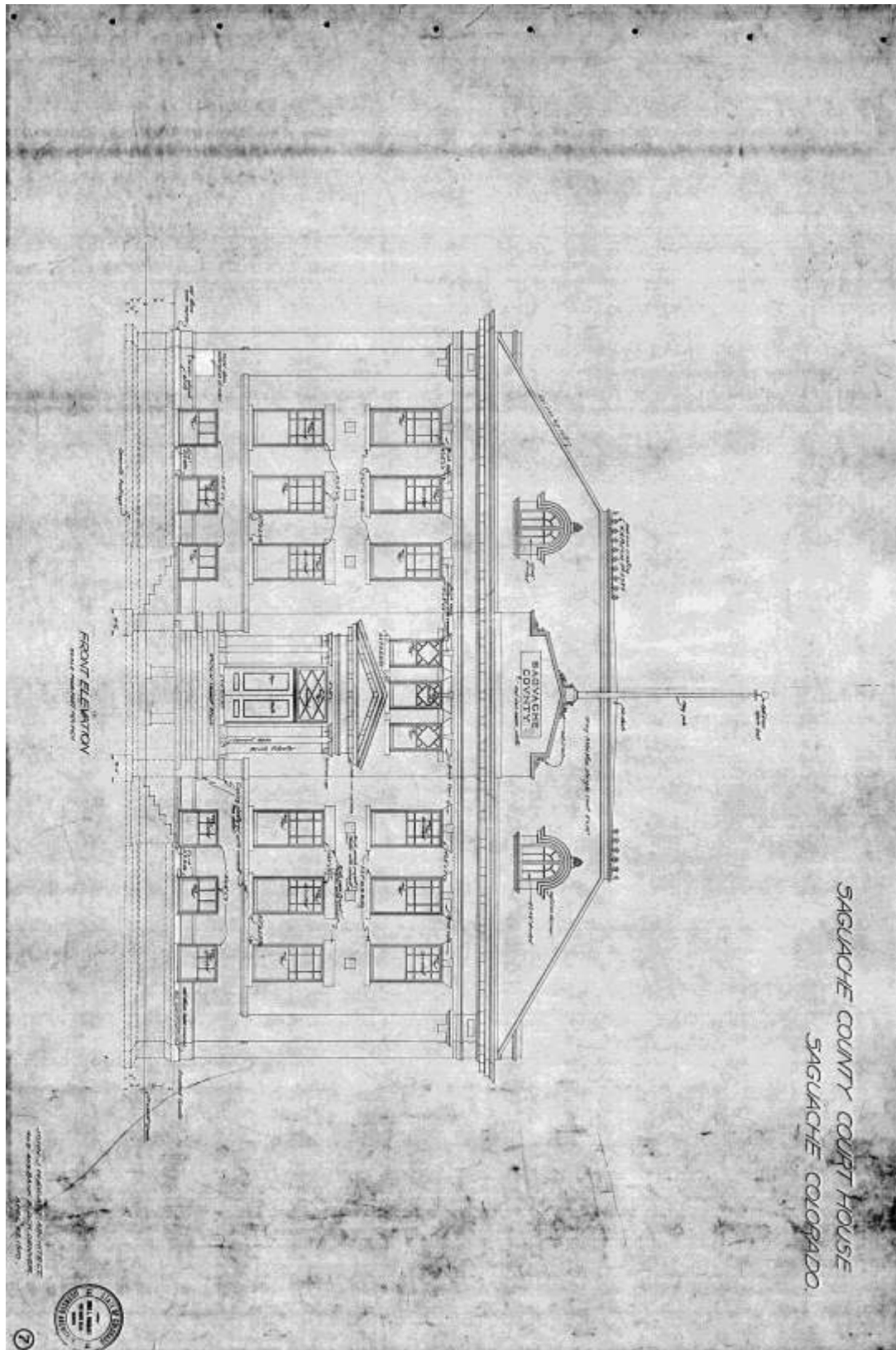
Architect: John James Huddart,

Sheet 6: ROOF PLAN



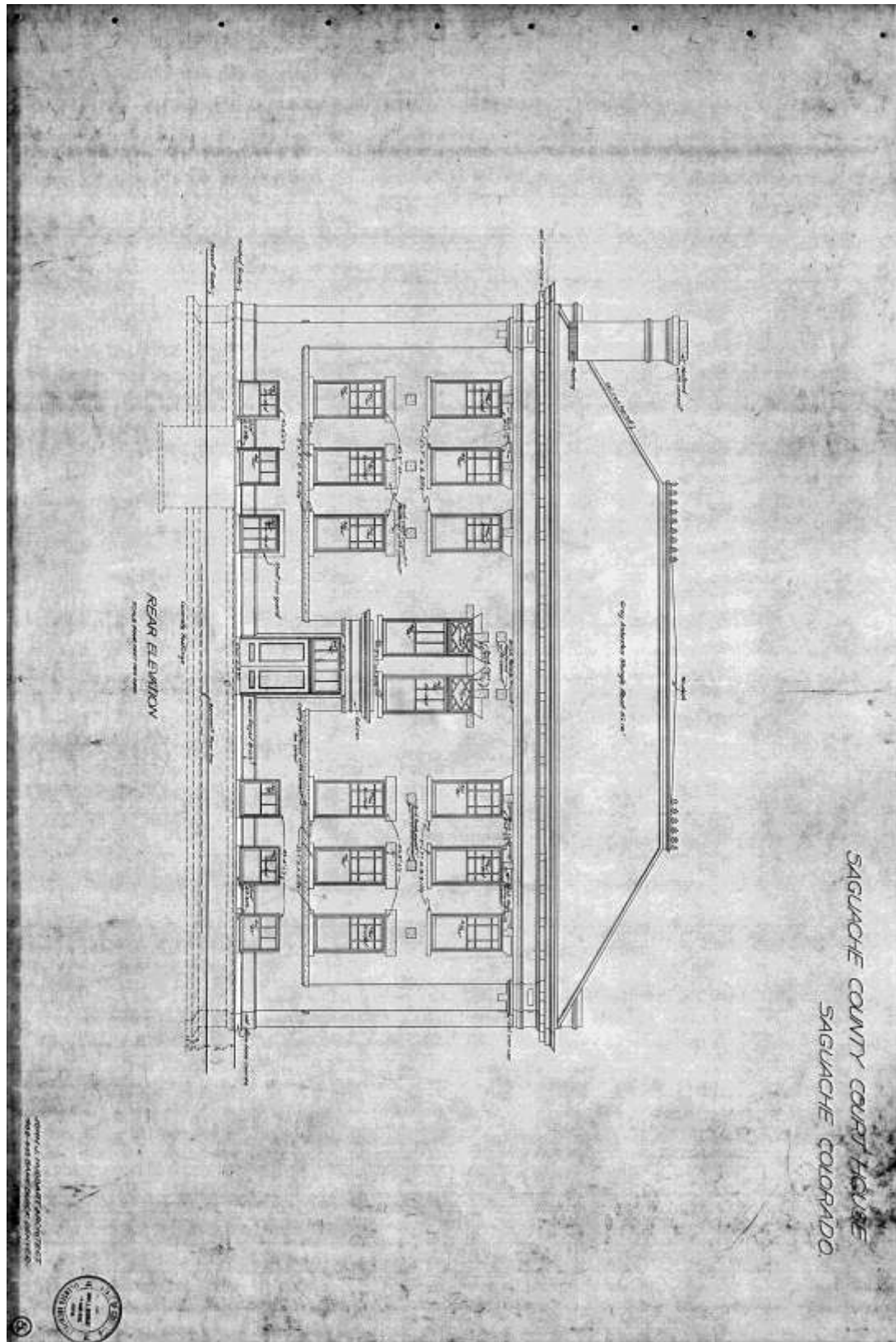
Architect: John James Huddart, 1910

Sheet 7: FRONT ELEVATION



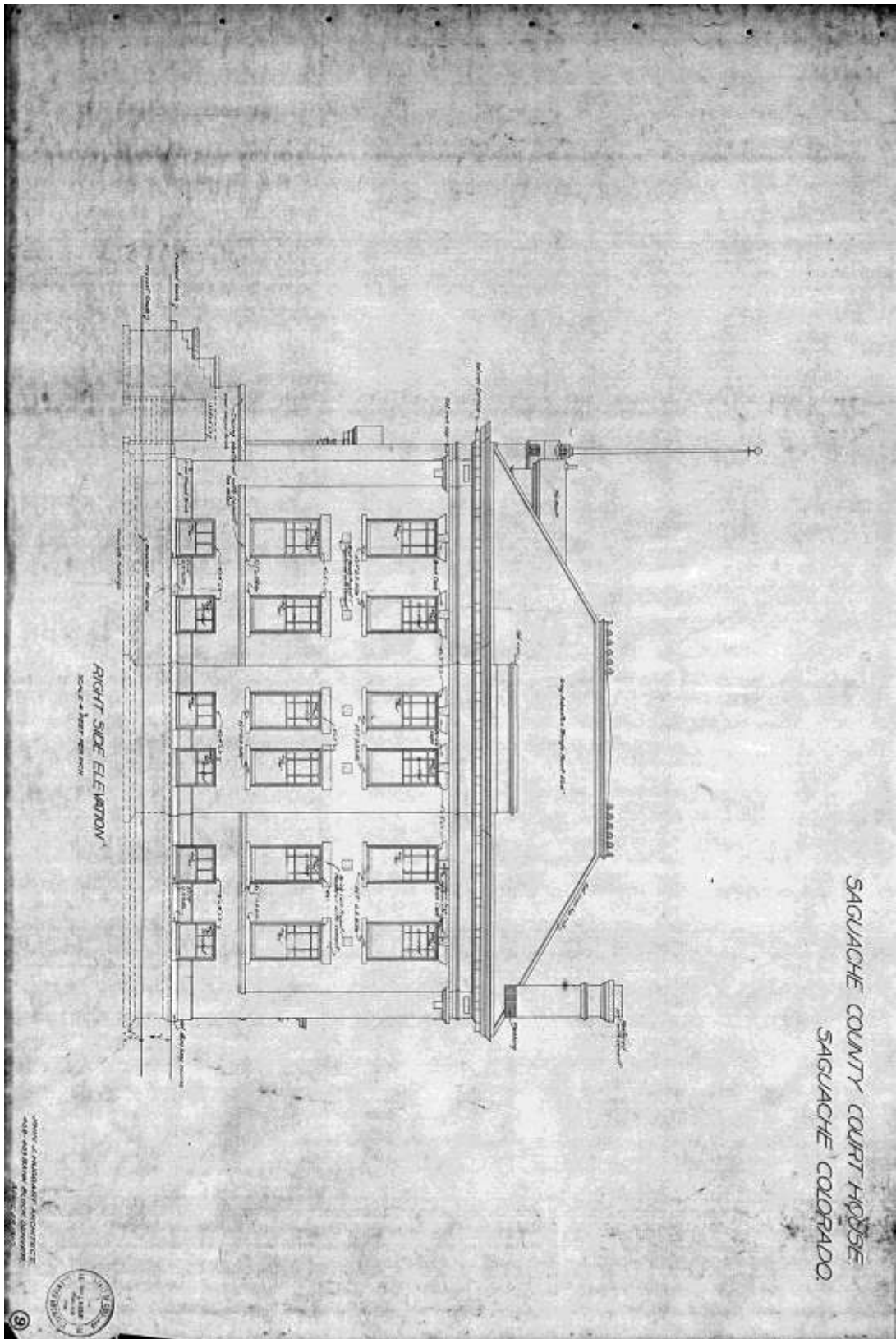
Architect: John James Huddart, 1910

Sheet 8: REAR ELEVATION



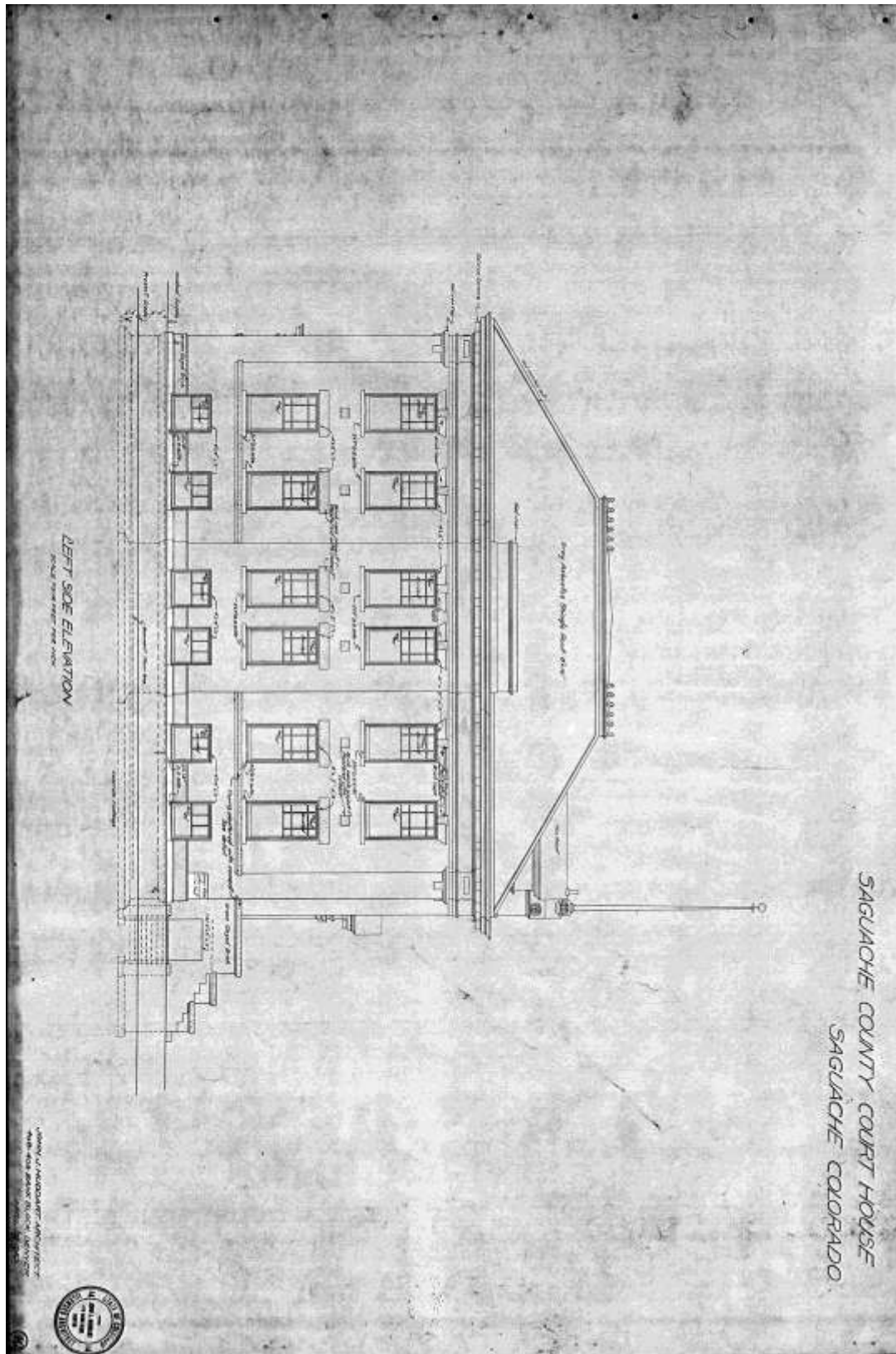
Architect: John James Huddart, 1910

Sheet 9: RIGHT SIDE ELEVATION



Architect: John James Huddart, 1910

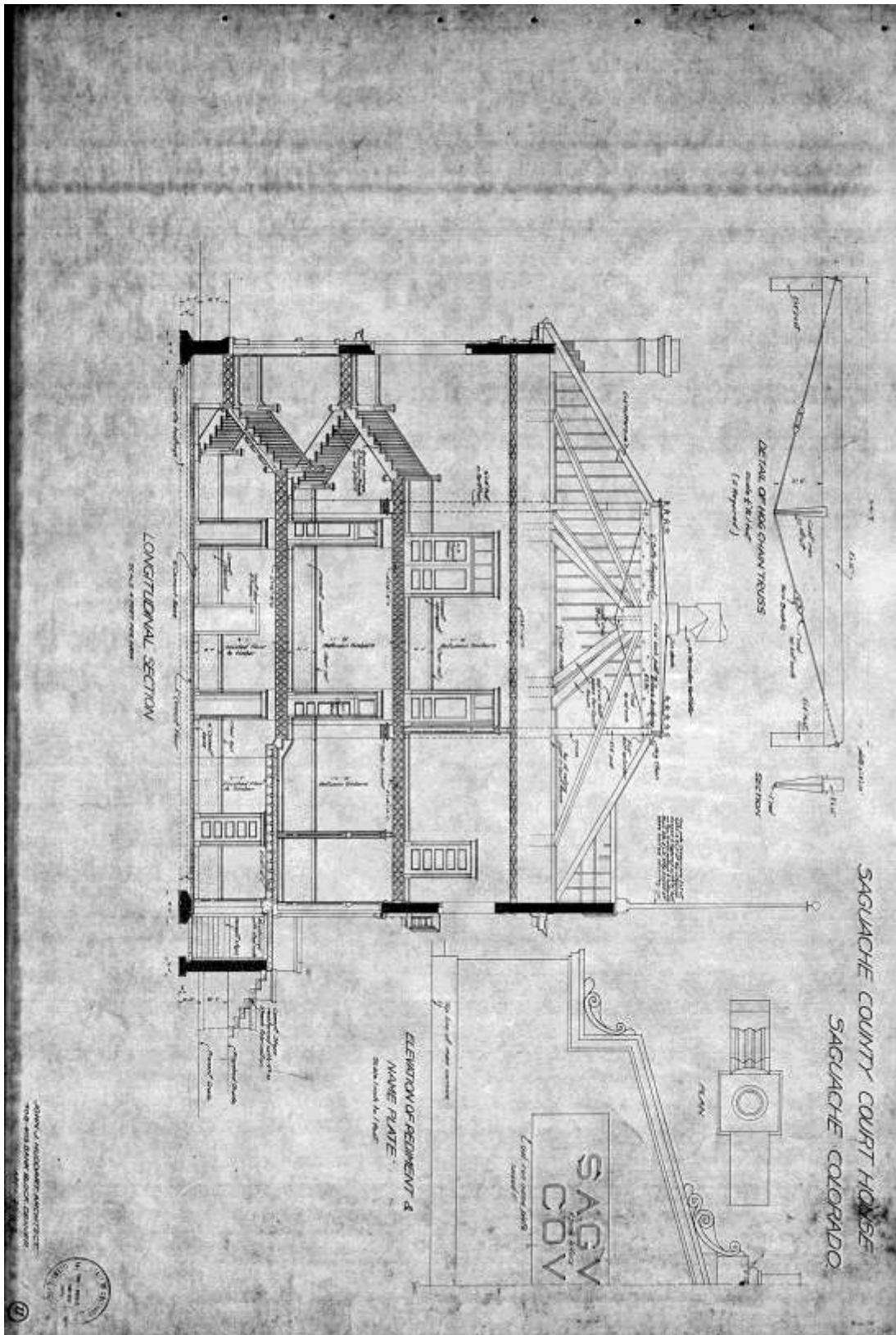
Sheet 10: LEFT SIDE ELEVATION



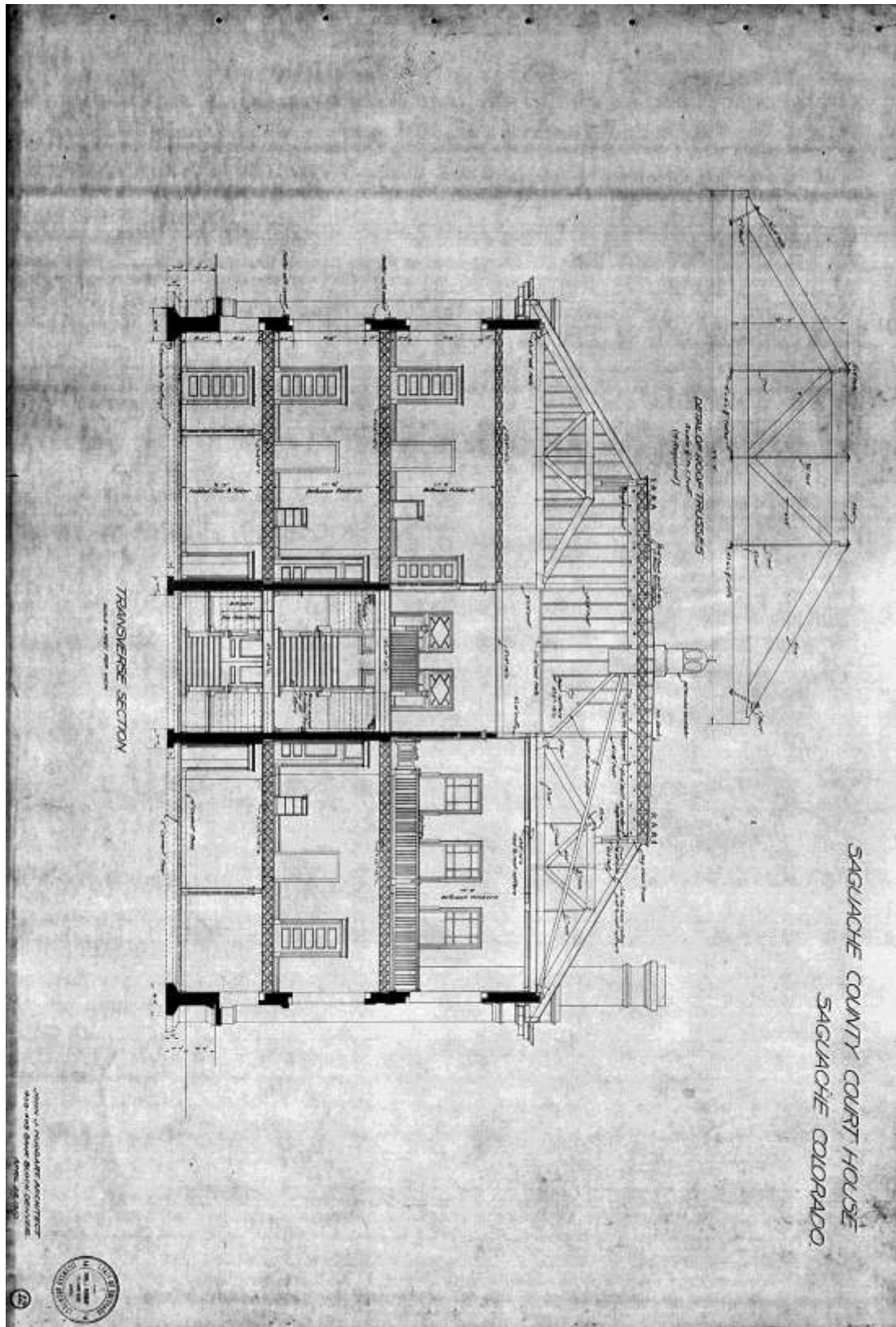
Architect: John James Huddart, 1910

