State of Nevada
Department of Tourism & Cultural Affairs
Division of Museums & History

NEVADA HISTORICAL SOCIETY SITE

1650 North Virginia Street
Reno, Nevada 89503

Site Number: 9856
STATE OF NEVADA PUBLIC WORKS DIVISION
FACILITY CONDITION ANALYSIS

Report distributed in December 2021

State of Nevada
Department of Tourism & Cultural Affairs
Division of Museums & History

The Facility Condition Analysis Program was created under the authority found in NRS 341.128. The State Public Works Division develops this report using cost estimates based on contractor pricing which includes materials, labor, location factors and profit and overhead. The costs of project design, management, special testing and inspections, inflation and permitting fees are not included. Cost estimates are derived from the R.S. Means Cost Estimating Guide and from comparable construction costs of projects completed by SPWD project managers.

The deficiencies outlined in this report were noted from a visual survey. This report does not address routine maintenance needs. Recommended projects do not include telecommunications, furniture, window treatments, space change, program issues, or costs that could not be identified or determined from the survey and available building information. If there are buildings without projects listed, this indicates that only routine maintenance needs were found. This report considers probable facility needs for a 10 year planning cycle.

This report is not a guarantee of funding and should not be used for budgeting purposes. This report is a planning level document for agencies and State Public Works Division to assess the needs of the Building and/or Site and to help support future requests for ADA upgrades / renovations, Capital Improvement Projects, and maintenance. The final scope and estimate of any budget request should be developed by a qualified individual. Actual project costs will vary from those proposed in this report when the final scope and budget are developed.

Establishing a Facility Condition Needs Index (FCNI) for each building

The FCA reports identify maintenance items and establish construction cost estimates. These costs are summarized at the end of the report and noted as construction costs per square foot. A FCNI is commonly used by facility managers to make a judgment whether to recommend whole replacement of facilities, rather than expending resources on major repairs and improvements. The FCNI is a ratio between the proposed facility upgrade costs and facility replacement costs (FRC). Those buildings with indices greater than .50 or 50% are recommended to be considered for complete replacement.

Class Definitions

PRIORITY CLASS 1 - Currently Critical (Immediate to Two Years)

Projects in this category require immediate action to return a facility to normal operation, stop accelerated deterioration, correct a fire/life safety hazard, or correct an ADA requirement.

PRIORITY CLASS 2 - Necessary - Not Yet Critical (Two to Four Years)

Projects in this category include conditions requiring appropriate attention to preclude predictable deterioration or potential downtime and the associated damage or higher costs if deferred further.

PRIORITY CLASS 3 - (Four to Ten Years)

Projects in this category include items that represent a sensible improvement to existing conditions. These items are not required for the most basic function of a facility; however, Priority 3 projects will either improve overall usability and/or reduce long-term maintenance.

Site number: 9856

Facility Condition Needs Index Report

Index #	Building Name		Sq. Feet	Yr. Built	Survey Date	Cost to Repair: P1	Cost to Repair: P2	Cost to Repair: P3	Total Cost to Repair	Cost to Replace	FCNI
0401	NEVADA HISTORICAL SOCIETY		22200	1968	8/4/2018	$340,700	$1,851,700	$478,400	$2,670,800	$6,660,000	40%
	1650 N. Virginia St.	Reno									
9856	NEVADA HISTORICAL SOCIETY SITE			0	8/4/2018	$195,000	$0	$0	$195,000		0%
	1650 N. Virginia St.	Reno									
	Report Totals.....:		**22,200**			**$535,700**	**$1,851,700**	**$478,400**	**$2,865,800**	**$6,660,000**	**43%**

