

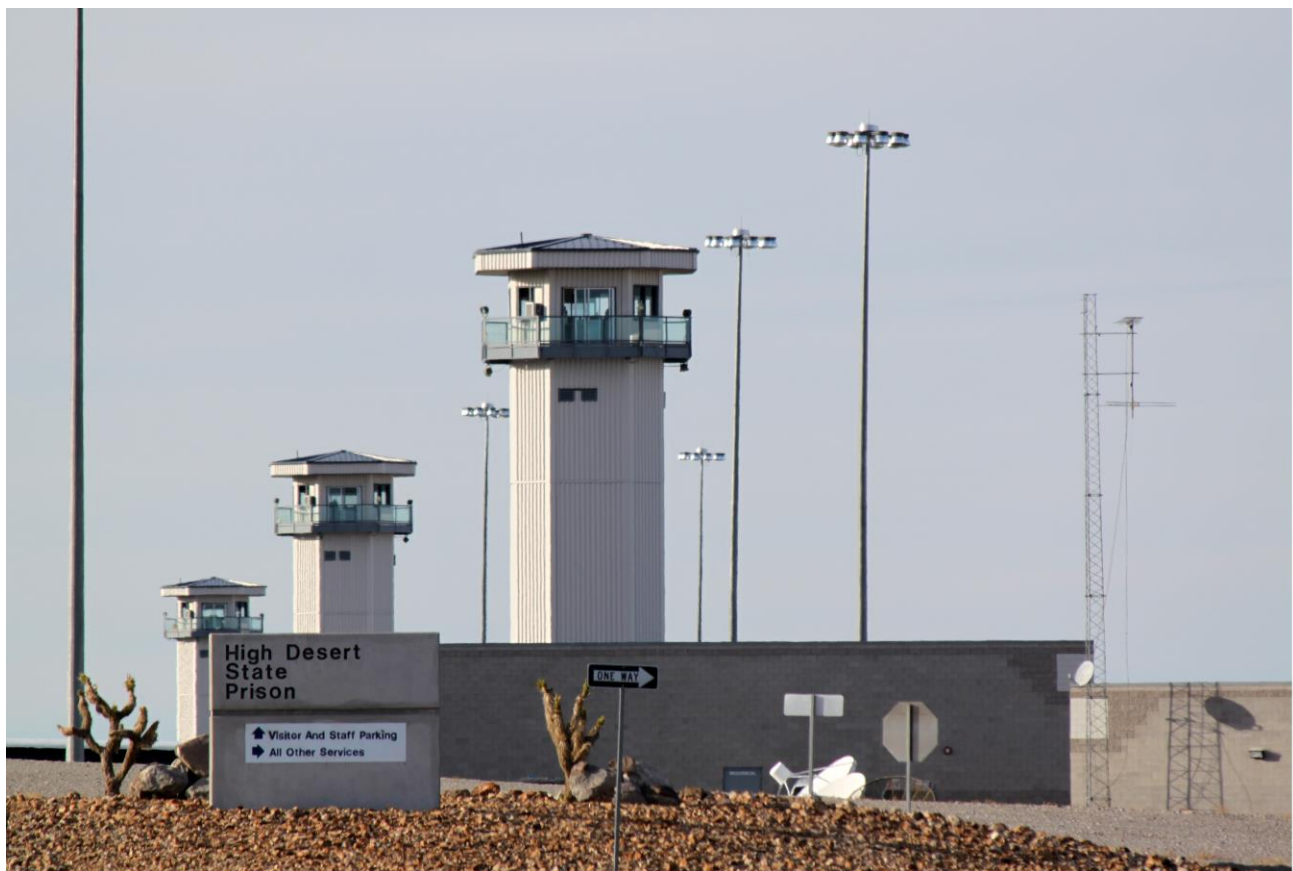
State of Nevada
Department of Corrections
Facility Condition Analysis

HIGH DESERT STATE PRISON

22010 Cold Creek Road
Las Vegas, Nevada 89070

Site Number: 9952

**STATE OF NEVADA PUBLIC WORKS DIVISION
FACILITY CONDITION ANALYSIS**



Report distributed in August, 2017

State of Nevada
Department of Corrections
Facility Condition Analysis

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 the 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: 9952

Facility Condition Needs Index Report

Index #	Building Name	Sq. Feet	Yr. Buil	Survey Date	Cost to Repair: P1	Cost to Repair: P2	Cost to Repair: P3	Total Cost to Repair	Cost to Replace	FCNI
2096	SALLYPORT 22010 Cold Creek Rd Indian Springs	192	2000	11/1/2016	\$19,296	\$13,376	\$2,880	\$35,552	\$67,200	53%
2173	HOUSING UNIT #7 22010 Cold Creek Rd Indian Springs	44500	2002	11/1/2016	\$871,092	\$3,683,516	\$1,635,000	\$6,189,608	\$15,575,000	40%
2087	HOUSING UNIT #2 22010 Cold Creek Rd Indian Springs	44500	2000	11/1/2016	\$2,309,333	\$3,580,275	\$300,000	\$6,189,608	\$15,575,000	40%
2089	HOUSING UNIT #3 22010 Cold Creek Rd Indian Springs	44500	2000	11/1/2016	\$2,309,333	\$3,580,275	\$300,000	\$6,189,608	\$15,575,000	40%
2086	HOUSING UNIT #1 22010 Cold Creek Rd Indian Springs	44500	2000	11/1/2016	\$2,309,333	\$3,580,275	\$300,000	\$6,189,608	\$15,575,000	40%
2174	HOUSING UNIT #6 22010 Cold Creek Rd Indian Springs	44500	2002	11/1/2016	\$871,092	\$3,683,516	\$1,635,000	\$6,189,608	\$15,575,000	40%
2175	HOUSING UNIT #5 22010 Cold Creek Rd Indian Springs	44500	2002	11/1/2016	\$871,092	\$3,238,516	\$2,080,000	\$6,189,608	\$15,575,000	40%
2088	HOUSING UNIT #4 22010 Cold Creek Rd Indian Springs	44500	2000	11/1/2016	\$2,304,833	\$3,880,275	\$0	\$6,185,108	\$15,575,000	40%
2099	SECURITY/ ADMINISTRATION 22010 Cold Creek Rd Indian Springs	13241	2000	11/1/2016	\$114,928	\$1,654,905	\$1,500	\$1,771,333	\$4,634,350	38%
2090	INFIRMARY/ INTAKE 22010 Cold Creek Rd Indian Springs	32986	2000	11/1/2016	\$524,138	\$2,728,516	\$824,650	\$4,077,304	\$11,545,100	35%
2097	MAINTENANCE/ CENTRAL PLANT 22010 Cold Creek Rd Indian Springs	30151	2000	11/1/2016	\$1,006,983	\$2,404,393	\$452,265	\$3,863,641	\$11,306,625	34%
2098	ARMORY/ EMERGENCY RESPONSE 22010 Cold Creek Rd Indian Springs	3405	2000	11/1/2016	\$127,840	\$209,300	\$1,500	\$338,640	\$1,021,500	33%
2178	WAREHOUSE/ MOTOR POOL 22010 Cold Creek Rd Indian Springs	37041	2002	11/1/2016	\$323,328	\$595,438	\$2,668,452	\$3,587,218	\$11,112,300	32%
2172	HOUSING UNIT #8 22010 Cold Creek Rd Indian Springs	44500	2002	11/1/2016	\$871,092	\$2,329,275	\$1,635,000	\$4,835,367	\$15,575,000	31%
2094	ADMINISTRATION 22010 Cold Creek Rd Indian Springs	11175	2000	11/1/2016	\$383,363	\$810,225	\$0	\$1,193,588	\$3,911,250	31%
2095	GATEHOUSE 22010 Cold Creek Rd Indian Springs	6165	2000	11/1/2016	\$213,661	\$320,701	\$92,475	\$626,837	\$2,157,750	29%

Facility Condition Needs Index Report

Index #	Building Name	Sq. Feet	Yr. Buil	Survey Date	Cost to Repair: P1	Cost to Repair: P2	Cost to Repair: P3	Total Cost to Repair	Cost to Replace	FCNI
2091	INMATE SERVICES/ CULINARY/ DINING 22010 Cold Creek Rd Indian Springs	77005	2000	11/1/2016	\$2,565,165	\$4,649,550	\$693,045	\$7,907,760	\$28,876,875	27%
2092	PROGRAM SERVICES/ EDUCATION 22010 Cold Creek Rd Indian Springs	33652	2000	11/1/2016	\$1,121,516	\$1,475,336	\$504,870	\$3,101,722	\$11,778,200	26%
2103	TOWER #5 22010 Cold Creek Rd Indian Springs	455	2002	11/1/2016	\$18,640	\$55,795	\$44,975	\$119,410	\$455,000	26%
2104	TOWER #6 22010 Cold Creek Rd Indian Springs	455	2002	11/1/2016	\$18,640	\$54,795	\$44,975	\$118,410	\$455,000	26%
2093	VISITATION 22010 Cold Creek Rd Indian Springs	11194	2000	11/1/2016	\$386,850	\$628,790	\$0	\$1,015,640	\$3,917,900	26%
2506	GYMNASIUM 22010 Cold Creek Rd Indian Springs	14620	2004	11/1/2016	\$126,860	\$633,210	\$540,940	\$1,301,010	\$5,117,000	25%
2176	YARD TOWER 22010 Cold Creek Rd Indian Springs	455	2000	11/1/2016	\$13,095	\$70,110	\$30,800	\$114,005	\$455,000	25%
2177	TOWER #4 22010 Cold Creek Rd Indian Springs	455	2002	11/1/2016	\$17,640	\$42,235	\$54,075	\$113,950	\$455,000	25%
3776	PUMP HOUSE #2 22010 Cold Creek Rd Indian Springs	840	2000	11/1/2016	\$5,000	\$34,800	\$0	\$39,800	\$168,000	24%
3775	PUMP HOUSE #1 22010 Cold Creek Rd Indian Springs	840	2000	11/1/2016	\$5,000	\$34,800	\$0	\$39,800	\$168,000	24%
2947	HOUSING UNIT #10 22010 Cold Creek Rd Indian Springs	51609	2009	11/1/2016	\$363,845	\$1,445,052	\$2,429,116	\$4,238,013	\$18,063,150	23%
2948	HOUSING UNIT #11 22010 Cold Creek Rd Indian Springs	51609	2009	11/1/2016	\$363,845	\$1,445,052	\$2,429,116	\$4,238,013	\$18,063,150	23%
2945	HOUSING UNIT #9 22010 Cold Creek Rd Indian Springs	51609	2008	11/1/2016	\$363,845	\$1,445,052	\$2,429,116	\$4,238,013	\$18,063,150	23%
2946	HOUSING UNIT #12 22010 Cold Creek Rd Indian Springs	52096	2008	11/1/2016	\$363,845	\$1,445,052	\$2,429,116	\$4,238,013	\$18,233,600	23%
2507	PRISON INDUSTRIES 22010 Cold Creek Rd Indian Springs	60000	2004	11/1/2016	\$532,000	\$1,689,000	\$2,520,000	\$4,741,000	\$21,000,000	23%
2100	TOWER #1 22010 Cold Creek Rd Indian Springs	455	2000	11/1/2016	\$18,640	\$61,710	\$21,700	\$102,050	\$455,000	22%
2101	TOWER #2 22010 Cold Creek Rd Indian Springs	455	2000	11/1/2016	\$18,640	\$61,710	\$21,700	\$102,050	\$455,000	22%

Site number: 9952

Facility Condition Needs Index Report

Index #	Building Name	Sq. Feet	Yr. Buil	Survey Date	Cost to Repair: P1	Cost to Repair: P2	Cost to Repair: P3	Total Cost to Repair	Cost to Replace	FCNI
2102	TOWER #3 22010 Cold Creek Rd Indian Springs	455	2000	11/1/2016	\$18,640	\$61,710	\$21,700	\$102,050	\$455,000	22%
3774	HAZMAT BUILDING 22010 Cold Creek Rd Indian Springs	64	2000	11/1/2016	\$0	\$2,240	\$0	\$2,240	\$12,800	18%
2505	STORAGE BUILDING 22010 Cold Creek Rd Indian Springs	144	2002	11/1/2016	\$0	\$2,880	\$0	\$2,880	\$28,800	10%
3225	HDSP WATER TANK #3 22010 Cold Creek Rd Indian Springs	1859	1998	11/1/2016	\$12,000	\$23,590	\$0	\$35,590	\$1,650,000	2%
3223	HDSP WATER TANK #1 22010 Cold Creek Rd Indian Springs	2952	1978	11/1/2016	\$12,000	\$59,040	\$0	\$71,040	\$4,262,500	2%
3224	HDSP WATER TANK #2 22010 Cold Creek Rd Indian Springs	2952	1998	11/1/2016	\$12,000	\$34,520	\$0	\$46,520	\$4,262,500	1%
9952	HIGH DESERT STATE PRISON SITE 22010 Cold Creek Rd Indian Springs		2000	11/1/2016	\$2,657,880	\$340,000	\$603,138	\$3,601,018		0%
Report Totals.....:		906,586			\$24,446,324	\$52,088,807	\$26,747,105	\$103,282,236	\$327,206,700	32%

Acronyms List

Acronym	Definition
<i>Building Codes, Laws, Regulations and Guidelines</i>	
AWWA	American Water Works Association
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 in the construction industry. Some or all of these acronyms are used throughout the report.

Table of Contents

Building Name	Index #
HIGH DESERT STATE PRISON SITE	9952
PUMP HOUSE #2	3776
PUMP HOUSE #1	3775
HAZMAT BUILDING	3774
HDSP WATER TANK #3	3225
HDSP WATER TANK #2	3224
HDSP WATER TANK #1	3223
HOUSING UNIT #11	2948
HOUSING UNIT #10	2947
HOUSING UNIT #12	2946
HOUSING UNIT #9	2945
PRISON INDUSTRIES	2507
GYMNASIUM	2506
STORAGE BUILDING	2505
WAREHOUSE/ MOTOR POOL	2178
TOWER #4	2177
YARD TOWER	2176
HOUSING UNIT #5	2175
HOUSING UNIT #6	2174
HOUSING UNIT #7	2173
HOUSING UNIT #8	2172
TOWER #6	2104
TOWER #5	2103
TOWER #3	2102
TOWER #2	2101
TOWER #1	2100
SECURITY/ ADMINISTRATION	2099
ARMORY/ EMERGENCY RESPONSE	2098
MAINTENANCE/ CENTRAL PLANT	2097
SALLYPORT	2096
GATEHOUSE	2095
ADMINISTRATION	2094
VISITATION	2093

PROGRAM SERVICES/ EDUCATION	2092
INMATE SERVICES/ CULINARY/ DINING	2091
INFIRMARY/ INTAKE	2090
HOUSING UNIT #3	2089
HOUSING UNIT #4	2088
HOUSING UNIT #2	2087
HOUSING UNIT #1	2086

HIGH DESERT STATE PRISON SITE

SPWD Facility Condition Analysis - 9952

Survey Date: 11/1/2016

HIGH DESERT STATE PRISON SITE**BUILDING REPORT**

The High Desert State Prison is located 40 miles north of Las Vegas on the west side of Highway 95. It is the largest correctional facility within the Department of Corrections. High Desert was designed to incorporate the best technology available to corrections to provide for officer safety and for the management and control of inmates. The complex totals approximately 1,576,000 square feet of space. The institution opened September 1, 2000 and is the reception unit for Southern Nevada.

PRIORITY CLASS 1 PROJECTS**Total Construction Cost for Priority 1 Projects: \$2,657,880****Currently Critical****Immediate to Two Years****SECURITY SYSTEM INSTALLATION****Project Index #: 9952SEC1****Construction Cost \$2,417,400**

The building does not have a security system. This project recommends installing video monitoring and recording equipment in every common inmate area and visitor area throughout the High Desert State Prison. This project would also include camera installation in all housing units.

WELL UPGRADE**Project Index #: 9952PLM2****Construction Cost \$240,480**

The construction of Well #6 was accomplished with CIP project (13-C04). This project would include construction of a well house with associated equipment and connection to the existing water distribution system at High Desert State Prison.

PRIORITY CLASS 2 PROJECTS**Total Construction Cost for Priority 2 Projects: \$340,000****Necessary - Not Yet Critical****Two to Four Years****ELECTRICAL EQUIPMENT SURVEY****Project Index #: 9952ELE2****Construction Cost \$95,000**

The electrical systems are original to the site and should be evaluated to reduce possibility of a fire hazard, equipment down time or energy loss. There seems to be loose connections and electrical deficiencies and repairs needed. It is recommended to perform an infrared and ultrasonic inspection on all electrical site-wide and sample the oil in all oil filled transformers. This project would provide for an electrical engineer to conduct analysis of the current electrical and to recommend a preventative maintenance plan and necessary repairs. Other projects may arise from this survey.

HIGH MAST LAMP REPLACEMENT**Project Index #: 9952ELE1****Construction Cost \$225,000**

There are 45 high mast security light poles throughout the facility that have 10 security lamps each. Many of the lamps were burned out at the time of this survey and should be scheduled for replacement. This project would provide for the purchase and installation of 450 LEDs and retrofit the fixtures for the high mast security light poles. The cost includes the removal and the disposal of the existing lamps and fixtures.

PIGEON ABATEMENT**Project Index #: 9952ENV1****Construction Cost \$20,000**

The site and buildings have been inhabited by pigeons. The birds introduce a potential risk of disease, cause maintenance problems with the mechanical systems and cost labor time for general clean-up. This project provides for removal and disposal of pigeon debris, eggs and carcasses from the site and buildings by a licensed pest control business. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$603,138

Long-Term Needs

Four to Ten Years

Project Index #: 9952SIT1

SLURRY SEAL ASPHALT PAVING

Construction Cost \$603,138

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 site wide including access roads and parking areas. 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. 504,110 square feet of asphalt area was used to generate this estimate.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$2,657,880
Priority Class 2:	\$340,000
Priority Class 3:	\$603,138
Grand Total:	\$3,601,018

PUMP HOUSE #2

SPWD Facility Condition Analysis - 3776

Survey Date: 11/21/2016

**PUMP HOUSE #2
BUILDING REPORT**

The Pump House #2 is a facility that has pumps and equipment for pumping water from the wells to the prison. It has a concrete slab-on-grade foundation, CMU walls and a single-ply membrane roof. The pump house has a 1200 amp panel, two roll up doors, one man door and is a conditioned space with a roof top HVAC system.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$5,000**
Currently Critical **Immediate to Two Years**

EXTERIOR LANDING INSTALLATION **Project Index #: 3776SFT1**
Construction Cost \$5,000

There is an out-swinging exterior door from the building which swings out over a step and does not have a landing. IBC Section 1008 requires a landing to be not more than 1/2" below the threshold. This project would provide for the installation of a compliant landing for the door.

PRIORITY CLASS 2 PROJECTS **Total Construction Cost for Priority 2 Projects: \$34,800**
Necessary - Not Yet Critical **Two to Four Years**

CONCRETE APRON INSTALLATION **Project Index #: 3776EXT1**
Construction Cost \$2,400

There are two rollup doors that don't have concrete aprons on the outside of the building. This project would provide for the installation of two new 120 square foot 4" thick concrete slab-on-grade aprons.

EXTERIOR FINISHES **Project Index #: 3776EXT2**
Construction Cost \$8,400

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 concrete masonry units and caulking flashing, fixtures and all other penetrations. It is recommended that the building be 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.

INTERIOR FINISHES **Project Index #: 3776INT1**
Construction Cost \$8,400

It is recommended to repair and seal the interior concrete block walls at least once in the 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.

PANIC HARDWARE IN ELECTRICAL ROOMS **Project Index #: 3776ELE1**
Construction Cost \$3,000

The Pump House with the uninterruptable power supply contains equipment that meets or exceeds 1,200 amps. It is recommended per the 2012 IBC 1008.1.10 that panic and fire exit hardware be installed. This equipment was not required when the building was constructed. When a remodel occurs, it is suggested to comply with current code. It is recommended that this project be completed within 2-3 years. The estimate is based on one door that requires panic hardware.

Project Index #: 3776EXT3
Construction Cost \$12,600

ROOF REPLACEMENT

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 2000. 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.

BUILDING INFORMATION:

Gross Area (square feet): 840
Year Constructed: 2000
Exterior Finish 1: 100 # Painted CMU
Exterior Finish 2: 0 #
Number of Levels (Floors): 1 Basement? No
IBC Occupancy Type 1: 0 #
IBC Occupancy Type 2: 0 #
Construction Type:
IBC Construction Type:
Percent Fire Suppressed: 0 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$5,000	Project Construction Cost per Square Foot	\$47.38
Priority Class 2:	\$34,800	Total Facility Replacement Construction Cost	\$168,000
Priority Class 3:	\$0	Facility Replacement Cost per Square Foot	\$200
Grand Total:	\$39,800	FCNI:	24%

PUMP HOUSE #1

SPWD Facility Condition Analysis - 3775

Survey Date: 11/21/2016

**PUMP HOUSE #1
BUILDING REPORT**

The Pump House #1 is a facility that has pumps and equipment for pumping water from the wells to the prison. It has a concrete slab-on-grade foundation, CMU walls and a single-ply membrane roof. The pump house has a 1200 amp panel, two roll up doors, one man door and is a conditioned space with a roof top HVAC system.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$5,000**
Currently Critical **Immediate to Two Years**

EXTERIOR LANDING INSTALLATION **Project Index #: 3775SFT1**
Construction Cost \$5,000

There is an out-swinging exterior door from the building which swings out over a step and does not have a landing. IBC Section 1008 requires a landing to be not more than 1/2" below the threshold. This project would provide for the installation of a compliant landing for the door.

PRIORITY CLASS 2 PROJECTS **Total Construction Cost for Priority 2 Projects: \$34,800**
Necessary - Not Yet Critical **Two to Four Years**

CONCRETE APRON INSTALLATION **Project Index #: 3775EXT1**
Construction Cost \$2,400

There are two rollup doors that don't have concrete aprons on the outside of the building. This project would provide for the installation of two new 120 square foot 4" thick concrete slab-on-grade aprons.

EXTERIOR FINISHES **Project Index #: 3775EXT2**
Construction Cost \$8,400

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 concrete masonry units and caulking flashing, fixtures and all other penetrations. It is recommended that the building be 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.

INTERIOR FINISHES **Project Index #: 3775INT1**
Construction Cost \$8,400

It is recommended to repair and seal the interior concrete block walls at least once in the 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.

PANIC HARDWARE IN ELECTRICAL ROOMS **Project Index #: 3775ELE1**
Construction Cost \$3,000

The Pump House with the uninterruptable power supply contains equipment that meets or exceeds 1,200 amps. It is recommended per the 2012 IBC 1008.1.10 that panic and fire exit hardware be installed. This equipment was not required when the building was constructed. When a remodel occurs, it is suggested to comply with current code. It is recommended that this project be completed within 2-3 years. The estimate is based on one door that requires panic hardware.

Project Index #: 3775EXT3

Construction Cost \$12,600

ROOF REPLACEMENT

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 2000. 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.

BUILDING INFORMATION:

Gross Area (square feet): 840
Year Constructed: 2000
Exterior Finish 1: 100 # Painted CMU
Exterior Finish 2: 0 #
Number of Levels (Floors): 1 Basement? No
IBC Occupancy Type 1: 0 #
IBC Occupancy Type 2: 0 #
Construction Type:
IBC Construction Type:
Percent Fire Suppressed: 0 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$5,000	Project Construction Cost per Square Foot	\$47.38
Priority Class 2:	\$34,800	Total Facility Replacement Construction Cost	\$168,000
Priority Class 3:	\$0	Facility Replacement Cost per Square Foot	\$200
Grand Total:	\$39,800	FCNI:	24%

HAZMAT BUILDING

SPWD Facility Condition Analysis - 3774

Survey Date: 11/21/2016

**HAZMAT BUILDING
BUILDING REPORT**

The Hazmat Building is a CMU structure designed for storage of materials deemed to be hazardous. It is a self-contained unit with a concrete slab-on-grade foundation and a single-ply membrane roofing system. The building has built in spill containment.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$2,240

Necessary - Not Yet Critical Two to Four Years

**Project Index #: 3774EXT1
Construction Cost \$640**

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 concrete masonry units and caulking flashing, fixtures and all other penetrations. It is recommended that the building be 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.

**Project Index #: 3774INT1
Construction Cost \$640**

INTERIOR FINISHES

It is recommended to repair and seal the interior concrete block walls at least once in the 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.

**Project Index #: 3774EXT2
Construction Cost \$960**

ROOF REPLACEMENT

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 2000. 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.

