

State of Nevada
Department of Administration
Buildings & Grounds Section

BLASDEL OFFICE BUILDING

209 East Musser Street
Carson City, Nevada 89701

Site Number: 9860
STATE OF NEVADA PUBLIC WORKS DIVISION
FACILITY CONDITION ANALYSIS



Report distributed in October 2021

State of Nevada
Department of Administration
Buildings & Grounds Section

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: 9860

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
0200	BLASDEL OFFICE BUILDING 209 E. Musser Street Carson City	41680	1957	1/26/2021	\$18,600	\$208,400	\$10,525,600	\$10,752,600	\$17,714,000	61%
9860	BLASDEL BUILDING SITE 209 E. Musser Street Carson City		0	1/26/2021	\$0	\$0	\$0			0%
Report Totals.....:		41,680			\$18,600	\$208,400	\$10,525,600	\$10,752,600	\$17,714,000	61%

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.

Table of Contents

Building Name	Index #
BLASDEL BUILDING SITE	9860 No Current Projects
BLASDEL OFFICE BUILDING	0200

BLASDEL OFFICE BUILDING

SPWD Facility Condition Analysis - 0200

Survey Date: 1/26/2021

BLASDEL OFFICE BUILDING BUILDING REPORT

The Blasdel Office is a three level reinforced concrete structure with a basement and a single-ply roofing system. The roofing system was replaced in 2010 and includes a 20 year warranty. The building was originally designed as a bomb and fallout shelter in the late 1950's. It currently provides office space for the Department of Administration including the Budget and Planning and Administrative Services divisions. The building has a designated ADA accessible entrance to the lower level with an elevator and two stairways providing access to the upper floors. There are ADA Men's and Women's restrooms on each level. The HVAC system is comprised of cooling and ventilation air distribution throughout the building and perimeter hydronic heating for each floor. The central plant is in the basement and the air handler and cooling tower are located in a penthouse on the roof. The HVAC system has undergone periodic renovations and equipment replacements, however it is aging and should be considered for replacement. The building is protected by a fire alarm system, however it is lacking a fire suppression system on the three main floors. The interior finishes are in good condition, however due to aging building infrastructure, the building should be considered for a complete renovation. This will be illustrated in the number and magnitude of the recommended projects.

PRIORITY CLASS 1 PROJECTS**Total Construction Cost for Priority 1 Projects: \$18,600****Currently Critical****Immediate to Two Years****Project Index #: 0200SFT3****Construction Cost \$13,600****SEAL PENETRATIONS**

There are a number of penetrations through the chases and corridor walls for plumbing, data cables and cable trays. Many of these penetrations do not have smoke and fire sealing which corrupts the fire rated wall separations. This project provides funds to hire a qualified contractor to address penetration problems throughout the building. This project or a portion thereof was previously recommended in the FCA report dated 4/10/2003 and 8/3/2010. It has been amended accordingly to reflect conditions observed during the most recent survey date of 01/26/2021.

Project Index #: 0200ADA1**Construction Cost \$5,000****SIDEWALK REPAIRS**

The concrete sidewalk on the south side of the building appears to have heaved significantly since it was installed. The transition from the sidewalk concrete to the existing concrete adjacent to the buildings south entrance has an elevation change of more than 1/2". This is on the accessible means of egress and should be remedied immediately. The concrete should be ground down to reduce the elevation change to less than 1/4". NRS 338.180, IBC - 2018, ICC/ANSI A117.1 and Americans with Disabilities Act Accessibility Guidelines (ADAAG) - 2003 were referenced for this project. This project or a portion thereof was previously recommended in the FCA report dated 8/3/2010. It has been amended accordingly to reflect conditions observed during the most recent survey date of 01/26/2021.

PRIORITY CLASS 2 PROJECTS**Total Construction Cost for Priority 2 Projects: \$208,400****Necessary - Not Yet Critical****Two to Four Years****Project Index #: 0200EXT2****Construction Cost \$208,400****EXTERIOR FINISHES**

The exterior finishes were 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. Included in the cost are cleaning and sealing the concrete and tile, repairing cracks in the concrete and granite, and caulking of the windows, flashing, fixtures, and all other penetrations. Special attention should be paid to the penthouse where the cooling tower has caused moss and mildew growth. It is recommended that the building be cleaned, 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.

PRIORITY CLASS 3 PROJECTS**Total Construction Cost for Priority 3 Projects: 10,525,600****Long-Term Needs****Four to Ten Years****ELECTRICAL UPGRADE****Project Index #: 0200ELE1****Construction Cost \$2,213,000**

This building is over 60 years old and the electrical system is original to the building and has reached the end of its useful life. 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. Removal and disposal of the existing equipment is included in this project.

This project or a portion thereof was previously recommended in the FCA report dated 4/10/2003 and 8/3/2010. It has been amended accordingly to reflect conditions observed during the most recent survey date of 01/26/2021.

CHILLED & HEATING WATER PLANT REPLACEMENT**Project Index #: 0200HVA2****Construction Cost \$1,044,500**

The chiller and boilers are not energy efficient and approaching the end of their 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 a new chiller, boilers, pumps, piping and controls. This project includes removal and disposal of the existing HVAC equipment and all required connections to utilities.