Acronyms List

Acronym	Definition
Building Codes, Laws, Regulations and Guidelines	
AHJ	Authority Having Jurisdiction
AWWA	American Water Works Association
HVAC	Heating, Ventilating & Air Conditioning
IBC	International Building Code
ICC	International Code Council
IEBC	International Existing Building Code
IECC	International Energy Conservation Code
IFC	International Fire Code
IFGC	International Fuel Gas Code
IRC	International Residential Code
NFPA	National Fire Protection Association
NEC	National Electrical Code
OSHA	Occupational Safety and Health Administration
SAD	Standards for Accessible Design
SMACNA	Sheet Metal and Air Conditioning Contractors National Association
UMC	Uniform Mechanical Code
UPC	Uniform Plumbing Code
State of Nevada	
CIP	Capital Improvement Project
FCA	Facility Condition Analysis
FCNI	Facility Condition Needs Index
FRC	Facility Replacement Cost
NAC	Nevada Administrative Code
NDEP	Nevada Department of Environmental Protection
NRS	Nevada Revised Statutes
SFM	State Fire Marshal
SHPO	State Historic Preservation Office
SPWD	State Public Works Division
Miscellaneous	
DDC	Direct Digital Controls
FRP	Fiberglass Reinforced Plastic
GFCI	Ground Fault Circuit Interrupter
LED	Light Emitting Diode
PRV	Pressure Regulating Valve
TDD	Telecommunications Device for the Deaf
VCT	Vinyl Composite Tile

This is a generic acronym list of commonly used terms throughout the Facility Condition Analysis report.

Table of Contents

NEVADA HISTORICAL SOCIETY SITE

BUILDING REPORT

The Nevada Historical Society site is located on the campus of the University of Nevada-Reno. The building footprint and building is on a 99 year lease with UNR and all parking areas are maintained by UNR. The ADA accessible parking, route of travel from the parking and the public bus stop on North Virginia Street is not fully ADA compliant. These items are under the purview of UNR and are an integral part of the public access / route to the Historical Society building and should be addressed.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: $195,000**

Currently Critical **Immediate to Two Years**

Project Index #: 9856ADA1

ADA ACCESS / ROUTE OF TRAVEL UPGRADES

Construction Cost $195,000

The Americans with Disabilities Act (ADA) provides for accessibility to sites and services for people with physical and mental limitations. There are numerous areas between the sidewalk and the main entry doors that do not comply with ADA guidelines. The sidewalks, stairway and entry landing are not compliant and should be scheduled for repairs. Due to the slope at the entry landing, the adjacent ramps will require modifications to meet the new elevation of the landing. The stairway will need to be completely rebuilt. If the handrails are re-used, proper returns will need to be retrofitted onto them. Directional signage from the parking spaces to the entry should be included as well. The 2018 IBC, ICC/ANSI A117.1 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project. There are deficiencies in the accessible route from the bus stop and the parking spaces to the entry stairs and accessible ramp. These accessible elements are under the purview of UNR and should be addressed to provide the public with an ADA accessible route from the parking, bus stop and entrance into the building. This project or a portion thereof was previously recommended in the FCA report dated 01/25/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 08/04/2018.

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	**$195,000**
Priority Class 2:	**$0**
Priority Class 3:	**$0**
Grand Total:	**$195,000**

NEVADA HISTORICAL SOCIETY

BUILDING REPORT

The Nevada Historical Society building provides archive and display space for records and artifacts chronicling the history of Reno and the surrounding areas. The original building was constructed in 1968 and is tilt-up concrete and steel construction with a single-ply roofing system and was approximately 12,300 square feet. The addition was built in 1981 and is also tilt-up concrete and steel with a single-ply roofing system but is has a painted exterior insulation and finish system (EIFS) and is about 9,900 square feet. The single ply roofing system was replaced in 2004 with a 15 year warranty product. The HVAC system consists of 5 roof mounted packaged units ducted throughout the facility. The building is protected by a fire alarm and fire suppression systems. Previously, the 1981 addition was protected by a Halon fire suppression system, which was replaced under CIP 09-S03-4. The building is mostly ADA compliant except for the south entrance which has some non-ADA compliant cross slope and landing issues which will be addressed in the report. The facility is in excellent shape and is well maintained.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: $340,700**

Currently Critical **Immediate to Two Years**

Project Index #: 0401ADA2

ADA SIGNAGE

Construction Cost $1,600

Americans with Disabilities Act (ADA) regulations pertaining to building access has established building signage criteria for permanent spaces in buildings. The criteria includes: sign mounting heights and locations; character heights and proportions; raised and Braille characters/pictograms; and sign contrast and finish. The signage in this facility does not comply with this criteria. It is recommended that applicable signage be installed where required. NRS 338.180, IBC - 2018, ICC/ANSI A117.1 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.
This project or a portion thereof was previously recommended in the FCA report dated 01/25/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 08/04/2018.