BUILDING INFORMATION:

Gross Area (square feet): 64
Year Constructed: 2000
Exterior Finish 1: 100 # Painted CMU
Exterior Finish 2: 0 #
Number of Levels (Floors): 1 Basement? No
IBC Occupancy Type 1: 0 #
IBC Occupancy Type 2: 0 #
Construction Type:
IBC Construction Type:
Percent Fire Suppressed: 0 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$0	Project Construction Cost per Square Foot	\$35.00
Priority Class 2:	\$2,240	Total Facility Replacement Construction Cost	\$13,000
Priority Class 3:	\$0	Facility Replacement Cost per Square Foot	\$200
Grand Total:	\$2,240	FCNI:	17%

HDSP WATER TANK #3

SPWD Facility Condition Analysis - 3225

Survey Date: 11/1/2016

**HDSP WATER TANK #3
BUILDING REPORT**

The HDSP Water Tank #3 is located on the south side of High Desert State Prison site. The tank is an above ground steel storage tank and has a 600,000 gallon capacity.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$12,000**
Currently Critical **Immediate to Two Years**

GUARDRAIL INSTALLATION **Project Index #: 3225EXT2**
Construction Cost \$12,000

The water tank is used to store water for fire protection. It is an AWWA D100 tank. 360° guardrails should be installed per NFPA 22 standards which designate the requirements for water tanks used for private fire protection. This project would provide for the purchase and installation of new guardrails to be located at the top of the water tank.

PRIORITY CLASS 2 PROJECTS **Total Construction Cost for Priority 2 Projects: \$23,590**
Necessary - Not Yet Critical **Two to Four Years**

EXTERIOR FINISHES **Project Index #: 3225EXT1**
Construction Cost \$18,590

It is important to maintain the finish, weather resistance and appearance of the water tank. This project would provide for the painting of the water tank and caulking of the joints to maintain it in a good, weather tight condition. It is recommended that this project be implemented in the next 2-3 years and is recommended on a cyclical basis based on environmental conditions.

INTERIOR FINISHES **Project Index #: 3225INT1**
Construction Cost \$5,000

It is important to maintain water quality, quantity and the interior finish of the water tank. This project would include hiring certified divers or draining the tank to inspect and clean the interior walls, and to weld, sandblast and perform repairs and add protective coatings, if needed. It is important to follow all ANSI, NSF and AWWA approved ways to disinfect and repair water tanks. The standard recommendation is to conduct a comprehensive inspection inside the water tank every 5 years, except for newly constructed tanks. Newly constructed water tanks should be inspected within 10 years of service and every 5 years thereafter.

BUILDING INFORMATION:

Gross Area (square feet): 1,859
Year Constructed: 1998
Exterior Finish 1: 0 #
Exterior Finish 2: 0 #
Number of Levels (Floors): 0 Basement? No
IBC Occupancy Type 1: 0 #
IBC Occupancy Type 2: 0 #
Construction Type:
IBC Construction Type:
Percent Fire Suppressed: 0 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$12,000	Project Construction Cost per Square Foot	\$19.14
Priority Class 2:	\$23,590	Total Facility Replacement Construction Cost	\$1,650,000
Priority Class 3:	\$0	Facility Replacement Cost per Square Foot	\$888
Grand Total:	\$35,590	FCNI:	2%

HDSP WATER TANK #2

SPWD Facility Condition Analysis - 3224

Survey Date: 11/1/2016

**HDSP WATER TANK #2
BUILDING REPORT**

The HDSP Water Tank #2 is located on the south west side of High Desert State Prison site. The tank is an above ground steel storage tank and has a 1.55 million gallon capacity.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$12,000**
Currently Critical **Immediate to Two Years**

GUARDRAIL INSTALLATION **Project Index #: 3224EXT2**
Construction Cost \$12,000

The water tank is used to store water for fire protection. It is an AWWA D100 tank. 360° guardrails should be installed per NFPA 22 standards which designate the requirements for water tanks used for private fire protection. This project would provide for the purchase and installation of new guardrails to be located at the top of the water tank.

PRIORITY CLASS 2 PROJECTS **Total Construction Cost for Priority 2 Projects: \$34,520**
Necessary - Not Yet Critical **Two to Four Years**

EXTERIOR FINISHES **Project Index #: 3224EXT1**
Construction Cost \$29,520

It is important to maintain the finish, weather resistance and appearance of the water tank. This project would provide for the painting of the water tank and caulking of the joints to maintain it in a good, weather tight condition. It is recommended that this project be implemented in the next 2-3 years and is recommended on a cyclical basis based on environmental conditions.

INTERIOR FINISHES **Project Index #: 3224INT1**
Construction Cost \$5,000

It is important to maintain water quality, quantity and the interior finish of the water tank. This project would include hiring certified divers or draining the tank to inspect and clean the interior walls, and to weld, sandblast and perform repairs and add protective coatings, if needed. It is important to follow all ANSI, NSF and AWWA approved ways to disinfect and repair water tanks. The standard recommendation is to conduct a comprehensive inspection inside the water tank every 5 years, except for newly constructed tanks. Newly constructed water tanks should be inspected within 10 years of service and every 5 years thereafter.

BUILDING INFORMATION:

Gross Area (square feet): 2,952
Year Constructed: 1998
Exterior Finish 1: 0 #
Exterior Finish 2: 0 #
Number of Levels (Floors): 0 Basement? No
IBC Occupancy Type 1: 0 #
IBC Occupancy Type 2: 0 #
Construction Type:
IBC Construction Type:
Percent Fire Suppressed: 0 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$12,000	Project Construction Cost per Square Foot	\$15.76
Priority Class 2:	\$34,520	Total Facility Replacement Construction Cost	\$4,262,000
Priority Class 3:	\$0	Facility Replacement Cost per Square Foot	\$1,444
Grand Total:	\$46,520	FCNI:	1%

HDSP WATER TANK #1

SPWD Facility Condition Analysis - 3223

Survey Date: 11/1/2016

**HDSP WATER TANK #1
BUILDING REPORT**

The HDSP Water Tank #1 is located on the south west side of High Desert State Prison site. The tank is an above ground steel storage tank and has a 1.55 million gallon capacity.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$12,000**
Currently Critical **Immediate to Two Years**

GUARDRAIL INSTALLATION **Project Index #: 3223EXT2**
Construction Cost \$12,000

The water tank is used to store water for fire protection. It is an AWWA D100 tank. 360° guardrails should be installed per NFPA 22 standards which designate the requirements for water tanks used for private fire protection. This project would provide for the purchase and installation of new guardrails to be located at the top of the water tank.

PRIORITY CLASS 2 PROJECTS **Total Construction Cost for Priority 2 Projects: \$59,040**
Necessary - Not Yet Critical **Two to Four Years**

EXTERIOR FINISHES **Project Index #: 3223EXT1**
Construction Cost \$29,520

It is important to maintain the finish, weather resistance and appearance of the water tank. This project would provide for the painting of the water tank and caulking of the joints to maintain it in a good, weather tight condition. It is recommended that this project be implemented in the next 2-3 years and is recommended on a cyclical basis based on environmental conditions.

INTERIOR FINISHES **Project Index #: 3223INT1**
Construction Cost \$29,520

It is important to maintain water quality, quantity and the interior finish of the water tank. This project would include hiring certified divers or draining the tank to inspect and clean the interior walls, and to weld, sandblast and perform repairs and add protective coatings, if needed. It is important to follow all ANSI, NSF and AWWA approved ways to disinfect and repair water tanks. The standard recommendation is to conduct a comprehensive inspection inside the water tank every 5 years, except for newly constructed tanks. Newly constructed water tanks should be inspected within 10 years of service and every 5 years thereafter.

BUILDING INFORMATION:

Gross Area (square feet): 2,952
Year Constructed: 1978
Exterior Finish 1: 0 #
Exterior Finish 2: 0 #
Number of Levels (Floors): 0 Basement? No
IBC Occupancy Type 1: 0 #
IBC Occupancy Type 2: 0 #
Construction Type:
IBC Construction Type:
Percent Fire Suppressed: 0 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$12,000	Project Construction Cost per Square Foot	\$24.07
Priority Class 2:	\$59,040	Total Facility Replacement Construction Cost	\$4,262,000
Priority Class 3:	\$0	Facility Replacement Cost per Square Foot	\$1,444
Grand Total:	\$71,040	FCNI:	2%

HOUSING UNIT #11

SPWD Facility Condition Analysis - 2948

Survey Date: 11/1/2016

**HOUSING UNIT #11
BUILDING REPORT**

The Housing Unit #11 is constructed with tilt-up pre-cast concrete walls, a slab-on-grade foundation and a single-ply membrane roofing system. It has 168 cells, one (1) main security control room and is rated at 280 inmates.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$363,845**
Currently Critical **Immediate to Two Years**

ADA TABLE UPGRADE

Project Index #: 2948ADA1
Construction Cost \$3,000

Per the United States Access Board and ICC ANSI-A117.1-2009, at least 5 percent of the seating spaces shall be, if fixed seating is provided, a loose seat or open space for a wheelchair. This project would provide funding to remove 3 of the fixed seats, which will allow access for wheel chairs.

COMMUNICATIONS SYSTEM UPGRADE

Project Index #: 2948SEC1
Construction Cost \$258,045

This building is equipped with a communications system that at the time of the survey was not working properly. The communications system provides paging, phone communications and communication to inmates. The communications system is an integral component of the notification and safety procedures for the inmates and staff. The system is problematic and replacement parts are no longer available. It is recommended that the communications system be upgraded.

EXHAUST FAN INSTALLATION

Project Index #: 2948HVA2
Construction Cost \$10,000

The mechanical room within the housing unit has plumbing fixtures and drains. Due to moisture in this room, the humidity is very high and there is an increase probability for indoor air quality concern. This project would provide for the purchase and installation of a new commercial grade exhaust fan and the assemblies and will include the connections to utilities.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

Project Index #: 2948SFT2
Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

FLOOR DRAIN REPAIR

Project Index #: 2948PLM1
Construction Cost \$2,000

The floor drain in the building is clogged and water has pooled around it. The standing water will prematurely deteriorate the building components as well as create a slipping hazard. This project would provide for a licensed contractor to clear the drain and provide any necessary repairs to prevent future problems.

ROOF HATCH REPLACEMENT

Project Index #: 2948SFT3
Construction Cost \$5,000

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.

Project Index #: 2948SFT1
Construction Cost \$16,800

SPRINKLER HEAD REPLACEMENT

The existing fire suppression sprinkler heads are an older style and are susceptible to damage and misuse by the inmates. Inmates have tied strings to the sprinkler heads and have broken them in the past. This project recommends that all of the fire sprinkler heads in all cells be removed and replaced with a new state of the art tamper-resistant sprinkler heads.

Project Index #: 2948ADA2
Construction Cost \$60,000

TDD INSTALLATION

The Housing Unit is not equipped with a TDD. In order to comply with ADA requirements it is recommended to install a TDD system in the Housing Unit. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$1,445,052

Necessary - Not Yet Critical Two to Four Years

Project Index #: 2948EXT1
Construction Cost \$516,090

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 is the caulking and sealing of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be caulked and sealed 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 #: 2948INT1
Construction Cost \$516,090

INTERIOR FINISHES

This project would provide funding to maintain the interior of the building. Included in the cost is painting the walls and ceilings, sealing the exposed masonry, repairing cracks in the masonry and replacing grout and caulk as needed. An epoxy-based paint should be utilized in wet areas for durability. It is recommended that the interior of the building be painted, sealed and 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 #: 2948ENR1
Construction Cost \$412,872

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$2,429,116

Long-Term Needs Four to Ten Years

Project Index #: 2948SEC2
Construction Cost \$421,875

CELL DOORS, LOCKS AND CONTROLS REPLACEMENT

Housing Unit 11 was constructed in 2009. The cell doors, locks and controls are original to the building and have been problematic due to inmate abuse and age. This project would provide for installing new cell doors, locks and controls. A total of 168 doors were used for this estimate. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2948PLM3
Construction Cost \$504,000

CELL WATER CONTROL SYSTEMS REPLACEMENT

This building is equipped with cell water control systems that are outdated and should be scheduled for replacement. Problems exist with the current water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. It is recommended to replace the water control systems. This project includes the replacement of the water controllers, piping, valves, access panels and all connections to the existing utilities.

Project Index #: 2948PLM5

Construction Cost \$50,000

COMPUTER WATER CONTROL SYSTEM REPLACEMENT

This building is equipped with a computer water control system that is outdated and should be scheduled for replacement. Problems exist with the current computer water control system. It is increasingly difficult to find software updates and experienced repairmen to service the equipment. This project recommends the installation of a new computer water control system for the building. This system will monitor and control the water for all fixtures throughout the building. New electronic sensors will be installed on each water control system.

Project Index #: 2948ELE2

Construction Cost \$1,438,241

DOOR CONTROLS SYSTEM REPLACEMENT

The control panel/ inmate movement and control system in the housing unit is not working properly. The cell door indicator lights on the control panel are falsely representing the actual status of the cell doors. The officer sometimes cannot tell if the cell door is open or closed. This project would replace the existing secured door control system with a programmable logic controlled system using touch screens for actuation and door status. This project would replace the existing door control system and the outdated wiring. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2948PLM4

Construction Cost \$15,000

SHOWER WATER CONTROL SYSTEMS REPLACEMENT

This building is equipped with shower water control systems that are outdated and should be scheduled for replacement. Problems exist with the current shower water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. This project includes the replacement of the shower water controllers, piping, valves, access panels, shower heads and all connections to the existing utilities.

BUILDING INFORMATION:

Gross Area (square feet): 51,609

Year Constructed: 2009

Exterior Finish 1: 100 # Tilt-up Concrete

Exterior Finish 2: 0 #

Number of Levels (Floors): 2 Basement? No

IBC Occupancy Type 1: 100 # I-3

IBC Occupancy Type 2: 0 #

Construction Type: Tilt-up Concrete

IBC Construction Type: II-B

Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$363,845	Project Construction Cost per Square Foot	\$82.12
Priority Class 2:	\$1,445,052	Total Facility Replacement Construction Cost	\$18,063,000
Priority Class 3:	\$2,429,116	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$4,238,013	FCNI:	23%

HOUSING UNIT #10

SPWD Facility Condition Analysis - 2947

Survey Date: 11/1/2016

**HOUSING UNIT #10
BUILDING REPORT**

The Housing Unit #10 is constructed with tilt-up pre-cast concrete walls, a slab-on-grade foundation and a single-ply membrane roofing system. It has 168 cells, one (1) main security control room and is rated at 280 inmates.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$363,845**
Currently Critical **Immediate to Two Years**

ADA TABLE UPGRADE

Project Index #: 2947ADA1
Construction Cost \$3,000

Per the United States Access Board and ICC ANSI-A117.1-2009, at least 5 percent of the seating spaces shall be, if fixed seating is provided, a loose seat or open space for a wheelchair. This project would provide funding to remove 3 of the fixed seats, which will allow access for wheel chairs.

COMMUNICATIONS SYSTEM UPGRADE

Project Index #: 2947SEC1
Construction Cost \$258,045

This building is equipped with a communications system that at the time of the survey was not working properly. The communications system provides paging, phone communications and communication to inmates. The communications system is an integral component of the notification and safety procedures for the inmates and staff. The system is problematic and replacement parts are no longer available. It is recommended that the communications system be upgraded.

EXHAUST FAN INSTALLATION

Project Index #: 2947HVA1
Construction Cost \$10,000

The mechanical room within the housing unit has plumbing fixtures and drains. Due to moisture in this room, the humidity is very high and there is an increase probability for indoor air quality concern. This project would provide for the purchase and installation of a new commercial grade exhaust fan and the assemblies and will include the connections to utilities.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

Project Index #: 2947SFT2
Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

FLOOR DRAIN REPAIR

Project Index #: 2947PLM1
Construction Cost \$2,000

The floor drain in the building is clogged and water has pooled around it. The standing water will prematurely deteriorate the building components as well as create a slipping hazard. This project would provide for a licensed contractor to clear the drain and provide any necessary repairs to prevent future problems.

ROOF HATCH REPLACEMENT

Project Index #: 2947SFT3
Construction Cost \$5,000

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.

Project Index #: 2947SFT1
Construction Cost \$16,800

SPRINKLER HEAD REPLACEMENT

The existing fire suppression sprinkler heads are an older style and are susceptible to damage and misuse by the inmates. Inmates have tied strings to the sprinkler heads and have broken them in the past. This project recommends that all of the fire sprinkler heads in all cells be removed and replaced with a new state of the art tamper-resistant sprinkler heads.

Project Index #: 2947ADA2
Construction Cost \$60,000

TDD INSTALLATION

The Housing Unit is not equipped with a TDD. In order to comply with ADA requirements it is recommended to install a TDD system in the Housing Unit. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$1,445,052

Necessary - Not Yet Critical Two to Four Years

Project Index #: 2947EXT1
Construction Cost \$516,090

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 is the caulking and sealing of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be caulked and sealed 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 #: 2947INT1
Construction Cost \$516,090

INTERIOR FINISHES

This project would provide funding to maintain the interior of the building. Included in the cost is painting the walls and ceilings, sealing the exposed masonry, repairing cracks in the masonry and replacing grout and caulk as needed. An epoxy-based paint should be utilized in wet areas for durability. It is recommended that the interior of the building be painted, sealed and 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 #: 2947ENR1
Construction Cost \$412,872

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$2,429,116

Long-Term Needs Four to Ten Years

Project Index #: 2947SEC2
Construction Cost \$421,875

CELL DOORS, LOCKS AND CONTROLS REPLACEMENT

Housing Unit 10 was constructed in 2009. The cell doors, locks and controls are original to the building and have been problematic due to inmate abuse and age. This project would provide for installing new cell doors, locks and controls. A total of 168 doors were used for this estimate. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2947PLM3
Construction Cost \$504,000

CELL WATER CONTROL SYSTEMS REPLACEMENT

This building is equipped with cell water control systems that are outdated and should be scheduled for replacement. Problems exist with the current water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. It is recommended to replace the water control systems. This project includes the replacement of the water controllers, piping, valves, access panels and all connections to the existing utilities.

Project Index #: 2947PLM5

Construction Cost \$50,000

COMPUTER WATER CONTROL SYSTEM REPLACEMENT

This building is equipped with a computer water control system that is outdated and should be scheduled for replacement. Problems exist with the current computer water control system. It is increasingly difficult to find software updates and experienced repairmen to service the equipment. This project recommends the installation of a new computer water control system for the building. This system will monitor and control the water for all fixtures throughout the building. New electronic sensors will be installed on each water control system.

Project Index #: 2947ELE2

Construction Cost \$1,438,241

DOOR CONTROLS SYSTEM REPLACEMENT

The control panel/ inmate movement and control system in the housing unit is not working properly. The cell door indicator lights on the control panel are falsely representing the actual status of the cell doors. The officer sometimes cannot tell if the cell door is open or closed. This project would replace the existing secured door control system with a programmable logic controlled system using touch screens for actuation and door status. This project would replace the existing door control system and the outdated wiring. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2947PLM4

Construction Cost \$15,000

SHOWER WATER CONTROL SYSTEMS REPLACEMENT

This building is equipped with shower water control systems that are outdated and should be scheduled for replacement. Problems exist with the current shower water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. This project includes the replacement of the shower water controllers, piping, valves, access panels, shower heads and all connections to the existing utilities.

BUILDING INFORMATION:

Gross Area (square feet): 51,609

Year Constructed: 2009

Exterior Finish 1: 100 # Tilt-up Concrete

Exterior Finish 2: 0 #

Number of Levels (Floors): 2 Basement? No

IBC Occupancy Type 1: 100 # I-3

IBC Occupancy Type 2: 0 #

Construction Type: Tilt-up Concrete

IBC Construction Type: II-B

Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$363,845	Project Construction Cost per Square Foot	\$82.12
Priority Class 2:	\$1,445,052	Total Facility Replacement Construction Cost	\$18,063,000
Priority Class 3:	\$2,429,116	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$4,238,013	FCNI:	23%

HOUSING UNIT #12

SPWD Facility Condition Analysis - 2946

Survey Date: 11/1/2016

HOUSING UNIT #12

BUILDING REPORT

The Housing Unit #12 is constructed with tilt-up pre-cast concrete walls, a slab-on-grade foundation and a single-ply membrane roofing system. It has 168 cells, one (1) main security control room and is rated at 280 inmates.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$363,845

Currently Critical

Immediate to Two Years

ADA TABLE UPGRADE

Project Index #: 2946ADA1

Construction Cost \$3,000

Per the United States Access Board and ICC ANSI-A117.1-2009, at least 5 percent of the seating spaces shall be, if fixed seating is provided, a loose seat or open space for a wheelchair. This project would provide funding to remove 3 of the fixed seats, which will allow access for wheel chairs.

COMMUNICATIONS SYSTEM UPGRADE

Project Index #: 2946SEC1

Construction Cost \$258,045

This building is equipped with a communications system that at the time of the survey was not working properly. The communications system provides paging, phone communications and communication to inmates. The communications system is an integral component of the notification and safety procedures for the inmates and staff. The system is problematic and replacement parts are no longer available. It is recommended that the communications system be upgraded.

EXHAUST FAN INSTALLATION

Project Index #: 2946HVA1

Construction Cost \$10,000

The mechanical room within the housing unit has plumbing fixtures and drains. Due to moisture in this room, the humidity is very high and there is an increase probability for indoor air quality concern. This project would provide for the purchase and installation of a new commercial grade exhaust fan and the assemblies and will include the connections to utilities.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

Project Index #: 2946SFT2

Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

FLOOR DRAIN REPAIR

Project Index #: 2946PLM1

Construction Cost \$2,000

The floor drain in the building is clogged and water has pooled around it. The standing water will prematurely deteriorate the building components as well as create a slipping hazard. This project would provide for a licensed contractor to clear the drain and provide any necessary repairs to prevent future problems.

ROOF HATCH REPLACEMENT

Project Index #: 2946SFT3

Construction Cost \$5,000

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.

Project Index #: 2946SFT1
Construction Cost \$16,800

SPRINKLER HEAD REPLACEMENT

The existing fire suppression sprinkler heads are an older style and are susceptible to damage and misuse by the inmates. Inmates have tied strings to the sprinkler heads and have broken them in the past. This project recommends that all of the fire sprinkler heads in all cells be removed and replaced with a new state of the art tamper-resistant sprinkler heads.

Project Index #: 2946ADA2
Construction Cost \$60,000

TDD INSTALLATION

The Housing Unit is not equipped with a TDD. In order to comply with ADA requirements it is recommended to install a TDD system in the Housing Unit. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$1,445,052

Necessary - Not Yet Critical Two to Four Years

Project Index #: 2946EXT1
Construction Cost \$516,090

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 is the caulking and sealing of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be caulked and sealed 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 #: 2946INT1
Construction Cost \$516,090

INTERIOR FINISHES

This project would provide funding to maintain the interior of the building. Included in the cost is painting the walls and ceilings, sealing the exposed masonry, repairing cracks in the masonry and replacing grout and caulk as needed. An epoxy-based paint should be utilized in wet areas for durability. It is recommended that the interior of the building be painted, sealed and 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 #: 2946ENR1
Construction Cost \$412,872

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$2,429,116

Long-Term Needs Four to Ten Years

Project Index #: 2946SEC2
Construction Cost \$421,875

CELL DOORS, LOCKS AND CONTROLS REPLACEMENT

Housing Unit 12 was constructed in 2008. The cell doors, locks and controls are original to the building and have been problematic due to inmate abuse and age. This project would provide for installing new cell doors, locks and controls. A total of 168 doors were used for this estimate. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2946PLM3
Construction Cost \$504,000

CELL WATER CONTROL SYSTEMS REPLACEMENT

This building is equipped with cell water control systems that are outdated and should be scheduled for replacement. Problems exist with the current water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. It is recommended to replace the water control systems. This project includes the replacement of the water controllers, piping, valves, access panels and all connections to the existing utilities.

Project Index #: 2946PLM5

Construction Cost \$50,000

COMPUTER WATER CONTROL SYSTEM REPLACEMENT

This building is equipped with a computer water control system that is outdated and should be scheduled for replacement. Problems exist with the current computer water control system. It is increasingly difficult to find software updates and experienced repairmen to service the equipment. This project recommends the installation of a new computer water control system for the building. This system will monitor and control the water for all fixtures throughout the building. New electronic sensors will be installed on each water control system.

Project Index #: 2946ELE2

Construction Cost \$1,438,241

DOOR CONTROLS SYSTEM REPLACEMENT

The control panel/ inmate movement and control system in the housing unit is not working properly. The cell door indicator lights on the control panel are falsely representing the actual status of the cell doors. The officer sometimes cannot tell if the cell door is open or closed. This project would replace the existing secured door control system with a programmable logic controlled system using touch screens for actuation and door status. This project would replace the existing door control system and the outdated wiring. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2946PLM4

Construction Cost \$15,000

SHOWER WATER CONTROL SYSTEMS REPLACEMENT

This building is equipped with shower water control systems that are outdated and should be scheduled for replacement. Problems exist with the current shower water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. This project includes the replacement of the shower water controllers, piping, valves, access panels, shower heads and all connections to the existing utilities.