Sheet 11: LONGITUDINAL SECTION

Architect: John James Huddart, 1910



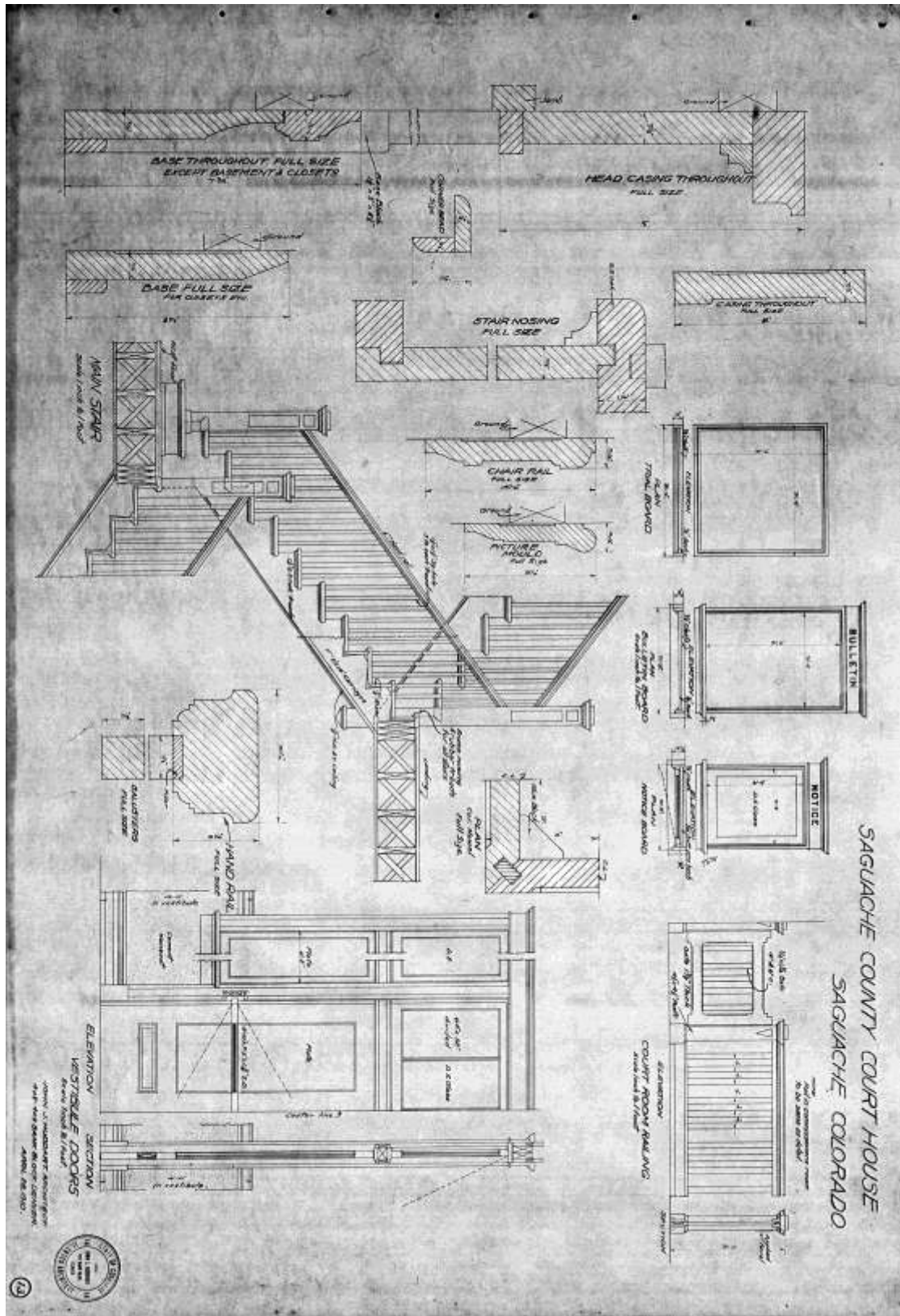
Sheet 12: TRANSVERSE SECTION



Architect: John James Huddart, 1910

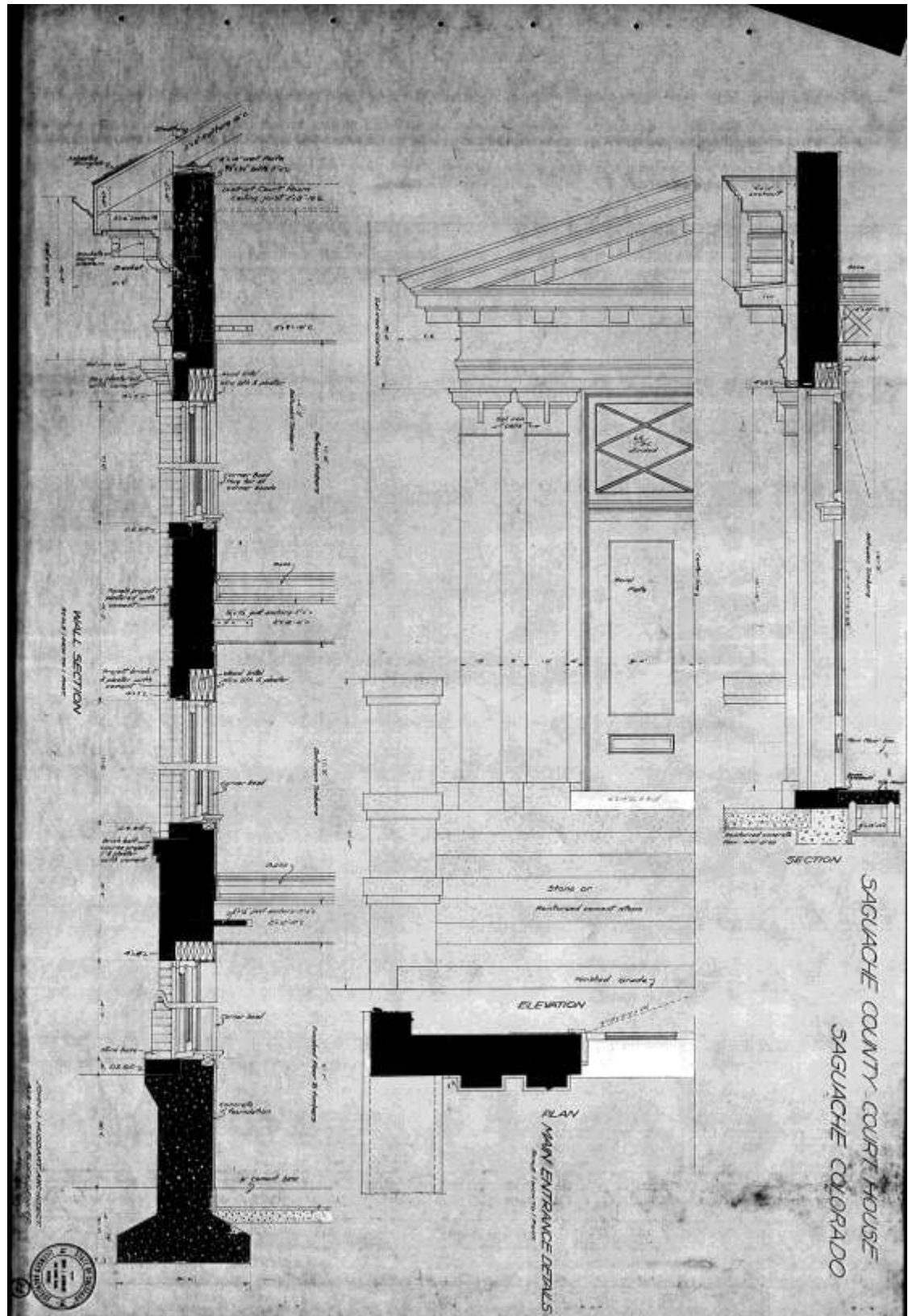
Sheet 13: STAIR AND MOULDING DETAILS

Architect: John James Huddart, 1910



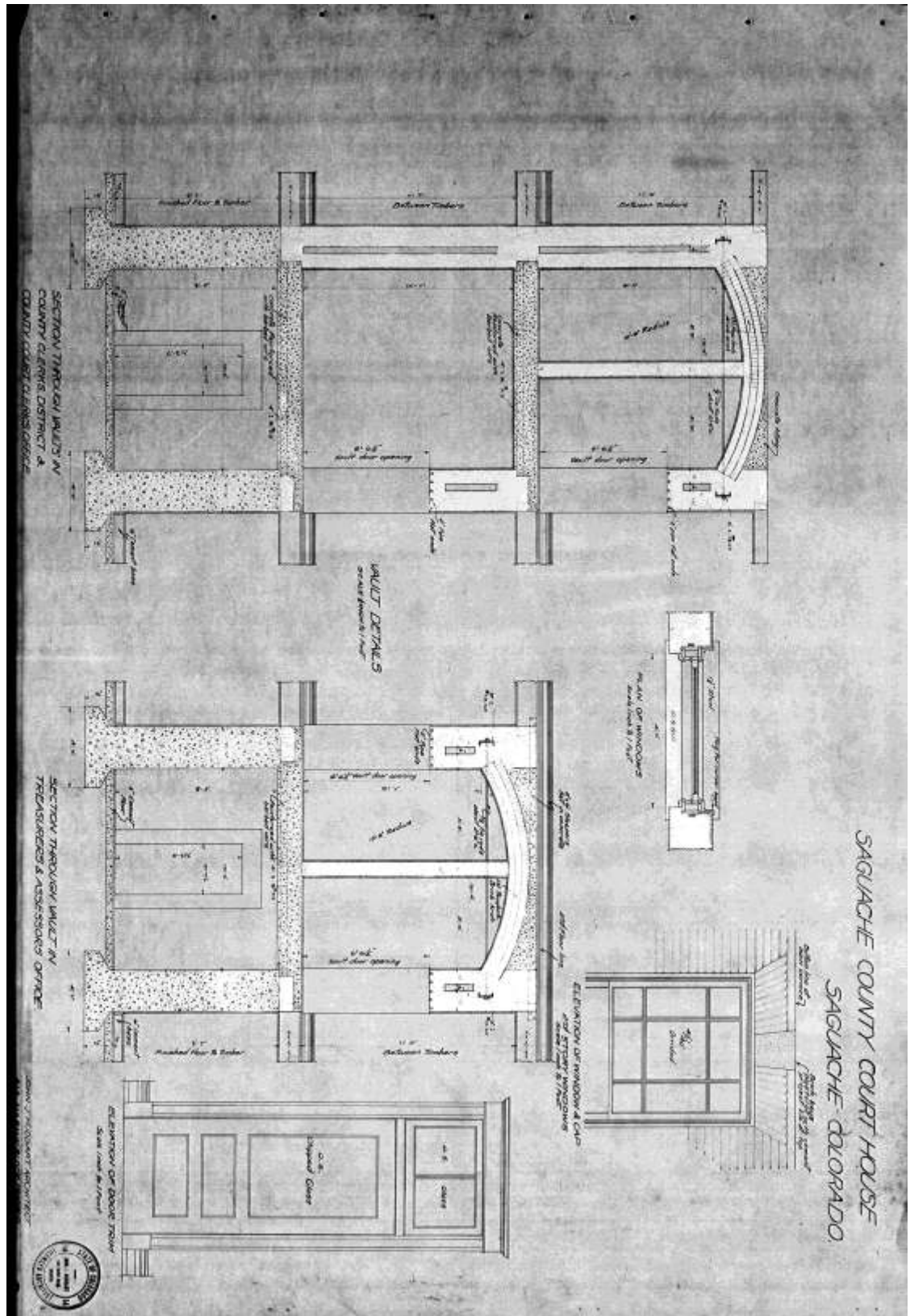
Sheet 14: WALL SECTIONS

Architect: John James Huddart, 1910

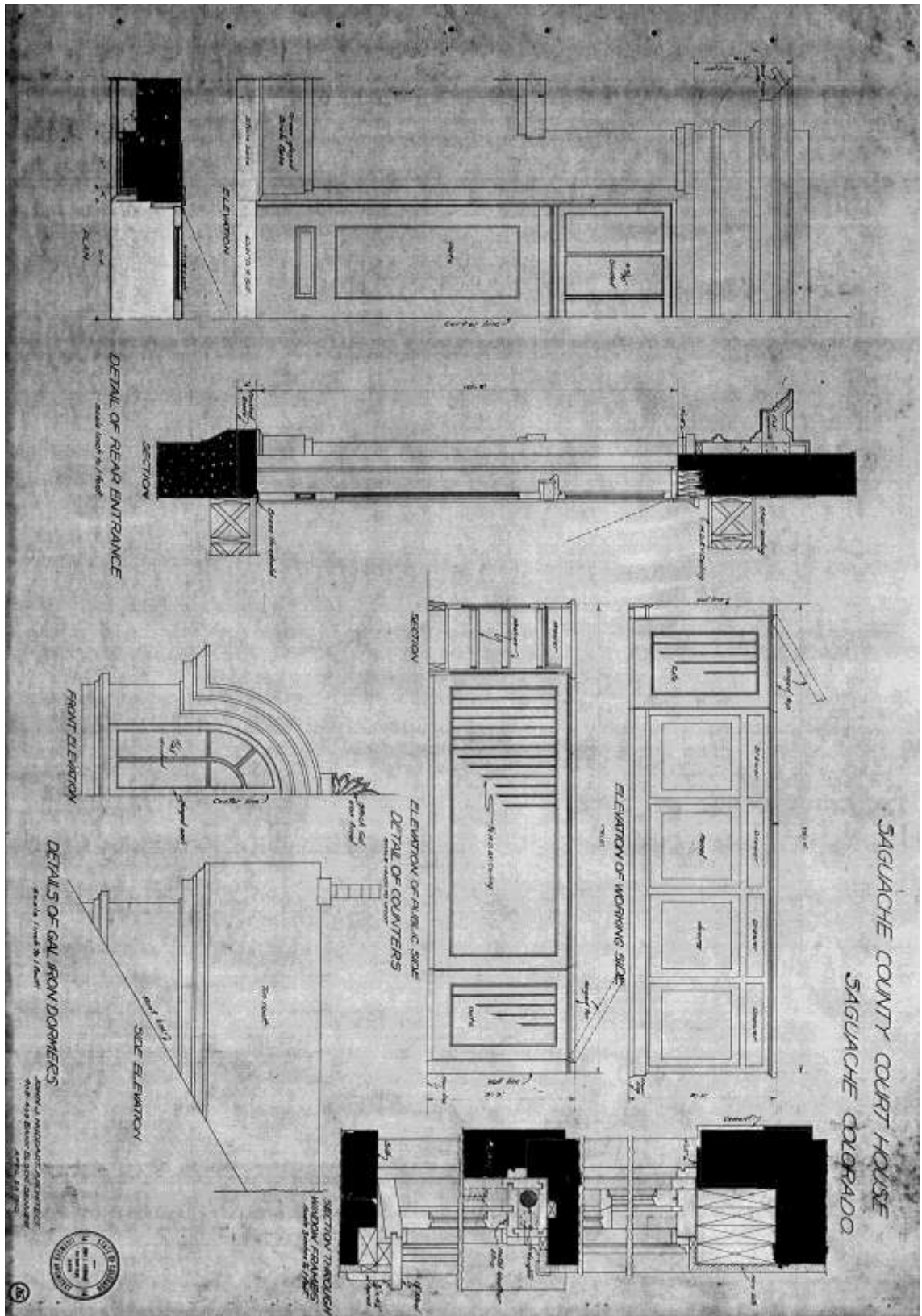


Sheet 15: VAULT SECTIONS

Architect: John James Huddart, 1910



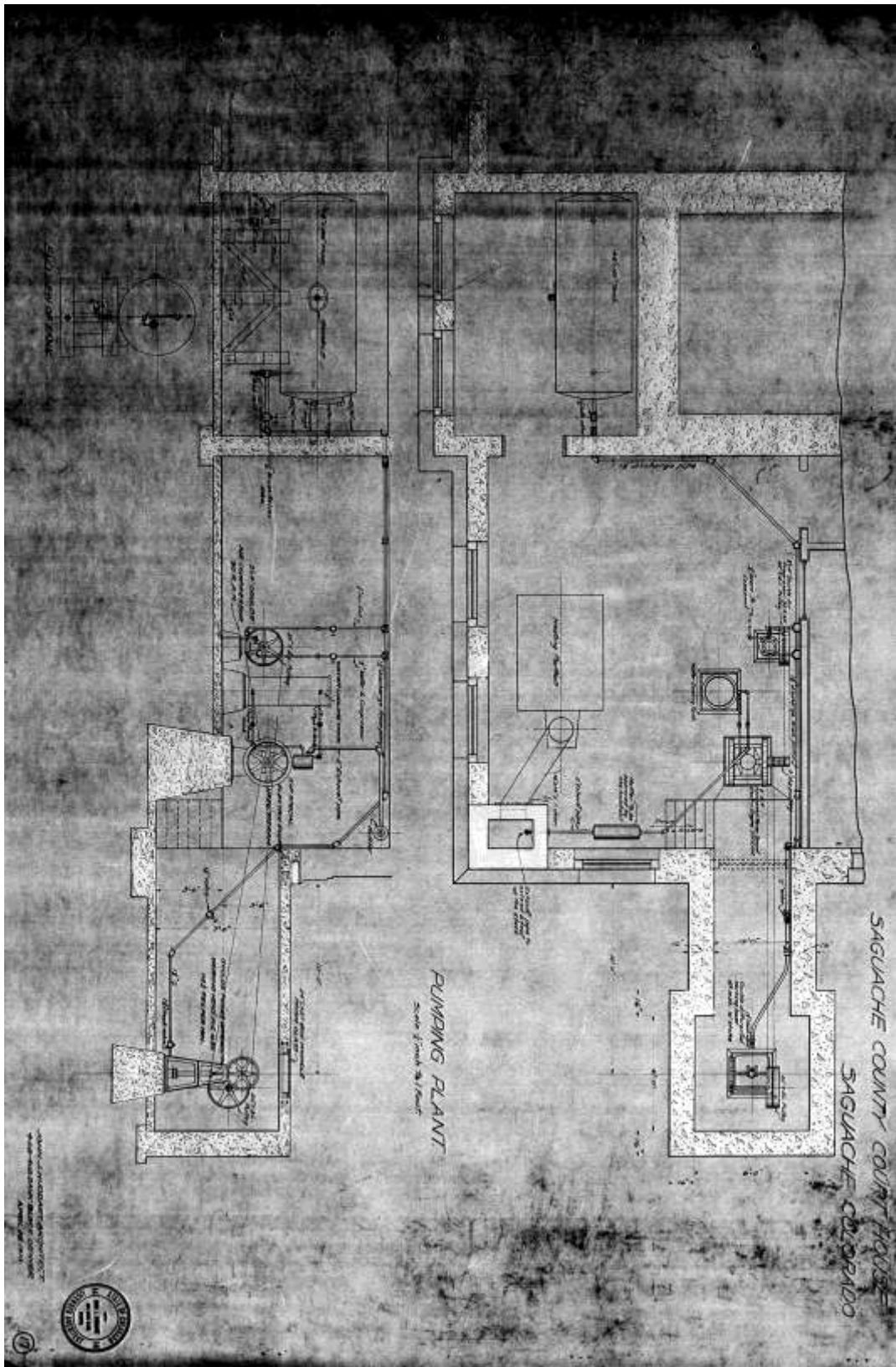
Sheet 16: DETAILS