Project Index #: 0401SFT4

EXIT SIGN UPGRADES

Construction Cost $12,900

The existing exit signs in the building are older types and should be replaced with new self-illuminated or LED style signs with battery-backed internal systems. The estimate is based on purchasing and installing 22 exit signs at $450 each. IBC - 2018 Chapter 10 was referenced for this project.
This project or a portion thereof was previously recommended in the FCA report dated 01/25/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 08/04/2018.

Project Index #: 0401SFT6

HIGH DENSITY STORAGE SYSTEM REPAIRS

Construction Cost $32,500

The existing high density storage system in the archive area is not functioning properly and is a safety hazard. The electrical and mechanical elements of the system are aged, compromising the safety of the staff and volunteers. The system has a safety feature which prevents the shelves from moving when a person is in the aisle. The electronics and sensors for this safety feature are failing and pose a very dangerous situation for a person working in the aisles. There are also shelves at the ends of the system that do not open fully. It is recommended to refurbish the entire storage system. The estimate includes removal and disposal of existing electrical and mechanical parts and purchase and installation of new parts to restore the system to a safe and fully functioning system.
This project or a portion thereof was previously recommended in the FCA report dated 01/25/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 08/04/2018.

Project Index #: 0401ELE1

PROVIDE CLEARANCE AT ELECTRICAL PANELS **Construction Cost $500**

There are electrical panels in the building which do not have proper clear floor space around them. The 2018 IFC section 605.3 states that, "A working space of not less than 30 inches in width, 36 inches in depth and 78 inches in height shall be provided in front of electrical service equipment. Where the electrical service equipment is wider than 30 inches, the working space shall not be less than the width of the equipment. No storage of any materials shall be located within the designated working space." This project would provide funds to relocate the janitors equipment and other items currently blocking the working space.
This project or a portion thereof was previously recommended in the FCA report dated 01/25/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 08/04/2018.

Project Index #: 0401SFT5

ROOF HATCH REPLACEMENT **Construction Cost $4,600**

The roof hatch is original to the building and has reached the end of its useful life. The compression spring operators do not function properly, the latches and handles are worn and the seals and flashing have deteriorated. A faulty roof hatch is a safety hazard to anyone accessing the roof. This project would provide for removal and disposal of the existing roof hatch and purchase and installation of a new roof hatch.
This project or a portion thereof was previously recommended in the FCA report dated 01/25/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 08/04/2018.

Project Index #: 0401SEC1

SECURITY SYSTEM UPGRADE **Construction Cost $288,600**

The buildings security system is limited and outdated and the intercom system through the telephones does not meet staff requirements. There are a few security cameras and alarmed doors, but this is not sufficient to protect the people, priceless artifacts, manuscripts, photographs and library collections in the building. The only intercom system is the speakerphones on the telephones. Staff noted that the speakers are not loud enough and they are not located in the most necessary areas. This project addresses upgrading the security and communications systems in the building.
This project or a portion thereof was previously recommended in the FCA report dated 01/25/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 08/04/2018.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: $1,851,700

Necessary - Not Yet Critical **Two to Four Years**

Project Index #: 0401INT5

CEILING TILE REPLACEMENT **Construction Cost $46,200**

A portion of the ceiling in the building is covered with acoustical ceiling tiles. The ceiling tiles are damaged and stained and some are coming loose from the substrate. This project would provide for the replacement of the ceiling tiles. Removal and disposal of the existing tiles is included in this estimate. Additional costs would be required if there is asbestos in the tiles or adhesive.

Project Index #: 0401EXT4

DOOR AWNING INSTALLATION **Construction Cost $4,600**

The exterior door on the east elevation is the main entrance for staff and volunteers. They must use this entrance to open the building and disable the alarm. During inclement weather, snow and ice builds up on and around the door and impedes its function. This makes it difficult and dangerous to get in and out of the building. It is recommended to retrofit the door with a metal awning to protect this entrance from the elements. The awning should span the full width of the concrete landing and include a gutter that ties into the adjacent downspout. This project also includes relocating the exterior light from its current location to a position below the awning.
This project or a portion thereof was previously recommended in the FCA report dated 01/25/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 08/04/2018.