BUILDING INFORMATION:

Gross Area (square feet): 52,096

Year Constructed: 2008

Exterior Finish 1: 100 # Tilt-up Concrete

Exterior Finish 2: 0 #

Number of Levels (Floors): 2 Basement? No

IBC Occupancy Type 1: 100 # I-3

IBC Occupancy Type 2: 0 #

Construction Type:

IBC Construction Type: II-B

Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$363,845	Project Construction Cost per Square Foot	\$81.35
Priority Class 2:	\$1,445,052	Total Facility Replacement Construction Cost	\$18,234,000
Priority Class 3:	\$2,429,116	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$4,238,013	FCNI:	23%

HOUSING UNIT #9

SPWD Facility Condition Analysis - 2945

Survey Date: 11/1/2016

**HOUSING UNIT #9
BUILDING REPORT**

The Housing Unit #9 is constructed with tilt-up pre-cast concrete walls, a slab-on-grade foundation and a single-ply membrane roofing system. It has 168 cells, one (1) main security control room and is rated at 280 inmates.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$363,845**
Currently Critical **Immediate to Two Years**

ADA TABLE UPGRADE

Project Index #: 2945ADA1
Construction Cost \$3,000

Per the United States Access Board and ICC ANSI-A117.1-2009, at least 5 percent of the seating spaces shall be, if fixed seating is provided, a loose seat or open space for a wheelchair. This project would provide funding to remove 3 of the fixed seats, which will allow access for wheel chairs.

COMMUNICATIONS SYSTEM UPGRADE

Project Index #: 2945SEC1
Construction Cost \$258,045

This building is equipped with a communications system that at the time of the survey was not working properly. The communications system provides paging, phone communications and communication to inmates. The communications system is an integral component of the notification and safety procedures for the inmates and staff. The system is problematic and replacement parts are no longer available. It is recommended that the communications system be upgraded.

EXHAUST FAN INSTALLATION

Project Index #: 2945HVA1
Construction Cost \$10,000

The mechanical room within the housing unit has plumbing fixtures and drains. Due to moisture in this room, the humidity is very high and there is an increase probability for indoor air quality concern. This project would provide for the purchase and installation of a new commercial grade exhaust fan and the assemblies and will include the connections to utilities.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

Project Index #: 2945SFT2
Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

FLOOR DRAIN REPAIR

Project Index #: 2945PLM1
Construction Cost \$2,000

The floor drain in the building is clogged and water has pooled around it. The standing water will prematurely deteriorate the building components as well as create a slipping hazard. This project would provide for a licensed contractor to clear the drain and provide any necessary repairs to prevent future problems.

ROOF HATCH REPLACEMENT

Project Index #: 2945SFT3
Construction Cost \$5,000

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.

SPRINKLER HEAD REPLACEMENT

**Project Index #: 2945SFT1
Construction Cost \$16,800**

The existing fire suppression sprinkler heads are an older style and are susceptible to damage and misuse by the inmates. Inmates have tied strings to the sprinkler heads and have broken them in the past. This project recommends that all of the fire sprinkler heads in all cells be removed and replaced with a new state of the art tamper-resistant sprinkler heads.

TDD INSTALLATION

**Project Index #: 2945ADA2
Construction Cost \$60,000**

The Housing Unit is not equipped with a TDD. In order to comply with ADA requirements it is recommended to install a TDD system in the Housing Unit. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$1,445,052

Necessary - Not Yet Critical Two to Four Years

EXTERIOR FINISHES

**Project Index #: 2945EXT1
Construction Cost \$516,090**

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

INTERIOR FINISHES

**Project Index #: 2945INT1
Construction Cost \$516,090**

This project would provide funding to maintain the interior of the building. Included in the cost is painting the walls and ceilings, sealing the exposed masonry, repairing cracks in the masonry and replacing grout and caulk as needed. An epoxy-based paint should be utilized in wet areas for durability. It is recommended that the interior of the building be painted, sealed and repaired in the next 2-3 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

LIGHTING UPGRADE

**Project Index #: 2945ENR1
Construction Cost \$412,872**

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. Any electrical wiring upgrades are not included in this estimate.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$2,429,116

Long-Term Needs Four to Ten Years

CELL DOORS, LOCKS AND CONTROLS REPLACEMENT

**Project Index #: 2945SEC2
Construction Cost \$421,875**

Housing Unit 9 was constructed in 2008. The cell doors, locks and controls are original to the building and have been problematic due to inmate abuse and age. This project would provide for installing new cell doors, locks and controls. A total of 168 doors were used for this estimate. Removal and disposal of the existing equipment is included in this estimate.

CELL WATER CONTROL SYSTEMS REPLACEMENT

**Project Index #: 2945PLM3
Construction Cost \$504,000**

This building is equipped with cell water control systems that are outdated and should be scheduled for replacement. Problems exist with the current water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. It is recommended to replace the water control systems. This project includes the replacement of the water controllers, piping, valves, access panels and all connections to the existing utilities.

Project Index #: 2945PLM5

Construction Cost \$50,000

COMPUTER WATER CONTROL SYSTEM REPLACEMENT

This building is equipped with a computer water control system that is outdated and should be scheduled for replacement. Problems exist with the current computer water control system. It is increasingly difficult to find software updates and experienced repairmen to service the equipment. This project recommends the installation of a new computer water control system for the building. This system will monitor and control the water for all fixtures throughout the building. New electronic sensors will be installed on each water control system.

Project Index #: 2945ELE2

Construction Cost \$1,438,241

DOOR CONTROLS SYSTEM REPLACEMENT

The control panel/ inmate movement and control system in the housing unit is not working properly. The cell door indicator lights on the control panel are falsely representing the actual status of the cell doors. The officer sometimes cannot tell if the cell door is open or closed. This project would replace the existing secured door control system with a programmable logic controlled system using touch screens for actuation and door status. This project would replace the existing door control system and the outdated wiring. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2945PLM4

Construction Cost \$15,000

SHOWER WATER CONTROL SYSTEMS REPLACEMENT

This building is equipped with shower water control systems that are outdated and should be scheduled for replacement. Problems exist with the current shower water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. This project includes the replacement of the shower water controllers, piping, valves, access panels, shower heads and all connections to the existing utilities.

BUILDING INFORMATION:

Gross Area (square feet): 51,609

Year Constructed: 2008

Exterior Finish 1: 100 # Tilt-up Concrete

Exterior Finish 2: 0 #

Number of Levels (Floors): 2 Basement? No

IBC Occupancy Type 1: 100 # I-3

IBC Occupancy Type 2: 0 #

Construction Type:

IBC Construction Type: II-B

Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$363,845	Project Construction Cost per Square Foot	\$82.12
Priority Class 2:	\$1,445,052	Total Facility Replacement Construction Cost	\$18,063,000
Priority Class 3:	\$2,429,116	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$4,238,013	FCNI:	23%

PRISON INDUSTRIES

SPWD Facility Condition Analysis - 2507

Survey Date: 11/1/2016

**PRISON INDUSTRIES
BUILDING REPORT**

The Prison Industries building is constructed of tilt-up pre-cast concrete walls, concrete floors, prefabricated steel roof trusses, metal decking and a single-ply membrane roof. The building is divided into 6 self-contained individual warehouses with self-leveling dock loaders and a small dining area for the inmates and staff. The building has full fire protection and has ADA compliant restrooms in all warehouse areas.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$532,000

Currently Critical

Immediate to Two Years

ADA UPGRADES

Project Index #: 2507ADA2

Construction Cost \$1,000

Section 4.13.9 of the ADAAG states that handles, pulls, latches, locks and other operating devices on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist to operate. Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs. It is recommended that proper lever hardware be installed in this building to meet these requirements.

DUAL LEVEL DRINKING FOUNTAIN INSTALLATION

Project Index #: 2507ADA1

Construction Cost \$12,000

This building contains a water fountain that is not ADA compliant. The 2012 IBC Section 1109.5 states where drinking fountains are provided on an exterior site, on a floor or within a secured area, no fewer than two drinking fountains shall be provided. One shall comply with the requirements for people who use a wheelchair and one shall comply with the requirements for standing persons. This project would provide funding for the purchase and installation of two drinking fountains to meet the ADA requirements.

FIRE ALARM SYSTEM REPLACEMENT

Project Index #: 2507SFT2

Construction Cost \$480,000

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

Project Index #: 2507SFT3

Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

INSTALL EMERGENCY EGRESS LIGHTING

Project Index #: 2507SFT1

Construction Cost \$30,000

There is no emergency egress lighting in the warehouse sections. This project would provide for the purchase and installation of emergency egress lighting in each section. Connections to utilities are included in this estimate. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$1,689,000

Necessary - Not Yet Critical Two to Four Years

**Project Index #: 2507EXT1
Construction Cost \$600,000**

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 concrete walls, painting the doors and trim and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be 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.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

**Project Index #: 2507INT1
Construction Cost \$600,000**

INTERIOR FINISHES

It is recommended to paint the interior walls and ceilings 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.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

**Project Index #: 2507ENR1
Construction Cost \$480,000**

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

**Project Index #: 2507PLM0
Construction Cost \$9,000**

WATER HEATER REPLACEMENT

There are six 30 gallon electric water heaters in the building. The average life span of a water heater is eight to ten years. With the passage of time and constant use, these units are showing signs of wear and should be scheduled for replacement in the next 2-3 years. It is recommended that new electric water heaters be installed. Removal and disposal of the existing equipment is included in this estimate.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$2,520,000

Long-Term Needs Four to Ten Years

**Project Index #: 2507ELE1
Construction Cost \$900,000**

ELECTRICAL AND COMMUNICATIONS UPGRADE

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

**Project Index #: 2507HVA1
Construction Cost \$900,000**

HVAC EQUIPMENT REPLACEMENT

The air handlers, fan coils and related equipment are original to the building, dating back to 2004. The equipment has consistent problems and has reached its expected life span. This project recommends replacement of the air handlers, fan coils, ventilation equipment and exhaust fans. It is recommended that this project be implemented in the next 6-7 years to avoid possible failure and emergency funding for replacement.

Project Index #: 2507EXT2

Construction Cost \$720,000

ROOF REPLACEMENT

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. It is recommended that this building be re-roofed in the next 6-7 years to be consistent with the roofing program and the end of the warranty period.

BUILDING INFORMATION:

Gross Area (square feet): 60,000

Year Constructed: 2004

Exterior Finish 1: 100 # Painted Tilt-Up Conc

Exterior Finish 2: 0 #

Number of Levels (Floors): 1 Basement? No

IBC Occupancy Type 1: 100 # S-1

IBC Occupancy Type 2: 0 #

Construction Type: Tilt-Up Concrete and Steel

IBC Construction Type: I-A

Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$532,000	Project Construction Cost per Square Foot	\$79.02
Priority Class 2:	\$1,689,000	Total Facility Replacement Construction Cost	\$21,000,000
Priority Class 3:	\$2,520,000	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$4,741,000	FCNI:	23%

GYMNASIUM

SPWD Facility Condition Analysis - 2506

Survey Date: 11/1/2016

**GYMNASIUM
BUILDING REPORT**

The Gymnasium is constructed of concrete masonry unit walls, steel roof trusses, metal decking and a single-ply membrane roof. The building is used for physical activities and contains a band room, storage rooms, ADA compliant restrooms and a gun post on the upper level. The building has full fire protection.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$126,860**
Currently Critical **Immediate to Two Years**

EMERGENCY EGRESS LIGHTING INSTALLATION **Project Index #: 2506SFT1**
Construction Cost \$900

There is no emergency egress lighting in the band room or in the barber/ storage room areas. This project would provide for the purchase and installation of 2 emergency egress lights in these two rooms. Connections to existing utilities is included in this estimate.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

FIRE ALARM SYSTEM REPLACEMENT **Project Index #: 2506SFT2**
Construction Cost \$116,960

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION **Project Index #: 2506SFT3**
Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

PRIORITY CLASS 2 PROJECTS **Total Construction Cost for Priority 2 Projects: \$633,210**
Necessary - Not Yet Critical **Two to Four Years**

EXTERIOR FINISHES **Project Index #: 2506EXT1**
Construction Cost \$146,200

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 concrete walls, painting the doors and trim and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be 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.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2506INT1
Construction Cost \$146,200

INTERIOR FINISHES

It is recommended to paint the interior walls and ceilings 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.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2506INT2
Construction Cost \$2,800

JANITORS CLOSET REPAIRS

The mop sink in the Janitors Closet has several cracks in the concrete and is leaking. This could lead to mold growth if not addressed. This project would provide for a new fiberglass mop sink and 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 #: 2506ENR1
Construction Cost \$116,960

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

Project Index #: 2506PLM1
Construction Cost \$1,750

WATER HEATER REPLACEMENT

There is a 66 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 electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2506EXT4
Construction Cost \$219,300

WINDOW REPLACEMENT

The existing windows in this building are of double pane wire mesh construction. Some are broken and all are not energy efficient. This project would provide for the removal and replacement of the windows with new dual pane security rated windows.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$540,940

Long-Term Needs

Four to Ten Years

Project Index #: 2506HVA1
Construction Cost \$365,500

HVAC EQUIPMENT REPLACEMENT

The air handlers, fan coils and related equipment are original to the building, dating back to 2004. The equipment has consistent problems and has reached its expected life span. This project recommends replacement of the air handlers, fan coils, ventilation equipment and exhaust fans. It is recommended that this project be implemented in the next 4-5 years to avoid possible failure and emergency funding for replacement.

Project Index #: 2506EXT3
Construction Cost \$175,440

ROOF REPLACEMENT

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. It is recommended that this building be re-roofed in the next 7-8 years to be consistent with the roofing program and the end of the warranty period.

BUILDING INFORMATION:

Gross Area (square feet): 14,620
Year Constructed: 2004
Exterior Finish 1: 100 # Concrete Masonry U
Exterior Finish 2: 0 #
Number of Levels (Floors): 2 Basement? No
IBC Occupancy Type 1: 100 # A-3
IBC Occupancy Type 2: 0 #
Construction Type: Concrete Masonry and Steel
IBC Construction Type: II-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$126,860	Project Construction Cost per Square Foot	\$88.99
Priority Class 2:	\$633,210	Total Facility Replacement Construction Cost	\$5,117,000
Priority Class 3:	\$540,940	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$1,301,010	FCNI:	25%

STORAGE BUILDING

SPWD Facility Condition Analysis - 2505

Survey Date: 11/1/2016

**STORAGE BUILDING
BUILDING REPORT**

The Storage Building is located at the north side, outside of the secured area at High Desert State Prison. The building is 144 square feet, constructed of concrete masonry units, steel frame truss, and a single-ply membrane roof. The building is used for the supply of oil and grease for Motor Pool.

PRIORITY CLASS 2 PROJECTS **Total Construction Cost for Priority 2 Projects: \$2,880**
Necessary - Not Yet Critical **Two to Four Years**

EXTERIOR FINISHES

Project Index #: 2505EXT1
Construction Cost \$1,440

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 sanding, priming, painting and caulking of the 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.

INTERIOR FINISHES

Project Index #: 2505INT1
Construction Cost \$1,440

It is recommended to paint the interior walls and ceilings 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 adequately prepared to receive the coating. An epoxy-based paint should be utilized in wet areas for durability.

BUILDING INFORMATION:

Gross Area (square feet): 144
Year Constructed: 2002
Exterior Finish 1: 100 # Precast Concrete
Exterior Finish 2: 0 #
Number of Levels (Floors): 1 Basement? No
IBC Occupancy Type 1: 100 # I-3
IBC Occupancy Type 2: 0 #
Construction Type:
IBC Construction Type: II-B
Percent Fire Suppressed: 0 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$0	Project Construction Cost per Square Foot	\$20.00
Priority Class 2:	\$2,880	Total Facility Replacement Construction Cost	\$29,000
Priority Class 3:	\$0	Facility Replacement Cost per Square Foot	\$200
Grand Total:	\$2,880	FCNI:	10%

WAREHOUSE/ MOTOR POOL

SPWD Facility Condition Analysis - 2178

Survey Date: 11/1/2016

**WAREHOUSE/ MOTOR POOL
BUILDING REPORT**

The Warehouse/ Motor Pool building is located on the north side of the prison, outside of the secured area of High Desert State Prison. The building is constructed of concrete masonry units, prefabricated steel trusses, metal decking and has a single-ply membrane roof. The interior of the building consists of a motor pool/ equipment service area on the west side and a receiving/ warehouse area on the east side. There is a loading dock for large trucks and a parking area for employees.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$323,328**
Currently Critical **Immediate to Two Years**

DUAL LEVEL DRINKING FOUNTAIN INSTALLATION **Project Index #: 2178ADA1**
Construction Cost \$8,000

This building contains two water fountains that are not ADA compliant. The 2012 IBC Section 1109.5 states where drinking fountains are provided on an exterior site, on a floor or within a secured area, no fewer than two drinking fountains shall be provided. One shall comply with the requirements for people who use a wheelchair and one shall comply with the requirements for standing persons. This project would provide funding for the purchase and installation of two drinking fountains to meet the ADA requirements.

FIRE ALARM SYSTEM REPLACEMENT **Project Index #: 2178SFT3**
Construction Cost \$296,328

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION **Project Index #: 2178SFT4**
Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

LOADING DOCK **Project Index #: 2178SFT2**
Construction Cost \$10,000

The Warehouse/ Motor Pool has a loading dock. The loading dock is used by large trucks and tractor trailers to back in for loading and unloading supplies needed for the High Desert State Prison. There are no wheel blocks installed to prevent the movement of trucks or trailers loading or unloading, per OSHA 1910.178(m)(7) requirements. The forklifts are battery operated. Per OSHA 1910.178(g)(2), the charging area for the forklifts do not provide an area for; flushing and neutralizing spilled electrolytes; for fire protection; for protecting charging apparatus; from damage by trucks, and for adequate ventilation for dispersal of fumes for gassing batteries. This project addresses the installation of blocks for the loading ramp, installation of two bollards to protect the battery charging/ flushing area in case of spills and provide adequate ventilation for dispersal of fumes for gassing batteries.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$595,438

Necessary - Not Yet Critical Two to Four Years

EXHAUST FAN REPLACEMENT

**Project Index #: 2178HVA3
Construction Cost \$1,500**

The exhaust fans in the restrooms serving the Warehouse/ Motor Pool building were inoperative and/or damaged at the time of the survey. Due to building code requirements and excessive humidity concerns, this project would provide funding for the purchase and installation of high volume commercial exhaust fans.

EXTERIOR FINISHES

**Project Index #: 2178EXT1
Construction Cost \$270,410**

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 concrete masonry units and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be 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.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

GFCI OUTLETS

**Project Index #: 2178ELE1
Construction Cost \$800**

The existing receptacles next to the drinking fountain and eye wash station are standard duplex receptacles. The 2011 NEC Code 210.8 require these locations to have GFCI protection. This project would provide for removing the standard receptacles and installing GFCI receptacles.

JANITORS CLOSET REPAIRS

**Project Index #: 2178INT2
Construction Cost \$1,400**

The mop sink in the Janitors Closet is mounted adjacent to CMU and is showing signs of water damage. This project would provide FRP to be installed on the CMU 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.

LIGHTING UPGRADE

**Project Index #: 2178ENR1
Construction Cost \$296,328**

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. Any electrical wiring upgrades are not included in this estimate.

WATER TREATMENT SYSTEM REPLACEMENT

**Project Index #: 2178PLM2
Construction Cost \$25,000**

The existing water softening/ treatment systems in the building are currently not operational. They are original to the building and approaching the end of their lifecycles. Failure of the equipment causes wear and tear on the domestic water supply lines, plumbing fixtures and HVAC equipment. This project would provide for the replacement of the existing water softeners/ treatment systems with new equipment. This project would also provide for a chemical treatment program including an updated chemicals control system, service and employee training provided by a qualified water treatment vendor. The annual maintenance fee charged by the water treatment vendor would be determined after an investigation of the water system is complete. These annual costs are not included in this project cost. For budgeting purposes, a \$12,000 maintenance fee is suggested.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$2,668,452

Long-Term Needs

Four to Ten Years

ELECTRICAL AND COMMUNICATIONS UPGRADE

**Project Index #: 2178ELE2
Construction Cost \$926,025**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

HVAC EQUIPMENT REPLACEMENT

**Project Index #: 2178HVA2
Construction Cost \$926,025**

The existing HVAC system consists of ceiling mounted hydronic heaters, 8 packaged heat pumps, 10 swamp coolers and an Evapco cooling tower. The HVAC system was installed in 2002. The HVAC system is not energy efficient and has reached the end of its expected and useful life. This project would provide for installation of new HVAC equipment. The new systems shall be designed to significantly reduce utility usage in order to comply with the 2012 IECC and ASHRAE 90.1. This project includes removal and disposal of the existing HVAC system and all required connections to utilities.

INTERIOR FINISHES

**Project Index #: 2178INT1
Construction Cost \$370,410**

This project would provide funding to maintain the interior of the building. Included in the cost is painting the walls and ceilings, sealing the exposed masonry, repairing cracks in the masonry and replacing grout and caulk as needed. An epoxy-based paint should be utilized in wet areas for durability. It is recommended that the interior of the building be painted, sealed and repaired in the next 4-5 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

ROOF REPLACEMENT

**Project Index #: 2178EXT2
Construction Cost \$444,492**

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 2002. It is recommended that this building be re-roofed in the next 4-5 years to be consistent with the roofing program and the end of the warranty period.

WATER HEATER REPLACEMENT

**Project Index #: 2178PLM1
Construction Cost \$1,500**

There is a 50 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 8-9 years. It is recommended that a new electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

BUILDING INFORMATION:

Gross Area (square feet): 37,041
Year Constructed: 2002
Exterior Finish 1: 100 # Natural Grey CMU
Exterior Finish 2: #
Number of Levels (Floors): 1 Basement? No
IBC Occupancy Type 1: 80 # S-1
IBC Occupancy Type 2: 20 # S-3
Construction Type: Concrete Masonry & Steel
IBC Construction Type: I-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$323,328	Project Construction Cost per Square Foot	\$96.84
Priority Class 2:	\$595,438	Total Facility Replacement Construction Cost	\$11,112,000
Priority Class 3:	\$2,668,452	Facility Replacement Cost per Square Foot	\$300
Grand Total:	\$3,587,218	FCNI:	32%

TOWER #4

SPWD Facility Condition Analysis - 2177

Survey Date: 11/1/2016

**TOWER #4
BUILDING REPORT**

Tower #4 is located on the north side, outside of the secured area at High Desert State Prison. The guard tower is constructed of precast concrete walls and has a concrete slab-on-grade foundation with a standing seam metal roofing system.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$17,640**
Currently Critical **Immediate to Two Years**

BACKFLOW PREVENTER REPLACEMENT **Project Index #: 2177SFT4**
Construction Cost \$5,000

There is a backflow preventer for the fire suppression system in the building. It is leaking and should be scheduled for replacement. At the time of the survey the staff indicated they have rebuilt the backflow preventer several times, however it continues to leak. This project would provide for replacing the backflow preventer by a licensed fire suppression contractor.

FIRE ALARM SYSTEM REPLACEMENT **Project Index #: 2177SFT2**
Construction Cost \$3,640

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION **Project Index #: 2177SFT3**
Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

PRIORITY CLASS 2 PROJECTS **Total Construction Cost for Priority 2 Projects: \$42,235**
Necessary - Not Yet Critical **Two to Four Years**

DOORS, LOCKS AND CONTROLS REPLACEMENT **Project Index #: 2177SEC1**
Construction Cost \$30,000

Tower #4 was constructed in 2002. The doors, locks and controls are original to the building and have been problematic due to age. This project would provide for installing new doors, locks and controls. Removal and disposal of the existing equipment is included in this estimate.

EGRESS LIGHTING REPLACEMENT **Project Index #: 2177SFT5**
Construction Cost \$1,000

There are older emergency egress lighting units in this building. These units have a finite lifespan, and this project recommends their replacement with new egress lights, and to also provide additional lights on the main exit routes as needed.

FLOORING REPLACEMENT

**Project Index #: 2177INT2
Construction Cost \$4,095**

The VCT flooring in Tower #4 is damaged and reaching the end of its useful life. It is recommended that the VCT flooring be replaced. This project would provide for removal and disposal of the VCT and installation of new 12x12 VCT with a 6" base.

LIGHTING UPGRADE

**Project Index #: 2177ENR1
Construction Cost \$3,640**

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. Any electrical wiring upgrades are not included in this estimate.

PEST CONTROL

**Project Index #: 2177ENV2
Construction Cost \$1,000**

There are numerous bird and rodent droppings throughout this building. Due to the potential risk of disease, this project provides for treatment and cleanup of the pigeon and rodent droppings by a licensed pest control business.

