State of Nevada
Department of Administration
Buildings and Grounds Division
Nevada State Capitol
Facility Condition Analysis

# **NEVADA STATE CAPITOL**

101 North Carson Street Carson City, Nevada 89701

# Site Number: 9918 STATE OF NEVADA PUBLIC WORKS BOARD FACILITY CONDITION ANALYSIS



Report Printed in April 2011

# State of Nevada Department of Administration Buildings and Grounds Division Nevada State Capitol Facility Condition Analysis

The Facility Condition Analysis Program was created under the authority found in NRS 341.201. The State Public Works Board 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 Board 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 num	ber: 9918	<b>Facility Condition Nee</b>	ds Index l	Report		Cost to	Cost to	Cost to	Total Cost	Cost to	FCNI
Index #	<b>Building Name</b>		Sq. Feet	Yr. Built	<b>Survey Date</b>	Repair: P1	Repair: P2	Repair: P3	to Repair	Replace	
0235	NEVADA STATE CAPITO	OL	54778	1870	3/23/2011	\$50,100	\$744,580	\$0	\$794,680	\$24,650,100	3%
	101 North Carson St.	Carson City									
0203	STATE CAPITOL ANNEX	X	9864	1905	3/23/2011	\$4,000	\$98,640	\$2,500	\$105,140	\$4,438,800	2%
	101 North Carson St.	Carson City									
9918	NEVADA STATE CAPITO	OL SITE		0	3/23/2011	\$35,000	\$0	\$7,500	\$42,500		0%
	101 North Carson St.	Carson City									
		Report Totals:	64,642	2		\$89,100	\$843,220	\$10,000	\$942,320	\$29,088,900	3%

Thursday, April 21, 2011

## **SPWB Facility Condition Analysis**

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STATE CAPITOL ANNEX	0203

State of Nevada / Administration NEVADA STATE CAPITOL SITE SPWB Facility Condition Analysis - 9918

**Survey Date:** 3/23/2011

# NEVADA STATE CAPITOL SITE BUILDING REPORT

The State Capitol site is home to the Nevada State Capitol and the Capitol Annex. It has a large landscaped area surrounding the buildings which consists of trees, some of which are indigenous to the state of Nevada, shrubs and a large area of turf. The site is fully irrigated and a short wrought iron fence on the south, west, and east side delineates the site from adjacent buildings in the area. All of the site is ADA accessible to the public via concrete walkways. Directional signage is present along the designated ADA accessible routes. There is on site parking for staff only and public parking is provided offsite.

PRIORITY CLASS 1 PROJECTS

**Total Construction Cost for Priority 1 Projects:** \$35,000

**Project Index #:** 

**Construction Cost** 

**Currently Critical** 

Immediate to Two Years

#### CONCRETE STAIR REPAIRS

The south side concrete stairs and landing at the breezeway between the Annex and Capitol are severely deteriorated. Spalling and cracking have occurred to the extent that the stairs need to be replaced and the landing resurfaced. It is currently a tripping hazard especially during inclement weather. This project addresses removal and replacement of the entire stair structure and resurfacing the concrete landing. The existing handrails do not meet current building codes and may need to be replaced in kind or altered to bring them into compliance. Due to the historical nature of the building, this project is subject to review and approval from the State Historical Preservation Office. Section 1012 of the 2006 IBC

#### DRAINAGE IMPROVEMENTS

was referenced for this project.

**Project Index #:** 9918SIT4 **Construction Cost** \$5,000

Site number: 9918

9918SFT1

\$15,000

There is a drainage problem on the west side of the Capitol building resulting in water leaking into the basement. Two roof drain downspouts and landscaping are just outside of the subject area and it is suspected that the water is pooling up in this area instead of running off away from the building. It is recommended to extend the downspouts underground to a dry well or similar drainage feature to carry the water away from the building and regrade the landscaped area to provide a positive slope away from the building.

#### SIDEWALK / CONCRETE REPAIRS

**Project Index #:** 9918ADA1 **Construction Cost** \$15,000

Some of the sidewalks around the building are deteriorated and failing and some do not meet ADA requirements. In some areas there is extensive cracking, heaving and settling. The concrete landings at the bottom of the three steel exterior exit stairs are too small and one is missing. This project addresses removal and replacement of existing sidewalks as needed particularly for the ADA path of travel on the east side of the site and installing new landings for the exit stairs. NRS 338.180, IBC - 2006, ICC/ANSI A117.1 - 2003 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

PRIORITY CLASS 3 PROJECTS

**Total Construction Cost for Priority 3 Projects:** \$7,500

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

9918SIT3 **Project Index #: Construction Cost** \$7,500

#### SLURRY SEAL ASPHALT PAVING

It is important to maintain the asphalt concrete paving on the site. This project would provide for minor crack filling and slurry sealing of the paving including the access road and parking area on the south side of the Capitol. Striping is included in this estimate. This project should be scheduled on a 5 year cyclical basis to maintain the integrity of the paving and prevent premature failure. 10,000 square feet of asphalt area was used to generate this estimate.