Project Index #: 0401ELE2

ELECTRICAL UPGRADE **Construction Cost $700,400**

This building is over 50 years old and the electrical system has reached the end of its useful life. There are also conflicts having electrical equipment clearances, and wet locations (janitor sink) in close proximity. Additionally, it was constructed before the requirements for NEC 70e electrical Arc Flash Assessments. As a consequence, the original subpanels, distribution boards and breakers are not labeled with available fault current (AIC Rating). In order to comply with the NEC 70e requirements, it is recommended that the original electrical equipment be replaced with new to facilitate the required Breaker Coordination and Arc Flash studies. Additionally, this project funds relocating the janitor functions to a newly created space. Removal and disposal of the existing equipment is included in this project.

Project Index #: 0401SFT7

EXPLOSION-PROOF REFRIGERATOR/ FREEZER **Construction Cost $22,100**

This project would provide for the purchase and installation of two explosion-proof refrigerator/ freezer units. The existing unit has reached capacity and staff reported a need for two additional units. These units protect the chemicals or substances stored inside the unit from explosions outside the unit as well as protecting the exterior environment from explosions inside the unit. The units must be hardwired to the electrical system to prevent a short or overheating a coil which could ignite a flammable or explosive substance stored inside. Additional costs are included for an electrician to hard-wire the units to the electrical system.

This project or a portion thereof was previously recommended in the FCA report dated 01/25/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 08/04/2018.

Project Index #: 0401EXT5

EXTERIOR DOOR REPLACEMENT **Construction Cost $6,500**

The exterior metal door assembly on the south side public entrance is damaged from age and general wear and tear and has reached the end of its expected life. This project would provide for the replacement of the south double door entry assembly with new metal doors, frames and hardware. Removal and disposal of the existing doors is included in this estimate.

This project or a portion thereof was previously recommended in the FCA report dated 01/25/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 08/04/2018.

Project Index #: 0401EXT3

EXTERIOR FINISHES **Construction Cost $111,000**

The exterior finishes are in poor condition. It is important to maintain the finish, weather resistance and appearance of the building. This project would provide funding to protect the exterior of the building excluding the roof. Included in the cost is power washing, priming and painting and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be painted in the next 2 - 3 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

Project Index #: 0401ENR3

EXTERIOR WALL PACK LIGHTING REPLACEMENT **Construction Cost $8,400**

The building mounted wall pack lights at the main entrance and the loading dock appear to be original to the building. These fixtures have High Pressure Sodium (HPS) lamps and are less efficient. This project would provide for the replacement of the existing wall pack fixtures with LED wall packs using the existing wiring.

Project Index #: 0401INT2

FLOORING REPAIRS **Construction Cost $64,400**

The painted and sealed concrete floor in the addition portion of the building is damaged and reaching the end of its useful life. It is recommended to refurbish the floor by stripping the existing finish, repairing any cracks, painting and sealing in order to extend its useful life. This project would provide for refurbishing the floor in the next 2-3 years.

This project or a portion thereof was previously recommended in the FCA report dated 01/25/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 08/04/2018.

Project Index #: 0401INT7

FLOORING REPLACEMENT **Construction Cost $104,400**

The VCT (vinyl composite tile) and carpet in the building are damaged and reaching the end of their useful life. It is recommended that the flooring be replaced. This project would provide for removal and disposal of the existing flooring and installation of new 12x12 VCT with a 6" base and heavy duty commercial grade carpet in the next 2-3 years. Additional costs would be required if there is asbestos in the tiles or adhesive.

Project Index #: 0401INT8

GYPSUM BOARD REPAIR **Construction Cost $0**

Water leaks and moisture has damaged the gypsum board in the Archive Storage area. The water damage was caused by previous roof leaks. This project recommends removing any damaged gypsum board, and replacing it and re-finishing the gypsum board seams.
This project should be implemented concurrently with the ROOF REPLACEMENT and INTERIOR FINISHES projects.

Project Index #: 0401INT4

HIGH DENSITY STORAGE SYSTEM INSTALLATION **Construction Cost $162,500**

The static shelving in the archive area has reached capacity and will no longer be able to meet storage demands. Leased space and other offsite storage space have already been utilized to handle the overflow. In order to maintain control and security of the artifacts it is recommended to replace the existing shelving with a new high density storage system as opposed to utilizing the offsite storage facilities. The new system will store two to three times as much material in the same amount of space. The estimate includes removal and disposal of existing static shelving and purchase and installation of a high density storage system.
This project or a portion thereof was previously recommended in the FCA report dated 01/25/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 08/04/2018.

