

State of Nevada
Department of Administration
State Library, Archives and Public Records Division

NEVADA STATE LIBRARY AND ARCHIVES

100 North Stewart Street
Carson City, Nevada 89701

Site Number: 9866
STATE OF NEVADA PUBLIC WORKS DIVISION
FACILITY CONDITION ANALYSIS



Report Printed in June 2021

State of Nevada
Department of Administration
State Library, Archives and Public Records Division

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 SPWB 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: 9866

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
1675	NEVADA STATE LIBRARY & ARCHIVES 100 N. Stewart Street Carson City	130000	1992	2/2/2021	\$230,400	\$2,806,700	\$260,000	\$3,297,100	\$45,500,000	7%
9866	NEVADA STATE LIBRARY & ARCHIVES SITE 100 N. Stewart Street Carson City		0	2/2/2021	\$1,600	\$98,300	\$0	\$99,900		0%
Report Totals.....:		130,000			\$232,000	\$2,905,000	\$260,000	\$3,397,000	\$45,500,000	7%

Acronyms List

Acronym	Definition
<i>Building Codes, Laws, Regulations and Guidelines</i>	
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
<i>State of Nevada</i>	
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
<i>Miscellaneous</i>	
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.

SPWD Facility Condition Analysis

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NEVADA STATE LIBRARY & ARCHIVES SITE

SPWD Facility Condition Analysis - 9866

Survey Date: 2/2/2021

NEVADA STATE LIBRARY & ARCHIVES SITE

BUILDING REPORT

The Nevada State Library and Archives site is just east of the State Capitol. There is a driveway to a loading dock on the west side of the building and some ADA accessible parking is also in this location. The public and employee parking is across Musser Street on the north side of the site along with additional ADA parking and route of travel to the building.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$1,600

Currently Critical

Immediate to Two Years

Project Index #: 9866ADA1

Construction Cost \$1,600

ADA SIGNAGE

The ADA provides for accessibility to sites and services for people with physical limitations. The ADA path of travel site signage is old, faded and in need of replacement. This project would provide for the purchase and installation of compliant signage. The 2018 IBC, ICC/ANSI A117.1, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as a reference for this project.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$98,300

Necessary - Not Yet Critical

Two to Four Years

Project Index #: 9866SIT1

Construction Cost \$46,100

ASPHALT REPLACEMENT

The asphalt paving on the west side of the building is failing, with significant alligatoring, settling and cracks observed. This project covers the removal and replacement of the existing asphalt from the entrance to the accessible parking to the loading dock / trash bin area. Striping for safety, parking and loading zones is included in this estimate. 5000 square feet was used to generate this estimate.

Project Index #: 9866SIT2

Construction Cost \$52,200

OVERHEAD DOOR REPLACEMENT

There are six 10' x 10' overhead coiling doors screening the trash bins on the west side of the building which are damaged and do not function properly. They are original to the building and should be scheduled for replacement. This project would provide for the removal and disposal of the manually operated overhead coiling doors and replacement with a new manually operated overhead coiling doors. Removal and disposal of the existing doors are included in this estimate.

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$1,600
Priority Class 2:	\$98,300
Priority Class 3:	\$0
Grand Total:	\$99,900

**NEVADA STATE LIBRARY & ARCHIVES
BUILDING REPORT**

The Nevada State Library and Archives is a statewide research library and provides library services for Nevada State Government and the public. Portions of this facility date to approximately 1885. It contains conference and meeting rooms, offices, library and research space, archive storage, law library, an art gallery, and storage space. The roofing system is a mix of a standing seam metal roofing on the gabled portions of the roof and the flat roof areas are single ply membrane installed in 2008. The facility's HVAC system consists of hot water boilers, a chiller, cooling tower, and air handlers. The HVAC systems are original to the building and its replacement will be addressed in the Projects section of this document. The cooling tower was replaced in 2011. There is a fire sprinkler and alarm system throughout and is in good operational condition. The building is mostly ADA compliant and is well maintained.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$230,400**
Currently Critical **Immediate to Two Years**

ACCESSIBLE DRINKING FOUNTAIN INSTALLATION

Project Index #: 1675ADA1
Construction Cost \$12,000

This building contains four water fountains, one on the basement floor, two on the first floor and one on the second floor. Section 4.1.3 (10) of the Americans with Disabilities Act Accessible Guidelines (ADAAG) states where one water fountain is provided on a floor it shall be accessible and where more than one is provided on a floor, 50% of those shall be accessible. This project would provide funding for the purchase and installation of three new accessible fixed high/low ADA drinking fountains. 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 01/11/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 02/02/2021.

ADA SIGNAGE

Project Index #: 1675ADA4
Construction Cost \$6,200

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 01/11/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 02/02/2021.