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# PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1: \$35,000
Priority Class 2: \$0
Priority Class 3: \$7,500
Grand Total: \$42,500

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State of Nevada / Administration NEVADA STATE CAPITOL

SPWB Facility Condition Analysis - 0235

**Survey Date: 3/23/2011** 

# NEVADA STATE CAPITOL BUILDING REPORT

The Capitol's prominent silver dome is Carson City's most visible landmark and has been a symbol of Nevada's government since its completion in 1870.

Nevada passed from a territory to statehood in four short years, 1861-1864. On display are the wine glasses Territorial Governor James W. Nye and Carson City founder Abe Curry used to toast the success of the new state. Also on view is a thirty-six star U.S. flag commemorating the Silver State's recognition as the thirty-sixth state to join the Union. Nevada's government has evolved in this building, where state officials have had their offices and the senate and assembly once met. On view is one of the original legislative desks purchased in 1871.

Also in place is the elk horn chair of Nevada Governor John Sparks, the honorary chair used by President Teddy Roosevelt when he was welcomed to the capital as the Hero of San Juan in 1903.

Today, The Capitol Building houses the offices of the Governor, Secretary of State, Treasurer, Lieutenant Governor, and Controller.

The sandstone masonry building has been seismically retrofitted and the HVAC system upgraded in 2005 which included 4 new hot water boilers, chiller, heat exchanger and linking the system with the annex. A new energy management system was being installed during the survey of 2011. The building is mostly ADA compliant, has fire sprinklers, and a new fire alarm system. The facility is well maintained and in excellent shape.

#### PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$50,100

**Project Index #:** 

**Construction Cost** 

0235ADA1

\$1,500

Currently Critical

**Immediate to Two Years** 

#### ADA ACCESSIBLE COUNTER

The Americans with Disabilities Act (ADA) provides for accessibility to sites and services for people with physical limitations. The security desk near the entrance to the building has a counter for the public to approach which does not meet current codes. Section 7.2 of the Americans with Disabilities Act Accessible Guidelines (ADAAG) states that the counter must have a portion which is at least 36" in length with a maximum height of 36" above the finish floor. This project will provide an accessible counter space in accordance with this requirement. NRS 338.180, IBC - 2006, ICC/ANSI A117.1 - 2003 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project. Due to the historical nature of the building, this project is subject to review and approval from the State Historical Preservation Office.

This project or a portion thereof was previously recommended in the FCA report dated 09/03/2003. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/23/2011.

#### ADA RESTROOM UPGRADES

Project Index #: 0235ADA3 Construction Cost \$15,000

Site number: 9918

The building has several ADA accessible restrooms, some of which are not fully compliant. For instance, the unisex ADA restroom on the 2nd floor is missing pipe protection under the sink and the water closet is lower than the required 17" height for the seat. Also, the countertop in the Men's restroom on the 1st floor does not meet height requirements and the water closet flush handle in the Men's restroom in the basement is on the wrong side of the water closet. This project would provide funding for these specific repairs and any other necessary upgrades to bring the restrooms into full compliance. NRS 338.180, IBC - 2006, ICC/ANSI A117.1 - 2003 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

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**Project Index #:** 0235ADA2 **Construction Cost** ADA SIGNAGE \$3,000

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 -2006, ICC/ANSI A117.1 - 2003 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project. Due to the historical nature of the building, this project is subject to review and approval from the State Historical Preservation Office.

This project or a portion thereof was previously recommended in the FCA report dated 09/03/2003. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/23/2011.

**Project Index #:** 

**Project Index #:** 

**Project Index #:** 

**Project Index #:** 

**Construction Cost** 

**Construction Cost** 

**Construction Cost** 

0235ADA4

0235SFT1

0235SFT4

0235EXT2

\$2,000

\$15,000

\$8,000

#### DUAL LEVEL DRINKING FOUNTAIN INSTALLATION

This building contains a water fountain on each floor. The basement floor and 1st floor drinking fountains are not accessible. The 2006 IBC Section 1109.5 states where a water fountain is provided, at least half should be accessible. This project would provide funding for the purchase and installation of two new accessible fixed high/low ADA drinking fountains for the basement and 1st floor, NRS 338.180, IBC - 2006, ICC/ANSI A117.1 - 2003 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

# GFCI DUPLEX OUTLET REPLACEMENTS

**Construction Cost** \$600 There are two outlets in the Governor's Office kitchen which are not GFCI. One is above the countertop near the sink and the other is in the cabinet directly under the sink. These outlets should be changed to GFCI type outlets per the NEC.