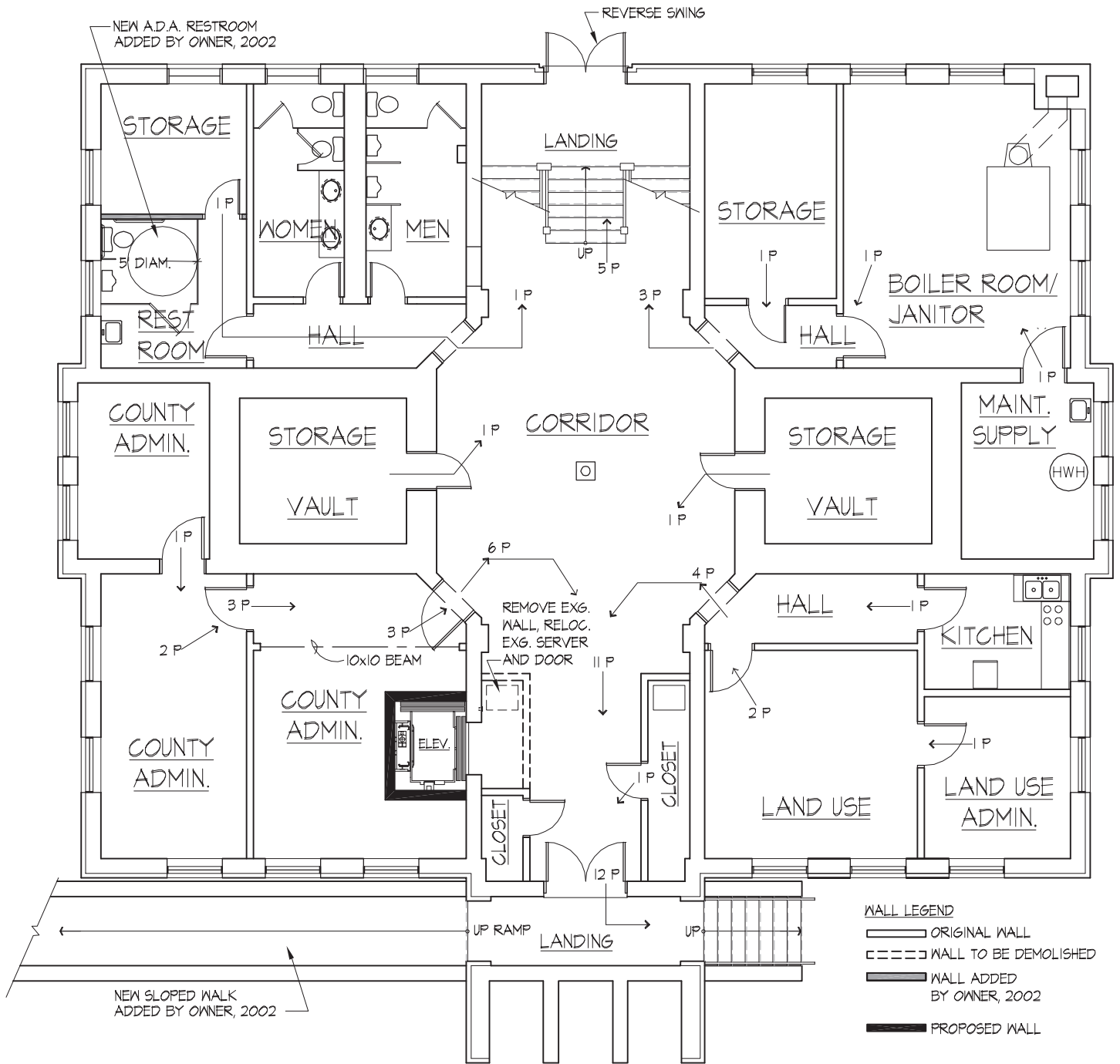


Architect: John James Huddart, 1910

Sheet 17: PUMPING PLANT

Architect: John James Huddart, 1910





MEASURED FLOOR PLAN WITH PROPOSED ALTERATIONS.
EGRESS PATHS ARE DEPICTED ON PLAN PER 1997
UNIFORM BUILDING CODE.

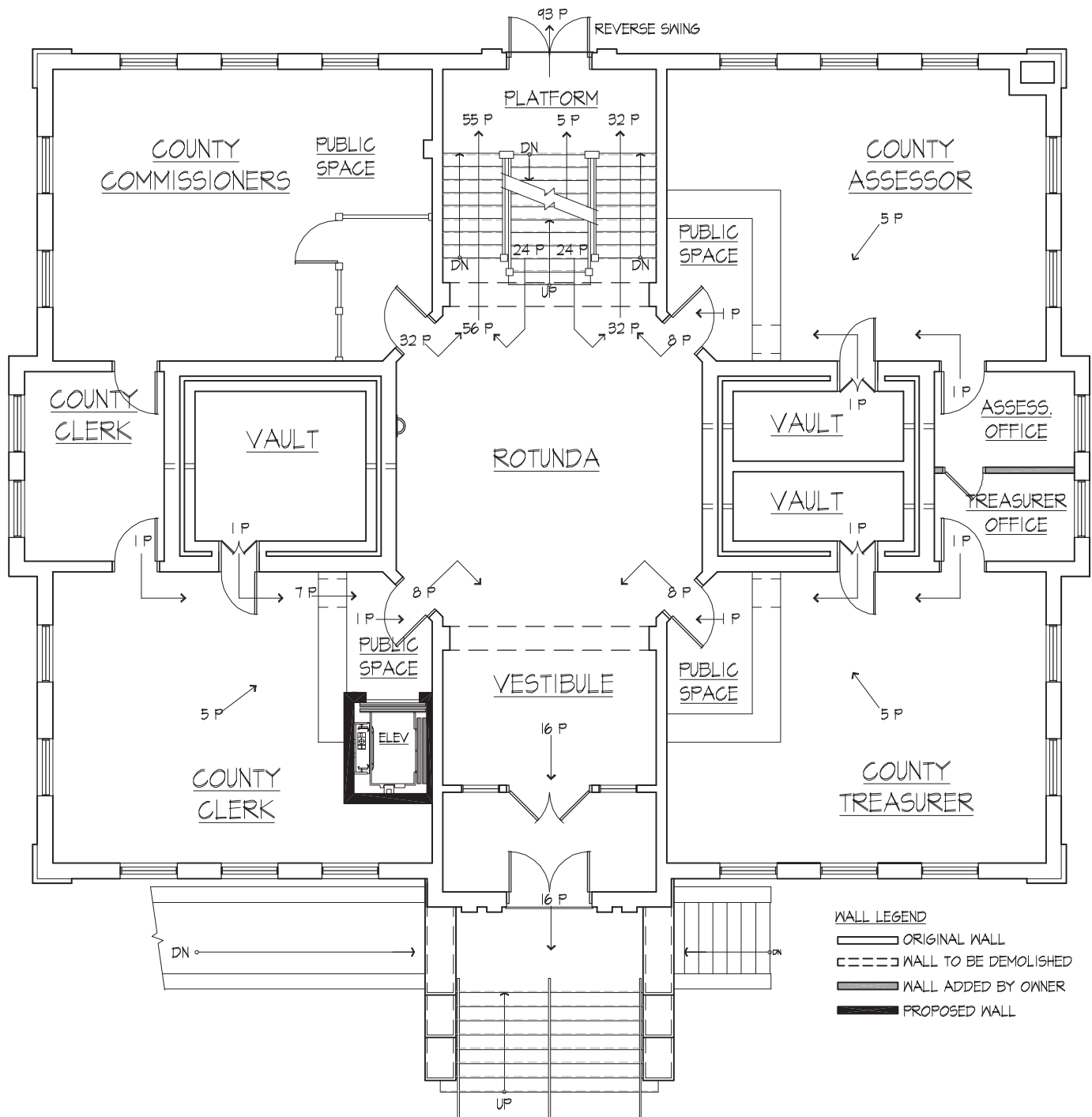


LOWER FLOOR PROPOSED PLAN

Scale : 3/32" = 1'-0"

MJA, LLC © 2003



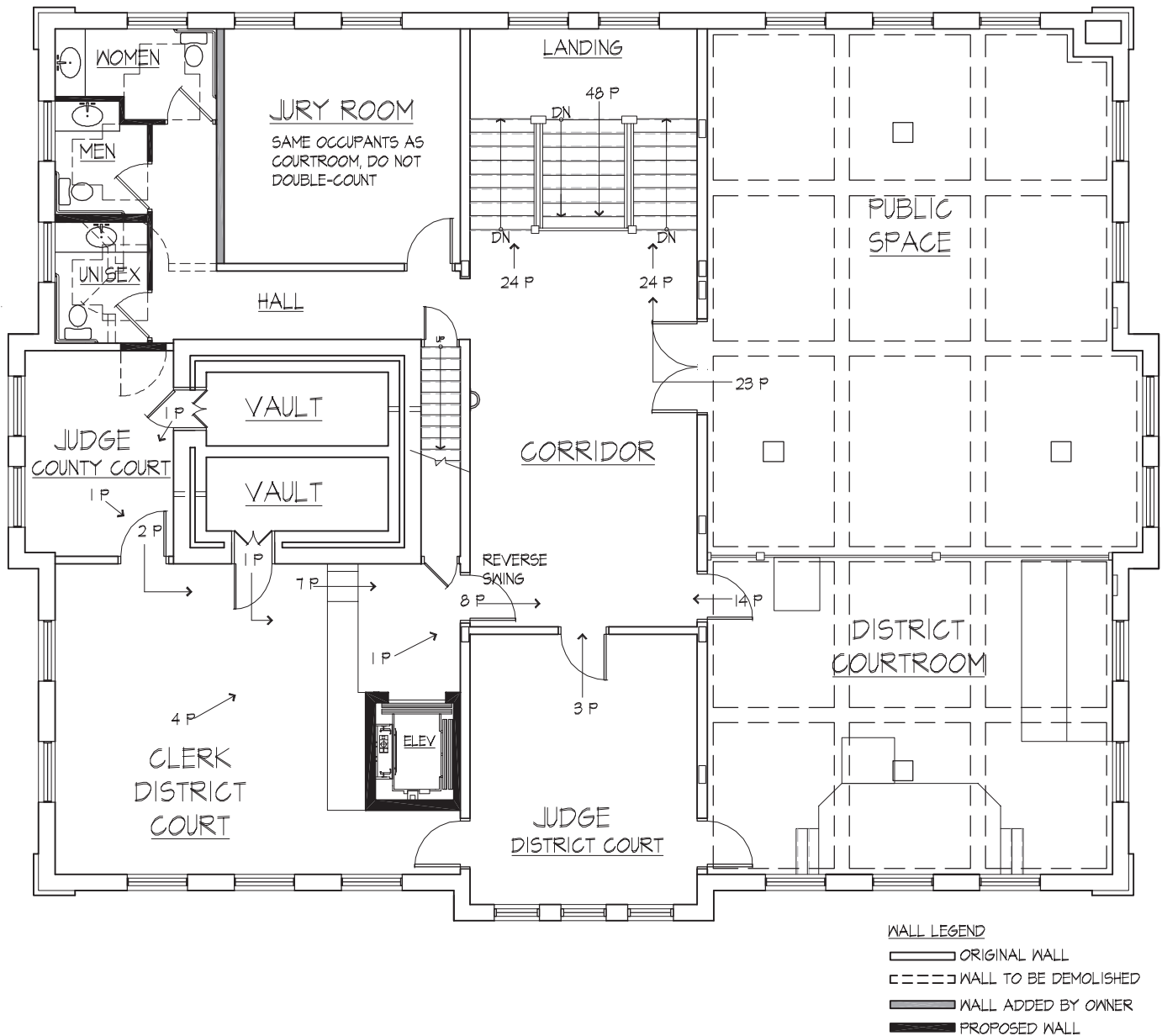


MAIN FLOOR PROPOSED PLAN

Scale : 3/32" = 1'-0"

MJA, LLC © 2003





MEASURED FLOOR PLAN WITH PROPOSED ALTERATIONS.
EGRESS PATHS ARE DEPICTED ON PLAN PER 1997
UNIFORM BUILDING CODE.