BUILDING LEAK REPAIRS EAST SIDE PATIO

Project Index #: 1675EXT4
Construction Cost \$10,000

A visual survey of the ceiling and flooring in the basement Classroom E and storage room to the north of Classroom E have water staining. This area is under the east public entry patio. A survey of the east entry patio area shows multiple areas of caulking failure and routes of water intrusion. This project would provide funds to remove and replace all expansion joint caulking along patio perimeter, joints in the patio and at the structural columns. This project recommendation should not be considered a permanent solution and should be scheduled on a cyclical basis.

Project Index #: 1675EXT3
Construction Cost \$25,000

BUILDING LEAK REPAIRS WEST SIDE PATIO

A visual survey of the ceiling in the Old Talking Books area of the basement shows evidence of significant water staining. This area is under the west public entry patio and entry bridge. A survey of the west entry patio and entry bridge area shows multiple areas of caulking failure and routes of water intrusion. In addition, significant joint failures were noted on the top of the masonry patio guard walls. This project would provide funds to remove and replace all expansion joint caulking along patio perimeter, joints in the patio and at the structural columns. This project recommendation should not be considered a permanent solution and should be scheduled on a cyclical basis. In addition, it is recommended that architectural stainless steel flashing caps be installed on the tops of the masonry patio guard walls. Permanent solutions, such as a pedestal paver system, are available for the west walkway and patio area that are not included in the scope of this project.

Project Index #: 1675ENV1
Construction Cost \$68,000

ELEVATOR SUMP REPAIRS

The elevator sumps contain equipment that contains hydraulic fluid. The building and elevators are 30 years old and the sumps have not been re-coated to prevent groundwater contamination. This project would provide for the cleaning, priming and coating of the 3 elevator sumps.

Project Index #: 1675SFT6
Construction Cost \$1,500

EQUIPMENT AND VENTING REMOVAL

There is an ammonia-based photo duplicating machine in the photo lab that is not used and there are no plans for future use. A visual survey of the machine showed a reservoir bottle in the equipment base still containing ammonia. It is recommended that the equipment and chemicals be disposed of properly and the ventilation ducting capped to prevent unnecessary conditioned air being vented from the building.

Project Index #: 1675SFT4
Construction Cost \$10,000

FUME HOOD / VENTING MODIFICATIONS

The fume hood in the photo processing lab appears to be non-operational. The pilot light fan switch does not illuminate and there is no indication of air movement in the hood. This project will provide funds for the replacement of the fume hood exhaust fan and associated controls.

This project or a portion thereof was previously recommended in the FCA report dated 01/11/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 02/02/2021.

Project Index #: 1675INT8
Construction Cost \$1,200

JANITORS CLOSET REPAIRS

The mop sink in the basement Janitors Closet is mounted adjacent to gypsum board and is 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 01/11/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 02/02/2021.

Project Index #: 1675SFT5
Construction Cost \$5,000

SEISMIC GAS SHUT-OFF VALVE INSTALLATION

This project would provide for the installation of a seismic gas shut-off valve on the main gas service piping prior to entering the building. This estimate is based on the manufacturer Pacific Seismic Products or approved equal, equipped with the optional Model MS remote monitoring switch (to be interfaced with the direct digital control system and/or with an audible alarm). The gas piping immediately adjacent to the seismic gas valve shall be secured to the building utilizing unistrut channel bracing.

Project Index #: 1675SIT2
Construction Cost \$75,000

STORMDRAIN UPGRADE

The precipitation captured by the exterior patio at the west public entrance sheet flows into drainage rock next to the old SHPO office building. Additionally, a downspout from the old SHPO office roof discharges into this same drainage rock. The volume of storm water is a likely source of water intrusion into the basement. It is recommended that this storm water be captured and directed to the storm drain. This project provides funding for the excavation, installation of drain trough grating and piping connections to storm drain and re-landscaping the area.

Project Index #: 1675EXT5
Construction Cost \$15,000

STUCCO REPAIRS

A visual survey of the west public entry detected stucco cracking in the overhead archways above the walkway and on the underside of the walkway bridge. The stucco cracks in the archways appear to be contributing to the brick efflorescence in the supporting columns beneath due to water intrusion behind the brick. This project would provide funding to repair and re-seal the flashing caps, repair the stucco, re-caulk the joints and re-paint to prevent further water intrusion.

The stucco repairs under the bridge should not be completed until after the BUILDING LEAK REPAIRS WEST SIDE PATIO project is complete.