WATER HEATER REPLACEMENT

**Project Index #: 2177PLM1
Construction Cost \$2,500**

There is an on-demand 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.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$54,075

Long-Term Needs

Four to Ten Years

EXTERIOR FINISHES

**Project Index #: 2177EXT1
Construction Cost \$4,550**

It is important to maintain the finish, weather resistance and appearance of the building. The caulked joints in the concrete panels form much of the exterior surface of this building, and are uniformly deteriorated. The caulking should be removed and the joints should be re-caulked. The metal doors and window frames should be sanded and painted on a cyclical basis.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

HVAC EQUIPMENT REPLACEMENT

**Project Index #: 2177HVA1
Construction Cost \$11,375**

The HVAC unit was installed in 2002 and is not energy efficient. It has reached the end of its expected and useful life. This project would provide for the installation of a new HVAC unit and cleaning of the existing duct work and grilles. This project includes the removal and the disposal of the existing equipment and all required connections to the utilities.

INTERIOR FINISHES

**Project Index #: 2177INT1
Construction Cost \$4,550**

It is recommended to paint the interior walls and ceilings 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 adequately prepared to receive the coating. An epoxy-based paint should be utilized in wet areas for durability. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

WINDOW REPLACEMENT

**Project Index #: 2177EXT2
Construction Cost \$33,600**

The existing windows in this building are of single pane wire mesh construction. They are not energy efficient. This project would provide for the removal and replacement of the windows with new dual pane security rated windows.

BUILDING INFORMATION:

Gross Area (square feet): 455
Year Constructed: 2002
Exterior Finish 1: 80 # Precast Concrete
Exterior Finish 2: 20 # Glass and Steel
Number of Levels (Floors): 2 Basement? No
IBC Occupancy Type 1: 100 # I-3
IBC Occupancy Type 2: #
Construction Type: Precast Concrete & Steel
IBC Construction Type: I-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$17,640	Project Construction Cost per Square Foot	\$250.44
Priority Class 2:	\$42,235	Total Facility Replacement Construction Cost	\$455,000
Priority Class 3:	\$54,075	Facility Replacement Cost per Square Foot	\$1,000
Grand Total:	\$113,950	FCNI:	25%

YARD TOWER

SPWD Facility Condition Analysis - 2176

Survey Date: 11/1/2016

**YARD TOWER
BUILDING REPORT**

The Yard Tower is in the center of High Desert State Prison. The guard tower is a steel framed structure with insulated steel siding and a metal roof. The building is currently manned and is used to observe the prisoners in the center of the yard.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$13,095**
Currently Critical **Immediate to Two Years**

EXIT SIGN AND EGRESS LIGHTING UPGRADE **Project Index #: 2176SFT4**
Construction Cost \$455

The building does not currently have exit signs and emergency egress lighting is insufficient. This project would provide for the purchase and installation of self-illuminated or LED style exit signs with battery-backed internal systems as well as emergency egress lighting to provide illumination along the egress route. IBC 2012 Chapter 10 was referenced for this project.

FIRE ALARM SYSTEM REPLACEMENT **Project Index #: 2176SFT1**
Construction Cost \$3,640

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION **Project Index #: 2176SFT2**
Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

PRIORITY CLASS 2 PROJECTS **Total Construction Cost for Priority 2 Projects: \$70,110**
Necessary - Not Yet Critical **Two to Four Years**

BACKFLOW PREVENTER REPLACEMENT **Project Index #: 2176PLM2**
Construction Cost \$5,000

There is a backflow preventer for the fire suppression system in the building. It is leaking and should be scheduled for replacement. At the time of the survey the staff indicated they have rebuilt the backflow preventer several times, however it continues to leak. This project would provide for replacing the backflow preventer by a licensed fire suppression contractor.

Project Index #: 2176ENR2
Construction Cost \$500

CONDENSER DUCTING

The condensing unit located on the middle level of the tower is missing the duct from the outside air intake louver to the condensing unit. This may be a cause for the overheating of the unit. This project would provide for replacing this missing duct and associated connections.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2176SEC1
Construction Cost \$30,000

DOORS, LOCKS AND CONTROLS REPLACEMENT

Yard Tower was constructed in 2000. The doors, locks and controls are original to the building and have been problematic due to age. This project would provide for installing new doors, locks and controls. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2176INT2
Construction Cost \$4,095

FLOORING REPLACEMENT

The VCT flooring in the tower is damaged and reaching the end of its useful life. It is recommended that the VCT flooring be replaced. This project would provide for removal and disposal of the VCT and installation of new 12x12 VCT with a 6" base.

Project Index #: 2176HVA1
Construction Cost \$11,375

HVAC EQUIPMENT REPLACEMENT

The HVAC unit was installed in 2000 and is not energy efficient. It has reached the end of its expected and useful life. This project would provide for the installation of a new HVAC unit and cleaning of the existing duct work and grilles. This project includes the removal and the disposal of the existing equipment and all required connections to the utilities.

Project Index #: 2176ENR1
Construction Cost \$12,000

INSULATE BUILDING

The tower walls are structural steel with metal siding. The condenser for the cooling system is located inside on the middle level of the tower. During the summer months, the metal siding radiates heat and causes the cooling unit to trip off due to extreme temperatures. This project would provide for 4" thick foil faced rigid insulation to be installed on the inside of the guard tower to help minimize the heat gain on the interior of the guard tower.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2176ENR3
Construction Cost \$3,640

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

Project Index #: 2176ENV1
Construction Cost \$1,000

PEST CONTROL

There are numerous bird and rodent droppings throughout this building. Due to the potential risk of disease, this project provides for treatment and cleanup of the pigeon and rodent droppings by a licensed pest control business.

Project Index #: 2176PLM1
Construction Cost \$2,500

WATER HEATER REPLACEMENT

There is an on-demand 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.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$30,800

Long-Term Needs

Four to Ten Years

Project Index #: 2176EXT1

Construction Cost \$4,550

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 is power washing, priming, painting the metal panels and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended to paint the building in the next 4-5 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2176INT1

Construction Cost \$4,550

INTERIOR FINISHES

It is recommended to paint the interior walls and ceilings at least once in the next 4-5 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.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2176EXT3

Construction Cost \$2,500

SLIDING GLASS DOOR REPLACEMENT

The sliding glass door 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 sliding glass door assembly with a new door, frame and hardware. Removal and disposal of the existing door is included in this estimate.

Project Index #: 2176EXT2

Construction Cost \$19,200

WINDOW REPLACEMENT

The existing windows in this building are of single pane wire mesh construction. They are not energy efficient. This project would provide for the removal and replacement of the windows with new dual pane security rated windows.

BUILDING INFORMATION:

Gross Area (square feet): 455
Year Constructed: 2000
Exterior Finish 1: 80 # Metal Siding
Exterior Finish 2: 20 # Glass and Steel
Number of Levels (Floors): 2 Basement? No
IBC Occupancy Type 1: 100 # I-3
IBC Occupancy Type 2: #
Construction Type: Steel and Concrete
IBC Construction Type: I-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$13,095	Project Construction Cost per Square Foot	\$250.56
Priority Class 2:	\$70,110	Total Facility Replacement Construction Cost	\$455,000
Priority Class 3:	\$30,800	Facility Replacement Cost per Square Foot	\$1,000
Grand Total:	\$114,005	FCNI:	25%

HOUSING UNIT #5

SPWD Facility Condition Analysis - 2175

Survey Date: 11/1/2016

**HOUSING UNIT #5
BUILDING REPORT**

The Housing Unit #5 is along the southeast secured side of High Desert State Prison. The building is constructed of tilt-up concrete walls, concrete floors at lower and upper levels, a concrete slab-on-grade foundation, prefabricated steel frame trusses, metal decking and has a single-ply membrane roof. The building is used to house inmates at the prison.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$871,092

Currently Critical

Immediate to Two Years

ADA SHOWER UPGRADE

**Project Index #: 2175ADA4
Construction Cost \$75,000**

This project would provide for three ADA compliant stainless steel shower cabinets to be installed to provide shower facilities for the disabled. Included in this estimate is the installation of three stainless steel ADA compliant shower cabinet units complete with accessible plumbing fixtures, seats, etc. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

ADA TABLE UPGRADE

**Project Index #: 2175ADA5
Construction Cost \$3,000**

Per the United States Access Board and ICC ANSI-A117.1-2009, at least 5 percent of the seating spaces shall be, if fixed seating is provided, a loose seat or open space for a wheelchair. This project would provide funding to remove 3 of the fixed seats, which will allow access for wheel chairs.

COMMUNICATIONS SYSTEM UPGRADE

**Project Index #: 2175SEC1
Construction Cost \$222,500**

This building is equipped with a communications system that at the time of the survey was not working properly. The communications system provides paging, phone communications and communication to inmates. The communications system is an integral component of the notification and safety procedures for the inmates and staff. The system is problematic and replacement parts are no longer available. It is recommended that the communications system be upgraded.

DUAL LEVEL DRINKING FOUNTAIN INSTALLATION

**Project Index #: 2175ADA3
Construction Cost \$4,000**

This building contains a water fountain that is not ADA compliant. The 2012 IBC Section 1109.5 states where drinking fountains are provided on an exterior site, on a floor or within a secured area, no fewer than two drinking fountains shall be provided. One shall comply with the requirements for people who use a wheelchair and one shall comply with the requirements for standing persons. This project would provide funding for the purchase and installation of two drinking fountains to meet the ADA requirements.

ELECTRICAL OUTLET & CABLE UPGRADES

**Project Index #: 2175SFT4
Construction Cost \$74,592**

At the time of the survey the building had residential and commercial cover plates over the electrical outlets and coaxial wires. This poses a safety hazard allowing inmates to remove them and use them as weapons. This could be a safety hazard to inmates and guards. This project would provide for the installation of new security grade cover plates throughout the entire housing unit.

Project Index #: 2175HVA3

Construction Cost \$4,000

EVAPORATIVE COOLER REPLACEMENT

There is a guard stationed on the roof to look out onto the yard. They have one overhead swamp cooler to keep them cool in the warmer months. At the time of the survey the swamp cooler was not working. It is severely scaled and has reached the end of its useful and expected life. This project would provide for a new evaporative cooler to be installed including all required connections to utilities. The estimate includes removal and disposal of the old cooler.

Project Index #: 2175HVA1

Construction Cost \$10,000

EXHAUST FAN INSTALLATION

The mechanical room within the housing unit has plumbing fixtures and drains. Due to moisture in this room, the humidity is very high and there is an increase probability for indoor air quality concern. This project would provide for the purchase and installation of a new commercial grade exhaust fan and the assemblies and will include the connections to utilities.

Project Index #: 2175SFT1

Construction Cost \$356,000

FIRE ALARM SYSTEM REPLACEMENT

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

Project Index #: 2175SFT3

Construction Cost \$9,000

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

Project Index #: 2175SFT5

Construction Cost \$10,000

ROOF HATCH REPLACEMENT

The roof hatches are original to the building and have reached the end of their 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 the removal and the disposal of the existing roof hatches and for the purchase and installation of new roof hatches.

Project Index #: 2175SFT2

Construction Cost \$40,000

SPRINKLER HEAD REPLACEMENT

The existing fire suppression sprinkler heads are an older style and are susceptible to damage and misuse by the inmates. Inmates have tied strings to the sprinkler heads and have broken them in the past. This project recommends that all of the fire sprinkler heads in all cells be removed and replaced with a new state of the art tamper-resistant sprinkler heads.

Project Index #: 2175ADA2

Construction Cost \$60,000

TDD INSTALLATION

The Housing Unit is not equipped with a TDD. In order to comply with ADA requirements it is recommended to install a TDD system in the Housing Unit. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

Project Index #: 2175STR1
Construction Cost \$3,000

WALKWAY RAILING

The perimeter roof walkway guardrail is failing. The railing is loose or not attached and is posing a potential safety problem. This project recommends an assessment be performed by a Structural Engineer to determine the cause and provide a design solution. Future projects will be based on the design solution recommendation. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

PRIORITY CLASS 2 PROJECTS **Total Construction Cost for Priority 2 Projects: \$3,238,516**
Necessary - Not Yet Critical **Two to Four Years**

Project Index #: 2175SEC2
Construction Cost \$421,875

CELL DOORS, LOCKS AND CONTROLS REPLACEMENT

The Housing Unit was constructed in 2002. The cell doors, locks and controls are original to the building and have been problematic due to inmate abuse and age. This project would provide for installing new cell doors, locks and controls. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2175PLM2
Construction Cost \$504,000

CELL WATER CONTROL SYSTEMS REPLACEMENT

This building is equipped with cell water control systems that are outdated and should be scheduled for replacement. Problems exist with the current water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. It is recommended to replace the water control systems. This project includes the replacement of the water controllers, piping, valves, access panels and all connections to the existing utilities.

Project Index #: 2175PLM4
Construction Cost \$50,000

COMPUTER WATER CONTROL SYSTEM REPLACEMENT

This building is equipped with a computer water control system that is outdated and should be scheduled for replacement. Problems exist with the current computer water control system. It is increasingly difficult to find software updates and experienced repairmen to service the equipment. This project recommends the installation of a new computer water control system for the building. This system will monitor and control the water for all fixtures throughout the building. New electronic sensors will be installed on each water control system.

Project Index #: 2175SEC3
Construction Cost \$1,438,241

DOOR CONTROLS SYSTEM REPLACEMENT

The control panel/ inmate movement and control system in the housing unit is not working properly. The cell door indicator lights on the control panel are falsely representing the actual status of the cell doors. The officer sometimes cannot tell if the cell door is open or closed. This project would replace the existing secured door control system with a programmable logic controlled system using touch screens for actuation and door status. This project would replace the existing door control system and the outdated wiring. 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 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2175ELE1
Construction Cost \$5,000

ELECTRICAL TRANSFORMER REPLACEMENT

The 50 kVA electrical transformer that provides services to the building was damaged at the time of inspection and does not function properly. This project recommends replacing the electrical transformer.

Project Index #: 2175INT1
Construction Cost \$445,000

INTERIOR FINISHES

This project would provide funding to maintain the interior of the building. Included in the cost is painting the walls and ceilings, sealing the exposed masonry, repairing cracks in the masonry and replacing grout and caulk as needed. An epoxy-based paint should be utilized in wet areas for durability. It is recommended that the interior of the building be painted, sealed and repaired in the next 2-3 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2175INT3
Construction Cost \$1,400

JANITORS CLOSET REPAIRS

The mop sink in the Janitors Closet is mounted adjacent to CMU and is showing signs of water damage. This project would provide 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 #: 2175ENR1
Construction Cost \$356,000

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

Project Index #: 2175PLM3
Construction Cost \$15,000

SHOWER WATER CONTROL SYSTEMS REPLACEMENT

This building is equipped with shower water control systems that are outdated and should be scheduled for replacement. Problems exist with the current shower water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. This project includes the replacement of the shower water controllers, piping, valves, access panels, shower heads and all connections to the existing utilities.

Project Index #: 2175PLM1
Construction Cost \$2,000

WATER HEATER REPLACEMENT

There are two 18 gallon electric water heaters in the building. The average life span of a water heater is eight to ten years. With the passage of time and constant use, these units are showing signs of wear and should be scheduled for replacement in the next 2-3 years. It is recommended that two new electric water heaters be installed. Removal and disposal of the existing equipment is included in this estimate.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$2,080,000

Long-Term Needs

Four to Ten Years

Project Index #: 2175EXT1
Construction Cost \$445,000

EXTERIOR FINISHES

It is important to maintain the finish, weather resistance and appearance of the building. The caulked control joints in the CMU of the exterior surface of this building are uniformly deteriorated and should be removed and the joints re-caulked. The metal doors and window frames should be sanded and painted on a cyclical basis.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2175HVA2
Construction Cost \$667,500

HVAC EQUIPMENT REPLACEMENT

The air handlers, fan coils and related equipment are original to the building, dating back to 2002. The equipment has consistent problems and has reached its expected life span. This project recommends the replacement of all air handlers, fan coils, ventilation equipment and exhaust fans. It is recommended that this project be implemented in the next 4-5 years to avoid possible failure and emergency funding for replacement.

Project Index #: 2175EXT2

Construction Cost \$667,500

ROOF REPLACEMENT

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 2002. It is recommended that this building be re-roofed in the next 4-5 years to be consistent with the roofing program and the end of the warranty period.

Project Index #: 2175INT2

Construction Cost \$300,000

SHOWER UPGRADE

There are twelve shower stalls in the building that are showing signs of failure and should be scheduled for repair or replacement. This project would provide for twelve stainless steel shower cabinets to be installed to provide shower facilities for the housing units. Removal and disposal of the existing materials is included in the estimate.

BUILDING INFORMATION:

Gross Area (square feet): 44,500

Year Constructed: 2002

Exterior Finish 1: 100 # Tilt-Up Concrete

Exterior Finish 2: #

Number of Levels (Floors): 2 Basement? No

IBC Occupancy Type 1: 100 # I-3

IBC Occupancy Type 2: #

Construction Type: Tilt-Up Concrete

IBC Construction Type: II-A

Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$871,092	Project Construction Cost per Square Foot	\$139.09
Priority Class 2:	\$3,238,516	Total Facility Replacement Construction Cost	\$15,575,000
Priority Class 3:	\$2,080,000	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$6,189,608	FCNI:	40%

HOUSING UNIT #6

SPWD Facility Condition Analysis - 2174

Survey Date: 11/1/2016

**HOUSING UNIT #6
BUILDING REPORT**

The Housing Unit #6 is along the southeast secured side of High Desert State Prison. The building is constructed of tilt-up concrete walls, concrete floors at lower and upper levels, a concrete slab-on-grade foundation, prefabricated steel frame trusses, metal decking and has a single-ply membrane roof. The building is used to house inmates at the prison.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$871,092

Currently Critical

Immediate to Two Years

ADA SHOWER UPGRADE

**Project Index #: 2174ADA4
Construction Cost \$75,000**

This project would provide for three ADA compliant stainless steel shower cabinets to be installed to provide shower facilities for the disabled. Included in this estimate is the installation of three stainless steel ADA compliant shower cabinet units complete with accessible plumbing fixtures, seats, etc. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

ADA TABLE UPGRADE

**Project Index #: 2174ADA1
Construction Cost \$3,000**

Per the United States Access Board and ICC ANSI-A117.1-2009, at least 5 percent of the seating spaces shall be, if fixed seating is provided, a loose seat or open space for a wheelchair. This project would provide funding to remove 3 of the fixed seats, which will allow access for wheel chairs.

COMMUNICATIONS SYSTEM UPGRADE

**Project Index #: 2174SEC1
Construction Cost \$222,500**

This building is equipped with a communications system that at the time of the survey was not working properly. The communications system provides paging, phone communications and communication to inmates. The communications system is an integral component of the notification and safety procedures for the inmates and staff. The system is problematic and replacement parts are no longer available. It is recommended that the communications system be upgraded.

DUAL LEVEL DRINKING FOUNTAIN INSTALLATION

**Project Index #: 2174ADA3
Construction Cost \$4,000**

This building contains a water fountain that is not ADA compliant. The 2012 IBC Section 1109.5 states where drinking fountains are provided on an exterior site, on a floor or within a secured area, no fewer than two drinking fountains shall be provided. One shall comply with the requirements for people who use a wheelchair and one shall comply with the requirements for standing persons. This project would provide funding for the purchase and installation of two drinking fountains to meet the ADA requirements.

ELECTRICAL OUTLET & CABLE UPGRADES

**Project Index #: 2174SFT4
Construction Cost \$74,592**

At the time of the survey the building had residential and commercial cover plates over the electrical outlets and coaxial wires. This poses a safety hazard allowing inmates to remove them and use them as weapons. This could be a safety hazard to inmates and guards. This project would provide for the installation of new security grade cover plates throughout the entire housing unit.

Project Index #: 2174HVA3

Construction Cost \$4,000

EVAPORATIVE COOLER REPLACEMENT

There is a guard stationed on the roof to look out onto the yard. They have one overhead swamp cooler to keep them cool in the warmer months. At the time of the survey the swamp cooler was not working. It is severely scaled and has reached the end of its useful and expected life. This project would provide for a new evaporative cooler to be installed including all required connections to utilities. The estimate includes removal and disposal of the old cooler.

Project Index #: 2174HVA1

Construction Cost \$10,000

EXHAUST FAN INSTALLATION

The mechanical room within the housing unit has plumbing fixtures and drains. Due to moisture in this room, the humidity is very high and there is an increase probability for indoor air quality concern. This project would provide for the purchase and installation of a new commercial grade exhaust fan and the assemblies and will include the connections to utilities.

Project Index #: 2174SFT2

Construction Cost \$356,000

FIRE ALARM SYSTEM REPLACEMENT

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

Project Index #: 2174SFT3

Construction Cost \$9,000

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

Project Index #: 2174SFT5

Construction Cost \$10,000

ROOF HATCH REPLACEMENT

The roof hatches are original to the building and have reached the end of their 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 the removal and the disposal of the existing roof hatches and for the purchase and installation of new roof hatches.

Project Index #: 2174SFT1

Construction Cost \$40,000

SPRINKLER HEAD REPLACEMENT

The existing fire suppression sprinkler heads are an older style and are susceptible to damage and misuse by the inmates. Inmates have tied strings to the sprinkler heads and have broken them in the past. This project recommends that all of the fire sprinkler heads in all cells be removed and replaced with a new state of the art tamper-resistant sprinkler heads.

Project Index #: 2174ADA2

Construction Cost \$60,000

TDD INSTALLATION

The Housing Unit is not equipped with a TDD. In order to comply with ADA requirements it is recommended to install a TDD system in the Housing Unit. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

Project Index #: 2174STR1
Construction Cost \$3,000

WALKWAY RAILING

The perimeter roof walkway guardrail is failing. The railing is loose or not attached and is posing a potential safety problem. This project recommends an assessment be performed by a Structural Engineer to determine the cause and provide a design solution. Future projects will be based on the design solution recommendation. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

PRIORITY CLASS 2 PROJECTS **Total Construction Cost for Priority 2 Projects: \$3,683,516**
Necessary - Not Yet Critical **Two to Four Years**

Project Index #: 2174SEC2
Construction Cost \$421,875

CELL DOORS, LOCKS AND CONTROLS REPLACEMENT

The Housing Unit was constructed in 2002. The cell doors, locks and controls are original to the building and have been problematic due to inmate abuse and age. This project would provide for installing new cell doors, locks and controls. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2174PLM2
Construction Cost \$504,000

CELL WATER CONTROL SYSTEMS REPLACEMENT

This building is equipped with cell water control systems that are outdated and should be scheduled for replacement. Problems exist with the current water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. It is recommended to replace the water control systems. This project includes the replacement of the water controllers, piping, valves, access panels and all connections to the existing utilities.

Project Index #: 2174PLM4
Construction Cost \$50,000

COMPUTER WATER CONTROL SYSTEM REPLACEMENT

This building is equipped with a computer water control system that is outdated and should be scheduled for replacement. Problems exist with the current computer water control system. It is increasingly difficult to find software updates and experienced repairmen to service the equipment. This project recommends the installation of a new computer water control system for the building. This system will monitor and control the water for all fixtures throughout the building. New electronic sensors will be installed on each water control system.

Project Index #: 2174SEC3
Construction Cost \$1,438,241

DOOR CONTROLS SYSTEM REPLACEMENT

The control panel/ inmate movement and control system in the housing unit is not working properly. The cell door indicator lights on the control panel are falsely representing the actual status of the cell doors. The officer sometimes cannot tell if the cell door is open or closed. This project would replace the existing secured door control system with a programmable logic controlled system using touch screens for actuation and door status. This project would replace the existing door control system and the outdated wiring. 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 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2174ELE1
Construction Cost \$5,000

ELECTRICAL TRANSFORMER REPLACEMENT

The 50 kVA electrical transformer that provides services to the building was damaged at the time of inspection and does not function properly. This project recommends replacing the electrical transformer.

Project Index #: 2174EXT1
Construction Cost \$445,000

EXTERIOR FINISHES

It is important to maintain the finish, weather resistance and appearance of the building. The caulked control joints in the CMU of the exterior surface of this building are uniformly deteriorated and should be removed and the joints re-caulked. The metal doors and window frames should be sanded and painted on a cyclical basis.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2174INT1
Construction Cost \$445,000

INTERIOR FINISHES

This project would provide funding to maintain the interior of the building. Included in the cost is painting the walls and ceilings, sealing the exposed masonry, repairing cracks in the masonry and replacing grout and caulk as needed. An epoxy-based paint should be utilized in wet areas for durability. It is recommended that the interior of the building be painted, sealed and repaired in the next 2-3 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2174INT3
Construction Cost \$1,400

JANITORS CLOSET REPAIRS

The mop sink in the Janitors Closet is mounted adjacent to CMU and is showing signs of water damage. This project would provide 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 #: 2174ENR1
Construction Cost \$356,000

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

Project Index #: 2174PLM3
Construction Cost \$15,000

SHOWER WATER CONTROL SYSTEMS REPLACEMENT

This building is equipped with shower water control systems that are outdated and should be scheduled for replacement. Problems exist with the current shower water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. This project includes the replacement of the shower water controllers, piping, valves, access panels, shower heads and all connections to the existing utilities.