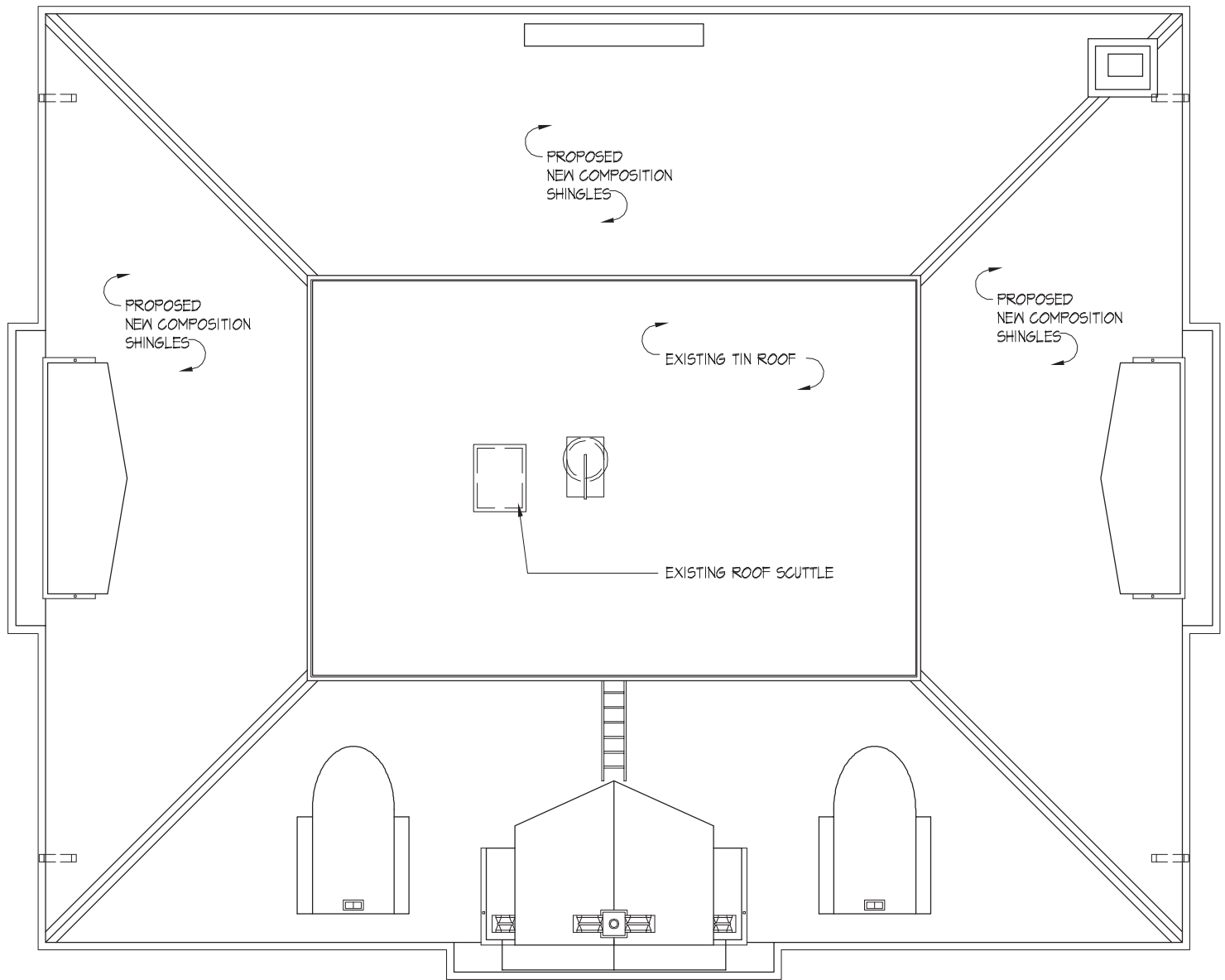


UPPER FLOOR PROPOSED PLAN

Scale : 3/32" = 1'-0"

MJA, LLC © 2003





1 ROOF PROPOSED PLAN
Scale : 3/32" = 1'-0"
MJA, LLC © 2003



2.3 PROPOSED USES

The Saguache County Courthouse has always been used as a court building and offices for county officials. Some offices have been slightly altered or exchanged, but the County of Saguache intends to maintain the entire structure as a courthouse and office facility. The lower level currently contains offices for the County Administrator and the Land Use Department, as well as maintenance and restroom facilities. The main level includes offices for the County Commissioners, the County Assessors, the County Treasurer, and the County Clerk, along with a gracious central rotunda. The upper level accommodates the Clerks and Judge of District Court, a jury room and conference room, and the District Courtroom and its adjoining public space. The attic currently contains storage for old records.

3.0 STRUCTURE CONDITION ASSESSMENT

3.1 SITE

DESCRIPTION:

The site is located at the corner of 4th Street and Christy Avenue. This site is at the end of a stretch of two-story commercial buildings on Christy. Eventually this street culminates in the Saguache High School. The site is home to a number of buildings dedicated to county business, including an office trailer and another office building. Parking is available both on-street at the east entry side, and on paved lots to the south and the west of the building. The site includes a number of concrete sidewalks, and on the east side of the building a long sloped concrete walk, built with retaining walls at each side. Access to the lower level from the east side was formerly obtained by symmetrical sets of stairs, on the north and south sides of the main entry stair and stoop. Of these stairs, the south set was recently removed (2000) and replaced by the sloped concrete walk mentioned above.

A wide concrete stair with four risers is integral with the front entry sidewalk. The entire site was raised with compacted soil approximately four feet prior to construction. This condition kept the basement above the normally high water table, and allowed for effective drainage away from the building. This also allowed for access to the main level and subsidiary access to the lower level without inordinate number of stairs.

North and east of the building is a lawn area. The lawn is irrigated by a sprinkler system which is carefully oriented so that none of the sprinklers hits the building. Upon the lawn are tall spruce trees, some nearly seventy feet in height, planted around the time the building was first built. The site has an irrigation and drainage ditch to the north.



Original silver spruce tree on courthouse site.



Courthouse, showing tall spruce trees.



Sloped concrete walk on east elevation, constructed by county crew in 2002, with retaining walls on each side.



*Front (east) site stair. Date constructed unknown.
Note crumbling on third tread and non-original pipe rail.*



Front (east) site stair, perspective view



Side (northeast) site stair.



*Walk from west entry towards the west.
Note slight slope (<1:20) and handrails.*



Walk from west entry towards the south.

CONDITION:

Site conditions are generally good, with several exceptions noted. The overall experience of the building is enhanced by its lovely setting, amidst a stand of tall spruce trees and a carpet of their soft needles. No floral planting areas are evident around the building perimeter. Some lawn areas have no grass. Spruce needles are acidic and kill any grass below the trees. The retaining walls on each side of the long sloped concrete walk are bowing and finished unevenly. The front sidewalk stair is crumbling, and has no adequate railing. The sidewalks northeast of the building are hewing and spalling.

RECOMMENDATIONS:

The existing site stairs just northeast of the building (leading from the north sidewalk) and east of the building (the front stair depicted above) and the existing long sloped concrete walk are all non-original site amenities. As such, no effort was made to harmonize these with existing historic fabric. However, they are functional and operationally necessary, and efforts can be made to improve their safety and appearance, and to better integrate them with the historic context.

On the site stairs, paint should be cleaned from the stringers with Prosoco restoration cleaner. The stairs should be repaired by patching with special concrete patch compound. New A.D.A. compliant iron handrails of a period style and design compatible with the 1910 courthouse should be installed on either side of the stairs. For the long sloped walk, the retaining walls should receive a coat of cement parging on all exposed sides. This should be smoothed until all surfaces are level and even. The portions of the flat sidewalks that are hewing and spalling should be removed and replaced with new concrete sidewalk slabs.

3.2 FOUNDATIONS

DESCRIPTION:

The perimeter foundation walls are the stone walls of the building basement. These foundation walls rest upon massive stone spread footings. Original plans indicate that these footings are three feet wide and sixteen inches deep.

CONDITION:

No significant shifting or settling has occurred in any of the walls above, so reasonably one can assume that the footings are well-founded and supported by adequate native or compacted soils.

RECOMMENDATIONS:

No work is recommended on the building foundation.

3.3 BUILDING STRUCTURAL SYSTEM

GENERAL STRUCTURAL SYSTEM DESCRIPTION:

The building is a load bearing masonry structure with wood framed floors and wood framed non-bearing partitions. The ceilings are also wood framed, as is the roof structure.

BASEMENT STRUCTURAL SYSTEM:

DESCRIPTION:

Bearing basement walls are made of stone. Basement perimeter walls are seventeen inches thick. Bearing basement interior walls are brick and thirteen inches thick, with the exception of the vault walls, which are two feet two inches thick. Non-bearing basement interior partitions are of 2x4 construction. Below grade stonework is rough-surfaced on the outside, and plastered on the inside. The interior walls of the basement appear to be dry. A portion of the basement wall is visible at the exterior.

CONDITION:

The basement interior walls are dry, indicating that waterproofing on the exterior of these walls is performing well. However, leaks have been known to occur during heavy rainstorms at perimeter rooms on the north side of the building at the floor level. It is believed that the perimeter drainage is performing adequately, but that the roof drainage systems oversaturate the surrounding soils.

This problem and potential solutions are dealt with in further detail under the section 3.5 BUILDING ENVELOPE-ROOFING AND WATERPROOFING in this report.

No foundation settlement is evidenced. The visible portion of the exterior basement walls forms a plinth on the exterior of the building. Portions of the north, west, and east plinth have eroded. This erosion, coupled with a lack of proper maintenance, has resulted in a deterioration of the plinth stonework. About 15% of the plinth is severely deteriorated and crumbling. About 30% of the plinth has suffered only mild erosion. In these cases the plinth is chipped and generally worn. About 20% of the eroded plinth has been covered with a Portland cement parging by

county maintenance workers. About 15% of the plinth has been painted by county maintenance workers.



Crumbling plinth.

RECOMMENDATIONS:

Mr. Tom Carr, Staff Archaeologist for the Colorado Historical fund was consulted about excavation necessary to repair or replace damaged stone. He advised that because the building has a basement, its site context was completely disturbed during the original construction. An archaeologist need not be present during the excavation. However, Mr. Carr requested that he be contacted in the event that archaeological materials are found while the soils are disturbed.

The 15% severely deteriorated and crumbling stone should be removed until a solid surface is reached. Then, new stone should be keyed in with drilled metal rods. The 30% mildly eroded stonework should be patched with a quality stone patch product. Painted or parged stone is unacceptable. The paint and parging should be removed with Prosoco Restoration cleaner in a dilution recommended by the manufacturer, applied with a medium soft bristle brush and then washed off. No pressure washers or sandblasters should be used, nor should any abrasive products or tools be used. Apply no sealers to the basement walls. Once this work is complete, assure that enough soil is compacted around the foundation perimeter.

FIRST FLOOR STRUCTURAL SYSTEM:

DESCRIPTION:

First floor framing varies. Per the original plans, beneath the majority of the first floor, framing is 2x12 at 12" on center. Beneath the first floor rotunda, framing is 2x12 at 9" on center.

CONDITION:

First floor framing appears to be in good condition. No dry rot has been observed.

RECOMMENDATIONS:

No corrective work is recommended.

SECOND FLOOR STRUCTURAL SYSTEM:

DESCRIPTION:

Second floor framing is similar to first floor framing. Per the original plans, beneath the majority of the second floor, framing is 2x12 at 12" on center. Beneath the second floor main corridor, framing is 2x12 at 9" on center.

CONDITION:

Second floor framing appears to be in good condition. No dry rot has been observed.

RECOMMENDATIONS:

No corrective work is recommended.

ATTIC FLOOR STRUCTURAL SYSTEM:

DESCRIPTION:

Attic floor framing is 2x8 at 16" on center throughout. In the area above the courtroom, these joists are directly tied to roof rafters.

CONDITION:

Portions of the attic floor currently hold loads for which the floor was never designed. Large shelving holding archived record books may load the floor up to one hundred pounds per square foot. These paper records also present a possible fire hazard.

RECOMMENDATIONS:

Remove heavy shelving units and all of their contents, and archive these materials off-site. Utilize attic for the storage of light-weight supplies only, and be sure to spread out loads over the entire attic floor.

ROOF FRAMING SYSTEM:

DESCRIPTION:

A combination of framing system components holds up the stately mansard roof of the courthouse. Carrying the majority of the load are four pitched flat-topped girder trusses. These trusses consist of 8x10 top and bottom chords, 6x8 diagonal struts, and three 1" vertical tension rods. The girder trusses are oriented in the north-south direction, and rest upon masonry knee walls at the exterior and 6x12 posts at the interior. 2x8 rafters at 16" on center complete the sloped portion of the roof. The flat portion of the roof is supported by two hog chain trusses running east to west as the primary members, located at the north and south ends of the flat roof, and by deck joists running in the same direction. The hog chain trusses are supported on each side by 8" by 8" posts which bear directly on the flat-topped girder trusses. Each hog chain truss consists of an 8" x 12" horizontal member with a cast iron strut in the center. Rods with turnbuckles run from the bottom of this strut to the steel plates on each end of the horizontal member. These rods act in tension, increasing the primary horizontal member's stiffness and resistance to deflection. The flat roof joists are 2x12 deck joists at 16" on center with two rows of cross bridging between each joist.

CONDITION:

The roof framing system is solid, sturdy, and in good condition. None of the girder trusses or hog chain trusses is in any way deflected or compromised in integrity. The roof rafters and decking are, interestingly, recycled. They appear to have been originally used to construct the foundation formwork. Some still show hardened cement on the surface. Some of the joists and the roof sheathing above them have evidence of minor dry rot due to roof leaks. Approximately five percent of the roof framing system contains dry rot due to roof leaks, primarily at the intersection of the sloped and flat roof areas. The deck joists and their bridging are in good condition.



One of four 8x10 construction girder roof trusses. Note vertical steel tension rods.



2x12 deck joists with 2x4 bridging



2x8 wood rafters and 2x12 decking, with cement-covered faces. Note primitive fire suppression units.



Hog chain trusses in attic, supporting edge of flat roof and rafters.

RECOMMENDATIONS:

The majority of the roof structure requires no work. The five percent of the roof structure with dry rot should be addressed. Any severely dry rotted rafters at the juncture of the flat and sloped roof areas should be sistered with new rafters with similar dimensions. Any rotted sheathing can be replaced, but only when the reroofing job is undertaken. No other corrective work is recommended at this time.

3.4 BUILDING ENVELOPE-EXTERIOR WALLS

EXTERIOR WALL CONSTRUCTION AND MASONRY

DESCRIPTION:

Exterior wall construction is load bearing three-wythe brick, 13" thick in most places. Exterior brick is smooth face throughout, but varies in finish. Brick finish is purple in the lower courses of the building near the plinth and dull yellow above. Brick mortar joints are raked.

CONDITION:

Exterior walls are in fair condition with no evidence of cracking on the entire building. The base conditions are noted in the Basement Structural Condition category. Some mortar has eroded from wind and weather over the years. Unfortunately, some bricks have been painted. This has either occurred from haphazard splashing of paint while painting other architectural elements, or has been intentional. A former coal chute opening on the west face of the building has been replaced by a ventilation grille and an empty space filled with cement parging.



Purple brick at stoop. Note improper painting of abutment.



Painted brick, to right of downspout.

RECOMMENDATIONS:

First of all, remove all cement parging from area above the grille on the west face. Clean this area completely, and install brick in a workmanlike manner, so as to show no distinction between new brick and existing brick field. See photograph below. The grill itself will be removed and replaced with a combustion air louver for the furnace. Please see the mechanical portion of this report, section 3.8, for further information about this louver.

Recommended work on the main body brick work includes repointing of joints on approximately 40% of the building elevations and cleaning of all the exterior brick. Protocol is as follows. Remove old deteriorated mortar from horizontal and vertical joints to approximately 1/2" to 1" depth using only hand tools and exercising extreme care not to damage brickwork. No power tools will be allowed. Remove mortar only in areas where original flush joint has

deteriorated or broken away. Repointing protocol: Do not use any Portland cement mortar. Mortar is to be of a soft permeable consistency intended to be softer than the stone. Use local rounded gradated sand, not crushed sand, in a 2 ¼-3 to one ratio with hydrated lime or lime putty. Type “O” bagged mortar may be substituted for the lime.

A test sample of mortar must be approved for color and consistency by the architect for each area to be treated. Fill joints with plain mortar up to the surface, applying at not more than ¼” depth at a time. After repointing, clean brick surfaces with the gentlest means possible. Do not use any sandblasting. For non-stained areas use ½ cup detergent per gallon of water and a medium soft bristle brush. For areas stained with paint, use Prosoco Restoration cleaner in dilution recommended by the manufacturer, applied with a medium soft bristle brush and washed off. Do not use any pressure washers or sandblasters, and do not use any abrasive products or tools. Do not apply any sealers to brick work.



Left: Condition of area above vent grille on west face of building. This area must have all cement removed and replaced with brick to match its surroundings.

Below: Upper level window brick jack arch with brick key plastered with cement.



EXTERIOR FINISHES

DESCRIPTION:

The exterior sills and horizontal band copings (below the main floor windows) are made of brick plastered with cement. Lintels on the main floor are made of brick plastered with cement. Jack arches on the upper floor windows are made of brick and have brick keys plastered with cement. Small (approximately 12” x 12”) decorative square panels between the main and upper floor windows, and above the center upper floor windows on the front and rear elevation are also made of brick plastered with cement. A decorative band of brick with cement plastering is present at the heads of the three second floor windows above the main entry. Most ornament on the building is made of galvanized architectural pressed sheet metal (this material is referred to as “galvanized iron” on Huddart’s original architectural plans). Galvanized architectural pressed sheet metal details include the four front column capitols, the pediment directly above the main entry door and the cornice above the back entry door, the

pilaster capitols, the cornice molding and its modillions, both dormers, the name plate and the volutes for the top pediment at the roof line, the hip roll, and the gothic tracery cresting at the building's summit. Two pressed sheet metal raised rectangular raised flat cornices also occur on the building, centered above the second level windows on the north and south elevations.

CONDITION:

Cement plastered sills, horizontal band copings, lintels, and decorative elements are in good condition. Some galvanized sheet metal pieces have worn quite well, while others are in poor condition. The capitols and pediment have been painted a non-original lime green color. The flat raised cornices appear to be in fair condition, but are also painted an improper color. The white painted cresting has deteriorated and is entirely missing from some parts of the roof.



Front (east) entry pediment



Back (west) entry cornice



Pilaster capitol, and cornice with dentils above.



South raised cornice, north side similar.



Dormer exterior, with galvanized sheet metal detailing.



Dormer, interior, showing 2x6 wood framing.

RECOMMENDATIONS:

Cleaning work of cement-plastered elements should be undertaken at the same time as the cleaning of the adjacent masonry. Samples of the galvanized sheet metal work should be removed at several locations. These should be sent to a laboratory for spectrographic color analysis to determine original color. All galvanized sheet metal pieces should be scraped and cleaned to the next good paintable surface. Assure all pieces are sturdily mechanically attached to the building. All metal should be painted in approximately their original color, ascertained by laboratory analysis. The W.H. Mullins Company of Salem, Ohio was responsible for the fabrication of the iron cresting. However this company is long since defunct, so the cresting will need to be custom ordered from another fabricator, such as the W.F. Norman Company of Nevada, Missouri. Send a portion of the original cresting for this company or an equivalent manufacturer to copy exactly. Upon fabrication of missing pieces, install and paint all in an approximation of their original color.



Portion of original iron cresting.



Similar (though not exact) cresting available from W.H. Norman Company catalog.

EXTERIOR APPENDAGES: PORCH, STOOP, PATIO, ETC.

DESCRIPTION:

At the front, east entry to the courthouse is a large porch with stone stairs and brick abutments. Beneath this porch is the lower level entry, accessible by a set of stairs from the north and a sloping concrete walk from the south. This sloping concrete walk (which replaced a set of stairs on this side) has already been considered under the site category. The back west entry is accessed by a concrete sidewalk.