Project Index #: 1675ENV2
Construction Cost \$1,500

WATER INTRUSION INTO FREIGHT ELEVATOR SUMP

There is a continuous flow of water through an opening in the sidewall of the freight elevator pit. The source of this water is unknown; however it is possibly caused by a leaking domestic water line below the building. In the past, the sump pumps have failed and has caused flooding in the basement. The source of this water should be determined and stopped before it causes further building damage. This project would provide funding to locate the source of the water intrusion. The cost of building excavation and repairs are not included in this estimate.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$3,056,700

Necessary - Not Yet Critical

Two to Four Years

Project Index #: 1675INT3
Construction Cost \$1,300

CARPET REPLACEMENT

The carpet in the Records Management Office is showing signs of extreme wear. It is recommended that the carpet be replaced with heavy duty commercial grade carpet in the next 2-3 years.

This project or a portion thereof was previously recommended in the FCA report dated 01/11/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 02/02/2021.

Project Index #: 1675INT11
Construction Cost \$4,000

CARPET REPLACEMENT

The carpet in the Microfilm office is showing signs of wear and is at the end of its useful life. It is recommended that the carpet be replaced with heavy duty commercial grade carpet in the next 2-3 years.

Project Index #: 1675INT7
Construction Cost \$106,400

DOOR HARDWARE REPLACEMENT

The interior wood doors are in good shape, but staff has had continuous problems with the hardware. The handles, tumblers and locks on the doors are damaged from age and general wear and tear and have reached the end of their useful life. This project would provide for the replacement of the hardware on 173 doors. Removal and disposal of the existing hardware is included in this estimate.

This project or a portion thereof was previously recommended in the FCA report dated 01/11/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 02/02/2021.

Project Index #: 1675SFT2
Construction Cost \$600,000

FM 200 SUPPRESSION SYSTEM

The Scope of the project is to remove the existing second floor Library and Archives Halon fire protection system and replace it with a new clean gas system. The project area square footage is approximately 7100 sq. ft. Clean gas agents are calculated on the actual cubic air space in the area to be protected. The volume of space to be protected is approximately 64,000 cubic feet. The project was estimated using a 9 foot ceiling space. Based on current systems, it is recommended to install an Ansul Sapphire system or similar system. This system appears to have the lowest impact to the environment.

This project or a portion thereof was previously recommended in the FCA report dated 07/25/2003 and 01/11/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 02/02/2021.

Project Index #: 1675INT10
Construction Cost \$35,000

FREIGHT ELEVATOR REPAIRS

This building has a freight elevator that occasionally trips offline indicating probable faulty sensors and switches. This project would provide funding to repair the elevator. These repairs are to include but not limited to updating the control panel, call buttons and all safety related sensors and switches.

Project Index #: 1675SFT7
Construction Cost \$250,000

FREIGHT ELEVATOR UPGRADE

The freight elevator is approaching 30 years of service and is original to the building. The hydraulic lift cylinder jack supporting the elevator carriage is located in the sump below the elevator and extends downward into the ground water. The current lift cylinder is single wall metal and subject to corrosion and failure due to direct immersion in the water. This project would provide funding for the removal of the hydraulic lift cylinder, boring a larger diameter hole and installing a new PVC jacketed lift cylinder.

Project Index #: 1675HVA2
Construction Cost \$1,700,000

HVAC CENTRAL PLANT REPLACEMENT

The central plant equipment including the chiller, boilers, pumps, piping, domestic hot water heating system and associated controls are original to the building and have reached the end of their expected and useful life. A complete replacement is recommended. This project includes removal and disposal of the existing equipment and all required connections to utilities.

Project Index #: 1675INT1
Construction Cost \$200,000

INTERIOR FINISHES

The interior finishes are in good condition. A majority of the walls are covered by wallpaper and most of the ceilings are suspended tile ceiling systems. It is recommended that the rest of the interior walls and ceilings be painted at least once in the next 6 - 8 years and that this project be scheduled on a cyclical basis to maintain the integrity of the wall finishes. Prior to painting, all surfaces should be repaired and prepped. An epoxy-based paint should be utilized in wet areas for durability.

Project Index #: 1675ENR4
Construction Cost \$160,000

LIGHTING UPGRADE

The existing lighting fixtures are older T-8's, T-12's and sodium vapor HID's and are not energy efficient. This project will upgrade fixtures and lamps 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. The scope of project includes HID (high intensity discharge) lighting in the atrium interior and exterior.

This project or a portion thereof was previously recommended in the FCA report dated 01/11/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 02/02/2021.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$260,000

Long-Term Needs

Four to Ten Years

Project Index #: 1675EXT2
Construction Cost \$260,000

EXTERIOR FINISHES

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 are cleaning and sealing the brick masonry, caulking of the windows, flashing, fixtures and all other penetrations and removing all of the climbing vines from the walls. It is recommended that the building be sealed and caulked in the next 8 - 9 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure. Re-pointing of the sandstone masonry on an as needed basis is included in this estimate.