ELEVATOR UPGRADES**Project Index #: 0200INT7****Construction Cost \$260,900**

The existing elevator control system and drive components have not been upgraded since the system was remodeled in 2000. It is due to be upgraded with new state-of-the-art ADA accessible controls and drive components. The scope of work is to replace the control system, various drive components and electrical and mechanical elements to increase safety and ensure current code compliance.

FIRE SUPPRESSION SYSTEM INSTALLATION**Project Index #: 0200SFT2****Construction Cost \$577,400**

The building does not have a fire suppression system on the first, second or third floors. Pursuant to the Nevada State Fire Marshal Regulation, NAC 477.915 (c) states, that every building owned or occupied by the state which is designated as an R occupancy, or has a floor area greater than 12,000 square feet on any floor or 24,000 square feet on all floors or is an R-1 occupancy, must have sprinklers installed when the building is remodeled or an addition is proposed. This project would provide funding for the installation of a fire sprinkler system and backflow prevention in the event the building is remodeled or an addition is undertaken. Costs are lower on this project because there is a fire suppression system installed in the basement and a 4" dry standpipe that supplies the fire hoses on the upper floors with fire department connections at the roof, basement, and at grade.

This project or a portion thereof was previously recommended in the FCA report dated 4/10/2003 and 8/3/2010. It has been amended accordingly to reflect conditions observed during the most recent survey date of 01/26/2021.

HVAC SYSTEMS REPLACEMENT**Project Index #: 0200HVA1****Construction Cost \$1,480,100**

The HVAC system was originally installed in 1957 with upgrades to the air distribution system in 1997 and replacement of the air handler in 2015. The hydronic radiant heating system is original to the building. This project would provide for the removal and disposal of the air handler, cooling tower, hydronic radiators, zone dampers, duct systems and controls and replace with new equipment including a new variable air volume (VAV) air distribution system.

INTERIOR DEMOLITION**Project Index #: 0200INT9****Construction Cost \$1,222,100**

Due to the extent of infrastructure construction and renovation recommended including fire suppression, plumbing & waste and HVAC systems replacement, it is recommended that the building interior be demolished to accommodate the efficient replacement of infrastructure.

INTERIOR FINISHES

Project Index #: 0200INT6

Construction Cost \$208,400

The interior finishes are in good condition. It is recommended that the interior walls and ceilings be painted at least once in the next 7 - 9 years. Prior to painting, all surfaces should be repaired and prepped. An epoxy-based paint should be utilized in wet areas for durability.

PLUMBING REPLACEMENT

Project Index #: 0200INT8

Construction Cost \$824,800

The plumbing and waste system is original to the building, approaching 65 years old and should be scheduled for replacement. This project recommends replacing all of the water and sewer lines in the building. This estimate includes removal and disposal of the existing system as required.

TENANT IMPROVEMENT BUILDING INTERIORS

Project Index #: 0200INT10

Construction Cost \$1,705,500

Once the building infrastructure has been completely renovated, a new interior fit out will be required. This project includes installation of metal stud and drywall partition walls, ceiling systems, wall paints and floor coverings. No demolition is included in this estimate.

WINDOW REPLACEMENT

Project Index #: 0200ENR3

Construction Cost \$988,900

The windows are original, single pane construction in a metal frame. These older windows are drafty and not energy efficient. This project recommends replacing the windows with dual pane, higher efficiency units with thermally broken frames. This estimate is for the replacement of 150 units consisting of one large pane with two operable windows below. Removal and disposal of the existing windows is included in this estimate.

This project or a portion thereof was previously recommended in the FCA report dated 8/3/2010. It has been amended accordingly to reflect conditions observed during the most recent survey date of 01/26/2021.

BUILDING INFORMATION:

Gross Area (square feet): 41,680	IBC Occupancy Type 1: 100 % B
Year Constructed: 1957	IBC Occupancy Type 2: %
Exterior Finish 1: 40 % Glass and Aluminum	Construction Type: Reinforced Concrete
Exterior Finish 2: 60 % Concrete / Tile	IBC Construction Type: II-A
Number of Levels (Floors): 3	Percent Fire Suppressed: 25 %
Basement? Yes	

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1: \$18,600	Project Construction Cost per Square Foot: \$257.98
Priority Class 2: \$208,400	Total Facility Replacement Construction Cost: \$17,714,000
Priority Class 3: \$10,525,600	Facility Replacement Cost per Square Foot: \$425
Grand Total: \$10,752,600	FCNI: 61%

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



Blasdel Office Building Site - Site #9860
Description: ADA Accessible Entrance.



Blasdel Office Building - Building #0200
Description: Walking Surface Creating Ponding Water at South Entrance.



Blasdel Office Building - Building #0200
Description: Fire Sprinkler Riser in Basement.



Blasdel Office Building - Building #0200
Description: Elevator Upgrade Needed.



Blasdel Office Building - Building #0200
Description: Typical Interior – Note Absence of Fire Sprinklers.



Blasdel Office Building - Building #0200
Description: Typical Accessible Restroom.



Blasdel Office Building - Building #0200
Description: HVAC Systems Replacement Recommended.



Blasdel Office Building - Building #0200
Description: Window & Hydronic Baseboard Replacement Needed.