CONDITION:

The stone stairs are in poor condition, having seriously worn due to weather and foot traffic, and having settled over time. The abutments have been inappropriately painted white. It appears as though the central stringer of the main entry stair is not original, as it does not appear on the architect's original drawings. No adequate, code-compliant railings are present on the main entry stair. In the installation of the sloping concrete walk, several bricks were damaged.

RECOMMENDATIONS:

Remove central steel pipe railing mounted on central stringer. Remove central stringer by hand with hammers and chisels, taking care not to damage the original stone steps beneath it. Remove all paint from concrete abutment caps, following protocol described under the category of Building Envelope. Again, do not apply any sealant over the cleaned concrete. Remove and reset all stone steps. Patch any holes or chips in stone steps with concrete patching compound. Install three new code-compliant period iron handrails, one on each side and one in the center. Clean all masonry composing the sidewalls on the east entry porch and stoop, as instructed under section 3.4. The brickwork on the south sidewall needs repair, by selective replacement of damaged brick. No recommendations are made for the west entry.



Entry photo, showing front stair.

3.5 BUILDING ENVELOPE-ROOFING AND WATERPROOFING

ROOFING SYSTEMS, FLASHING, AND DRAINAGE SYSTEMS

DESCRIPTION:

Sloped portions of roof are covered with original asbestos shingles. Galvanized sheet metal flashing is present at the hips, and at the edges of the flat roof. The flat portion of the roof itself

is composed of tin, as are the roofs for the top east elevation pediment and the two dormers. Galvanized sheet metal gutters surround the entire perimeter, and are served by 4" x 6" galvanized sheet metal downspouts in each of the four corners.



Above:
*Roof
edge
with*



cresting,

Right: *Roof vent and hatch.*



Above: *View of galvanized iron dormer*



Above: *Flat tin roof area, top*

CONDITION:

The asbestos shingles are presently in serviceable condition. However, recently a painter has haphazardly covered some of the shingles in white paint, effectively ruining them. The shingles themselves are non-friable, and away from any inhabited area.

Some leaks are present. Flashing does not appear to be functioning adequately. The flat roof is in fair condition, but for a few patches of rust. The roof of the pediment and dormers are in good condition, except that they do not match the other galvanized pieces in color. The gutters and

downspouts are in poor condition, and leak. One downspout in particular is unacceptably aligned so as to block a basement window.

During heavy rainstorms, water has been known to leak in at the basement level, at the floor level rather than at the walls. The rooms in which leaks are apparent are the furnace room in the northwest of the building and the land use office in the northeast. It is believed that these leaks are primarily caused by excessive water drainage through leaders from the roof permeating the surrounding soils rather than from inadequate waterproofing in the walls themselves or from inadequate perimeter drainage. The leaks occur at the line between the wall and the floor, and are periodic episodes. No evidence of chronic or prolonged leakage, in the form of spalling or efflorescence on the walls, is present.



Left: leader (downspout) blocking basement window at front (east) elevation.

RECOMMENDATIONS:

Our initial recommendation was to reuse the existing asbestos shingles. This process would entail removal of the asbestos shingles and discarding or removing any that are broken or painted. A professional roofer advised that in the process of removing these, we should anticipate losing approximately 25% because of the brittleness of the material. Only roughly three hundred replacement shingles are presently in storage in the courthouse attic. This supply would not be enough to replace the painted shingles and those broken during their removal.

The current asbestos shingles are non-friable. Despite this fact, the county would prefer these shingles to be completely removed and properly disposed of. Due to the short supply of these shingles, their complete unavailability in the current marketplace, and the county's preference, we recommend their removal.

Asbestos shingles should first be removed and properly disposed of. Then, sheathing should be inspected and rotting boards should be replaced. Ice and water shield should be installed upon roof sheathing at all hips, valleys, eaves, and at the top of the mansard. The remainder of roof sheathing should receive thirty pound roofing felt. Then, new shingles should be installed. These should be heavy duty premium quality forty-year shingles, and should have a similar profile and color to the asbestos shingles they replace. A potential product choice could be Certainteed *Hatteras* shingles, or an approved equal. Rust stains should be cleaned from the flat roof, and this roof should be painted with rustoleum primer and metal paint. The pediment and

dormers should be scraped down to the next good paintable surface, and then painted to match the other galvanized iron architectural elements of the project.

The gutters and leaders should be repaired and sealed, and then should receive the same painting treatment as noted above. The leader blocking the basement window should be raised and remounted so as not to obscure this window. Insofar as possible other leaders should be kept in their original position, but water from these leaders should be collected and conducted away from the building on a hard surface device. Generally, water drained from the roof should be kept a minimum of eight feet away from the building at the entire building perimeter. The hard surface device should be accomplished by means of extended leaders, drain pans, or even trench drains leading away from the building. Once an appropriate remedy is installed, the area should be monitored for a prescribed period of one full year for signs of further leakage at rooms along the building perimeter, especially the land use offices and the furnace room.

3.6 WINDOWS AND DOORS

DOORS, WINDOWS, HARDWARE, AND TRIM:

DESCRIPTION:

Exterior windows and doors are wood framed. Exterior window sills, lintels, headers, and decorative bands are described under section 3.4 in EXTERIOR FINISHES, above. The interior window sills are of wood and have simple rectangular profiles. Windows generally have brass hardware, including brass sash locks and handle-style sash lifts. Windows are mostly double hung, with divided lites in the upper sash and single panes in the lower sash. On the lower level, the upper sashes consist of three divided lites. On the main level and upper floor, the upper sashes consist of nine divided lites. On the east elevation, the transom above the main entry door and the top sashes of the three windows above the entry pediment are special diagonal divided lites. Two similar windows are above the west entry. The transom for the west entry door consists of five tall rectangular lites. Windows in the dormers are arched divided lites. All glazing is clear, and all original windows appear to be in place. Many operable windows have single pane removable exterior vinyl storm windows.



Left: *Brass sash lock.*

Right: *Brass sash lift.*



Exterior doors and hardware items are apparently original. Both exterior entries are two panel double doors. These doors are made of fir, and contain fine original brass hardware. Interior doors and frames are also made of fir. Doors on the lower level are five-panel, and mostly painted. Doors on the upper two levels are three panel doors with one top lite. The doors on these levels are, for the most part, finished with a light varnish, so that the beauty of the wood

shines through. Most of these doors feature operable transoms. The brass hardware on these doors is especially unique, as most doorknobs feature an engraved monogram “S” for Saguache. Interior wood trim is in fir to match the doors, and consists of base molding, chair rail, picture rail, and crown molding.

Special plaster brackets with carved acanthus leaves decorate the walls in the rotunda and upper level corridor. Well-fashioned wood accoutrements include a bulletin board and notice board in the entry foyer. Other permanent wood furnishings abound, including built in desks in many of the county officers service areas.



Above: *Lower level window.*



Right: *Main level window.*



Far right: *Window above
pediment.*

*Lower level window, interior**Main level window, interior**Upper level window, interior***CONDITION:**

Window condition generally ranges from fair to poor. Most original windows are intact and contain their original glass. Some window sills are significantly rotted. Most sash locks and sash lifts are present and in good condition. Some windows have rotted sash, and several have bowed rails. Several window panes are broken in windows on the south elevation. The glazing putty on the majority of the windows was hastily and poorly applied, and never painted. Interior condition of most windows is fair. Stain and varnish on these windows appears to be in good condition. The exterior doors are in good condition, but along with their frames are painted an inappropriate lime color.



Rotted window sill at second floor



Rotted sash at stair landing window



Rotted sash at second floor window



Cracked panes and bowing rails at second floor window



Cracked window at basement level



Rotted exterior trim at basement window

Interior doors, frames, and wood trim are in good condition, having suffered scuff marks. As they are nearly without exception original, they show signs of nearly one hundred years of wear.



West entry doors, exterior view.



West entry doors, interior view.



East entry vestibule and doors, view from interior.



Left: Typical interior three panel door with lite and two lite operable transom. Note base and chair rail moldings and acanthus leaf bracket at upper right.

Below: Operable transom mechanism. Note picture rail near head casing.



Plaster acanthus leaf bracket.

Below: *Detail at overdoor casing*



Below: *Detail at base molding.*



Right: *Detail at doorknob with engraved monogram.*

Below: *Detail at pin-hinged front entry door.*



RECOMMENDATIONS:

Forty percent of the interior window sills should be replaced, as they are significantly deteriorated. Mill new interior window sills to exactly match the profile of the original sills.

Approximately eight windows with rotted sash and bowed rails should be removed and restored off-site. The broken panes should be replaced with modern glass. All windows should have their ropes and weights removed and replaced. Seventy-five percent of the windows should have all glazing putty scraped off and replaced. All glazing putty should be painted. Approximately half of galvanized weatherstripping should be replaced.



Left: Window at north elevation basement level. Note poor application of glazing putty on window.

Refurbish windows as follows: Remove and dispose of storm sash. Using gentlest means possible, remove all chipped and peeled paint from sash and frames only down to the next good paintable surface. All paint should be removed from basement windows. Use epoxy filler to patch any damaged areas. Remove cracked or poorly applied glazing putty and re-putty. Prime sash and frames. Use epoxy filler on cracked sills as needed. Follow lead paint protocol. Replace all ropes and reset or replace any missing weights. Install galvanized architectural sheet metal weatherstripping. Check all sashes for proper operation. Replace any cracked panes. Check inside finish and reseal with low sheen poly on any areas, especially sills, which are worn. As an alternate, traditional varnish can be used, but would not be as durable as a poly finish. Remove surface paint from any painted interior sash, frames, trim, and sills and restore original finish with stain sealer as needed, and poly finish coat. Lubricate all moving parts of window hardware, and clean all window hardware with a soft cloth.

Remove and dispose of all exterior vinyl storm/screen windows as inconsistent with the defining architectural character of the windows. Install new interior storm screen, matching the mullion and sash profile of the existing windows. (Another option would be to install interior storm screen with no mullions whatsoever, so as to prevent any interference with the appearance of the historic windows from the inside). The screen itself and its surrounding wood trim should have a profile complementary to the window, and should match the jamb and casing finishes of the existing window. Interior storm screens have been effectively utilized by Mark M. Jones, Associates, Architects LLC in a similar manner on another historic building, the Alamosa County Courthouse.

Determine original color of doors through laboratory spectrographic analysis. These tests will also reveal whether the doors were in fact painted originally. If doors were originally not painted or stained, all paint and stain should be removed. All doors should then be cleaned and lightly sanded. Then doors should receive a low-sheen protective coat of polyurethane. If doors were originally painted, only surface paint should be removed from exterior doors down to next good paintable surface. Then doors should be stained or painted an appropriate historical color, as confirmed by the architect.

Determine original color of plaster brackets through laboratory spectrographic analysis. Clean plaster acanthus leaf molded brackets and strip paint down to next good paintable surface. Repaint these brackets in a close approximation of their original color. Clean all interior wood doors and all base, chair rail, picture rails, and crown molding trim. Coat all these with a low-sheen polyurethane finish product or varnish.



Interior view of office.



Interior view of entry rotunda.



Courtroom, looking west.



Courtroom podium, looking east.



Clerk of Court's Office, July, 1919.

This photo describes the Clerk of Court's office at a definite point in time. Noted here are a wood floor, many furniture pieces and counters that are still in existence, and no wood wainscot. This picture documents the suspended pendant lights. The man in the picture is standing next to a mechanical device that may be a stenograph machine for a court recorder.

3.7 INTERIOR FINISHES AND FURNISHINGS

INTERIOR WALLS AND CEILINGS:

DESCRIPTION:

Most interior walls and ceilings in finished areas are lath and plaster, using an interior lime-based plaster. The ceiling of the courtroom is an exception, as it is made of decorative stamped tin. Some retrofit wood paneling is present in the jury room and other locations. Well preserved built-in furnishings abound in the courthouse. Among these are original clerk's desks and counters in various rooms and hallways and built-in seating. The built-in seating is original courtroom seating, and is still present in the building on landings and in the upper lobby. Stairs and their balustrades are made of fir, and possess rubber nosings. Original plans actually called for brass nosings, which may or may not have been installed originally.

Seven vault rooms are present in the building. Two full sized vaults in the lower level are accessed from the lower level central space. On the main level, one full sized vault is accessed from the county clerk's office, and two smaller vaults are accessed from the county assessor's office and the county treasurer's office respectively. On the upper level, two small vaults are accessed from the circuit court judge's office and the clerk of the district court's office, respectively. The walls for the vaults are composed of concrete and the floors and ceilings are concrete slabs of various thicknesses. The top vaults, as shown on the architect's original drawings on page 33 of this report, are enclosed at the ceiling by triple-wythe rowlock arch vaults, further strengthened by regularly spaced steel tie rods. The vaults are used for storage of important administration and public records. Each is sealed by a solid steel door with large steel hinges and a steel cylinder locking system and hardware.

CONDITION:

Interior finishes range from fair to good. Plaster walls are largely intact and without any protuberances or loss of integrity. Wood paneling where it occurs is of low quality. Wood wainscots are not original; rather, they are made of 1/4" plywood and installed much later. The decorative stamped tin ceiling in the courtroom is fair, with some blemishes and signs of wear. Built in casework and clerk's desks is also in fair condition. These have been for the most part well-maintained. Some have unfortunately had electrical and communications lines mounted in conspicuous places directly on their surfaces.

The built-in theater-style seating is in good condition. This was the original seating used in the courtroom. Some rows of this same seating have been dissembled, and can be recovered from the attic. Also discovered in a reconnaissance to the attic were antique wood voting boxes, which should be saved.



Tin ceiling in courtroom.



Original courtroom fixed seating.



Original desk and counter in clerk's office. Note non-original plywood wainscot, which should be removed.



Courtroom, seen from judge's platform.



Courtroom: view of podium and judge's platform.



Judge's desk, free standing.

The courtroom itself is a pastiche of late twentieth-century built-in and free standing furnishings. These include the wood-paneled jury box and chairs. Chairs and tables in the courtroom are not original or in a consistent style. One original element remains: the rail separating the public seating area from the court area proper. The judge's desk is actually a well crafted piece of oak furniture with a handsome finish.

The stairs have generally been well-preserved, and are in fair condition. Woodwork on these stairs is exemplary, and matches the fir woodwork of the interior doors and trim. The newels are an example of fine wood craftsmanship. Nosings for these stairs are worn in some areas. Some stairs, especially on the lower level, are severely deteriorating, with trim separating from the stairs and stair treads splitting.

The vaults are in good condition, and most are well organized. The vault doors and hardware are in good, operable condition.



Typical vault interior.

Vault door, exterior. Vault door with cylinder lock.

RECOMMENDATIONS:

All retrofit wall wainscot paneling should be removed to expose original plaster. Throughout the courthouse, any damaged or cracked plaster should be patched and all wall and ceiling surfaces should be cleaned. Once all surfaces are repaired and cleaned, paint should be applied where necessary.

Built-in seating is now located on the second floor landing, but was originally placed in the courtroom. About twenty seats of the same variety are located in the attic. These seats could be refurbished and reintroduced in the courtroom. The antique voting boxes could be refurbished as display cases.

The courtroom requires special consideration. Insufficient documentation is available for a restoration to the courtroom to its original appearance. However, the Secretary of the Interior's Standards for the Treatment of Historic Properties Rehabilitation chapter allows for a new interior design that is compatible with the historic character of the building. A complete renovation with modern woodwork and furnishings complementing the original wood moldings, the original seating rail, and any other original design elements is recommended. All new interior features and furnishings should be evaluated as compatible with the scale, design, materials, textures, and colors of the remaining original interior features and furnishings. The jury box and all free-standing eclectic furnishings should be removed from the courtroom, with the exception of the judge's desk. New furnishings sympathetic to the original period but not imitative should be provided. A new jury box with wood trim compatible with the existing courtroom perimeter wood trim should be constructed. New furnishings subject to the needs of the court should include additional public seating, jury seating, built-in desks and chairs for plaintiff and defendant and their counsel, new desks and chairs for stenographer and court reporter, a new judge's chair, and other requisite matching furnishings. Existing lighting in courtroom should be removed and replaced with historic fixtures. Energy efficient indirect fluorescent fixtures should be introduced at the courtroom perimeter, integral with wood picture rail trim, complementary to existing wood trim.

The stairs and balustrade should be cleaned and varnished if necessary. Any completely worn nosings should be replaced. Cracked or broken stair trim, treads, or risers should be removed and replaced by milled pieces. New pieces should be firmly mechanically attached to the stairs.

No corrective work is recommended for the vaults, nor their doors and hardware.



Grand stair, from first floor.



Newel post and balustrade.

Right: *Rubber nosing at stairs descending to lower level. Note poor application of paint at riser.*





Stair with split tread at lower level.



Stair with separating edge trim at lower level.

INTERIOR FLOOR FINISHES

DESCRIPTION:

The basement flooring in the central hall, the mechanical, and the restroom spaces is painted concrete. Most office spaces in the basement have composition tile throughout. The upper level floors are all finished with carpet over original hardwood floors. The main entry is composed of an original green and white tile in square and hexagonal shapes.

CONDITION:

The composition tile is in fair condition, having worn considerably. Carpet on the upper levels appears to be in good condition, as it has been replaced recently. An exception to this rule is the carpet in the courtroom itself. It is worn, and its chartreuse green color is severely dated. The entry tile is in good condition.

RECOMMENDATIONS:

An asbestos survey is recommended on the tile. However, the tile is not friable, and complete abatement would only be required if the tile were disturbed. Care should be taken while obtaining a tile sample to prevent the disruption of any adjacent tiles.

Newer carpet can remain wherever it is found. Once this carpet is worn and due for replacement, it should be removed. The hardwood below this carpet should then be cleaned and restored. The chartreuse carpet in the courtroom should be removed entirely. The hardwood below should be cleaned and varnished. Several fixed area rugs should be placed in the courtroom, at the request of the Saguache County administration. The rugs themselves add acoustic value in a room that is otherwise mostly hard-surfaced. These rugs should be of a design complementary to the overall interior design of the courtroom. These should be placed near the judge's platform, and out of the path of most foot traffic. Edges of these rugs should be firmly affixed to the floor with carpet tape or equivalent, so as to not create a tripping hazard. The judge's platform should be carpeted in a tasteful, contemporary carpet. The decorative entry tile should be thoroughly cleaned so as to restore its luster.

3.8 MECHANICAL SYSTEMS

Mark Burggraaf, P.E., of Burggraaf Associates has been commissioned to provide a scope of work and estimated costs for mechanical and electrical improvements for the Saguache County Courthouse. Mr. Burggraaf met with Mr. Christopher Lobas and Mr. Edward Garcia from the maintenance staff of the courthouse to examine the building and to discuss the Owners' desires for the structure on Wednesday, April 23, 2003.