Project Index #: 0401INT1

INTERIOR FINISHES **Construction Cost $111,000**

The interior finishes are in poor condition. It is recommended that the interior walls and ceilings be painted at least once in the next 2 - 3 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure. Prior to painting, all surfaces should be repaired and prepped. An epoxy-based paint should be utilized in wet areas for durability.

Project Index #: 0401INT3

JANITORS CLOSET REPAIRS **Construction Cost $1,800**

The mop sink in the Janitors Closet is mounted adjacent to gypsum board and showing signs of water damage. This project would provide fiberglass reinforced panels (FRP) to be installed on the walls adjacent to the mop sink. The FRP shall extend two feet beyond the edge of the sink and a minimum of 54" above the floor finish.
This project or a portion thereof was previously recommended in the FCA report dated 01/25/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 08/04/2018.

Project Index #: 0401ENR2

LIGHTING UPGRADE **Construction Cost $66,600**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade fixtures to higher efficiency units with a longer life cycle. 5,000K LED lamps, without the ballasts are suggested, and new tombstones (if needed). Occupancy sensors will be installed in low occupancy areas for additional savings. Electrical wiring upgrades are not included in this estimate.
This project or a portion thereof was previously recommended in the FCA report dated 01/25/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 08/04/2018.

Project Index #: 0401EXT6

ROOF REPLACEMENT **Construction Cost $439,300**

The roof on this building was in fair condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 years. The roof warranty expires at the end of the same time frame. The temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 2004 with a 15 year warranty. It is recommended that this building be re-roofed in the next 2 - 3 years to be consistent with the roofing program and the end of the warranty period.

Project Index #: 0401PLM1

WATER HEATER REPLACEMENT **Construction Cost $2,500**

There is a 30 gallon electric water heater in the building. The average life span of a water heater is eight to ten years. With the passage of time and constant use, this unit is showing signs of wear and should be scheduled for replacement in the next 2-3 years. It is recommended that a new on-demand electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.
This project or a portion thereof was previously recommended in the FCA report dated 01/25/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 08/04/2018.

PRIORITY CLASS 3 PROJECTS **Total Construction Cost for Priority 3 Projects: $478,400**

Long-Term Needs **Four to Ten Years**

Project Index #: 0401HVA2

HVAC EQUIPMENT REPLACEMENT **Construction Cost $439,300**

The five HVAC roof top units were installed in 1997. They are not energy efficient and have reached the end of their expected and useful life. The R-22 refrigerant in the cooling system is no longer EPA compliant and its production is mandated to be phased out completely by January 1, 2020. This project would provide for installation of five new HVAC packaged units and cleaning of the existing duct work and grilles. This project includes removal and disposal of the existing equipment, including utility exhaust fan and all required connections to utilities.

Project Index #: 0401INT6

INTERIOR DOOR REPLACEMENT **Construction Cost $39,100**

The interior doors in this building are solid core wood veneer units and many are damaged. This project would provide for the installation of new solid core interior doors including frames, lever action door handles, hardware and finish. Removal and disposal of the existing doors is included in this cost estimate. A total of 30 interior doors was used in this estimate.

BUILDING INFORMATION:

Gross Area (square feet):	**22,200**	**IBC Occupancy Type 1:**	**50 % B**
Year Constructed:	**1968**	**IBC Occupancy Type 2:**	**50 % A-3**
Exterior Finish 1:	**50 % Tilt-Up Concrete**	**Construction Type:**	**Tilt-up Concrete**
Exterior Finish 2:	**50 % Painted Stucco / EIFS**	**IBC Construction Type:**	**I-B**
Number of Levels (Floors):	**1 Basement? No**	**Percent Fire Supressed:**	**100 %**

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	**$340,700**	**Project Construction Cost per Square Foot:**	**$120.31**
Priority Class 2:	**$1,851,700**	**Total Facility Replacement Construction Cost:**	**$6,660,000**
Priority Class 3:	**$478,400**	**Facility Replacement Cost per Square Foot:**	**$300**
Grand Total:	**$2,670,800**	**FCNI:**	**40%**

NOTES:

The deficiencies outlined in this report were noted from a visual survey. The costs do not represent the cost of a complete facility renovation or maintenance needs. Recommended projects do not include telecommunications, furniture, window treatment, space change, program issues, relocation, swing space, or costs that could not be identified or determined from the survey and available building information.