Project Index #: 2174PLM1
Construction Cost \$2,000

WATER HEATER REPLACEMENT

There are two 18 gallon electric water heaters in the building. The average life span of a water heater is eight to ten years. With the passage of time and constant use, these units are showing signs of wear and should be scheduled for replacement in the next 2-3 years. It is recommended that two new electric water heaters be installed. Removal and disposal of the existing equipment is included in this estimate.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$1,635,000

Long-Term Needs

Four to Ten Years

Project Index #: 2174HVA2
Construction Cost \$667,500

HVAC EQUIPMENT REPLACEMENT

The air handlers, fan coils and related equipment are original to the building, dating back to 2002. The equipment has consistent problems and has reached its expected life span. This project recommends the replacement of all air handlers, fan coils, ventilation equipment and exhaust fans. It is recommended that this project be implemented in the next 4-5 years to avoid possible failure and emergency funding for replacement.

Project Index #: 2174EXT2
Construction Cost \$667,500

ROOF REPLACEMENT

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 2002. It is recommended that this building be re-roofed in the next 4-5 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2174INT2
Construction Cost \$300,000

SHOWER UPGRADE

There are twelve shower stalls in the building that are showing signs of failure and should be scheduled for repair or replacement. This project would provide for twelve stainless steel shower cabinets to be installed to provide shower facilities for the housing units. Removal and disposal of the existing materials is included in the estimate.

BUILDING INFORMATION:

Gross Area (square feet): 44,500
Year Constructed: 2002
Exterior Finish 1: 100 # Tilt-Up Concrete
Exterior Finish 2: #
Number of Levels (Floors): 2 Basement? No
IBC Occupancy Type 1: 100 # I-3
IBC Occupancy Type 2: #
Construction Type: Tilt-Up Concrete & Steel
IBC Construction Type: II-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$871,092	Project Construction Cost per Square Foot	\$139.09
Priority Class 2:	\$3,683,516	Total Facility Replacement Construction Cost	\$15,575,000
Priority Class 3:	\$1,635,000	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$6,189,608	FCNI:	40%

HOUSING UNIT #7

SPWD Facility Condition Analysis - 2173

Survey Date: 11/1/2016

**HOUSING UNIT #7
BUILDING REPORT**

The Housing Unit #7 is along the southeast secured side of High Desert State Prison. The building is constructed of tilt-up concrete walls, concrete floors at lower and upper levels, a concrete slab-on-grade foundation, prefabricated steel frame trusses, metal decking and has a single-ply membrane roof. The building is used to house inmates at the prison.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$871,092

Currently Critical

Immediate to Two Years

ADA SHOWER UPGRADE

**Project Index #: 2173ADA4
Construction Cost \$75,000**

This project would provide for three ADA compliant stainless steel shower cabinets to be installed to provide shower facilities for the disabled. Included in this estimate is the installation of three stainless steel ADA compliant shower cabinet units complete with accessible plumbing fixtures, seats, etc. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

ADA TABLE UPGRADE

**Project Index #: 2173ADA1
Construction Cost \$3,000**

Per the United States Access Board and ICC ANSI-A117.1-2009, at least 5 percent of the seating spaces shall be, if fixed seating is provided, a loose seat or open space for a wheelchair. This project would provide funding to remove 3 of the fixed seats, which will allow access for wheel chairs.

COMMUNICATIONS SYSTEM UPGRADE

**Project Index #: 2173SEC1
Construction Cost \$222,500**

This building is equipped with a communications system that at the time of the survey was not working properly. The communications system provides paging, phone communications and communication to inmates. The communications system is an integral component of the notification and safety procedures for the inmates and staff. The system is problematic and replacement parts are no longer available. It is recommended that the communications system be upgraded.

DUAL LEVEL DRINKING FOUNTAIN INSTALLATION

**Project Index #: 2173ADA3
Construction Cost \$4,000**

This building contains a water fountain that is not ADA compliant. The 2012 IBC Section 1109.5 states where drinking fountains are provided on an exterior site, on a floor or within a secured area, no fewer than two drinking fountains shall be provided. One shall comply with the requirements for people who use a wheelchair and one shall comply with the requirements for standing persons. This project would provide funding for the purchase and installation of two drinking fountains to meet the ADA requirements.

ELECTRICAL OUTLET & CABLE UPGRADES

**Project Index #: 2173SFT4
Construction Cost \$74,592**

At the time of the survey the building had residential and commercial cover plates over the electrical outlets and coaxial wires. This poses a safety hazard allowing inmates to remove them and use them as weapons. This could be a safety hazard to inmates and guards. This project would provide for the installation of new security grade cover plates throughout the entire housing unit.

Project Index #: 2173HVA3

Construction Cost \$4,000

EVAPORATIVE COOLER REPLACEMENT

There is a guard stationed on the roof to look out onto the yard. They have one overhead swamp cooler to keep them cool in the warmer months. At the time of the survey the swamp cooler was not working. It is severely scaled and has reached the end of its useful and expected life. This project would provide for a new evaporative cooler to be installed including all required connections to utilities. The estimate includes removal and disposal of the old cooler.

Project Index #: 2173HVA1

Construction Cost \$10,000

EXHAUST FAN INSTALLATION

The mechanical room within the housing unit has plumbing fixtures and drains. Due to moisture in this room, the humidity is very high and there is an increase probability for indoor air quality concern. This project would provide for the purchase and installation of a new commercial grade exhaust fan and the assemblies and will include the connections to utilities.

Project Index #: 2173SFT2

Construction Cost \$356,000

FIRE ALARM SYSTEM REPLACEMENT

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

Project Index #: 2173SFT3

Construction Cost \$9,000

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

Project Index #: 2173SFT6

Construction Cost \$10,000

ROOF HATCH REPLACEMENT

The roof hatches are original to the building and have reached the end of their 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 the removal and the disposal of the existing roof hatches and for the purchase and installation of new roof hatches.

Project Index #: 2173SFT5

Construction Cost \$40,000

SPRINKLER HEAD REPLACEMENT

The existing fire suppression sprinkler heads are an older style and are susceptible to damage and misuse by the inmates. Inmates have tied strings to the sprinkler heads and have broken them in the past. This project recommends that all of the fire sprinkler heads in all cells be removed and replaced with a new state of the art tamper-resistant sprinkler heads.

Project Index #: 2173ADA2

Construction Cost \$60,000

TDD INSTALLATION

The Housing Unit is not equipped with a TDD. In order to comply with ADA requirements it is recommended to install a TDD system in the Housing Unit. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

Project Index #: 2173STR1
Construction Cost \$3,000

WALKWAY RAILING

The perimeter roof walkway guardrail is failing. The railing is loose or not attached and is posing a potential safety problem. This project recommends an assessment be performed by a Structural Engineer to determine the cause and provide a design solution. Future projects will be based on the design solution recommendation.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$3,683,516

Necessary - Not Yet Critical Two to Four Years

Project Index #: 2173SEC2
Construction Cost \$421,875

CELL DOORS, LOCKS AND CONTROLS REPLACEMENT

The Housing Unit was constructed in 2002. The cell doors, locks and controls are original to the building and have been problematic due to inmate abuse and age. This project would provide for installing new cell doors, locks and controls. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2173PLM2
Construction Cost \$504,000

CELL WATER CONTROL SYSTEMS REPLACEMENT

This building is equipped with cell water control systems that are outdated and should be scheduled for replacement. Problems exist with the current water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. It is recommended to replace the water control systems. This project includes the replacement of the water controllers, piping, valves, access panels and all connections to the existing utilities.

Project Index #: 2173PLM4
Construction Cost \$50,000

COMPUTER WATER CONTROL SYSTEM REPLACEMENT

This building is equipped with a computer water control system that is outdated and should be scheduled for replacement. Problems exist with the current computer water control system. It is increasingly difficult to find software updates and experienced repairmen to service the equipment. This project recommends the installation of a new computer water control system for the building. This system will monitor and control the water for all fixtures throughout the building. New electronic sensors will be installed on each water control system.

Project Index #: 2173SEC3
Construction Cost \$1,438,241

DOOR CONTROLS SYSTEM REPLACEMENT

The control panel/ inmate movement and control system in the housing unit is not working properly. The cell door indicator lights on the control panel are falsely representing the actual status of the cell doors. The officer sometimes cannot tell if the cell door is open or closed. This project would replace the existing secured door control system with a programmable logic controlled system using touch screens for actuation and door status. This project would replace the existing door control system and the outdated wiring. 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 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2173ELE1
Construction Cost \$5,000

ELECTRICAL TRANSFORMER REPLACEMENT

The 50 kVA electrical transformer that provides services to the building was damaged at the time of inspection and does not function properly. This project recommends replacing the electrical transformer.

Project Index #: 2173EXT1
Construction Cost \$445,000

EXTERIOR FINISHES

It is important to maintain the finish, weather resistance and appearance of the building. The caulked control joints in the CMU of the exterior surface of this building are uniformly deteriorated and should be removed and the joints re-caulked. The metal doors and window frames should be sanded and painted on a cyclical basis.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2173INT1
Construction Cost \$445,000

INTERIOR FINISHES

This project would provide funding to maintain the interior of the building. Included in the cost is painting the walls and ceilings, sealing the exposed masonry, repairing cracks in the masonry and replacing grout and caulk as needed. An epoxy-based paint should be utilized in wet areas for durability. It is recommended that the interior of the building be painted, sealed and repaired in the next 2-3 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2173INT3
Construction Cost \$1,400

JANITORS CLOSET REPAIRS

The mop sink in the Janitors Closet is mounted adjacent to CMU and is showing signs of water damage. This project would provide 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 #: 2173ENR1
Construction Cost \$356,000

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

Project Index #: 2173PLM3
Construction Cost \$15,000

SHOWER WATER CONTROL SYSTEMS REPLACEMENT

This building is equipped with shower water control systems that are outdated and should be scheduled for replacement. Problems exist with the current shower water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. This project includes the replacement of the shower water controllers, piping, valves, access panels, shower heads and all connections to the existing utilities.

Project Index #: 2173PLM1
Construction Cost \$2,000

WATER HEATER REPLACEMENT

There are two 18 gallon electric water heaters in the building. The average life span of a water heater is eight to ten years. With the passage of time and constant use, these units are showing signs of wear and should be scheduled for replacement in the next 2-3 years. It is recommended that two new electric water heaters be installed. Removal and disposal of the existing equipment is included in this estimate.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$1,635,000

Long-Term Needs

Four to Ten Years

Project Index #: 2173HVA2
Construction Cost \$667,500

HVAC EQUIPMENT REPLACEMENT

The air handlers, fan coils and related equipment are original to the building, dating back to 2002. The equipment has consistent problems and has reached its expected life span. This project recommends the replacement of all air handlers, fan coils, ventilation equipment and exhaust fans. It is recommended that this project be implemented in the next 4-5 years to avoid possible failure and emergency funding for replacement.

Project Index #: 2173EXT2
Construction Cost \$667,500

ROOF REPLACEMENT

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 2002. It is recommended that this building be re-roofed in the next 4-5 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2173INT2
Construction Cost \$300,000

SHOWER UPGRADE

There are twelve shower stalls in the building that are showing signs of failure and should be scheduled for repair or replacement. This project would provide for twelve stainless steel shower cabinets to be installed to provide shower facilities for the housing units. Removal and disposal of the existing materials is included in the estimate.

BUILDING INFORMATION:

Gross Area (square feet): 44,500
Year Constructed: 2002
Exterior Finish 1: 100 # Tilt-Up Concrete
Exterior Finish 2: #
Number of Levels (Floors): 2 Basement? No
IBC Occupancy Type 1: 100 # I-3
IBC Occupancy Type 2: #
Construction Type: Tilt-Up Concrete & Steel
IBC Construction Type: II-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$871,092	Project Construction Cost per Square Foot	\$139.09
Priority Class 2:	\$3,683,516	Total Facility Replacement Construction Cost	\$15,575,000
Priority Class 3:	\$1,635,000	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$6,189,608	FCNI:	40%

HOUSING UNIT #8

SPWD Facility Condition Analysis - 2172

Survey Date: 11/1/2016

**HOUSING UNIT #8
BUILDING REPORT**

The Housing Unit #8 is along the southeast secured side of High Desert State Prison. The building is constructed of tilt-up concrete walls, concrete floors at lower and upper levels, a concrete slab-on-grade foundation, prefabricated steel frame trusses, metal decking and has a single-ply membrane roof. The building is used to house inmates at the prison.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$871,092

Currently Critical

Immediate to Two Years

ADA SHOWER UPGRADE

**Project Index #: 2172ADA4
Construction Cost \$75,000**

This project would provide for three ADA compliant stainless steel shower cabinets to be installed to provide shower facilities for the disabled. Included in this estimate is the installation of three stainless steel ADA compliant shower cabinet units complete with accessible plumbing fixtures, seats, etc. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

ADA TABLE UPGRADE

**Project Index #: 2172ADA1
Construction Cost \$3,000**

Per the United States Access Board and ICC ANSI-A117.1-2009, at least 5 percent of the seating spaces shall be, if fixed seating is provided, a loose seat or open space for a wheelchair. This project would provide funding to remove 3 of the fixed seats, which will allow access for wheel chairs.

COMMUNICATIONS SYSTEM UPGRADE

**Project Index #: 2172SEC1
Construction Cost \$222,500**

This building is equipped with a communications system that at the time of the survey was not working properly. The communications system provides paging, phone communications and communication to inmates. The communications system is an integral component of the notification and safety procedures for the inmates and staff. The system is problematic and replacement parts are no longer available. It is recommended that the communications system be upgraded.

DUAL LEVEL DRINKING FOUNTAIN INSTALLATION

**Project Index #: 2172ADA3
Construction Cost \$4,000**

This building contains a water fountain that is not ADA compliant. The 2012 IBC Section 1109.5 states where drinking fountains are provided on an exterior site, on a floor or within a secured area, no fewer than two drinking fountains shall be provided. One shall comply with the requirements for people who use a wheelchair and one shall comply with the requirements for standing persons. This project would provide funding for the purchase and installation of two drinking fountains to meet the ADA requirements.

ELECTRICAL OUTLET & CABLE UPGRADES

**Project Index #: 2172SFT5
Construction Cost \$74,592**

At the time of the survey the building had residential and commercial cover plates over the electrical outlets and coaxial wires. This poses a safety hazard allowing inmates to remove them and use them as weapons. This could be a safety hazard to inmates and guards. This project would provide for the installation of new security grade cover plates throughout the entire housing unit.

Project Index #: 2172HVA3

Construction Cost \$4,000

EVAPORATIVE COOLER REPLACEMENT

There is a guard stationed on the roof to look out onto the yard. They have one overhead swamp cooler to keep them cool in the warmer months. At the time of the survey the swamp cooler was not working. It is severely scaled and has reached the end of its useful and expected life. This project would provide for a new evaporative cooler to be installed including all required connections to utilities. The estimate includes removal and disposal of the old cooler.

Project Index #: 2172HVA1

Construction Cost \$10,000

EXHAUST FAN INSTALLATION

The mechanical room within the housing unit has plumbing fixtures and drains. Due to moisture in this room, the humidity is very high and there is an increase probability for indoor air quality concern. This project would provide for the purchase and installation of a new commercial grade exhaust fan and the assemblies and will include the connections to utilities.

Project Index #: 2172SFT4

Construction Cost \$356,000

FIRE ALARM SYSTEM REPLACEMENT

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

Project Index #: 2172SFT3

Construction Cost \$9,000

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

Project Index #: 2172SFT6

Construction Cost \$10,000

ROOF HATCH REPLACEMENT

The roof hatches are original to the building and have reached the end of their 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 the removal and the disposal of the existing roof hatches and for the purchase and installation of new roof hatches.

Project Index #: 2172SFT2

Construction Cost \$40,000

SPRINKLER HEAD REPLACEMENT

The existing fire suppression sprinkler heads are an older style and are susceptible to damage and misuse by the inmates. Inmates have tied strings to the sprinkler heads and have broken them in the past. This project recommends that all of the fire sprinkler heads in all cells be removed and replaced with a new state of the art tamper-resistant sprinkler heads.

Project Index #: 2172ADA2

Construction Cost \$60,000

TDD INSTALLATION

The Housing Unit is not equipped with a TDD. In order to comply with ADA requirements it is recommended to install a TDD system in the Housing Unit. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

Project Index #: 2172STR1
Construction Cost \$3,000

WALKWAY RAILING

The perimeter roof walkway guardrail is failing. The railing is loose or not attached and is posing a potential safety problem. This project recommends an assessment be performed by a Structural Engineer to determine the cause and provide a design solution. Future projects will be based on the design solution recommendation. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

PRIORITY CLASS 2 PROJECTS **Total Construction Cost for Priority 2 Projects: \$2,329,275**
Necessary - Not Yet Critical **Two to Four Years**

Project Index #: 2172SEC2
Construction Cost \$421,875

CELL DOORS, LOCKS AND CONTROLS REPLACEMENT

The Housing Unit was constructed in 2002. The cell doors, locks and controls are original to the building and have been problematic due to inmate abuse and age. This project would provide for installing new cell doors, locks and controls. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2172PLM2
Construction Cost \$588,000

CELL WATER CONTROL SYSTEMS REPLACEMENT

This building is equipped with cell water control systems that are outdated and should be scheduled for replacement. Problems exist with the current water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. It is recommended to replace the water control systems. This project includes the replacement of the water controllers, piping, valves, access panels and all connections to the existing utilities.

Project Index #: 2172PLM4
Construction Cost \$50,000

COMPUTER WATER CONTROL SYSTEM REPLACEMENT

This building is equipped with a computer water control system that is outdated and should be scheduled for replacement. Problems exist with the current computer water control system. It is increasingly difficult to find software updates and experienced repairmen to service the equipment. This project recommends the installation of a new computer water control system for the building. This system will monitor and control the water for all fixtures throughout the building. New electronic sensors will be installed on each water control system.

Project Index #: 2172ELE1
Construction Cost \$5,000

ELECTRICAL TRANSFORMER REPLACEMENT

The 50 kVA electrical transformer that provides services to the building was damaged at the time of inspection and does not function properly. This project recommends replacing the electrical transformer.

Project Index #: 2172EXT1
Construction Cost \$445,000

EXTERIOR FINISHES

It is important to maintain the finish, weather resistance and appearance of the building. The caulked control joints in the CMU of the exterior surface of this building are uniformly deteriorated and should be removed and the joints re-caulked. The metal doors and window frames should be sanded and painted on a cyclical basis. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2172INT1
Construction Cost \$445,000

INTERIOR FINISHES

This project would provide funding to maintain the interior of the building. Included in the cost is painting the walls and ceilings, sealing the exposed masonry, repairing cracks in the masonry and replacing grout and caulk as needed. An epoxy-based paint should be utilized in wet areas for durability. It is recommended that the interior of the building be painted, sealed and repaired in the next 2-3 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

JANITORS CLOSET REPAIRS

**Project Index #: 2172INT3
Construction Cost \$1,400**

The mop sink in the Janitors Closet is mounted adjacent to CMU and is showing signs of water damage. This project would provide 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.

LIGHTING UPGRADE

**Project Index #: 2172ENR1
Construction Cost \$356,000**

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. Any electrical wiring upgrades are not included in this estimate.

SHOWER WATER CONTROL SYSTEMS REPLACEMENT

**Project Index #: 2172PLM3
Construction Cost \$15,000**

This building is equipped with shower water control systems that are outdated and should be scheduled for replacement. Problems exist with the current shower water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. This project includes the replacement of the shower water controllers, piping, valves, access panels, shower heads and all connections to the existing utilities.

WATER HEATER REPLACEMENT

**Project Index #: 2172PLM1
Construction Cost \$2,000**

There are two 18 gallon electric water heaters in the building. The average life span of a water heater is eight to ten years. With the passage of time and constant use, these units are showing signs of wear and should be scheduled for replacement in the next 2-3 years. It is recommended that two new electric water heaters be installed. Removal and disposal of the existing equipment is included in this estimate.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$1,635,000

Long-Term Needs

Four to Ten Years

HVAC EQUIPMENT REPLACEMENT

**Project Index #: 2172HVA2
Construction Cost \$667,500**

The air handlers, fan coils and related equipment are original to the building, dating back to 2002. The equipment has consistent problems and has reached its expected life span. This project recommends the replacement of all air handlers, fan coils, ventilation equipment and exhaust fans. It is recommended that this project be implemented in the next 4-5 years to avoid possible failure and emergency funding for replacement.

ROOF REPLACEMENT

**Project Index #: 2172EXT2
Construction Cost \$667,500**

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 2002. It is recommended that this building be re-roofed in the next 4-5 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

SHOWER UPGRADE

**Project Index #: 2172INT2
Construction Cost \$300,000**

There are twelve shower stalls in the building that are showing signs of failure and should be scheduled for repair or replacement. This project would provide for twelve stainless steel shower cabinets to be installed to provide shower facilities for the housing units. Removal and disposal of the existing materials is included in the estimate.

BUILDING INFORMATION:

Gross Area (square feet): 44,500
Year Constructed: 2002
Exterior Finish 1: 100 # Tilt-Up Concrete
Exterior Finish 2: #
Number of Levels (Floors): 2 Basement? No
IBC Occupancy Type 1: 100 # I-3
IBC Occupancy Type 2: #
Construction Type: Tilt-Up Concrete & Steel
IBC Construction Type: II-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$871,092	Project Construction Cost per Square Foot	\$108.66
Priority Class 2:	\$2,329,275	Total Facility Replacement Construction Cost	\$15,575,000
Priority Class 3:	\$1,635,000	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$4,835,367	FCNI:	31%

TOWER #6

SPWD Facility Condition Analysis - 2104

Survey Date: 11/1/2016

**TOWER #6
BUILDING REPORT**

Tower #6 is located on the southeast side, outside of the secured area at High Desert State Prison. The building is constructed of precast concrete with a concrete slab-on-grade foundation and has a single-ply roofing system. The building is currently unmanned.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$18,640**
Currently Critical **Immediate to Two Years**

BACKFLOW PREVENTER REPLACEMENT **Project Index #: 2104SFT4**
Construction Cost \$5,000

There is a backflow preventer for the fire suppression system in the building. It is leaking and should be scheduled for replacement. At the time of the survey the staff indicated they have rebuilt the backflow preventer several times, however it continues to leak. This project would provide for replacing the backflow preventer by a licensed fire suppression contractor.

EGRESS LIGHTING REPLACEMENT **Project Index #: 2104SFT5**
Construction Cost \$1,000

There are older emergency egress lighting units in this building. These units have a finite lifespan, and this project recommends their replacement with new egress lights, and to also provide additional lights on the main exit routes and in individual rooms as needed.

FIRE ALARM SYSTEM REPLACEMENT **Project Index #: 2104SFT2**
Construction Cost \$3,640

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION **Project Index #: 2104SFT3**
Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

PRIORITY CLASS 2 PROJECTS **Total Construction Cost for Priority 2 Projects: \$54,795**
Necessary - Not Yet Critical **Two to Four Years**

DOORS, LOCKS AND CONTROLS REPLACEMENT **Project Index #: 2104SEC1**
Construction Cost \$30,000

Tower #6 was constructed in 2002. The doors, locks and controls are original to the building and have been problematic due to age. This project would provide for installing new doors, locks and controls. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2104EXT1
Construction Cost \$4,550

EXTERIOR FINISHES

It is important to maintain the finish, weather resistance and appearance of the building. The caulked joints in the concrete panels, form much of the exterior surface of this building, and are uniformly deteriorated. The caulking should be removed and the joints should be re-caulked. The metal doors and window frames should be sanded and painted on a cyclical basis.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2104INT2
Construction Cost \$4,095

FLOORING REPLACEMENT

The VCT flooring in the building is damaged and reaching the end of its useful life. It is recommended that the VCT flooring be replaced. This project would provide for removal and disposal of the VCT and installation of new 12x12 VCT with a 6" base.

Project Index #: 2104INT1
Construction Cost \$4,550

INTERIOR FINISHES

It is recommended to paint the interior walls and ceilings 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 adequately prepared to receive the coating. An epoxy-based paint should be utilized in wet areas for durability.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2104ENR1
Construction Cost \$3,640

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

Project Index #: 2104EXT3
Construction Cost \$5,460

ROOF REPLACEMENT

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 2002. 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 #: 2104PLM1
Construction Cost \$2,500

WATER HEATER REPLACEMENT

There is an on-demand 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.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$44,975

Long-Term Needs

Four to Ten Years

Project Index #: 2104HVA1
Construction Cost \$11,375

HVAC EQUIPMENT REPLACEMENT

The HVAC unit was installed in 2002 and is not energy efficient. It has reached the end of its expected and useful life. This project would provide for the installation of a new HVAC unit and cleaning of the existing duct work and grilles. This project includes the removal and the disposal of the existing equipment and all required connections to the utilities.