Comments and recommendations are intended to document the existing mechanical and electrical systems presently in the building, identify equipment and systems which are deficient and determine the requirements for new mechanical and electrical systems which will need to be installed in order to ensure the habitability of the building for the future.

EXECUTIVE SUMMARY AND UTILITIES SERVICES SUMMARY

The Saguache County Courthouse was built in 1910 and made use of the standard technology available at the time, including a coal-fired boiler and limited power capability. The mechanical and electrical systems have been retrofitted and remodeled over time and are in relatively good condition. The existing systems *are* functional. However, they are unable to meet the requirements of the equipment and personnel in the building. In addition, whereas the visible workmanship is generally good, some of the more recent mechanical and electrical retrofits are exposed, resulting in detracting from the historical architecture.

Presently, all of the mechanical, plumbing and electrical systems in the building are functional and are in reasonable repair given the age of the systems. Ventilation systems are generally non-existent and heating controls are manual. These conditions make some of the spaces less than desirable for office use. Restroom facilities are limited and do not meet all requirements for handicapped accessibility, fixture count, and proximity. The electrical service is too small given the amount of computers used in the building. The mostly retrofitted lighting systems tend to detract from rather than enhance the architectural significance of the building.

The Saguache County Courthouse was built in 1910. The building was wired for electricity during the original construction. In general, other than a recent electrical service upgrade, the building utility services are in place as originally constructed.

Water and sewer services enter and exit the building from the west. Gas extends into the building from the northwest corner of the building. A single phase overhead power service extends to a service disconnect mounted on the south side of the building. Telephone service also connects to the building from the south.

The water service is routed under the floor of the boiler room with the main shut-off in the maintenance supply room. The service entrance is steel and appears to be in good condition and is adequately sized for the present and future domestic water requirements of the facility.

The waste system discharges west to the city sanitary sewer system. The system appears to be adequately sized and, based on a conversation with the maintenance supervisor Mr. Garcia, is generally in good condition.

The gas service into the building is only used for the boiler. The installation is in good condition and appears to be adequate for the intended use.

No work is recommended for the utilities service entries.

MECHANICAL HEATING SYSTEM

DESCRIPTION:

The heating system for the building is the original low pressure steam system supplying cast iron radiators. The system is somewhat unique in that it uses a combination of single pipe steam and condensate return for the main and upper levels and a more standard steam piping with separate condensate return for the lower level. The steam boiler is relatively new, having been replaced with a Peerless one thousand six hundred and eighty thousand British thermal units per hour (1680 MBH) input single stage cast iron boiler in 2001.

The radiator and piping systems appear to be part of the original building construction. The building is run as a single heating zone with individual radiators being controlled manually through the steam shut-off valve at each unit.



Peerless cast iron boiler, 2001

CONDITION:

Most of the radiators appear to be in good condition and should continue to be usable for the foreseeable future. Nine radiators were removed from various offices in the building and are now stored in the boiler room. These radiators were removed to open up more space in the offices, and also because the heat gain in these offices was already high due to the presence of computers and office equipment.

It was noted that approximately fifty percent of the piping in the steam piping in the lower level is not insulated, leading to uncontrolled heat gain to the spaces. Much of the piping in the lower level is exposed, suggesting that the spaces were probably originally designed for storage uses rather than office spaces. At least one steam line patch was noted in the boiler room, suggesting that the steam piping system may be nearing the end of its useful life. A number of steam traps are present in the system, including several “home-made” loops. The presence of steam venting from the condensate receiver suggested that some of the traps in the system are not working. Although the loss of heat through the venting system is relatively low given the use of the low pressure steam, nonetheless, the system is not as energy efficient as it might be. Also of note is that the boiler room does not have an adequate source of combustion air, resulting in non-compliance with current building codes.



Left: *Cast iron radiator, typical throughout building.*

RECOMMENDATIONS:

The use of a single stage boiler of this size is questionable. Consideration should be given to changing the boiler controls to allow either two-stage or modulating firing.

The boiler is in need of a reliable source for combustion air. The former coal chute in the southwest corner of the room is adequately sized for conversion into a combustion air louver. An in-line fan should be mounted in association with this louver installation. A duct should route the combustion air directly into the furnace room, as specified in the mechanical engineer

construction documents. The duct for this application will not be visible in any character defining spaces.

It is recommended that the heating piping system be scheduled for replacement within the next 5 years. Depending on the timing of the replacement of the piping system, consideration should be given to the installation of insulation on all exposed steam piping in the lower level.

At the time of the replacement of the piping system, consideration should be given to changing the system from steam to hot water. The decision to change to a hot water system should be made for several reasons. The current steam system has problems associated with traps. Steam systems tend to corrode steel lines more quickly than hot water systems. Changing to hot water will allow for the installation of simple zone controls, providing better temperature control throughout the building. Finally, steam systems are nearing obsolescence, and less skilled workers will be available to maintain them in the future.

Radiators originally designed for low pressure steam heat can often be utilized for hot water heat. The radiators in the courthouse appear to be solid and in good enough condition to retrofit for this purpose. In the event that the internal condition of the radiators is such that replacement is necessary, new radiators with a compatible appearance to the original historic radiators are available in the marketplace.

At the time the building mechanical system is reengineered, consideration should be given to reinstalling some or all of the nine extra radiators currently stored in the boiler room. In any case the stored radiators should be retained and protected, either as reinstalled units or replacements in the case that other existing radiators fail.

MECHANICAL VENTILATION AND COOLING SYSTEM

DESCRIPTION:

The building does not have a central mechanical ventilation or cooling system. Part of the original building design included a gravity ventilation system for the District Courtroom. A number of paddle type ceiling fans and window type air conditioners have been installed in the office areas. In these cases, the equipment appears to have been installed to combat the heat gain from the office equipment being used. A small kitchen has been installed on the lower level. The oven in the kitchen does not include a hood.

CONDITION:

The gravity ventilation system in the courtroom appears to be operational, but does allow penetrations without firestops between the upper floor courtroom and the attic space.

Although the building does not have a central ventilation system, it does meet code requirements with the use of operable windows. Due to the use of electronic equipment in the office spaces and the exceptionally cold winters in the San Luis Valley, there are a number of times during the year that the windows are not opened because of unfiltered and untempered outside air. Therefore, while the letter of the building code is being met, the actual intent of the code (providing fresh air for the occupants) is not being met. The lack of an oven hood results in the

presence of cooking odors spreading throughout the building. Exhaust systems have been installed in the restrooms and although the ductwork is exposed, the systems are functional.

RECOMMENDATIONS:

First, all window air conditioners should be removed, as they are incompatible with the architecture and detract from the outside appearance of the building.

Given that it will be very difficult and expensive to retrofit the building for central air conditioning, a more unobtrusive design would be to use spot cooling type systems, installed on interior walls with a remote air cooled chilled water system. The chilled water piping should be installed at the same time the steam heating system is replaced with a hot water heat system as noted above.

Fire dampers should be installed at the penetrations through the courtroom ceiling. A fan should be added to the existing gravity system and a mechanical cooling system should be added to the courtroom space.

The installation of two hydronically heated make-up air units is recommended in the lower level with the extension of vertical ductwork up through the building in three or four interior chases. This would allow for the introduction of tempered and filtered make-up air into the large office spaces as required by code. Since the air would be ventilation air and not necessarily cooling, the placement of the chases is less an issue than in a modern office building with an overhead cooling system. It is recommended that the chases be located in the corners of the offices near the interior core of the building. During the mechanical engineering schematic design phase, exact sizes and positions of the chases would be evaluated and determined. Care will be taken to place them in locations where they would have the least impact on historical spaces. No built in desks and furnishings will be disturbed by the locations of the chases.

It is recommended that a simple residential hood be installed in the kitchen.

WATER SERVICE, PLUMBING SERVICES, AND SEWER UTILITIES

DESCRIPTION:

The original domestic water piping in the building appears to have been galvanized steel. Subsequent areas which have been remodeled have seen the use of copper tubing. The waste and vent piping system is in cast iron bell and spigot type piping. There are a limited number plumbing fixtures in the building, comprising three toilet rooms and the previously noted kitchen area on the lower level and a toilet room on the upper level. The domestic hot water heater is a thirty gallon, four and one-half kilowatt electric unit, installed in 1992.

The original toilet room configurations are shown in the original architect's plan drawings on pages 18 through 20 of this report. On the lower level, the plans called for a large men's restroom with two toilets, two urinals and one lavatory and a much smaller women's restroom with one toilet and one lavatory. The men's room was presumably larger because at the time of construction the majority of county employees were male. Sometime after World War II (judging by the age of the fixtures) the toilet rooms were redesigned with a central dividing wall.

The redesigned men's restroom contains one toilet, one urinal, and two lavatories; and the redesigned women's restroom contains two toilets and two lavatories. In 2001, county employees converted the majority of the room formally assigned to storage into an accessible toilet room, with one toilet and one lavatory.

CONDITION:

Where visible, the galvanized steel and copper piping appears to be in relatively good condition. The waste and vent piping system also appears to be in good condition. All of the fixtures are in fair to good condition. However, the handicapped accessible toilet in the lower level is in fact a standard toilet which has been raised up by installing it on a 1" tall wood blocking. Neither the wood blocking nor the final height would appear to meet the requirements of the Americans with Disabilities Act Accessibility Guidelines. The water heater is out of warranty and will likely fail within the next five years.

RECOMMENDATIONS:

Recommendations are made under section 4.4 Code Requirements to increase the number of restrooms. The new restrooms, one men's, one women's, and one unisex, could be installed on the second floor. This installation would require that the walls forming witness room (not a character defining space) in the southwest corner of the building be demolished, and that a small closet-like unisex restroom in the same vicinity be enlarged. Once the new restrooms are installed, care should be taken to patch adjacent materials, and to integrate wood doors, frames, and trim into the design as appropriate. A test design for the new second floor restrooms is shown on the sketch design plans provided in this report. This is acknowledged as one possible option to meet code requirements for number and location of restroom fixtures in the building.

It is also recommended that the toilet in the accessible restroom on the basement level be replaced with a standard handicapped accessible unit. The water heater should be replaced as soon as possible, before it fails and floods a portion of the basement.

Existing plumbing fixtures:



Men's lavatory & urinal



Men's toilet



Accessible restroom fixtures



Women's lavatories



Women's toilet



Upper level water fountain

FIRE SUPPRESSION - SPRINKLER SYSTEMS

DESCRIPTION:

The building does not have a modern automatic fire suppression system in place. There are in the attic the remains of a hanging chemical ball system. In this system, apparently the heat of the fire would explode the balls, resulting in a spray of chemical fire suppression. These were not particularly effective, but provided some sense of security. There is a two inch exposed cold water standpipe with approximately fifty feet of attached garden hose at the west stairwell.

CONDITION:

The hanging chemical ball system is adequate only to extinguish the smallest, contained fires. The amount of water available at the standpipe through the garden hose would be minimal. Neither of these systems would be particularly useful in the event of a fire.

RECOMMENDATIONS:

It is highly recommend that a new sprinkler system be installed. Once this system is installed, the existing standpipe should be removed. Sprinkler system piping lines could be installed relatively simply in the attic for the attic space and the upper level. Sprinkler heads for the second level would be installed in the ceiling. On the main level and lower level two options are possible. Sprinkler lines could be installed between floor joists above, but not without disturbing the existing original plaster ceilings on these levels. This option would call for delicate ceiling patch work and repainting. The other option is that sprinkler lines could also be ceiling mounted and exposed on these floors. These pipes could be installed at the corners of the rooms rather than through the center and then painted to match the plaster ceilings. In either case, care would be taken to make the installation of both sprinkler piping lines and sprinkler heads as unobtrusive and invisible as possible. The sprinkler options would each be fully evaluated and determined in the mechanical engineering schematic design phase, and would be approved by the Saguache County Administration and the State Historical Fund. A sprinkler system installation would in any case require that the water service into the building be upgraded to four inches in order to have adequate water flow.

3.9 ELECTRICAL SYSTEMS

ELECTRICAL SERVICE AND PANELS

DESCRIPTION:

The existing exterior service disconnect is two hundred amp, two hundred forty volt, single phase.

From the exterior meter, the electrical service is extended to a two hundred amp load center in the county clerk's office on the main level. Sub-panels from this load center have been installed in the boiler room and in the hall serving the county court judge's office on the upper level.

CONDITION:

The electrical service appears to be in good condition, but it is undersized for the needs of the building. Also, the overhead lines tend to detract from the exterior appearance of the building. Mr. Garcia has indicated that the service panel installation has become a source of irritation for the county maintenance employees. The circuiting through out the system has not been properly traced and labeled, leading to difficulties in switching the circuit breakers and in adding additional circuits. The grounding system seems to be of questionable quality, resulting in significant static electricity discharges, particularly on the first floor.

RECOMMENDATIONS:

It has been proposed to add an elevator to the building, but the existing power systems do not have adequate capacity to support this addition. The existing two hundred amp panel and all existing sub panels should be removed. It is recommended that the existing panel be replaced with a new four hundred amp, three phase main power panel be installed in the boiler room. This will support both the addition of the elevator noted above and the proposed chiller systems previously mentioned. New two hundred sub-panels should be located on the lower floor and on the main floor. An additional sub-panel should be located in the attic. Although the existing sub panels are a relatively new installation, they must be replaced rather than reconfigured, so as to assure new warranties and guarantees apply.

ELECTRICAL DISTRIBUTION SYSTEM

DESCRIPTION:

Some original concealed wiring is still operating within the building. Also, some retrofit exposed and painted conduits travel from the current electrical panels to outlets and lighting fixtures.

CONDITION:

The installation is generally workmanlike and in fair condition. However, the exposed and painted conduits tend to detract from the overall aesthetics of the building. Some of the original wiring in the system is old and cannot be reused due to obsolete cloth insulation.

RECOMMENDATIONS:

All original cloth-insulated wiring and retrofit exposed conduits should be removed. The electrical distribution system should be replaced in its entirety, and given the extensive use of office equipment and computers, a flexible raceway system around the baseboard should be used, allowing the surface mounted conduits and outlets to be removed. Most conduit should be routed vertically from the sub-panels on the lower and main floor through the floor/ ceiling structure above to a surface raceway system. The raceway system will route the wiring horizontally through the building. Also the sub-panel in the attic could allow service with conduit to the attic proper and down through the ceiling where required for needs on the upper level.

LIGHTING SYSTEMS

DESCRIPTION:

Lighting systems throughout the building are a mixture of fluorescent and incandescent. Many of the office spaces are illuminated with surface-mounted fluorescent strip lights. The District Courtroom makes use of industrial strip fixtures which are chain hung from the ceiling. The central rotunda has ceiling hung incandescent fixtures which appear to date from the original installation. Similar fixtures are identifiable in the 1919 Clerk's office photograph on page 56 of this report.



Four-bulb suspended fixture in upper level central space.

CONDITION:

While the surface-mounted fluorescent strip lights provide good illumination, they significantly detract from the ambience. The original ceiling hung incandescent fixtures have had the shades removed, resulting in the use of bare incandescent bulbs. Note that these fixtures were not combination gas/ electric; if so, the bulbs would be pointed up.

RECOMMENDATIONS:

Any original lighting should be retained, and should have their shades and escutcheons replaced. Shades are available from a variety of reproduction lighting manufacturers, such as Rejuvenation

Lamp and Fixture Company. For this particular fixture, Rejuvenation's Craftsman-era *Raleigh* model may be an approximate match for the replacement shades and escutcheons.

It is recommended that the retrofit lighting systems throughout the building be replaced with lights which are matched to the historical style of the building. The lighting systems will have to be designed to not only be correct period style, but also to provide adequate general illumination. A mixture of ceiling hung incandescent fixtures and wall mounted indirect fluorescent lighting should be considered. The indirect fluorescent lighting could be integrated with a wood molding detail at the level of a picture rail. Also add period task lighting at workstations.

FIRE DETECTION SYSTEM

DESCRIPTION:

The building does not presently have a central fire detection system, but a number of local smoke detectors and a carbon monoxide detector are in the boiler room. Because these are not on a dialer, they are of no value after work hours.

RECOMMENDATIONS:

Given that there can be significant unoccupied periods in the building of this type, we recommend the installation of a complete fire detection system with a central station dial up capability. The detectors would be ceiling mounted, and the wiring for the detectors would be concealed in conduit in the ceilings. Some ceiling will need to be removed to accomplish the work. Care would be taken to delicately patch the plaster and paint the affected areas. The actual detectors selected will be specified to be small in size and to be a color matching the plaster ceilings, so that they are less visible. Any central system controls will be installed in a discreet location. Further design of the system would be undertaken during the mechanical engineering schematic design phase.

TELEPHONE / DATA SYSTEM

DESCRIPTION:

The telephone service lines extend overhead from the south. The telephone service entry is on the south side of the building. From the exterior phone box, cables have been routed on the exterior of the building as required to serve office spaces within the building. A new internal telephone wiring system was installed throughout the building in 2002.

CONDITION:

The telephone service appears to be functional and in good condition, and does not technically need repair or replacement at this time, however, the installation does tend to detract from the appearance of the building, both inside and out. The service entrance and cable routing at the exterior of the building is not attractive. The internal cabling detracts from the appearance of the office spaces and reduces the overall flexibility for phone and data use in the office areas.

RECOMMENDATIONS:

An underground extension to the building should be provided, and the service entrance should be located inside the building rather than on the exterior. When the building receives new electrical wiring, it is recommended that the new electrical power raceway system integrate new telephone and data lines within the same raceway conduit. The raceway could be located directly above the wood base molding and have the same approximate thickness as this molding. New combination telephone/ data/ electrical outlets should then be installed at discreet locations at the perimeter walls of each office.

SECURITY ALARM SYSTEM**DESCRIPTION:**

No security alarm system is currently present on the structure.

RECOMMENDATIONS:

Break-ins have occurred in past years, and the installation of a new system is advised. This system would consist of a front end with a keypad and controls, and alarms on each of the three pairs of exterior doors and all windows on the ground level and first level. The keypad selected should be specified to be unassuming and not distracting from the architectural features of the entries. The controls for the system should be installed in a discreet location within the building, accessible by maintenance workers, the county administration, and local authorities. Because the courthouse is located adjacent to the sheriff's office, consideration should be given to a system that would automatically notify the sheriff in case of a break-in at the courthouse. For aesthetic as well as security reasons, alarm nodes attached to the windows should be as small and as discreetly installed as possible. Some trim pieces for the windows and doors would need to be temporarily removed so that alarm wiring could be installed behind or beneath them. Alarm wiring would also be located within the ceiling spaces on the lower and main level. Again, this will require that the original plaster ceilings be disturbed in some places. After the alarm system installation, the ceilings should be carefully and delicately patched and painted as required to make them seamless. Full design of the security alarm system and the selection of specific components would take place during the mechanical engineering schematic design phase.