Individual projects and costs noted herein may be impacted by new construction materials or methods, agency projects, and pending or proposed Capital Improvement Projects (CIP).

This report was created under the authority found in NRS 341.128 by the State Public Works Division and should be utilized as a planning level document.

REPORT DEVELOPMENT:

State Public Works Division	515 E. Musser Street, Suite 102	(775) 684-4141 voice
Facilities Condition Analysis	Carson City, Nevada 89701-4263	(775) 684-4142 facsimile

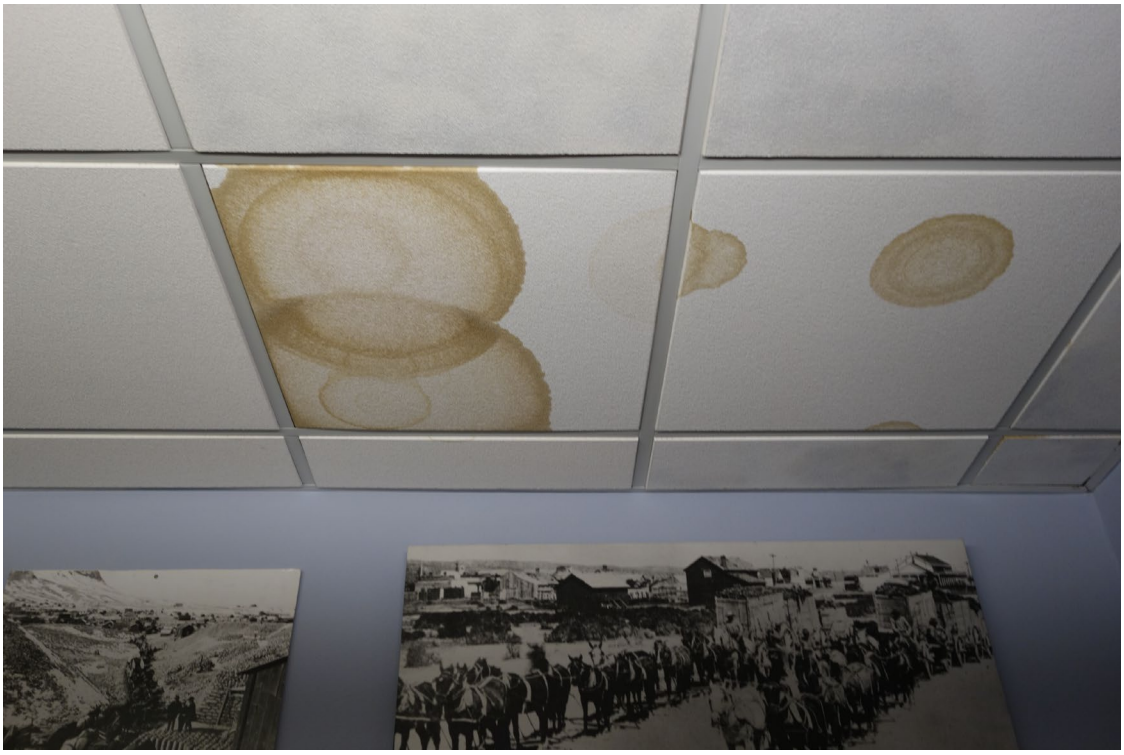
Nevada Historical Society - Building #0401
Description: View of Artifact Display Area.

Nevada Historical Society - Building #0401
Description: View of Break Area.

Nevada Historical Society - Building #0401
Description: High Density Storage System Repairs Needed.

Nevada Historical Society - Building #0401
Description: Clearance at Electrical Equipment Required.

Nevada Historical Society - Building #0401
Description: Electrical Upgrade Recommended.



Nevada Historical Society - Building #0401
Description: Ceiling Tile Replacement Needed.

Nevada Historical Society - Building #0401
Description: Exterior Wall Lighting Upgrade Recommended.

Nevada Historical Society - Building #0401
Description: Gypsum Board Repairs Needed.

Nevada Historical Society - Building #0401
Description: Roof Replacement Recommended.

Nevada Historical Society - Building #0401
Description: HVAC Equipment Replacement Recommended.