Project Index #: 2104EXT2

Construction Cost \$33,600

WINDOW REPLACEMENT

The existing windows in this building are of single pane wire mesh construction. They are not energy efficient. This project would provide for the removal and replacement of the windows with new dual pane security rated windows.

BUILDING INFORMATION:

Gross Area (square feet): 455
Year Constructed: 2002
Exterior Finish 1: 80 # Precast Concrete
Exterior Finish 2: 20 # Glass and Aluminum
Number of Levels (Floors): 2 Basement? No
IBC Occupancy Type 1: 100 # I-3
IBC Occupancy Type 2: #
Construction Type: Precast Concrete & Steel
IBC Construction Type: II-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$18,640	Project Construction Cost per Square Foot	\$260.24
Priority Class 2:	\$54,795	Total Facility Replacement Construction Cost	\$455,000
Priority Class 3:	\$44,975	Facility Replacement Cost per Square Foot	\$1,000
Grand Total:	\$118,410	FCNI:	26%

TOWER #5

SPWD Facility Condition Analysis - 2103

Survey Date: 11/1/2016

**TOWER #5
BUILDING REPORT**

Tower #5 is located along the east fence line, outside of the secured area at High Desert State Prison. The building is constructed of precast concrete with a concrete slab-on-grade foundation and has a single-ply roofing system.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$18,640**
Currently Critical **Immediate to Two Years**

BACKFLOW PREVENTER REPLACEMENT **Project Index #: 2103SFT4**
Construction Cost \$5,000

There is a backflow preventer for the fire suppression system in the building. It is leaking and should be scheduled for replacement. At the time of the survey the staff indicated they have rebuilt the backflow preventer several times, however it continues to leak. This project would provide for replacing the backflow preventer by a licensed fire suppression contractor.

EGRESS LIGHTING REPLACEMENT **Project Index #: 2103SFT5**
Construction Cost \$1,000

There are older emergency egress lighting units in this building. These units have a finite lifespan, and this project recommends their replacement with new egress lights, and to also provide additional lights on the main exit routes and in individual rooms as needed.

FIRE ALARM SYSTEM REPLACEMENT **Project Index #: 2103SFT2**
Construction Cost \$3,640

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION **Project Index #: 2103SFT3**
Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

PRIORITY CLASS 2 PROJECTS **Total Construction Cost for Priority 2 Projects: \$55,795**
Necessary - Not Yet Critical **Two to Four Years**

DOORS, LOCKS AND CONTROLS REPLACEMENT **Project Index #: 2103SEC1**
Construction Cost \$30,000

Tower #5 was constructed in 2002. The doors, locks and controls are original to the building and have been problematic due to age. This project would provide for installing new doors, locks and controls. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2103EXT1
Construction Cost \$4,550

EXTERIOR FINISHES

It is important to maintain the finish, weather resistance and appearance of the building. The caulked joints in the concrete panels, form much of the exterior surface of this building, and are uniformly deteriorated. The caulking should be removed and the joints should be re-caulked. The metal doors and window frames should be sanded and painted on a cyclical basis.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2103INT2
Construction Cost \$4,095

FLOORING REPLACEMENT

The VCT flooring in the building is damaged and reaching the end of its useful life. It is recommended that the VCT flooring be replaced. This project would provide for removal and disposal of the VCT and installation of new 12x12 VCT with a 6" base.

Project Index #: 2103INT1
Construction Cost \$4,550

INTERIOR FINISHES

It is recommended to paint the interior walls and ceilings 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 adequately prepared to receive the coating. An epoxy-based paint should be utilized in wet areas for durability.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2103ENR1
Construction Cost \$3,640

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

Project Index #: 2103ENV1
Construction Cost \$1,000

PEST CONTROL

There are numerous bird and rodent droppings throughout this building. Due to the potential risk of disease, this project provides for treatment and cleanup of the pigeon and rodent droppings by a licensed pest control business.

Project Index #: 2103EXT3
Construction Cost \$5,460

ROOF REPLACEMENT

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 2002. 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 #: 2103PLM1
Construction Cost \$2,500

WATER HEATER REPLACEMENT

There is an on-demand 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.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$44,975

Long-Term Needs

Four to Ten Years

HVAC EQUIPMENT REPLACEMENT

Project Index #: 2103HVA1

Construction Cost \$11,375

The HVAC unit was installed in 2002 and is not energy efficient. It has reached the end of its expected and useful life. This project would provide for the installation of a new HVAC unit and cleaning of the existing duct work and grilles. This project includes the removal and the disposal of the existing equipment and all required connections to the utilities.

WINDOW REPLACEMENT

Project Index #: 2103EXT2

Construction Cost \$33,600

The existing windows in this building are of single pane wire mesh construction. They are not energy efficient. This project would provide for the removal and replacement of the windows with new dual pane security rated windows.

BUILDING INFORMATION:

Gross Area (square feet): 455

Year Constructed: 2002

Exterior Finish 1: 80 # Precast Concrete

Exterior Finish 2: 20 # Glass and Aluminum

Number of Levels (Floors): 2 Basement? No

IBC Occupancy Type 1: 100 # I-3

IBC Occupancy Type 2: #

Construction Type: Precast Concrete & Steel

IBC Construction Type: II-A

Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$18,640	Project Construction Cost per Square Foot	\$262.44
Priority Class 2:	\$55,795	Total Facility Replacement Construction Cost	\$455,000
Priority Class 3:	\$44,975	Facility Replacement Cost per Square Foot	\$1,000
Grand Total:	\$119,410	FCNI:	26%

TOWER #3

SPWD Facility Condition Analysis - 2102

Survey Date: 11/1/2016

**TOWER #3
BUILDING REPORT**

Tower #3 is in the northwest corner of High Desert State Prison. The guard tower is a steel framed structure on a concrete slab-on-grade foundation with steel siding and a metal roof. The building is currently manned and is used to observe the prisoners in the yard.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$18,640**
Currently Critical **Immediate to Two Years**

BACKFLOW PREVENTER REPLACEMENT **Project Index #: 2102SFT3**
Construction Cost \$5,000

There is a backflow preventer for the fire suppression system in the building. It is leaking and should be scheduled for replacement. At the time of the survey the staff indicated they have rebuilt the backflow preventer several times, however it continues to leak. This project would provide for replacing the backflow preventer by a licensed fire suppression contractor.

EGRESS LIGHTING REPLACEMENT **Project Index #: 2102SFT4**
Construction Cost \$1,000

There are older emergency egress lighting units in this building. These units have a finite lifespan, and this project recommends their replacement with new egress lights, and to also provide additional lights on the main exit routes and in individual rooms as needed.

FIRE ALARM SYSTEM REPLACEMENT **Project Index #: 2102SFT1**
Construction Cost \$3,640

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION **Project Index #: 2102SFT2**
Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$61,710

Necessary - Not Yet Critical Two to Four Years

Project Index #: 2102ENR2

Construction Cost \$1,000

CONDENSER DUCTING

The condensing unit located in the middle level of the tower is missing the duct from the outside air intake louver to the condensing unit. This may be a cause for the overheating of the unit. This project would provide for replacing this missing duct and associated connections.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2102SEC1

Construction Cost \$30,000

DOORS, LOCKS AND CONTROLS REPLACEMENT

Tower #3 was constructed in 2000. The doors, locks and controls are original to the building and have been problematic due to age. This project would provide for installing new doors, locks and controls. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2102EXT1

Construction Cost \$4,550

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 is power washing, priming, painting the metal panels and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended to paint the building in the next 2-3 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2102INT2

Construction Cost \$4,095

FLOORING REPLACEMENT

The VCT flooring in the tower is damaged and reaching the end of its useful life. It is recommended that the VCT flooring be replaced. This project would provide for removal and disposal of the VCT and installation of new 12x12 VCT with a 6" base.

Project Index #: 2102HVA1

Construction Cost \$11,375

HVAC EQUIPMENT REPLACEMENT

The HVAC unit was installed in 2000 and is not energy efficient. It has reached the end of its expected and useful life. This project would provide for the installation of a new HVAC unit and cleaning of the existing duct work and grilles. This project includes the removal and the disposal of the existing equipment and all required connections to the utilities.

Project Index #: 2102INT1

Construction Cost \$4,550

INTERIOR FINISHES

It is recommended to paint the interior walls and ceilings 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.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2102ENR3

Construction Cost \$3,640

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

Project Index #: 2102PLM1
Construction Cost \$2,500

WATER HEATER REPLACEMENT

There is an on-demand 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.

PRIORITY CLASS 3 PROJECTS **Total Construction Cost for Priority 3 Projects: \$21,700**
Long-Term Needs **Four to Ten Years**

Project Index #: 2102EXT3
Construction Cost \$2,500

SLIDING GLASS DOOR REPLACEMENT

The sliding glass door 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 sliding glass door assembly with a new door, frame and hardware. Removal and disposal of the existing door is included in this estimate.

Project Index #: 2102EXT2
Construction Cost \$19,200

WINDOW REPLACEMENT

The existing windows in this building are of single pane wire mesh construction. They are not energy efficient. This project would provide for the removal and replacement of the windows with new dual pane security rated windows.

BUILDING INFORMATION:

Gross Area (square feet): 455
Year Constructed: 2000
Exterior Finish 1: 80 # Metal Siding
Exterior Finish 2: 20 # Glass and Aluminum
Number of Levels (Floors): 2 **Basement? No**
IBC Occupancy Type 1: 100 # I-3
IBC Occupancy Type 2: #
Construction Type: Steel
IBC Construction Type: II-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$18,640	Project Construction Cost per Square Foot	\$224.29
Priority Class 2:	\$61,710	Total Facility Replacement Construction Cost	\$455,000
Priority Class 3:	\$21,700	Facility Replacement Cost per Square Foot	\$1,000
Grand Total:	\$102,050	FCNI:	22%

TOWER #2

SPWD Facility Condition Analysis - 2101

Survey Date: 11/1/2016

**TOWER #2
BUILDING REPORT**

Tower #2 is located on the west (center) perimeter of High Desert State Prison. The guard tower is a steel framed structure on a concrete slab-on-grade foundation with uninsulated steel siding and a metal roof. The building is currently manned and is used to observe the prisoners in the yard.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$18,640**
Currently Critical **Immediate to Two Years**

BACKFLOW PREVENTER REPLACEMENT **Project Index #: 2101SFT3**
Construction Cost \$5,000

There is a backflow preventer for the fire suppression system in the building. It is leaking and should be scheduled for replacement. At the time of the survey the staff indicated they have rebuilt the backflow preventer several times, however it continues to leak. This project would provide for replacing the backflow preventer by a licensed fire suppression contractor.

EGRESS LIGHTING REPLACEMENT **Project Index #: 2101SFT4**
Construction Cost \$1,000

There are older emergency egress lighting units in this building. These units have a finite lifespan, and this project recommends their replacement with new egress lights, and to also provide additional lights on the main exit routes and in individual rooms as needed.

FIRE ALARM SYSTEM REPLACEMENT **Project Index #: 2101SFT1**
Construction Cost \$3,640

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION **Project Index #: 2101SFT2**
Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$61,710

Necessary - Not Yet Critical Two to Four Years

**Project Index #: 2101ENR2
Construction Cost \$1,000**

CONDENSER DUCTING

The condensing unit located in the middle level of the tower is missing the duct from the outside air intake louver to the condensing unit. This may be a cause for the overheating of the unit. This project would provide for replacing this missing duct and associated connections.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

**Project Index #: 2101SEC1
Construction Cost \$30,000**

DOORS, LOCKS AND CONTROLS REPLACEMENT

Tower #2 was constructed in 2000. The doors, locks and controls are original to the building and have been problematic due to age. This project would provide for installing new doors, locks and controls. Removal and disposal of the existing equipment is included in this estimate.

**Project Index #: 2101EXT1
Construction Cost \$4,550**

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 is power washing, priming, painting the metal panels and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended to paint the building in the next 2-3 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

**Project Index #: 2101INT2
Construction Cost \$4,095**

FLOORING REPLACEMENT

The VCT flooring in the tower is damaged and reaching the end of its useful life. It is recommended that the VCT flooring be replaced. This project would provide for removal and disposal of the VCT and installation of new 12x12 VCT with a 6" base.

**Project Index #: 2101HVA1
Construction Cost \$11,375**

HVAC EQUIPMENT REPLACEMENT

The HVAC unit was installed in 2000 and is not energy efficient. It has reached the end of its expected and useful life. This project would provide for the installation of a new HVAC unit and cleaning of the existing duct work and grilles. This project includes the removal and the disposal of the existing equipment and all required connections to the utilities.

**Project Index #: 2101INT1
Construction Cost \$4,550**

INTERIOR FINISHES

It is recommended to paint the interior walls and ceilings 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.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

**Project Index #: 2101ENR3
Construction Cost \$3,640**

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

Project Index #: 2101PLM1

Construction Cost \$2,500

WATER HEATER REPLACEMENT

There is an on-demand 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.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$21,700

Long-Term Needs

Four to Ten Years

Project Index #: 2101EXT3

Construction Cost \$2,500

SLIDING GLASS DOOR REPLACEMENT

The sliding glass door 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 sliding glass door assembly with a new door, frame and hardware. Removal and disposal of the existing door is included in this estimate.

Project Index #: 2101EXT2

Construction Cost \$19,200

WINDOW REPLACEMENT

The existing windows in this building are of single pane wire mesh construction. They are not energy efficient. This project would provide for the removal and replacement of the windows with new dual pane security rated windows.

BUILDING INFORMATION:

Gross Area (square feet): 455

Year Constructed: 2000

Exterior Finish 1: 80 # Metal Siding

Exterior Finish 2: 20 # Glass and Aluminum

Number of Levels (Floors): 2 Basement? No

IBC Occupancy Type 1: 100 # I-3

IBC Occupancy Type 2: #

Construction Type: Steel

IBC Construction Type: II-A

Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$18,640	Project Construction Cost per Square Foot	\$224.29
Priority Class 2:	\$61,710	Total Facility Replacement Construction Cost	\$455,000
Priority Class 3:	\$21,700	Facility Replacement Cost per Square Foot	\$1,000
Grand Total:	\$102,050	FCNI:	22%

TOWER #1

SPWD Facility Condition Analysis - 2100

Survey Date: 11/1/2016

**TOWER #1
BUILDING REPORT**

Tower #1 is located in the southwest corner of High Desert State Prison. The guard tower is a steel framed structure on a concrete slab-on-grade foundation with steel siding and a metal roof. The building is currently manned and observes the prisoners in the yard.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$18,640**
Currently Critical **Immediate to Two Years**

BACKFLOW PREVENTER REPLACEMENT **Project Index #: 2100SFT3**
Construction Cost \$5,000

There is a backflow preventer for the fire suppression system in the building. It is leaking and should be scheduled for replacement. At the time of the survey the staff indicated they have rebuilt the backflow preventer several times, however it continues to leak. This project would provide for replacing the backflow preventer by a licensed fire suppression contractor.

EGRESS LIGHTING REPLACEMENT **Project Index #: 2100SFT4**
Construction Cost \$1,000

The building does not currently have exit signs and emergency egress lighting is insufficient. This project would provide for the purchase and installation of self-illuminated or LED style exit signs with battery-backed internal systems as well as emergency egress lighting to provide illumination along the egress route. IBC 2012 Chapter 10 was referenced for this project.

FIRE ALARM SYSTEM REPLACEMENT **Project Index #: 2100SFT1**
Construction Cost \$3,640

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION **Project Index #: 2100SFT2**
Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$61,710

Necessary - Not Yet Critical Two to Four Years

**Project Index #: 2100ENR2
Construction Cost \$1,000**

CONDENSER DUCTING

The condensing unit located in the middle level of the tower is missing the duct from the outside air intake louver to the condensing unit. This may be a cause for the overheating of the unit. This project would provide for replacing this missing duct and associated connections.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

**Project Index #: 2100SFT5
Construction Cost \$30,000**

DOORS, LOCKS AND CONTROLS REPLACEMENT

Tower #1 was constructed in 2000. The doors, locks and controls are original to the building and have been problematic due to age. This project would provide for installing new doors, locks and controls. Removal and disposal of the existing equipment is included in this estimate.

**Project Index #: 2100EXT0
Construction Cost \$4,550**

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 is power washing, priming, painting the metal panels and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended to paint the building in the next 2-3 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

**Project Index #: 2100INT2
Construction Cost \$4,095**

FLOORING REPLACEMENT

The VCT flooring in the tower is damaged and reaching the end of its useful life. It is recommended that the VCT flooring be replaced. This project would provide for removal and disposal of the VCT and installation of new 12x12 VCT with a 6" base.

**Project Index #: 2100HVA1
Construction Cost \$11,375**

HVAC EQUIPMENT REPLACEMENT

The HVAC unit was installed in 2000 and is not energy efficient. It has reached the end of its expected and useful life. This project would provide for the installation of a new HVAC unit and cleaning of the existing duct work and grilles. This project includes the removal and the disposal of the existing equipment and all required connections to the utilities.

**Project Index #: 2100INT1
Construction Cost \$4,550**

INTERIOR FINISHES

It is recommended to paint the interior walls and ceilings 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.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

**Project Index #: 2100ENR3
Construction Cost \$3,640**

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate

Project Index #: 2100PLM1
Construction Cost \$2,500

WATER HEATER REPLACEMENT

There is an on-demand 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.

PRIORITY CLASS 3 PROJECTS **Total Construction Cost for Priority 3 Projects: \$21,700**
Long-Term Needs **Four to Ten Years**

Project Index #: 2100EXT1
Construction Cost \$2,500

SLIDING GLASS DOOR REPLACEMENT

The sliding glass door 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 sliding glass door assembly with a new door, frame and hardware. Removal and disposal of the existing door is included in this estimate.

Project Index #: 2100EXT2
Construction Cost \$19,200

WINDOW REPLACEMENT

The existing windows in this building are of single pane wire mesh construction. They are not energy efficient. This project would provide for the removal and replacement of the windows with new dual pane security rated windows.

BUILDING INFORMATION:

Gross Area (square feet): 455
Year Constructed: 2000
Exterior Finish 1: 80 # Metal Siding
Exterior Finish 2: 20 # Glass and Aluminum
Number of Levels (Floors): 2 **Basement? No**
IBC Occupancy Type 1: 100 # I-3
IBC Occupancy Type 2: #
Construction Type: Steel
IBC Construction Type: II-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$18,640	Project Construction Cost per Square Foot	\$224.29
Priority Class 2:	\$61,710	Total Facility Replacement Construction Cost	\$455,000
Priority Class 3:	\$21,700	Facility Replacement Cost per Square Foot	\$1,000
Grand Total:	\$102,050	FCNI:	22%

SECURITY/ ADMINISTRATION

SPWD Facility Condition Analysis - 2099

Survey Date: 11/1/2016

SECURITY/ ADMINISTRATION
BUILDING REPORT

The Security/ Administration building is located on the south side, outside of the secured area at High Desert State Prison. The building is constructed of concrete masonry units on a concrete slab-on-grade foundation with prefabricated steel trusses, metal decking and has a single-ply membrane roof. The building contains all of the security administration services as well as isolation cells for inmates. The main control room is located in the upper level of the building.

PRIORITY CLASS 1 PROJECTS Total Construction Cost for Priority 1 Projects: \$114,928
Currently Critical Immediate to Two Years

FIRE ALARM SYSTEM REPLACEMENT

Project Index #: 2099SFT2
Construction Cost \$105,928

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

Project Index #: 2099SFT3
Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

PRIORITY CLASS 2 PROJECTS Total Construction Cost for Priority 2 Projects: \$1,654,905
Necessary - Not Yet Critical Two to Four Years

CELL DOORS, LOCKS AND CONTROLS REPLACEMENT

Project Index #: 2099SEC2
Construction Cost \$125,790

Security/ Administration was constructed in 2000. The cell doors, locks and controls are original to the building and have been problematic due to inmate abuse and age. This project would provide for installing new cell doors, locks and controls. A total square footage of 13,241 was used for this estimate. Removal and disposal of the existing equipment is included in this estimate.

DOORS CONTROL SYSTEM REPLACEMENT

Project Index #: 2099SEC1
Construction Cost \$423,712

The control panel/ inmate movement and control system in the Security/ Administration is not working properly. The cell door indicator lights on the control panel are falsely representing the actual status of the cell doors. The officer sometimes cannot tell if the cell door is open or closed. This project would replace the existing secured door control system with a programmable logic controlled system using touch screens for actuation and door status. This project would replace the existing door control system and the outdated wiring. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2099ELE2
Construction Cost \$331,025

ELECTRICAL AND COMMUNICATIONS UPGRADE

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

Project Index #: 2099ELE1
Construction Cost \$5,000

ELECTRICAL TRANSFORMER REPLACEMENT

The 45 kVA electrical transformer that provides services to the building was damaged at the time of inspection and does not function properly. This project recommends replacing the electrical transformer.

Project Index #: 2099EXT1
Construction Cost \$132,410

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 concrete masonry units and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be 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.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2099HVA1
Construction Cost \$198,615

HVAC EQUIPMENT REPLACEMENT

The air handlers, fan coils and related equipment are original to the building, dating back to 2000. The equipment has consistent problems and has reached its expected life span. This project recommends replacement of the air handlers, fan coils, ventilation equipment and exhaust fans. It is recommended that this project be implemented in the next 2-3 years to avoid possible failure and emergency funding for replacement.

Project Index #: 2099INT1
Construction Cost \$132,410

INTERIOR FINISHES

It is recommended to paint the interior walls and ceilings 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.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2099INT2
Construction Cost \$1,400

JANITORS CLOSET REPAIRS

The mop sink in the Janitors Closet is mounted adjacent to CMU and is showing signs of water damage. This project would provide 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 #: 2099ENR1
Construction Cost \$105,928

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

Project Index #: 2099LGT1
Construction Cost \$198,615

ROOF REPLACEMENT

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 2000. 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.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$1,500

Long-Term Needs

Four to Ten Years

Project Index #: 2099PLM1
Construction Cost \$1,500

WATER HEATER REPLACEMENT

There is a 50 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 4-5 years. It is recommended that a new electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

BUILDING INFORMATION:

Gross Area (square feet): 13,241
Year Constructed: 2000
Exterior Finish 1: 80 # Natural Grey CMU
Exterior Finish 2: 20 # Glass and Steel
Number of Levels (Floors): 2 Basement? No
IBC Occupancy Type 1: 100 # B
IBC Occupancy Type 2: #
Construction Type: Concrete Masonry & Steel
IBC Construction Type: II-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$114,928	Project Construction Cost per Square Foot	\$133.78
Priority Class 2:	\$1,654,905	Total Facility Replacement Construction Cost	\$4,634,000
Priority Class 3:	\$1,500	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$1,771,333	FCNI:	38%

ARMORY/ EMERGENCY RESPONSE

SPWD Facility Condition Analysis - 2098

Survey Date: 11/1/2016

**ARMORY/ EMERGENCY RESPONSE
BUILDING REPORT**

The Armory/ Emergency Response building is located on the southeast side, outside of the secured area at High Desert State Prison. The building is constructed of concrete masonry units, a concrete slab-on-grade foundation, prefabricated steel frame trusses, and a single-ply membrane roof. The building is no longer used for canine activities and housing. The building is now being used for mail services in this area. The Armory is still housed in the east end of this building.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$127,840**
Currently Critical **Immediate to Two Years**

BACKFLOW PREVENTER REPLACEMENT

Project Index #: 2098SFT3
Construction Cost \$5,000

There is a backflow preventer for the fire suppression system in the building. It is leaking and should be scheduled for replacement. At the time of the survey the staff indicated they have rebuilt the backflow preventer several times, however it continues to leak. This project would provide for replacing the backflow preventer by a licensed fire suppression contractor.

BREAK ROOM REMODEL

Project Index #: 2098ADA1
Construction Cost \$15,000

The kitchenette and associated cabinets in the employee break room are original to the building. The quality of construction and installation were inadequate for the high usage at this facility, and the cabinets and countertops are delaminating and failing. This project recommends the replacement of the existing kitchen countertops, cabinets, and associated equipment with heavy duty, quality components. The cabinets should be finished inside and outside with a melamine or similar finish which encapsulates the door, frame, and shelving. The countertops should be constructed of a highly durable product, such as stainless steel, over a moisture resistant underlayment to minimize swelling and damage from water exposure. ADA compliance according to NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the ADA Standards for Accessible Design should be incorporated into the design such as providing an accessible sink. This estimate includes removal and disposal of the existing materials.