4.0 ANALYSIS AND COMPLIANCE**4.1 HAZARDOUS MATERIALS**

An asbestos survey is recommended. An environmental analysis firm should closely inspect four materials in the building: roof shingles, pipe insulation in the furnace room, floor tiles in the basement, and interior plaster. Roof shingles are almost certainly asbestos-containing transite shingles. These were specified on the original drawings, and can be confirmed with a simple visual inspection. Evidence of potential asbestos containing materials was found in pipe insulation in the basement. Pipe fittings also may be coated with asbestos containing mudding. Also the tiles on the basement floors should be tested to determine if they are indeed vinyl asbestos tiles.

It is unlikely that plaster in a building of this vintage contains plaster, but since several locations will be disturbed, the plaster should be tested nonetheless. The asbestos survey could be performed by D & D Environmental, A.G. Wassenaar, or a similarly qualified environmental inspector. D & D Environmental has preliminarily quoted the cost for an inspection of all four materials for approximately six hundred forty dollars (\$640).

Asbestos abatement will also be necessary for the transite roof shingles, the asbestos-containing pipe insulation and mudded fittings, any removed or disturbed asbestos-containing floor tiles, and any disturbed asbestos-containing plaster. The roof shingles will be removed and disposed of by appropriately outfitted qualified asbestos abatement contractors prior to the installation of a new roofing system. Certified Insulators, Inc. of Denver, Colorado gave a preliminary quote of \$15,250 to accomplish this task. While present in Saguache, the abatement contractor should also remove any asbestos containing pipe insulation (approximately \$95-100 per linear foot), any asbestos containing vinyl floor tiles that will be replaced or disturbed during the course of construction (approximately \$10-15 per square foot) and any asbestos containing plaster that will be disturbed during the course of construction (approximately \$45 per square foot). Conceptual pricing for the abatement contractor listed above would include permits, set-up and containment, removal of asbestos containing materials, disposal, insurance, travel and mobilization, and hotel expenses.

4.2 EXISTING MATERIALS ANALYSIS

PAINT:

Original paint and clear finishes on the building, because of their age, are understood to be lead-based. Restoration work should follow approved protocol for encapsulation of lead-based paint, varnishes, and other clear finishes.

4.3 ZONING CODE COMPLIANCE

No zoning code has been adopted by the town or county of Saguache.

4.4 BUILDING CODE COMPLIANCE

No building code has been adopted by the town or county of Saguache. Mark Jones Associates, Architects LLC and their consultants have proceeded with the analysis of the building using the Uniform Building Code 1997 edition. Recommended work for the Saguache County Courthouse is intended to follow the requirements of this code. Electrical recommendations are in accordance with the National Electric Code, and fire protection recommendations are in accordance with NFPA 1991.

The salient points of the code analysis are as follows:

The building is considered a B (business) occupancy type, except for the courtroom, which is considered an A-3 (assembly) occupancy type. Occupant loads are listed for each room in the sketch plans included in this report. Paths of egress for the exiting occupants for each space are also shown on the sketch plans. The entire 2nd floor exiting population is 47, therefore the existing single stair with 5'-0" width is wide enough for egress from this floor.

In order to meet codes for number of restrooms and proximity requirements, one men's and one women's toilet are required for both the basement floor, and either the first or the second floor. In order to create minimal disruption, it is recommended that new restrooms be provided on the second floor. This potential modification is noted on the sketch plans included in this report.

4.5 ACCESSIBILITY COMPLIANCE

The property is not currently in compliance with the Americans with Disabilities Act Accessibility Guidelines. Several key modifications must be undertaken in order to comply. These are delineated on the CAD drafted plans located in section 2.2. A new accessible restroom has already been constructed on the basement level. New elements would include a new accessible limited-use limited-access elevator and new accessible restrooms on the second floor.

In order to make all three floors accessible, it will be necessary to install an elevator. Necessary interior walls and casework will be required to be removed in order to construct a shaft for the limited-use, limited-access elevator servicing all three floors. A shaft should be constructed and a machine room be built for this elevator. The elevator is noted on the sketch plans included in this report.

The building was studied to determine which location for an elevator would have the least impact on the overall architecture and historic integrity. Locations within the vaults were rejected because of construction impediments, such as thick concrete floors and thick brick walls. Various locations within the central space and stair areas were considered. These were rejected because of the disruption of the architecturally significant central space and main stair character defining features. The location recommended on the sketch plan provides elevator access at each inhabited floor of the building, while keeping the elevator shaft within less architecturally significant spaces such as offices. At no time was an external elevator tower considered because of the significant disruption of the historic character and overall building symmetry.

It should be noted that the locations of the elevator and of the new accessible restrooms depicted on the sketch plans of this report are not definitive, final solutions to the accessibility needs of the building. Rather, these were drawn as "test solutions" to assure that there are indeed viable solutions, and in order to evaluate them to assure the least amount of impact on existing historical fabric. These were also drawn in order to establish a meaningful budget for the project. Other possible design solutions should be considered by the design architect as schematic design planning for the project moves forward. Once schematic design solutions are approved by the Saguache County Administration and the State Historical Fund, they will be fully detailed in construction documents.

5.0 PRESERVATION PLAN

5.1 PRIORITIZED WORK

PRIORITY 1: Asbestos Survey and Abatement, Roofing, Building Drainage, and Site Safety. Perform asbestos survey on roof shingles, pipe wrap, basement floor tiles, and interior plaster. Abate pipe wrap. Abate only any basement floor tiles and interior plaster that will be disturbed in the course of construction. Remove and dispose of asbestos roof shingles. Install ice and water shield, and rework base flashing. Install new high quality composition shingles with profile similar to original shingles. Repair and seal all gutters and downspouts. Reposition downspout currently blocking basement window. Apply cement parging on exposed sides of ramp. Repair brick at ramp opening (main entry stair sidewall). Repair concrete at front sidewalk stair and exterior stair. Demolish central stringer of front entry stairs. Reset stone stairs. Remove all paint from these elements, and their corresponding abutments and stringers. Remove all existing tube steel handrails from exterior stairs, and replace these with A.D.A. compliant handrails in period black iron. The items in the attic space are excessively loading the attic floor structure and are a fire hazard. Remove *all* of these items from the attic and locate them off-site.

PRIORITY 2: Electrical System

Install interior telephone service entrance. Increase building electrical capacity. Introduce three-phase four hundred amp service. Add additional panels as required. Install new electrical wiring in room perimeter raceways and required chases. Relocate all telephone and data lines into these perimeter raceways.

PRIORITY 3: ADA Requirements.

Remove necessary interior walls and casework required to construct shaft for limited-use, limited-access elevator servicing three floors. Build the shaft and install the elevator and its machine room. Execute necessary demolition and construction to install three new ADA restrooms on the second floor (one unisex, one men's and one women's). After construction is complete, patch and paint all surfaces to match existing.

PRIORITY 4: Building Exterior.

Obtain samples of painted metal and painted wood for spectroscopic analysis. Use this analysis as an aid in correct color selection. Scrape and clean all sheet metal elements on the exterior of the building. Paint these and all gutters and downspouts. Remove parging and re-brick area above grille on west elevation. Remove all paint, parging, and foreign applications from plinth. Remove blocks of plinth that are deteriorated. Replace these with new stone pieces, keyed to solid stone behind. Remove paint and foreign matter from all stone and brick. Repoint masonry as needed and then clean all brick and stone with restoration cleaner. Do not use any sand or water blasting on the building. Do not apply any sealer to bricks or stone.

PRIORITY 5: Exterior Doors and Windows.

Refurbish all exterior doors and windows throughout the building. Keep windows and sashes in place if at all possible. If it is necessary to replace parts, remove sash. Replace any missing or damaged parts of the window assembly. If it is not necessary to replace parts, refurbish windows

in place. Remove exterior storm windows. Fabricate and install new interior storm screens. These should match the mullion and sash profile and the jamb and casing finishes of the existing windows.

PRIORITY 6: Interior Doors and Woodwork.

Thoroughly clean all existing original wood doors and frames, using Murphy's Oil Soap or equivalent product. Clean all interior woodwork. Varnish woodwork where required to restore original luster.

PRIORITY 7: Courtroom and Other Interior Finishes.

With an eye toward retaining as much original historic fabric as possible, rehabilitate courtroom. This should first include the removal of any existing modern furnishings. Then, remove the chartreuse carpet in the courtroom and refinish the hardwood floor below. Place fixed area rugs in the courtroom, in area directly in front of judge's stand, out of the way of the majority of foot traffic. Carpet the judge's platform with a tasteful, contemporary carpet.

Obtain a sample section of the courtroom decorative ceiling for laboratory spectrographic analysis. Clean and repair this ceiling, and paint in an approximate match to the original color. Refurnish courtroom with tasteful modern styled furnishings, so as not to be mistaken for historical furnishings. Remove existing lighting in courtroom and replace with historic fixtures. Introduce energy efficient indirect fluorescent fixtures at the courtroom perimeter.

In the building entry, thoroughly clean all floor tiles. If tiles in basement contain asbestos, abate these and replace with new resilient tiles. If not, then clean all tiles in the basement and repair any broken tile. Remove chartreuse carpet from courtroom. Clean and restore hardwood floors beneath this carpet. Clean all remaining existing carpet.

PRIORITY 8: Lighting.

Redesign lighting system for the balance of the entire building, including period pendant fixtures and energy efficient indirect fluorescent lighting fixtures. Any potential new lighting fixtures should be evaluated for successful integration into a harmonious, historically sensitive lighting plan for the building.

PRIORITY 9: Alarm System.

Install alarm system with numbered keypad, proper controls, and alarm locations at each pair of exterior doors and all ground floor and first floor windows. Care should be taken to select system components with minimal impact on historic features, and to install all alarm nodes and wiring discreetly.

PRIORITY 10: Mechanical Systems: Heating, Ventilation, and Air Conditioning.

Change from steam heating system to hot water heat. Change the boiler firing from single stage to modulating. Install new ventilation chases in corners of offices where required, in locations determined to have minimal impact on historic spaces. Make other mechanical system improvements as noted. Existing mechanical equipment and radiators should be preserved in place as much as possible.

PRIORITY 11: Fire Detection and Prevention.

Install new fire detection system with remote fire station dial-up capacity and a new wet pipe sprinkler system. Mechanical engineering schematic design should be undertaken for these life safety provisions so that their installations each minimally affect historic structure, materials, and spaces.

5.2 PHASING PLAN**COUNTY PRELIMINARY PHASING PLAN**

Priorities 1 and 2	2004, Spring and Summer
Priority 3	2004, Autumn
Priority 4 through 6	2005, Spring and Summer
Priorities 7 through 9	2006
Priorities 10 and 11	2007 forward.

Construction costs are presumed to escalate five percent per year, compounded.

5.3 ESTIMATED COSTS

Historic Structure Assessments are by nature conceptual and do not include plans and specifications sufficient to develop actual quantity takeoffs for purposes of cost estimating. As such, this is approached as a conceptual budgeting effort, based on the level of detail available. Consequently, contingencies ranging from 20% to 30% have been included in each item. A&E fees are also included.

PRELIMINARY BUDGET

Construction Priorities	2004	As scheduled*
PRIORITY 1: Asbestos Survey and Abatement, Roofing, Building Drainage, and Site Safety	\$97,900	\$97,900
PRIORITY 2: Electrical System.	\$81,000	\$81,000
PRIORITY 3: ADA Requirements	\$69,600	\$69,600
PRIORITY 4: Building Exterior	\$45,300	\$47,500
PRIORITY 5: Exterior Doors and Windows.	\$58,900	\$58,900
PRIORITY 6: Interior Doors and Woodwork.	\$ 4,900	\$ 5,200
PRIORITY 7: Courtroom and Finishes.	\$74,600	\$82,200
PRIORITY 8: Interior Lighting.	\$51,300	\$56,600
PRIORITY 9: Alarm System.	\$ 9,600	\$10,600
PRIORITY 10: Mechanical Systems.	\$146,300	\$169,400
PRIORITY 11: Fire Detection and Prevention.	\$52,000	\$60,200
TOTALS:	\$691,400	\$739,100
Heated Square Footage, Total	13020 sf	13020 sf
Cost per Square Foot	\$53/sf	\$57/sf

*As scheduled in phasing plan above. Construction costs are presumed to increase five percent per year, compounded.

6.0 PHOTOS AND ILLUSTRATIONS

Photos and illustrations appear where applicable within the text in each section of the report.

7.0 BIBLIOGRAPHY

Burggraaf, Mark, P.E., Burggraaf Associates. *Mechanical/ Electrical Recommendations and Construction Cost Estimates*. May 8, 2003

Norgren, Barbara S. and Thomas J. Noel. *Denver, The City Beautiful and its Architects, 1893-1941*. Historic Denver, Incorporated, Denver, Colorado, 1987.

Pearce, Sarah J. *A Guide to Colorado Architecture*. The Colorado Historical Society.

Uniform Building Code, 1997, International Conference of Building Officials

The Secretary of the Interior's Standard for the Treatment of Historic Properties, U.S. Government Printing Office, Washington, D.C.'
Newspapers:

Saguache County Court House, Which burned down yesterday morning
The Saguache Crescent March 3rd, 1910

Board Assembles...The Saguache Crescent May, 1910
Saguache on the Boom. Sight (sic.) Chosen, Contracts Let
The Saguache Crescent May 19th, 1910

Official Directory (of the Saguache County Courthouse)
The Saguache Crescent May, 1910

County Commissioners in Session
The Saguache Crescent November, 1910

County Officials Move, The Saguache Crescent December 10th, 1910

The vaults in the office of the county treasurer and...
The Saguache Crescent 1910

8.0 APPENDICES

8.1 MEASURED DRAWINGS

Original architects' drawings and measured drawings are included in Section 2.3 and in annotated form as appropriate in the text

8.2 CONSULTANT DOCUMENTS

A report detailing mechanical/ electrical recommendations and construction cost estimates for the recommended elements by Mark Burggraaf, P.E. is included in this section.

8.3 HISTORIC DOCUMENTS

On pages to follow.

8.4 HISTORIC NEWSPAPERS

On pages to follow.

SAGUACHE COUNTY COURTHOUSE

SAGUACHE, COLORADO

MECHANICAL/ELECTRICAL

RECOMMENDATIONS

AND

CONSTRUCTION COST ESTIMATES

PREPARED BY

**BURGGRAAF ASSOCIATES INC.
543 PARK AVE., SUITE #1 - P.O. BOX 5770
PAGOSA SPRINGS, COLORADO 81147
970/731-4278**

May 8, 2003

INTRODUCTION

Burggraaf Associates has been commissioned to provide a scope of work and estimated costs for mechanical and electrical improvements for the Saguache County Courthouse, in Saguache, Colorado. We met with Chris Lobas of Mark M. Jones Associates on Wednesday, May 23, 2003 to examine the building. We later spoke with Mr. Eddie Garcia of the County's maintenance staff with regards to electrical issues and problems within the existing structure.

Our comments and recommendations are intended to document the existing mechanical and electrical systems presently in the building, identify equipment and systems which are deficient and determine the requirements for new mechanical and electrical systems which will need to be installed in order to ensure the habitability of the building for the future. We have provided an opinion of probable cost associated with each of the systems.

The existing building was built shortly after the turn of the century and made use of the standard technology available at the time, including a coal fired boiler and limited if any power capability. The mechanical and electrical systems have been retrofitted and remodeled over time and are in relatively good condition. Primary problems associated with the systems are less in the functionality of the existing systems and more in the inability of the existing systems to meet the requirements of the equipment and personnel in the building. In addition, whereas the visible workman ship is generally good, some of the more recent mechanical and electrical retrofits are exposed, resulting in a detracting from the historical architecture of the building as a whole.

Presently, all of the mechanical, plumbing and electrical systems in the building are functional and are in reasonable repair given the age of the systems. Ventilation systems are generally non-existent and heating controls are manual, making some of the spaces less than desirable for office use. Restroom facilities are limited and do not meet all requirements for handicapped accessibility. The electrical service is too small given the amount of computer based office equipment being used in the building and the lighting systems tend to detract from rather than enhance the architectural significance of the building.

UTILITY SYSTEMS

Water and sewer services enter and exit the building from the west. Gas extends into the building from the northwest corner of the building. A single phase overhead power service extends to a service disconnect mounted on the south side of the building. Telephone service also connects to the building from the south.

The water service is routed under the floor of the boiler room with the main shut-off in the maintenance supply room. The service entrance is steel and appears to be in good condition and is adequately sized for the present and future domestic water requirements of the facility.

The waste system discharges west to the city sanitary sewer system. The system appears to be adequately sized and based on our conversation with the Mr. Garcia is generally in good condition.

The gas service into the building is only used for the boiler. The installation is in good condition and appears to be adequate for the intended use.

The existing exterior service disconnect is 200 amp, 240 volt, 1 phase. Whereas the service is in good condition, it is undersized for the needs of the building and in addition, the overhead lines tend to detract from the exterior appearance of the building.

The telephone service entrance is also overhead from the south. It appears to be functional and does not need repair or replacement at this time, however, the installation does tend to detract from the exterior appearance of the building. Consideration should be given to providing an underground extension to the building and installing the service entrance inside the building rather than on the exterior.

We estimate the cost of a new electrical service entry will be approximately \$ 5,000.

We estimate the cost of relocating the telephone service from the building exterior to an interior space will be approximately \$2,500.

MECHANICAL HEATING SYSTEM

The heating system for the building is low pressure steam supplying cast iron radiators. The system is somewhat unique in that it uses a combination of single pipe steam and condensate return for the main and upper levels and a more standard steam piping with separate condensate return for the lower level. The steam boiler is relatively new, having been replaced with a Peerless 1,680 MBH input single stage cast iron boiler in 2001. The use of a single stage boiler of this size is questionable. Consideration should be given to changing the boiler controls to allow either two stage or modulating firing.

The radiator and piping systems appear to be part of the original building construction. The building is run as a single heating zone with individual radiators being controlled manually through the steam shut-off valve at each unit. Most of the radiators appear to be in good condition and should continue to be usable for the foreseeable future. We noted that approximately 50% of the piping in the steam piping in the lower level is un-insulated, leading to uncontrolled heat gain to the spaces. Much of the piping in the lower level is exposed, suggesting that the spaces were probably originally designed for basement / storage uses rather than office spaces. We did note at least one steam line patch in the boiler room, suggesting that the steam piping system may be nearing the end of its useful life. We also noted a number of steam traps in the system, including several "home made" loops. The presence of steam venting from the condensate receiver suggested that some of the traps in the system are not working. Although the loss of heat through the venting system is relatively low given the use of the low pressure steam, none the less, the system is not as energy efficient as it might be. Depending on the timing of the replacement of the piping system, consideration should be given to the installation of insulation on all exposed steam piping in the lower level.