BUILDING INFORMATION:

Gross Area (square feet):	130,000	IBC Occupancy Type 1:	70 % B
Year Constructed:	1992	IBC Occupancy Type 2:	30 % A-3
Exterior Finish 1:	75 % Brick Masonry	Construction Type:	Masonry, Stucco and Glass
Exterior Finish 2:	25 % Sandstone Masonry	IBC Construction Type:	I-B
Number of Levels (Floors):	2 Basement? Yes	Percent Fire Supressed:	100 %

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$230,400	Project Construction Cost per Square Foot:	\$27.29
Priority Class 2:	\$3,056,700	Total Facility Replacement Construction Cost:	\$45,500,000
Priority Class 3:	\$260,000	Facility Replacement Cost per Square Foot:	\$350
Grand Total:	\$3,547,100	FCNI:	8%

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 State Library & Archives - Site #9866
Description: ADA Site Path of Travel Signage Replacement Needed.



Nevada State Library & Archives - Site #9866
Description: Pavement Replacement Needed.



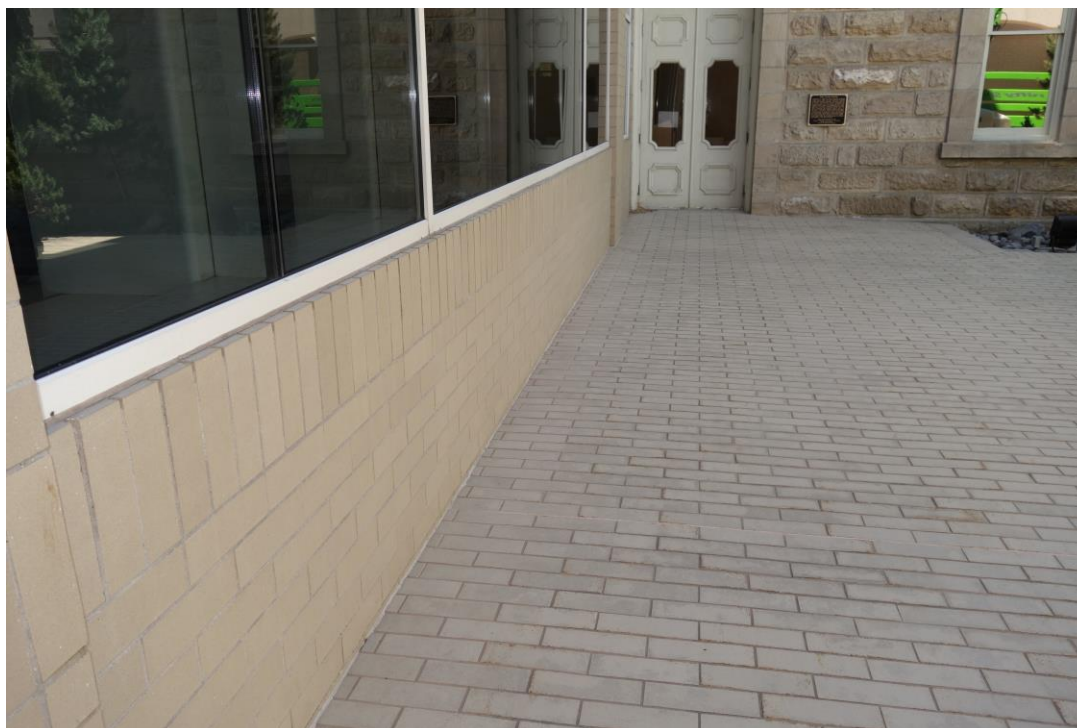
Nevada State Library & Archives - Site #9866
Description: Overhead Door Replacement Needed.



Nevada State Library & Archives - Building #1675
Description: East Public Entrance



Nevada State Library & Archives - Building #1675
Description: Building Leak Repairs East Side Patio.



Nevada State Library & Archives - Building #1675
Description: Building Leak Repairs West Side Patio (Pic 1 of 2)



Nevada State Library & Archives - Building #1675
Description: Building Leak Repairs West Side Patio (Pic 2 of 2).



Nevada State Library & Archives - Building #1675
Description: Stainless Steel Flashing Caps for Masonry Guard Rails.



Nevada State Library & Archives - Building #1675
Description: Stucco Repairs Needed.



Nevada State Library & Archives - Building #1675
Description: Ceiling Condition in Old Talking Books Room.



Nevada State Library & Archives - Building #1675
Description: Elevator Sump Repairs.



Nevada State Library & Archives - Building #1675
Description: Dual Level Drinking Fountains Needed.



Nevada State Library & Archives - Building #1675
Description: Equipment & Venting Removal Recommended.



Nevada State Library & Archives - Building #1675
Description: Seismic Gas Valve Installation Needed.



Nevada State Library & Archives - Building #1675
Description: Replacement of Chiller & Central Plant Needed.



Nevada State Library & Archives - Building #1675
Description: Lighting Upgrade to LED Recommended.