FIRE ALARM SYSTEM REPLACEMENT

Project Index #: 2098SFT2
Construction Cost \$27,240

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

Project Index #: 2098SFT4
Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

Project Index #: 2098HVA1
Construction Cost \$46,600

HVAC EQUIPMENT REPLACEMENT

The air handlers, fan coils and related HVAC equipment are original to the building, dating back to 2000. At the time of the survey the HVAC equipment was not working and the staff had indicated that it was very problematic and they had abandon the system and installed a mini split for the office location within the building. The equipment has reached its expected life span. This project recommends replacement of all the air handlers, fan coils, ventilation and related HVAC equipment and exhaust fans. It is recommended that this project be implemented in the next year.

Project Index #: 2098PLM2
Construction Cost \$25,000

WATER TREATMENT SYSTEM REPLACEMENT

The existing water softening/ treatment systems in the building are currently not operational. They are original to the building and approaching the end of their lifecycles. Failure of the equipment causes wear and tear on the domestic water supply lines, plumbing fixtures and HVAC equipment. This project would provide for the replacement of the existing water softeners/ treatment systems with new equipment. This project would also provide for a chemical treatment program including an updated chemicals control system, service and employee training provided by a qualifiec water treatment vendor. The annual maintenance fee charged by the water treatment vendor would be determined after an investigation of the water system is complete. These annual costs are not included in this project cost. For budgeting purposes, a \$12,000 maintenance fee is suggested.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$209,300

Necessary - Not Yet Critical Two to Four Years

Project Index #: 2098ELE2
Construction Cost \$85,125

ELECTRICAL AND COMMUNICATIONS UPGRADE

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

Project Index #: 2098ELE1
Construction Cost \$5,000

ELECTRICAL TRANSFORMER REPLACEMENT

The 30 kVA electrical transformer that provides services to the building was damaged at the time of inspection and does not function properly. This project recommends replacing the electrical transformer.

Project Index #: 2098EXT2
Construction Cost \$34,050

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 concrete masonry units and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be 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.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2098INT1
Construction Cost \$34,050

INTERIOR FINISHES

It is recommended that the interior walls and floors be painted or sealed at least once in the next 2-3 years. Prior to painting or sealing, all surfaces should be repaired and prepped. An epoxy-based paint should be utilized in wet areas for durability.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2098EXT3

Construction Cost \$51,075

ROOF REPLACEMENT

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 2000. 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.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$1,500

Long-Term Needs

Four to Ten Years

Project Index #: 2098PLM1

Construction Cost \$1,500

WATER HEATER REPLACEMENT

There is a 50 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 4-5 years. It is recommended that a new electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

BUILDING INFORMATION:

Gross Area (square feet): 3,405

Year Constructed: 2000

Exterior Finish 1: 100 # Natural Grey CMU

Exterior Finish 2: #

Number of Levels (Floors): 1 Basement? No

IBC Occupancy Type 1: 100 # B

IBC Occupancy Type 2: #

Construction Type: Concrete Masonry & Steel

IBC Construction Type: II-A

Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$127,840	Project Construction Cost per Square Foot	\$99.45
Priority Class 2:	\$209,300	Total Facility Replacement Construction Cost	\$1,022,000
Priority Class 3:	\$1,500	Facility Replacement Cost per Square Foot	\$300
Grand Total:	\$338,640	FCNI:	33%

MAINTENANCE/ CENTRAL PLANT

SPWD Facility Condition Analysis - 2097

Survey Date: 11/1/2016

**MAINTENANCE/ CENTRAL PLANT
BUILDING REPORT**

The Maintenance/ Central Plant building is located on the north side of the site, outside of the secured area at High Desert State Prison. The building is constructed of concrete masonry units, a slab-on-grade concrete foundation, prefabricated steel frame trusses and a single-ply membrane roof. The building contains most of the mechanical equipment required to run the entire prison including the boilers, cooling towers, emergency generators, equipment storage, and offices for maintenance personnel.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$1,006,983**
Currently Critical **Immediate to Two Years**

ELECTRICAL AND COMMUNICATIONS UPGRADE **Project Index #: 2097ELE2**
Construction Cost \$753,775

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

FIRE ALARM SYSTEM REPLACEMENT **Project Index #: 2097SFT4**
Construction Cost \$241,208

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION **Project Index #: 2097SFT1**
Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

PANIC HARDWARE IN ELECTRICAL ROOMS **Project Index #: 2097SFT2**
Construction Cost \$3,000

The electrical room with the uninterruptable power supply contains equipment that meets or exceeds 1,200 amps. It is recommended per the 2012 IBC 1008.1.10 that panic and fire exit hardware be installed. This equipment was not required when the building was constructed in 2000. When a remodel occurs, it is suggested to comply with current code. It is recommended that this project be completed within the next year. The estimate is based on one door that requires panic hardware.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$2,404,393

Necessary - Not Yet Critical Two to Four Years

**Project Index #: 2097HVA2
Construction Cost \$670,000**

BOILER BURNER REPLACEMENT

The burners on the boilers were not working correctly at the time of the survey. This project recommends replacing all 6 boiler burners with energy-efficient boiler burners. This project would provide for the labor and materials to install 6 new boiler burners.

**Project Index #: 2097ENR2
Construction Cost \$30,000**

ENERGY MANAGEMENT SYSTEM INSTALLATION

The Snider energy management system is original to the building and should be scheduled for replacement. Replacement parts for performing routine and emergency maintenance are not made any more. The system has had numerous failures and the staff no longer has some monitoring capabilities. In a facility of this type, it is imperative that the conditioned spaces are properly controlled at all times. This project would provide for the removal and disposal of the existing energy management system and replacement with new equipment including all required connections to utilities and equipment.

**Project Index #: 2097PLM1
Construction Cost \$350,000**

EXPANSION TANKS

The expansion tanks in the Central Plant Boiler Room are undersized for the system which has ruptured the bladders and blown out pump seals. They were not operational at the time of survey. The system was designed to have an acceptance volume/gallon of 3,964. The existing tanks are Wassels model number NLA7500 which has an acceptance volume/gallon number 1980. This project would provide for two expansion tanks, Wassels model number NLA-15000. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

**Project Index #: 2097EXT0
Construction Cost \$301,510**

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 concrete masonry units and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be 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. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

**Project Index #: 2097INT3
Construction Cost \$301,510**

INTERIOR FINISHES

It is recommended to paint the interior walls and ceilings 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. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

**Project Index #: 2097INT2
Construction Cost \$1,400**

JANITORS CLOSET REPAIRS

The mop sink in the Janitors Closet is mounted adjacent to CMU and is showing signs of water damage. This project would provide 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 #: 2097ENR1
Construction Cost \$241,208

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

Project Index #: 2097EXT2
Construction Cost \$452,265

ROOF REPLACEMENT

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 2000. 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 #: 2097HVA1
Construction Cost \$35,000

VARIABLE FREQUENCY DRIVE REPLACEMENT

The Variable Frequency Drives (VLT 6000) for the hot water drives have been disabled. Staff reports that the hot water VFD's have been problematic and have purposely been by-passed from the HVAC system. This project would provide for purchase and installation of the VFD's for the hot water drives.

Project Index #: 2097PLM3
Construction Cost \$1,500

WATER HEATER REPLACEMENT

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 electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2097PLM2
Construction Cost \$20,000

WATER TREATMENT SYSTEM REPLACEMENT

The existing water softening/ treatment systems in the building are currently not operational. They are original to the building and approaching the end of their lifecycles. Failure of the equipment causes wear and tear on the domestic water supply lines, plumbing fixtures and HVAC equipment. This project would provide for the replacement of the existing water softeners/ treatment systems with new equipment. This project would also provide for a chemical treatment program including an updated chemicals control system, service and employee training provided by a qualified water treatment vendor. The annual maintenance fee charged by the water treatment vendor would be determined after an investigation of the water system is complete. These annual costs are not included in this project cost. For budgeting purposes, a \$12,000 maintenance fee is suggested.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$452,265

Long-Term Needs

Four to Ten Years

Project Index #: 2097HVA3
Construction Cost \$452,265

HVAC EQUIPMENT REPLACEMENT

The air handlers, fan coils and related equipment are original to the building, dating back to 2000. The equipment has consistent problems and has reached its expected life span. This project recommends replacement of the air handlers, fan coils, ventilation equipment and exhaust fans. It is recommended that this project be implemented in the next 2-3 years to avoid possible failure and emergency funding for replacement.

BUILDING INFORMATION:

Gross Area (square feet): 30,151
Year Constructed: 2000
Exterior Finish 1: 90 # Natural Grey CMU
Exterior Finish 2: 10 # Doors and Louvers
Number of Levels (Floors): 1 Basement? No
IBC Occupancy Type 1: 40 # B
IBC Occupancy Type 2: 60 # S-2
Construction Type: Concrete Masonry & Steel
IBC Construction Type: II-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$1,006,983	Project Construction Cost per Square Foot	\$128.14
Priority Class 2:	\$2,404,393	Total Facility Replacement Construction Cost	\$11,307,000
Priority Class 3:	\$452,265	Facility Replacement Cost per Square Foot	\$375
Grand Total:	\$3,863,641	FCNI:	34%

SALLYPORT

SPWD Facility Condition Analysis - 2096

Survey Date: 11/1/2016

**SALLYPORT
BUILDING REPORT**

The Sallyport is located on the north side, outside of the secured area at High Desert State Prison. The building is a prefabricated steel framed structure with a concrete slab-on-grade foundation, metal siding and a metal roof. This is the only secured entrance into the prison yard for delivery trucks and maintenance personnel. It has a small restroom and a wall mounted heat pump.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$19,296**
Currently Critical **Immediate to Two Years**

ADA UPGRADES

Project Index #: 2096ADA2
Construction Cost \$10,000

Section 4.13.9 of the ADAAG states that handles, pulls, latches, locks and other operating devices on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist to operate. Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs. It is recommended that proper lever hardware be installed in this building to meet these requirements.

EGRESS DOOR UPGRADE

Project Index #: 2096SFT2
Construction Cost \$2,000

The egress door located on south east side of the building was welded shut from the inside. IBC 2012 Section 1003.6 Obstructions shall not be placed in the required width of a means of egress. This project would provide for the removal of the welded angle iron and would cut any welds holding the door shut. This project should coincide with an Exterior Door Replacement project.

ELECTRICAL AND COMMUNICATIONS UPGRADE

Project Index #: 2096ELE2
Construction Cost \$4,800

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

EXIT SIGN AND EGRESS LIGHTING INSTALLATION

Project Index #: 2096SFT1
Construction Cost \$960

The building does not have emergency lighting or exit signs. This project would provide for the purchase and installation of self-illuminated or LED style exit signs with battery-backed internal systems as well as emergency egress lighting to provide illumination along the egress route. IBC 2012 Chapter 10 was referenced for this project.

FIRE ALARM SYSTEM REPLACEMENT

Project Index #: 2096SFT3
Construction Cost \$1,536

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$13,376

Necessary - Not Yet Critical Two to Four Years

**Project Index #: 2096EXT2
Construction Cost \$8,000**

EXTERIOR DOOR REPLACEMENT

The existing exterior metal doors and frames appear to be original to the building. They are damaged and showing signs of wear and deterioration from constant use. This project would provide for the removal and replacement of two new metal door assemblies including frames, locks, hardware and painting. Removal and disposal of the existing doors and painting of the new doors is included in this estimate.

**Project Index #: 2096EXT1
Construction Cost \$1,920**

EXTERIOR FINISHES

It is important to maintain the finish, weather resistance and appearance of the building. The metal exterior, doors and window frames should be sanded and painted on a cyclical basis.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

**Project Index #: 2096INT1
Construction Cost \$1,920**

INTERIOR FINISHES

It is recommended that the interior walls and floors be painted or sealed at least once in the next 2-3 years. Prior to painting or sealing, all surfaces should be repaired and prepped. An epoxy-based paint should be utilized in wet areas for durability.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

**Project Index #: 2096ENR1
Construction Cost \$1,536**

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$2,880

Long-Term Needs Four to Ten Years

**Project Index #: 2096HVA1
Construction Cost \$2,880**

HEAT PUMP REPLACEMENT

The heat pumps in the building should be scheduled for replacement. They are not energy efficient and have reached the end of their expected and useful life. This project would provide for installation of new heat pump units and the cleaning of the existing ducting and grilles. This project includes removal and disposal of the existing heat pump units and all required connections to utilities.

BUILDING INFORMATION:

Gross Area (square feet): 192
Year Constructed: 2000
Exterior Finish 1: 80 # Metal Siding
Exterior Finish 2: 20 # Glass and Aluminum
Number of Levels (Floors): 1 Basement? No
IBC Occupancy Type 1: 100 # B
IBC Occupancy Type 2: #
Construction Type: Prefabricated Steel Building
IBC Construction Type: II-B
Percent Fire Suppressed: 0 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$19,296	Project Construction Cost per Square Foot	\$185.17
Priority Class 2:	\$13,376	Total Facility Replacement Construction Cost	\$67,000
Priority Class 3:	\$2,880	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$35,552	FCNI:	53%

GATEHOUSE

SPWD Facility Condition Analysis - 2095

Survey Date: 11/1/2016

**GATEHOUSE
BUILDING REPORT**

The Gatehouse is located on the southwest side of High Desert State Prison. The building is constructed of concrete masonry units, prefabricated steel frame trusses, metal decking and has a single-ply membrane roof. The building is used as the primary entrance into the prison by employees.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$213,661**
Currently Critical **Immediate to Two Years**

ADA ACCESSIBLE COUNTER **Project Index #: 2095ADA2**
Construction Cost \$4,000

The ADA provides for accessibility to sites and services for people with physical limitations. The lobby at the entrance of the building has a service counter for the public to approach which does not meet current requirements. Section 904.4 of the ADA Standards for Accessible Design states that a portion of the counter surface that is 36" long minimum and 36" high maximum above the finish floor shall be provided. This project will provide an accessible counter space in accordance with this requirement. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

ADA SHOWER UPGRADE **Project Index #: 2095ADA1**
Construction Cost \$50,000

This project would provide for three ADA compliant stainless steel shower cabinets to be installed to provide shower facilities for the disabled. Included in this estimate is the installation of two stainless steel ADA compliant shower cabinet units complete with accessible plumbing fixtures, seats, etc. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

DUAL LEVEL DRINKING FOUNTAIN INSTALLATION **Project Index #: 2095ADA3**
Construction Cost \$4,000

This building contains a water fountain that is not ADA compliant. The 2012 IBC Section 1109.5 states where drinking fountains are provided on an exterior site, on a floor or within a secured area, no fewer than two drinking fountains shall be provided. One shall comply with the requirements for people who use a wheelchair and one shall comply with the requirements for standing persons. This project would provide funding for the purchase and installation of two drinking fountains to meet the ADA requirements.

ELECTRICAL AND COMMUNICATIONS UPGRADE **Project Index #: 2095ELE1**
Construction Cost \$154,125

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

Project Index #: 2095SFT3
Construction Cost \$1,536

FIRE ALARM SYSTEM REPLACEMENT

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

PRIORITY CLASS 2 PROJECTS **Total Construction Cost for Priority 2 Projects: \$320,701**
Necessary - Not Yet Critical **Two to Four Years**

Project Index #: 2095SEC1
Construction Cost \$30,000

DOOR CONTROLS SYSTEM REPLACEMENT

The control panel/ inmate movement and control system in the Gatehouse is not working properly. The cell door indicator lights on the control panel are falsely representing the actual status of the cell doors. The officer sometimes cannot tell if the cell door is open or closed. This project would replace the existing secured door control system with a programmable logic controlled system using touch screens for actuation and door status. This project would replace the existing door control system and the outdated wiring. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2095EXT0
Construction Cost \$61,650

EXTERIOR FINISHES

It is important to maintain the finish, weather resistance and appearance of the building. The caulked control joints in the CMU of the exterior surface of this building are uniformly deteriorated and should be removed and the joints re-caulked. The metal doors and window frames should be sanded and painted on a cyclical basis. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2095INT3
Construction Cost \$55,485

FLOORING REPLACEMENT

The VCT flooring in the gymnasium is damaged and reaching the end of its useful life. It is recommended that the VCT flooring be replaced. This project would provide for removal and disposal of the VCT and installation of new 12x12 VCT with a 6" base.

Project Index #: 2095INT1
Construction Cost \$61,650

INTERIOR FINISHES

It is recommended to repair, paint or seal the interior concrete block walls at least once in the 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. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2095INT2
Construction Cost \$1,400

JANITORS CLOSET REPAIRS

The mop sink in the Janitors Closet is mounted adjacent to CMU and is showing signs of water damage. This project would provide fiberglass reinforced panels (FRP) to be installed on the CMU 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 #: 2095ENR1
Construction Cost \$1,536

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

Project Index #: 2095EXT3
Construction Cost \$73,980

ROOF REPLACEMENT

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 2000. 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 #: 2095PLM1
Construction Cost \$10,000

WATER HEATER REPLACEMENT

There are two 119 gallon electric water heaters in the building. The average life span of a water heater is eight to ten years. With the passage of time and constant use, the units are showing signs of wear and should be scheduled for replacement in the next 2-3 years. It is recommended that new electric water heaters be installed. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2095PLM2
Construction Cost \$25,000

WATER TREATMENT SYSTEM REPLACEMENT

The existing water softening/ treatment systems in the building are currently not operational. They are original to the building and approaching the end of their lifecycles. Failure of the equipment causes wear and tear on the domestic water supply lines, plumbing fixtures and HVAC equipment. This project would provide for the replacement of the existing water softeners/ treatment systems with new equipment. This project would also provide for a chemical treatment program including an updated chemicals control system, service and employee training provided by a qualified water treatment vendor. The annual maintenance fee charged by the water treatment vendor would be determined after an investigation of the water system is complete. These annual costs are not included in this project cost. For budgeting purposes, a \$12,000 maintenance fee is suggested.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$92,475

Long-Term Needs

Four to Ten Years

Project Index #: 2095HVA1
Construction Cost \$92,475

HVAC EQUIPMENT REPLACEMENT

The air handlers, fan coils and related equipment are original to the building, dating back to 2000. The equipment has consistent problems and has reached its expected life span. This project recommends replacement of the air handlers, fan coils, ventilation equipment and exhaust fans. It is recommended that this project be implemented in the next 2-3 years to avoid possible failure and emergency funding for replacement.

BUILDING INFORMATION:

Gross Area (square feet): 6,165
Year Constructed: 2000
Exterior Finish 1: 95 # Natural Grey CMU
Exterior Finish 2: 5 # Glass and Steel
Number of Levels (Floors): 1 Basement? No
IBC Occupancy Type 1: 100 # I-3
IBC Occupancy Type 2: #
Construction Type: Concrete Masonry & Steel
IBC Construction Type: II-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$213,661	Project Construction Cost per Square Foot	\$101.68
Priority Class 2:	\$320,701	Total Facility Replacement Construction Cost	\$2,158,000
Priority Class 3:	\$92,475	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$626,837	FCNI:	29%

ADMINISTRATION

SPWD Facility Condition Analysis - 2094

Survey Date: 11/1/2016

**ADMINISTRATION
BUILDING REPORT**

The Administration building is located on the southwest corner of High Desert State Prison. The building is constructed of concrete masonry units, a concrete slab-on-grade foundation, prefabricated steel trusses, metal decking and has a single-ply membrane roof. The building contains the administrative support offices and training classrooms for staff.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$383,363**
Currently Critical **Immediate to Two Years**

EGRESS LIGHTING UPGRADE **Project Index #: 2094SFT1**
Construction Cost \$5,588

There are older emergency egress lighting units in this building. These units have a finite lifespan, and this project recommends their replacement with new egress lights, and to also provide additional lights on the main exit routes and in individual rooms as needed.

ELECTRICAL AND COMMUNICATIONS UPGRADE **Project Index #: 2094ELE1**
Construction Cost \$279,375

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

FIRE ALARM SYSTEM REPLACEMENT **Project Index #: 2094SFT3**
Construction Cost \$89,400

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 "If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure". When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION **Project Index #: 2094SFT2**
Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$810,225

Necessary - Not Yet Critical Two to Four Years

**Project Index #: 2094EXT1
Construction Cost \$111,750**

EXTERIOR FINISHES

It is important to maintain the finish, weather resistance and appearance of the building. The caulked control joints in the CMU of the exterior surface of this building are uniformly deteriorated and should be removed and the joints re-caulked. The metal doors and window frames should be sanded and painted on a cyclical basis.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

**Project Index #: 2094INT3
Construction Cost \$100,575**

FLOORING REPLACEMENT

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.

**Project Index #: 2094HVA2
Construction Cost \$167,625**

HVAC EQUIPMENT REPLACEMENT

The air handlers, fan coils and related equipment are original to the building, dating back to 2000. The equipment has consistent problems and has reached its expected life span. This project recommends replacement of the air handlers, fan coils, ventilation equipment and exhaust fans. It is recommended that this project be implemented in the next 2-3 years to avoid possible failure and emergency funding for replacement.

**Project Index #: 2094INT1
Construction Cost \$111,750**

INTERIOR FINISHES

It is recommended that the interior walls be painted at least once in the next 2-3 years. Prior to painting, all surfaces should be repaired and prepped. An epoxy-based paint should be utilized in wet areas for durability.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

**Project Index #: 2094ENR1
Construction Cost \$89,400**

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

**Project Index #: 2094EXT2
Construction Cost \$167,625**

ROOF REPLACEMENT

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 2000. 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 #: 2094HVA1
Construction Cost \$35,000**

VARIABLE FREQUENCY DRIVE REPLACEMENT

The Variable Frequency Drives throughout the building have been disabled. Staff reports that the VFD's are problematic and have been by-passed from the HVAC system. This project would provide for purchase and installation of new VFD's.

Project Index #: 2094PLM2

Construction Cost \$1,500

WATER HEATER REPLACEMENT

There is a 40 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 electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2094PLM1

Construction Cost \$25,000

WATER TREATMENT SYSTEM REPLACEMENT

The existing water softening/ treatment systems in the building are currently not operational. They are original to the building and approaching the end of their lifecycles. Failure of the equipment causes wear and tear on the domestic water supply lines, plumbing fixtures and HVAC equipment. This project would provide for the replacement of the existing water softeners/ treatment systems with new equipment. This project would also provide for a chemical treatment program including an updated chemicals control system, service and employee training provided by a qualified water treatment vendor. The annual maintenance fee charged by the water treatment vendor would be determined after an investigation of the water system is complete. These annual costs are not included in this project cost. For budgeting purposes, a \$12,000 maintenance fee is suggested.

BUILDING INFORMATION:

Gross Area (square feet): 11,175

Year Constructed: 2000

Exterior Finish 1: 90 # Natural Grey CMU

Exterior Finish 2: 10 # Glass and Steel

Number of Levels (Floors): 1 Basement? No

IBC Occupancy Type 1: 100 # B

IBC Occupancy Type 2: #

Construction Type: Concrete Masonry & Steel

IBC Construction Type: II-A

Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$383,363	Project Construction Cost per Square Foot	\$106.81
Priority Class 2:	\$810,225	Total Facility Replacement Construction Cost	\$3,911,000
Priority Class 3:	\$0	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$1,193,588	FCNI:	31%

VISITATION

SPWD Facility Condition Analysis - 2093

Survey Date: 11/1/2016

**VISITATION
BUILDING REPORT**

The Visitation building is located on the southwest side, adjacent to the secured area at High Desert Prison. The building is constructed of concrete masonry units, a concrete slab-on-grade foundation, prefabricated steel frame trusses, and a single-ply membrane roof. The building is used for visitation of inmates and contains a large contact visitation area, restrooms, small office area and individual non-contact visitation areas.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$386,850**
Currently Critical **Immediate to Two Years**

ADA ACCESSIBLE COUNTER

Project Index #: 2093ADA2
Construction Cost \$4,000

The ADA provides for accessibility to sites and services for people with physical limitations. The lobby at the entrance of the building has a service counter for the public to approach which does not meet current requirements. Section 904.4 of the ADA Standards for Accessible Design states that a portion of the counter surface that is 36" long minimum and 36" high maximum above the finish floor shall be provided. This project will provide an accessible counter space in accordance with this requirement. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

ADA RESTROOM FIXTURES

Project Index #: 2093ADA3
Construction Cost \$1,000

The fixtures in the ADA restrooms are worn and damaged from many years of use including the water closets, urinals, lavatories, faucets, shower heads and handles. Many fixtures are or have been leaking and have caused extensive scaling and staining to the fixtures themselves. It is recommended that all fixtures be replaced with new ADA compliant units. This project includes removal and disposal of the existing fixtures and installation of new fixtures. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

ADA TABLE UPGRADE

Project Index #: 2093ADA1
Construction Cost \$3,000

Per the United States Access Board and ICC ANSI-A117.1-2009, at least 5 percent of the seating spaces shall be, if fixed seating is provided, a loose seat or open space for a wheelchair. This project would provide funding to remove 3 of the fixed seats, which will allow access for wheel chairs.