**Project Index #:** 0235SFT5 **GUARD REPAIRS Construction Cost** \$5,000

This project would provide for the purchase and installation of two GFCI duplex outlets.

The guardrail on the 2nd floor of the building around the stairwell is older and does not meet code for safety. Being a historic building, the guard is only required to meet a level of protection for a means of egress. It does not meet this level of protection because it is not at least 42 inches in height. This project provides for attaching a new top rail to the existing guard in order to raise the overall height to more than 42 inches. The new rail will be designed and built to match the style of the existing historic guard. Due to the historical nature of the building, this project is subject to review and approval from the State Historical Preservation Office. Section 1003.1 of the 2006 International Existing Building Code and section 1013.2 of the 2006 International Building Code were used as a reference for this project.

#### INTERIOR STAIR HANDRAIL REPLACEMENT

There are two exit stairwells on the west side of the building. The handrails are older and do not meet code for safety or accessibility. The gripping surfaces are incorrect, they do not have proper returns, they are on only one side of the stairway and they are not continuous from the top to bottom landings. This project recommends the installation of handrails on both sides of the stairs, with proper gripping surfaces, returns and supports. Removal and disposal of the existing railing is included. Due to the historical nature of the building, this project is subject to review and approval from the State Historical Preservation Office. NRS 338.180, 2006 IBC Chapter 10, Section 1012, ICC/ANSI A117.1 -2003 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

#### REMOVE VINE GROWTH FROM BUILDING

There is extensive vine growth on the exterior sandstone masonry of the building. This will damage the sandstone masonry and grout joints. This project will provide for the removal of all vines from the exterior of the building including the actual plant itself along the perimeter of the structure.

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PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$744,580

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

> **Project Index #:** 0235INT4 **Construction Cost** \$2,800

#### BASEMENT CARPET REPLACEMENT

The carpet in the staff offices in the Basement 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.

> **Project Index #:** 0235ELE2 **Construction Cost** \$190,000

> > \$1,000

#### **ELEVATOR UPGRADES**

The elevator was built in 1979 and requires periodic repairs. It is currently due for a refurbishment of all mechanical parts to maintain the elevator in a safe working order. The maintenance staff has acquired a bid for the work in the amount of \$190,000 which also includes a regenerative elevator drive that generates its own electricity.

**Project Index #:** 0235EXT1 **EXTERIOR FINISHES Construction Cost** \$273,890

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 sanding, priming and painting, cleaning and pointing the sandstone masonry as needed and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be repaired 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 #:** 0235INT2 **INTERIOR FINISHES Construction Cost** \$273,890

The interior finishes are in fair 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 #:** 0235INT3 JANITORS CLOSET REPAIRS **Construction Cost**

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.

**Project Index #:** 0235PLM1 WATER HEATER REPLACEMENT **Construction Cost** \$3,000

There is a 100 gallon natural gas-fired water heater in the basement mechanical room. 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 3-4 years. It is recommended that a new natural gas-fired water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

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#### **BUILDING INFORMATION:**

Gross Area (square feet): 54,778

Year Constructed: 1870

Exterior Finish 1: 100 % Sandstone Masonry

Exterior Finish 2: %

Number of Levels (Floors): 2 Basement? Yes

IBC Occupancy Type 1: 70 % B
IBC Occupancy Type 2: 30 % A-3

**Construction Type: Sandstone Masonry** 

IBC Construction Type: III-B Percent Fire Supressed: 100 %

#### PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$50,100	Project Construction Cost per Square Foot:	\$14.51
Priority Class 2:	\$744,580	Total Facility Replacement Construction Cost:	\$24,650,000
Priority Class 3:	<b>\$0</b>	Facility Replacement Cost per Square Foot:	\$450
Grand Total:	\$794,680	FCNI:	3%

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State of Nevada / Administration STATE CAPITOL ANNEX

SPWB Facility Condition Analysis - 0203

**Survey Date:** 3/23/2011

# STATE CAPITOL ANNEX

**BUILDING REPORT** 

The State Capitol Annex is a sandstone masonry and wood framed structure with a composition roofing system on a concrete and stone foundation. Originally constructed in 1905, it was remodeled and seismically retrofitted in 2005. It contains offices, a break room and ADA unisex restroom on the first level and a large meeting room and ADA unisex restroom on the upper level although the upper level does not have an elevator for people who are mobility impaired. The facility has fire sprinklers and a new alarm system and the HVAC system has been upgraded and tied into the State Capitol's system along with a new energy management system.