The boiler room does not have an adequate source of combustion air, resulting in non-compliance with current building codes.

We are recommending that the heating piping system be scheduled for replacement within the next 5 years. At that time, consideration should be given to changing the system from steam to hot water. This will eliminate the problems associated with traps and result in a system which is much more conventional at the present time. Changing to hot water will also allow for the installation of simple zone controls, providing better temperature control throughout the building.

We estimate the installed costs of the above noted recommendations as follows:

- Change the boiler firing from single stage to modulating- \$2,000
- Replacement of all steam and condensate lines with a hot water heating system- \$40,000
- Code compliant combustion air system- \$1,500
- Insulate exposed lower level steam piping- \$3,000

MECHANICAL VENTILATION / COOLING SYSTEMS

The building does not have a central mechanical ventilation or cooling system. Part of the original building design included a gravity ventilation system for the District courtroom. The system appears to be operational, but does allow not fire stopped penetrations between the upper floor courtroom and the attic space. Depending on the desired use of the Courtroom, at a minimum, fire dampers should be installed at the penetrations through the courtroom ceiling. Additional steps could be taken to either add a fan to the existing gravity system (thus improving its natural performance), or adding a mechanical cooling system for the space as a whole.

We noted that a number of paddle type ceiling fans and window type air conditioners have been installed in the office areas. In both cases, the equipment appears to have been installed to combat the heat gain from the office equipment being used. Given that it will be very difficult and expensive to retrofit the building for central air conditioning, we suggest that a more un-obtrusive design would be to use spot cooling type systems, installed on interior walls with a remote air cooled chilled water system. The chilled water piping could be installed at the same time as the heating water replacement noted above.

Although the building does not have a central ventilation system, it does meet code requirements with the use of operable windows. Due to the use of electronic equipment in the office spaces and the exceptionally cold winters in the San Luis Valley, there are a number of times during the year that the windows are not opened because of unfiltered and untempered outside air. Therefore, while the letter of the building code is being met, the actual intent of the code (providing fresh air for the occupants), is not being met. We recommend the installation of two hydronically heated make-up air units in the lower level and the extension of vertical ductwork up through the building in three or four interior chases. This would allow for the introduction of tempered and filtered make-up air into the large office spaces.

A small kitchen has been installed on the lower level. The kitchen does not include a hood resulting in the opportunity for cooking odors to be spread through the building. We recommend that a simple residential hood be installed to combat this potential problem.

Exhaust systems have been installed in the restrooms and although the ductwork is exposed, the systems are functional.

We estimate the installed costs of the above noted recommendations as follows:

- Fire dampers between the Courtroom and the attic - \$ 6,000
- Adding a fan to the Courtroom ventilation system - \$ 3,000
- Air cooled water chiller(s) and associated chilled water piping loop - \$ 40,000
- Individual spot cooling systems - \$ 2,000 per unit
- Central ventilation (two fan coil units and associated vertical duct risers) - \$ 20,000
- Kitchen hood - \$ 500

DOMESTIC PLUMBING SERVICES

The original domestic water piping in the building appears to have been galvanized steel. Subsequent areas which have been remodeled have seen the use of copper tubing. Where visible, the galvanized steel appears to be in relatively good condition.

The waste and vent piping system is cast iron and appears to be in good condition.

There are a limited number plumbing fixtures in the building, comprising three toilet rooms and the previously noted kitchen area on the lower level and a toilet room on the upper level. All of the fixtures are in fair to good condition; however, the handicapped accessible toilet in the lower level is in fact a standard toilet which has been raised up by installing it on a 1" tall wood blocking. Neither the wood blocking nor the final height would appear to meet the requirements of the Americans with Disabilities Act. We recommend that the toilet be replaced with a standard handicapped accessible unit.

The domestic hot water heater is a 30 gallon, 4.5 KW electric unit, installed in 1992. The water heater is out of warranty and will likely fail within the next five years. At that time, replacement should be in kind.

We estimate the installed costs of the above noted recommendations as follows:

- Handicapped toilet replacement - \$1,500
- Electric water heater replacement - \$ 1000

FIRE SUPPRESSION - SPRINKLER SYSTEMS

The building does not have a modern automatic fire suppression system in place. There is in the attic, the remains of a hanging chemical ball system (apparently the heat of the fire would explode the balls, resulting in a spray of chemical fire suppression) and there is a 2" exposed cold water standpipe with approximately 50' of attached garden hose at the west stairwell. A sprinkler system could be installed relatively simply in the attic and upper level, but the system would have to be exposed in the ceiling space of the main and lower levels. The installation would require that the water service into the building be upgraded to 4" in order to have adequate water flow. Given the use of the attic space for storage and the value of the records that are presently stored on site, we highly recommend the installation of the sprinkler system. The existing standpipe should be removed as it visually tends to promote a level of security which is not actually available.

In the event that a sprinkler system is installed, we estimate the cost to be \$ 35,000.

ELECTRICAL PANELS and DISTRIBUTION SYSTEM

From the exterior meter, the electrical service is extended to a 200 amp load center in the county clerk's office on the main level. Sub-panels from this load center have been installed in the boiler room and in the hall serving the county court judge's office on the upper level. The installation is generally workmanlike, but uses a number of exposed and painted conduits which tend to detract from the overall aesthetics of the building. Our conversations with Mr. Garcia indicated that the installation has become a source of irritation for their department. Some of the wiring in the system is old and cannot be reused due to proper insulation. The circuiting through out the system has not been properly traced and labeled, leading to difficulties in adding additional circuits. The grounding system seems to be of questionable quality, resulting in significant static electricity discharges, particularly on the first floor. Finally, it has been proposed to add an elevator to the building, but the existing power systems do not have adequate capacity to support this addition.

We recommend that a new 400 amp, 3 phase main power panel be installed in the boiler room. This will support both the addition of the elevator noted above and the proposed chiller systems previously mentioned. The electrical distribution system should be replaced in its entirety, and given the extensive use of office equipment and computers; consideration should be made for the use of a flexible raceway system, allowing the surface mounted conduits and outlets to be removed. Sub-panels should be located on the lower floor and on the main floor with most conduit routing being vertically through the floor ceiling structure above to the surface raceway system. An additional sub-panel could be located in the attic, allowing service in the attic proper and down through the ceiling were required by needs on the upper level.

We estimate the cost of re-wiring the building will be \$60,000.

LIGHTING SYSTEMS

Lighting systems throughout the building are a mixture of fluorescent and incandescent. Many of the office spaces are illuminated with surface mounted fluorescent strip lights which while providing generally good illumination significantly detract from the ambience. The District Courtroom makes use of industrial strip fixtures which are chain hung from the ceiling. The central rotunda has ceiling hung incandescent fixtures which appear to date from the original installation, but have had the globes removed, resulting in the use of bare incandescent bulbs.

We recommend that the lighting systems throughout the building be replaced with lights which are matched to the historical nature of the building. The lighting systems will have to be designed to not only be in harmony with the building, but to also provide adequate task lighting. A mixture of ceiling hung incandescent fixtures and wall mounted indirect fluorescent lighting should be considered.

We estimate the cost of re-lighting the building will be \$ 50,000.

FIRE DETECTION SYSTEM

The building does not presently have a central fire detection system, but we did note the use of a number of local smoke detectors and a carbon monoxide detector in the boiler room. Given that there can be significant unoccupied periods in the building of this type, we recommend the installation of a complete fire detection system with a central station dial up capability.

We estimate the cost of installing a fire detection system to be \$ 5,000.

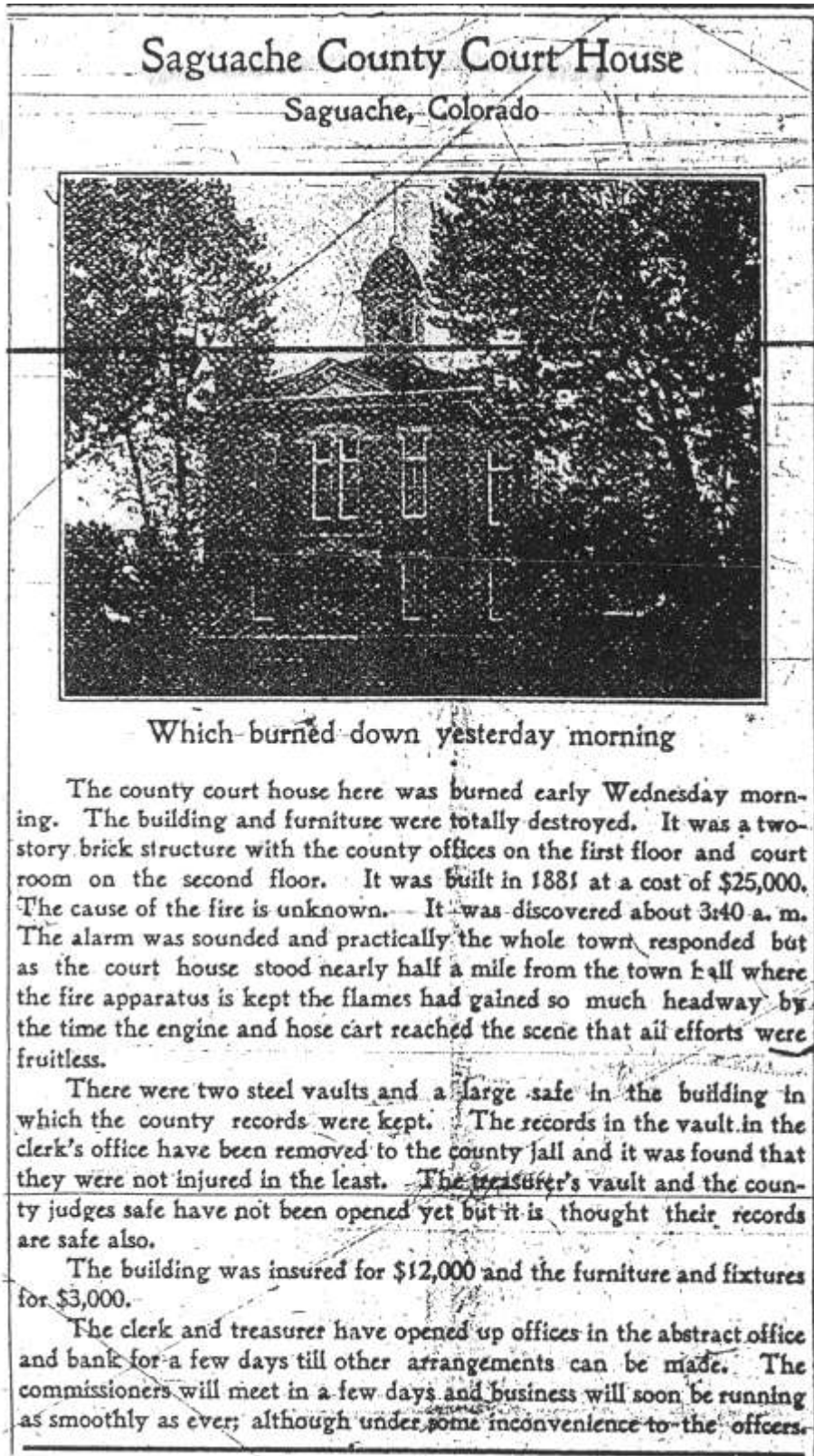
TELEPHONE / DATA SYSTEM

The telephone service entry is on the south side of the building. From the exterior phone box, cables have been routed on the exterior of the building as required to serve office spaces within the building. The cabling detracts from the overall appearance of the building and reduces the overall flexibility for phone and data use in the office areas.

The costs associated with the power raceway system noted in re-wiring the building would include the telephone / data raceway system.

MECHANICAL / ELECTRICAL DESIGN FEES

Design fees will range from 6% to 10% of the construction costs depending on the construction administration requirements.



Saguache Crescent, Article March 3rd, 1910.

Wednesday, May 11, board assembles at 8 a. m. with same members present.

Board now proceeds to examine the plans and specifications for the erection of the new court house, making estimates and preparing to receive bids and other preparation for the awarding of the contract.

The board now adjourns until tomorrow morning at 8 o'clock.

Thursday, May 12, board assembles at 8 a. m. with members present as yesterday's session.

Bids for the building of the new court house were opened promptly at 10 o'clock a. m. and the contract awarded to J. Y. Parker, his bid being the lowest.

Following is a list of the bidders with the amount of their bid, the first three not being accompanied by a certified check: F. F. Peacock, \$39,728; Ladd, Sanger Cont. Co., \$34,829; A. F. Cherry, \$37,250; M. J. Kenney, \$34,962; J. Y. Parker, \$34,750; S. L. Work, \$35,387.

John Farrington submitted an estimate, upon request, of what the building could safely be done for—which was \$35,435.

An extra allowance of \$600 was made for facing the building with pressed grey brick, and \$760 for Fort Collins stone steps instead of concrete, making total of \$36,110 for the new court house, and a contract for that amount was entered into between the board of county commissioners and the said J. Y. Parker, the details of which are too long for publication. The building is to be completed by the 20th of December, 1910.

Saguache Crescent, Article May 1910



*Saguache Crescent, Article May 19, 1910
describing award of contract.*

OFFICIAL DIRECTORY.	
County Officers.	
Judge—Hon. John H. Williams.	
Clerk—Oscar S. Marold.	
Treasurer—Dallas Stubbs.	
Sheriff—W. R. Monteith.	
Assessor—H. A. Fullenwider.	
Supt. of Schools—S. M. Ludwick.	
Surveyor—A. H. Smith.	
Coroner—Dr. S. E. Kortright.	
Attorney—Henry W. Riblett.	
County Physician—Dr. O. P. Shippey.	
COMMISSIONERS.	
Michael Jordan, Chairman.	
A. V. Shippey.	
John Britton.	
Town of Saguache.	
Mayor—Thos. Noland.	
Clerk—B. P. Stubbs.	
Treasurer—Arthur Greger.	
Marshal—C. L. Townsend.	
Magistrate—B. M. Clare.	
Aldermen—J. I. Palmer, T. M. Alexander, Charles Tarbell, Perry Campbell, Warren Joy and John Farrington.	
Saguache Fire Company.	
Regular meetings on the first Monday evening of each month, at Town Hall.	
WALTER HAMMOND.	WM. F. BOYD.
Secretary.	President.
High School Committee.	
President—M. M. Sutley, Center.	
Sec—S. M. Ludwick, Saguache.	
Treas—Dr. O. P. Shippey, Saguache.	
Hon. D. S. Jones, Center.	
Hon. W. J. King, Villa Grove.	
School Board.	
President—Dr. O. P. Shippey.	
Secretary—J. W. Beery.	
Treasurer—J. I. Palmer.	

Saguache Crescent, Building Directory, May 1910

SAGUACHE CRESCENT.

County Commissioners in Session.

Proceedings of the board of county commissioners, November term, 1910.

First day, Nov. 14.—The board assembles at 1 o'clock p. m. with the following members present:

M. N. Jordan, Chairman.

A. V. Shippey, Com.

John Britton, Com.

H. W. Riblett, County Atty.

Oscar S. Marold, County Clerk.

The treasurer is instructed to cancel tax-sale certificate No. 12 of the 1882 tax sale for the tax of 1881 on sw $\frac{1}{4}$ ne $\frac{1}{2}$, s $\frac{1}{2}$ nw $\frac{1}{4}$ and nw $\frac{1}{4}$ sw $\frac{1}{4}$ sec 11, twp 41 Range 6 and abate said tax for 1881.

Comes now Crescencio Torres, by his attorney, John I. Palmer, and offers proof of the loss of tax sale certificate No. 159 of the tax sale of 1893, as follows to-wit:

State of Colorado }
County of Rio Grande. } SS

Crescencio Torres, being first duly sworn, deposes and says, that the s $\frac{1}{2}$ nw $\frac{1}{4}$ of sec 11, twp 41, R 6 in Saguache county, Colo., was in the year 1892, assessed for the taxes of that year to J. & J. M. de Torres; that the said taxes remained unpaid and that on Nov. 20, 1893, said land was sold for said tax to one Robt. Young; that subsequently and on the 16th day of Nov., 1893, affiant purchased the tax sale certificate of said sale being tax sale certificate No. 159 of the said sale of 1893, and took said Young's assignment of said certificate and caused the same to be entered upon the records of said county; that affiant at the time

date when the same could be gone into more fully.

The rest of the day was consumed in selecting fixtures for lighting purposes in the new court house.

The hour of adjournment having arrived the board adjourns until 8 o'clock tomorrow morning.

Third day, Nov. 16.—The board assembles at 8 o'clock a. m. with all members present.

Bills against the county are taken up and disposed of as shown by bill book.

The board then took up the work of preparing to let contract for fitting the new court house with light fixtures.

The board then adjourned till 8 o'clock tomorrow morning.

Fourth day, Nov. 17.—Board assembles at 8 o'clock a. m. with all members present.

The county treasurer is instructed to transfer from the unforeseen contingencies fund into the ordinary county revenue fund the sum of \$999.61.

The report of Chairman Jordan, receipts and expenditures of the exposition fund was examined and approved; the report showed receipts from the citizens of Saguache, \$231; and of Center \$175, making a total of \$406, of which a total of \$250 was expended for fair and exposition purposes, and the balance of \$156 is to be kept in a fund to be known as the Saguache County Exposition fund for future use for fair purposes.

The clerk is instructed to advertise for bids for janitor for the court house for one year from such time as the commissioners may determine, and no later than January 1, 1911; said janitor to live in building, giving his entire time and attention to the work of janitor which

Saguache Crescent, Partial proceedings, November 1910

County Officials Move.

The county commissioners met last Friday and accepted the new county court house from the contractor, J. Y. Parker. The records were transferred from the county jail, where they have been kept since the fire which destroyed the old court house last March, to the new building the first of the week and now the officers have everything convenient and will be pleased to have their friends call and examine the place. This is the finest court house in the San Luis valley and one which the tax payers of the county may well feel proud of. It is supplied throughout with hot and cold water, is lighted by acetylene gas and heated by steam.

Left: Saguache Crescent, December 10th, 1910, describing the move to inhabit the new courthouse structure.

The vaults in the offices of the county treasurer and clerk of the district court have been opened and everything found to have passed through the fire without even having been smoked. But when the safe in the county judge's office was opened it was discovered that some of the books had been slightly burned. It is not known yet if this damage will amount to anything; but it is thought that it will not.

Saguache Crescent, 1910.

Describes fire damage to vaults and safe in first courthouse.