The facility is well maintained and in excellent shape.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$4,000

Currently Critical Immediate to Two Years

ADA KITCHENETTE UPGRADES

Project Index #: 0203ADA1 Construction Cost \$2,500

Site number: 9918

The kitchenette in the employee break room does not entirely meet the Americans with Disabilities Act (ADA) requirements. Minor modifications are necessary. This project would provide funding for upgrades to the kitchenette to remove architectural barriers. These items may include a new sink, modifications to the casework to provide clearances, hardware, relocating the microwave and moving furniture to provide clearances. NRS 338.180, IBC - 2006, ICC/ANSI A117.1 - 2003 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

ADA SIGNAGE

Project Index #: 0203ADA4

ADA SIGNAGE

Construction Cost \$1,500

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 - 2006, ICC/ANSI A117.1 - 2003 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project. Due to the historical nature of the building, this project is subject to review and approval from the State Historical Preservation Office.

This project or a portion thereof was previously recommended in the FCA report dated 09/03/2003. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/23/2011.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$98,640

Necessary - Not Yet Critical Two to Four Years

Project Index #: 0203EXT2
EXTERIOR FINISHES Construction Cost \$49,320

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 sanding, priming and painting, cleaning and sealing the sandstone masonry and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be painted, sealed and caulked in the next 2-3 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

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Project Index #: 0203INT2
INTERIOR FINISHES Construction Cost \$49,320

The interior finishes are in fair 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.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$2,500

**Project Index #:** 

**Construction Cost** 

0203PLM1

\$2,500

Long-Term Needs

Four to Ten Years

#### WATER HEATER REPLACEMENT

There is a 30 gallon electric water heater in the building that was installed in 2005. 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 4-5 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.

#### **BUILDING INFORMATION:**

Gross Area (square feet): 9,864

Year Constructed: 1905

Exterior Finish 1: 100 % Sandstone Masonry

Exterior Finish 2: %

Number of Levels (Floors): 2 Basement? Yes

IBC Occupancy Type 1: 50 % B
IBC Occupancy Type 2: 50 % A-3

**Construction Type: Sandstone Masonry** 

IBC Construction Type: III-B
Percent Fire Supressed: 100 %

#### PROJECT CONSTRUCTION COST TOTALS SUMMARY:

\$10.66	<b>Project Construction Cost per Square Foot:</b>	\$4,000	<b>Priority Class 1:</b>
\$4,439,000	<b>Total Facility Replacement Construction Cost:</b>	\$98,640	<b>Priority Class 2:</b>
\$450	Facility Replacement Cost per Square Foot:	\$2,500	<b>Priority Class 3:</b>
2%	FCNI:	\$105,140	Grand Total:

#### 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 341.201 by the State Public Works Board and should be utilized as a planning level document.

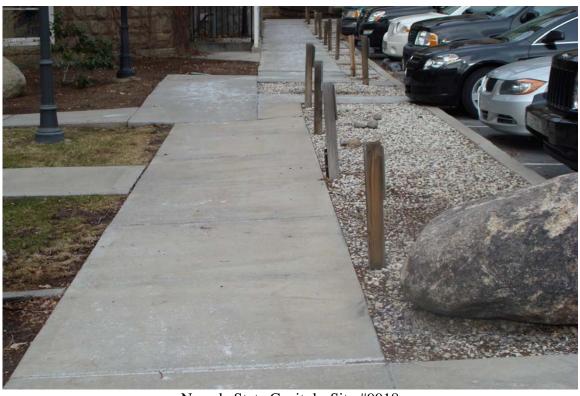
#### REPORT DEVELOPMENT:

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

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Nevada State Capitol - Site #9918 Description: Stairs / rails in need of replacement.

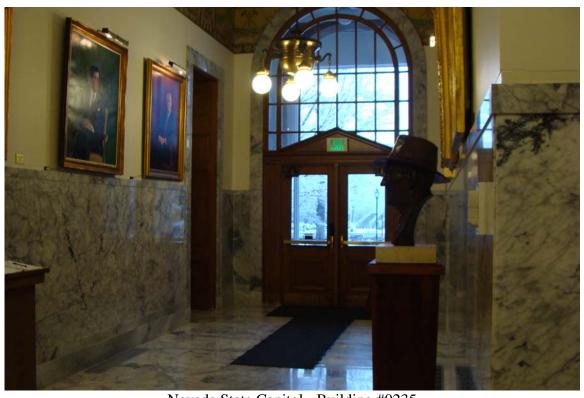


Nevada State Capitol - Site #9918
Description: ADA accessible route with cross slope exceeding 2%.



Nevada State Capitol - Site #9918

Description: Area in need of drainage improvements.



Nevada State Capitol - Building #0235 Description: View of the public entrance / lobby.



Nevada State Capitol - Building #0235 Description: Interior stairway handrails in need of upgrade.



Nevada State Capitol - Building #0235 Description: Drinking fountain in need of replacement.



Nevada State Capitol Annex - Building #0203 Description: Public entrance.



Nevada State Capitol Annex - Building #0203 Description: View of seismic retrofit completed in 2005.