ADA UPGRADES

Project Index #: 2093ADA4
Construction Cost \$600

ADA regulations pertaining to building access, route of travel and restrooms 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. This project would provide funding for purchase and installation of ADA signage including directional signage from parking to accessible building entrances, route of travel inside the building and restrooms. It is recommended that applicable signage be installed where required. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

Project Index #: 2093ELE1
Construction Cost \$279,850

ELECTRICAL AND COMMUNICATIONS UPGRADE

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

Project Index #: 2093SFT3
Construction Cost \$89,400

FIRE ALARM SYSTEM REPLACEMENT

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

Project Index #: 2093SFT2
Construction Cost \$9,000

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$628,790

Necessary - Not Yet Critical Two to Four Years

Project Index #: 2093SEC1
Construction Cost \$30,000

DOOR CONTROLS SYSTEM REPLACEMENT

The control panel/ inmate movement and control system in the building is not working properly. The cell door indicator lights on the control panel are falsely representing the actual status of the cell doors. The officer sometimes cannot tell if the cell door is open or closed. This project would replace the existing secured door control system with a programmable logic controlled system using touch screens for actuation and door status. This project would replace the existing door control system and the outdated wiring. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2093EXT1
Construction Cost \$111,940

EXTERIOR FINISHES

It is important to maintain the finish, weather resistance and appearance of the building. The caulked control joints in the CMU of the exterior surface of this building are uniformly deteriorated and should be removed and the joints re-caulked. The metal doors and window frames should be sanded and painted on a cyclical basis. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2093INT3
Construction Cost \$45,000

FLOORING REPLACEMENT

The VCT in the building is damaged and reaching the end of its 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 in the next 2-3 years.

Project Index #: 2093HVA1
Construction Cost \$167,910

HVAC EQUIPMENT REPLACEMENT

The air handlers, fan coils and related equipment are original to the building, dating back to 2000. The equipment has consistent problems and has reached its expected life span. This project recommends replacement of the air handlers, fan coils, ventilation equipment and exhaust fans. It is recommended that this project be implemented in the next 2-3 years to avoid possible failure and emergency funding for replacement.

Project Index #: 2093INT1
Construction Cost \$111,940

INTERIOR FINISHES

It is recommended to paint the interior walls and ceilings 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.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2093INT2
Construction Cost \$1,400

JANITORS CLOSET REPAIRS

The walls adjacent to and above the janitor's closet mop sink did not have a water resistant finish. This project recommends the installation of fiberglass reinforced panels on the walls adjacent to the mop sink to a height of 54" above the finish floor.

Project Index #: 2093EXT3
Construction Cost \$134,100

ROOF REPLACEMENT

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 2000. 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 #: 2093PLM2
Construction Cost \$1,500

WATER HEATER REPLACEMENT

There is a 40 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 electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2093PLM1
Construction Cost \$25,000

WATER TREATMENT SYSTEM REPLACEMENT

The existing water softening/ treatment systems in the building are currently not operational. They are original to the building and approaching the end of their lifecycles. Failure of the equipment causes wear and tear on the domestic water supply lines, plumbing fixtures and HVAC equipment. This project would provide for the replacement of the existing water softeners/ treatment systems with new equipment. This project would also provide for a chemical treatment program including an updated chemicals control system, service and employee training provided by a qualified water treatment vendor. The annual maintenance fee charged by the water treatment vendor would be determined after an investigation of the water system is complete. These annual costs are not included in this project cost. For budgeting purposes, a \$12,000 maintenance fee is suggested.

BUILDING INFORMATION:

Gross Area (square feet): 11,194
Year Constructed: 2000
Exterior Finish 1: 85 # Natural Grey CMU
Exterior Finish 2: 15 # Glass and Steel
Number of Levels (Floors): 1 Basement? No
IBC Occupancy Type 1: 50 # A-3
IBC Occupancy Type 2: 50 # I-3
Construction Type: Concrete Masonry & Steel
IBC Construction Type: II-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$386,850	Project Construction Cost per Square Foot	\$90.73
Priority Class 2:	\$628,790	Total Facility Replacement Construction Cost	\$3,918,000
Priority Class 3:	\$0	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$1,015,640	FCNI:	26%

PROGRAM SERVICES/ EDUCATION

SPWD Facility Condition Analysis - 2092

Survey Date: 11/1/2016

**PROGRAM SERVICES/ EDUCATION
BUILDING REPORT**

The Program Services/ Education building is located on the southwest corner inside the secured area at High Desert State Prison. The building is constructed of concrete masonry units, a concrete slab-on-grade foundation, prefabricated steel frame trusses, and a single-ply membrane roof. The building contains a chapel, educational classrooms, and the library.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$1,121,516

Currently Critical

Immediate to Two Years

ADA DOOR HARDWARE REPLACEMENT

**Project Index #: 2092ADA1
Construction Cost \$2,000**

The 2010 ADA Standards for Accessible Design states that the force to activate operable parts shall be 5 pounds maximum. It is recommended that 5 pounds or less closers be installed on the men's and woman's ADA restroom doors. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and Sections 309.4 and 404.2.7 of the 2010 ADA Standards for Accessible Design were used as references for this project.

ELECTRICAL AND COMMUNICATIONS UPGRADE

**Project Index #: 2092ELE2
Construction Cost \$841,300**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

FIRE ALARM SYSTEM REPLACEMENT

**Project Index #: 2092SFT2
Construction Cost \$269,216**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

**Project Index #: 2092SFT1
Construction Cost \$9,000**

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$1,475,336

Necessary - Not Yet Critical Two to Four Years

**Project Index #: 2092EXT1
Construction Cost \$336,520**

EXTERIOR FINISHES

It is important to maintain the finish, weather resistance and appearance of the building. The caulked control joints in the CMU of the exterior surface of this building are uniformly deteriorated and should be removed and the joints re-caulked. The metal doors and window frames should be sanded and painted on a cyclical basis. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

**Project Index #: 2092INT3
Construction Cost \$269,216**

FLOORING REPLACEMENT

The VCT 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.

**Project Index #: 2092ELE1
Construction Cost \$400**

GFCI OUTLETS

The existing receptacle in the mechanical room is a standard duplex receptacle. The 2011 NEC 210.8 require this location to have GFCI protection. This project would provide for removing the standard receptacle and installing a GFCI receptacle.

**Project Index #: 2092HVA1
Construction Cost \$504,780**

HVAC EQUIPMENT REPLACEMENT

The air handlers, fan coils and related equipment are original to the building, dating back to 2000. The equipment has consistent problems and has reached its expected life span. This project recommends replacement of the air handlers, fan coils, ventilation equipment and exhaust fans. It is recommended that this project be implemented in the next 2-3 years to avoid possible failure and emergency funding for replacement.

**Project Index #: 2092INT1
Construction Cost \$336,520**

INTERIOR FINISHES

It is recommended to paint the interior walls and ceilings 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. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

**Project Index #: 2092INT2
Construction Cost \$1,400**

JANITORS CLOSET REPAIRS

The walls adjacent to and above the janitor's closet mop sink did not have a water resistant finish. This project recommends the installation of FRP on the walls adjacent to the mop sink to a height of 54" above the finish floor.

**Project Index #: 2092PLM1
Construction Cost \$1,500**

WATER HEATER REPLACEMENT

There is a 40 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 electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2092PLM2

Construction Cost \$25,000

WATER TREATMENT SYSTEM REPLACEMENT

The existing water softening/ treatment systems in the building are currently not operational. They are original to the building and approaching the end of their lifecycles. Failure of the equipment causes wear and tear on the domestic water supply lines, plumbing fixtures and HVAC equipment. This project would provide for the replacement of the existing water softeners/ treatment systems with new equipment. This project would also provide for a chemical treatment program including an updated chemicals control system, service and employee training provided by a qualified water treatment vendor. The annual maintenance fee charged by the water treatment vendor would be determined after an investigation of the water system is complete. These annual costs are not included in this project cost. For budgeting purposes, a \$12,000 maintenance fee is suggested.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$504,870

Long-Term Needs

Four to Ten Years

Project Index #: 2092LGT1

Construction Cost \$504,870

ROOF REPLACEMENT

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 2000. 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.

BUILDING INFORMATION:

Gross Area (square feet): 33,652

Year Constructed: 2000

Exterior Finish 1: 100 # Natural Grey CMU

Exterior Finish 2: #

Number of Levels (Floors): 1 Basement? No

IBC Occupancy Type 1: 100 # B

IBC Occupancy Type 2: #

Construction Type: Concrete Masonry & Steel

IBC Construction Type: II-A

Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$1,121,516	Project Construction Cost per Square Foot	\$92.17
Priority Class 2:	\$1,475,336	Total Facility Replacement Construction Cost	\$11,778,000
Priority Class 3:	\$504,870	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$3,101,722	FCNI:	26%

INMATE SERVICES/ CULINARY/ DINING

SPWD Facility Condition Analysis - 2091

Survey Date: 11/1/2016

**INMATE SERVICES/ CULINARY/ DINING
BUILDING REPORT**

The Inmate Services/ Culinary/ Dining building is located on the west side of High Desert State Prison. The building is constructed of concrete masonry units, a concrete slab-on-grade foundation, prefabricated steel trusses, metal decking, and has a single-ply membrane roof. The interior of the building primarily consists of dining areas, kitchen, bakery, bulk storage and distribution, large mechanical/ electrical room, laundry room and a canteen for inmates. The laundry and culinary areas of the building were designed to accommodate additional equipment for expansion.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$2,565,165

Currently Critical

Immediate to Two Years

ADA TABLE UPGRADE

**Project Index #: 2091ADA1
Construction Cost \$7,000**

Per the United States Access Board Section 226.1 where dining surfaces are provided for the consumption of food or drink, at least 5 percent of the seating spaces and standing spaces at the dining surfaces shall comply with 902. ICC ANSI-A117.1-2009 Section 902 which says, if fixed seating is provided, a loose seat or open space for a wheelchair location must be available at those accessible tables. This project would provide funding to remove 4 of the fixed seats, which will allow access for seven wheel chairs.

ELECTRICAL AND COMMUNICATIONS UPGRADE

**Project Index #: 2091ELE2
Construction Cost \$1,925,125**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

FIRE ALARM SYSTEM REPLACEMENT

**Project Index #: 2091SFT2
Construction Cost \$616,040**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

**Project Index #: 2091SFT3
Construction Cost \$9,000**

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

Project Index #: 2091SFT4
Construction Cost \$3,000

PANIC HARDWARE IN ELECTRICAL ROOMS

The electrical room with the uninterruptable power supply contains equipment that meets or exceeds 1,200 amps. It is recommended per the 2012 IBC 1008.1.10 that panic and fire exit hardware be installed. This equipment was not required when the building was constructed in 2000. When a remodel occurs, it is suggested to comply with current code. It is recommended that this project be completed within 1-2 years. The estimate is based on one door that requires panic hardware.

Project Index #: 2091STR1
Construction Cost \$5,000

STEAM PIPE BRACING/ SUPPORT

During the visit to the bulk storage/ distribution area of this building, the high pressure steam pipes suspended from the ceiling were moving and shaking violently. It appears that there were surges of pressure in the steam lines that were causing a hammer-locking type condition. The pipes have vibrated badly enough that pieces of the FRP pipe insulation and the metal protective sleeves have fallen from the ceiling mounted pipes. This is a safety concern that needs to be addressed immediately. According to the original drawings, these high pressure steam pipes have 150 psig and there are special system design and inspection/ maintenance parameters and procedures that are required. This project would provide for a licensed Mechanical Engineer who specializes in steam boiler design to investigate this condition and provided a report on the conditions that are causing the condition mentioned above. Future projects would be based on this report.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$4,649,550

Necessary - Not Yet Critical Two to Four Years

Project Index #: 2091SFT1
Construction Cost \$130,500

CATWALKS

The mechanical room has equipment located about 20 feet above the finish floor that need to be monitored or serviced on a regular basis. Currently the maintenance staff is using ladders or climbing on the equipment. This project would provide for the installation of 100 feet long, 2 foot wide of catwalk with guard rails and one set of stairs. All required structural supports are included in this project.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2091CUL1
Construction Cost \$350,000

DISHWASHER REPLACEMENT

The commercial dishwashers in the kitchen appear to be original to the building and are troublesome and problematic to operate. Considering the age of the dishwashers and the evolving needs of the facility they are recommended to be replaced. This project provides for removal and disposal of the two existing dishwashers and replacement with two new units.

Project Index #: 2091ELE1
Construction Cost \$5,000

ELECTRICAL UPGRADE

The electrical system within the building needs to have repairs made and an inspection on the main electrical distribution panel. Light switches are broken, electrical covers missing, and parts are missing out of the electrical distribution panel. The maintenance staff said the electrical distribution panel is at or over its rating capacity. This project recommends hiring a professional licensed electrician to make repairs and determine if the main electrical distribution panel is at or over its rated capacity. Future projects would be based on the information provided.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2091EXT4
Construction Cost \$770,050

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 concrete masonry units and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be 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.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2091PLM2
Construction Cost \$12,000

GREASE WASTE INTERCEPTOR

The automatic grease waste separator system for the Kitchen is failing to perform as intended. The system is constantly getting clogged with plastic kitchen utensils and other items disposed of by the inmates. The system has clogged and overflowed onto the floor creating a safety and health hazard. This project would provide for bypassing this equipment and having the waste go directly into the grease interceptor located below grade outside. The facility maintenance staff would have a third party vendor provide pumping services per a routine preventive maintenance schedule based on usage developed by staff to meet the demands of the system. The project cost represents an estimated yearly amount required for this service.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2091HVA1
Construction Cost \$250,000

HOT WATER RE-USE ROOM REMODEL

The hot water re-use room was designed to recycle hot final rinse water to be used as a pre-rinse and provide adequate pressure to laundry washers. During the time of the survey, the equipment required high maintenance, parts were obsolete, the holding tanks had failures and the system had been changed over to a cold wash and rinse system for energy savings. The hot water re-use area is due for a remodel to increase capacity and support the cold wash and rinse system. A mechanical engineer is needed to redesign the area and this project would provide for remodeling the existing area.

Project Index #: 2091HVA2
Construction Cost \$1,155,075

HVAC EQUIPMENT REPLACEMENT

The air handlers, fan coils and related equipment are original to the building, dating back to 2000. The equipment has consistent problems and has reached its expected life span. This project recommends replacement of the air handlers, fan coils, ventilation equipment and exhaust fans. It is recommended that this project be implemented in the next 2-3 years to avoid possible failure and emergency funding for replacement.

Project Index #: 2091INT2
Construction Cost \$770,050

INTERIOR FINISHES

The Inmate Services/Culinary/Dining building has painted CMU walls. All flooring is sealed concrete and non-slip tile. It is recommended that the interior walls be painted and/or sealed at least once in the next 2-4 years. This also includes the sealing of the floor and floor tile maintenance in the kitchen and bakery area. Prior to painting or sealing, all surface should be repaired and prepped. An epoxy-based paint should be utilized in wet areas for durability.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2091INT1
Construction Cost \$2,800

JANITORS CLOSET REPAIRS

The mop sinks in the Janitors Closets are mounted adjacent to CMU walls and are showing signs of water damage. This project would provide 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 #: 2091EXT3
Construction Cost \$1,155,075

ROOF REPLACEMENT

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 2000. 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 #: 2091PLM1
Construction Cost \$11,500

SUMP PUMP

The sump pump in the mechanical room portion of the building is constantly failing. The ½ H.P. pump cannot handle all of the potential water that may flow into the pit. This project recommends the installation of 1H.P. sump pump to replace the existing pump.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2091PLM3
Construction Cost \$12,500

WATER HEATER REPLACEMENT

There are five electric on-demand water heaters that are 5-gallon capacity in the building. The average life span of the water heaters is eight to ten years. With the passage of time and constant use, these units are showing signs of wear and should be scheduled for replacement in the next 2-3 years. It is recommended that 5 new 5-gallon on-demand electric water heaters be installed. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2091PLM4
Construction Cost \$25,000

WATER TREATMENT SYSTEM REPLACEMENT

The existing water softening/ treatment systems in the building are currently not operational. They are original to the building and approaching the end of their lifecycles. Failure of the water softening/ treatment system causes additional wear and tear on the domestic water supply lines, water heaters and plumbing fixtures. This project would provide for the installation of a PRV (to be installed prior to the water softener/ treatment system) and the replacement of the existing water softeners/ treatment systems with new equipment. This project would also provide for a chemical treatment program to include an updated chemical control system, service and employee training to be provided by a qualified water treatment vendor. The annual maintenance fee charged by the water treatment vendor would be determined after an investigation of the water system is complete. These annual costs are not included in this project cost. For budgeting purposes, a \$12,000 fee is suggested.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$693,045

Long-Term Needs

Four to Ten Years

Project Index #: 2091INT3
Construction Cost \$693,045

FLOORING REPLACEMENT

The tile in the building is damaged and reaching the end of its 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 culinary grade tile in the next 4-5 years.

BUILDING INFORMATION:

Gross Area (square feet): 77,005
Year Constructed: 2000
Exterior Finish 1: 100 # Natural Grey CMU
Exterior Finish 2: #
Number of Levels (Floors): 1 Basement? No
IBC Occupancy Type 1: 100 # I-3
IBC Occupancy Type 2: #
Construction Type: Concrete Masonry & Steel
IBC Construction Type: II-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$2,565,165	Project Construction Cost per Square Foot	\$102.69
Priority Class 2:	\$4,649,550	Total Facility Replacement Construction Cost	\$28,877,000
Priority Class 3:	\$693,045	Facility Replacement Cost per Square Foot	\$375
Grand Total:	\$7,907,760	FCNI:	27%

INFIRMARY/ INTAKE

SPWD Facility Condition Analysis - 2090

Survey Date: 11/1/2016

**INFIRMARY/ INTAKE
BUILDING REPORT**

The Infirmary/ Intake building is located on the west side of High Desert State Prison. The building is constructed of concrete masonry units, a concrete slab-on-grade foundation, prefabricated steel frame trusses, metal decking and has a single-ply membrane roof. The building is used for all medical related services and intake for new or transferring inmates.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$524,138**
Currently Critical **Immediate to Two Years**

ADA ACCESSIBLE COUNTER

Project Index #: 2090ADA4
Construction Cost \$4,000

The ADA provides for accessibility to sites and services for people with physical limitations. The nurse's station at the entrance of the building has a service counter which does not meet current requirements. Section 904.4 of the ADA Standards for Accessible Design states that a portion of the counter surface that is 36" long minimum and 36" high maximum above the finish floor shall be provided. This project will provide an accessible counter space in accordance with this requirement. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

ADA EMPLOYEE LOUNGE UPGRADES

Project Index #: 2090ADA3
Construction Cost \$4,000

In order to comply with current ADA requirements, modification will be necessary for the employee lounge and the sinks. It is recommended to upgrade some of the features of the rooms for compliance with accessibility standards for employees. This project would provide funding for construction of an accessible sink and faucet, an accessible space at one of the dining tables and an accessible path of travel throughout the room. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

ADA SHOWER UPGRADE

Project Index #: 2090ADA1
Construction Cost \$225,000

This project would provide for nine ADA compliant stainless steel shower cabinets to be installed to provide shower facilities for the disabled. Included in this estimate is the installation of nine stainless steel ADA compliant shower cabinet units complete with accessible plumbing fixtures, seats, etc. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

ANCHOR SHELVES

Project Index #: 2090SFT2
Construction Cost \$10,000

OSHA recommends that the bottom of all columns be furnished with column base plates, and be anchored to the floor with anchor bolts capable of resisting the forces caused by the loads on the shelving unit. Per OSHA standard 1926.250(a)(1) All materials stored in tiers shall be stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, falling or collapse. This project would provide for a licensed contractor to install anchor bolts and properly secure the shelving units to the floor and to the other shelves. This project should be overseen by a licensed engineer or architect.

Project Index #: 2090ADA2
Construction Cost \$8,000

DUAL LEVEL DRINKING FOUNTAIN INSTALLATION

This building contains several water fountains that are not ADA compliant. The 2012 IBC Section 1109.5 states where drinking fountains are provided on an exterior site, on a floor or within a secured area, no fewer than two drinking fountains shall be provided. One shall comply with the requirements for people who use a wheelchair and one shall comply with the requirements for standing persons. This project would provide funding for the purchase and installation of two drinking fountains to meet the ADA requirements.

Project Index #: 2090SFT3
Construction Cost \$263,888

FIRE ALARM SYSTEM REPLACEMENT

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

Project Index #: 2090SFT4
Construction Cost \$9,000

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

Project Index #: 2090ELE2
Construction Cost \$250

PROVIDE CLEARANCE AT ELECTRICAL PANELS

There are electrical panels in the building which do not have proper clear floor space around them. The 2012 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 items currently blocking the working space.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$2,728,516

Necessary - Not Yet Critical Two to Four Years

Project Index #: 2090SEC2
Construction Cost \$800,000

CELL DOORS, LOCKS AND CONTROLS REPLACEMENT

Infirmery/ Intake was constructed in 2000. The cell doors, locks and controls are original to the building and have been problematic due to inmate abuse and age. This project would provide for installing new cell doors, locks and controls. A total of 100 doors were used for this estimate. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2090SEC1
Construction Cost \$30,000

DOOR CONTROLS SYSTEM REPLACEMENT

The control panel/ inmate movement and control system in the housing unit is not working properly. The cell door indicator lights on the control panel are falsely representing the actual status of the cell doors. The officer sometimes cannot tell if the cell door is open or closed. This project would replace the existing secured door control system with a programmable logic controlled system using touch screens for actuation and door status. This project would replace the existing door control system and the outdated wiring. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2090INT4
Construction Cost \$8,000

DRYER REPLACEMENT

The commercial tumbler dryer in the laundry area is original to the building and is troublesome and problematic to operate. Considering the age of the machine and the evolving needs of the facility it is recommended to be replaced. This project provides for the removal and disposal of the existing tumbler dryer and replacement with a new unit. A total of 1 dryer was used for this estimate.

Project Index #: 2090EXT1
Construction Cost \$329,860

EXTERIOR FINISHES

It is important to maintain the finish, weather resistance and appearance of the building. The caulked control joints in the CMU of the exterior surface of this building are uniformly deteriorated and should be removed and the joints re-caulked. The metal doors and window frames should be sanded and painted on a cyclical basis. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2090INT2
Construction Cost \$296,874

FLOORING REPLACEMENT

The VCT flooring in the Infirmary/ Intake is damaged and reaching the end of its useful life. It is recommended that the VCT flooring be replaced. This project would provide for removal and disposal of the VCT and installation of new 12x12 VCT with a 6" base.

Project Index #: 2090HVA2
Construction Cost \$494,790

HVAC EQUIPMENT REPLACEMENT

The air handler fan coils and related equipment are original to the building (2000). The equipment has consistent problems and has reached its expected life span. This project recommends replacement of all air handlers, fan coils, ventilation equipment and exhaust fans. It is recommended that this project be implemented in the next 2-3 years to avoid possible failure and emergency funding for replacement.

Project Index #: 2090INT1
Construction Cost \$329,860

INTERIOR FINISHES

It is recommended to paint the interior walls and ceilings 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. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2090INT5
Construction Cost \$2,800

JANITORS CLOSET REPAIRS

The mop sinks in the Janitor Closets are mounted adjacent to CMU walls and are showing signs of water damage. This project would provide 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 #: 2090EXT2
Construction Cost \$395,832

ROOF REPLACEMENT

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 2000. 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 #: 2090HVA1
Construction Cost \$5,000

VENTILATION

At the time of the survey, the mechanical room was extremely warm. It did not appear to have air conditioning or ventilation. This is causing the motors to become hot and will cause premature failure. This project recommends adding a ventilation system for proper temperature control of the mechanical room.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2090INT3
Construction Cost \$9,000

WASHING MACHINE REPLACEMENT

One of the existing commercial washing machines appears to be a year 2000 model and has reached the end of its useful life. It is showing signs of age, and is constantly breaking down. This project would provide funding for the purchase and installation of one new 60lb. commercial washing machine.

Project Index #: 2090PLM3
Construction Cost \$1,500

WATER HEATER REPLACEMENT

There is a 40 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 electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2090PLM2
Construction Cost \$25,000

WATER TREATMENT SYSTEM REPLACEMENT

The existing water softening/ treatment systems in the building are currently not operational. They are original to the building and approaching the end of their lifecycles. Failure of the equipment causes wear and tear on the domestic water supply lines, plumbing fixtures and HVAC equipment. This project would provide for the replacement of the existing water softeners/ treatment systems with new equipment. This project would also provide for a chemical treatment program including an updated chemicals control system, service and employee training provided by a qualified water treatment vendor. The annual maintenance fee charged by the water treatment vendor would be determined after an investigation of the water system is complete. These annual costs are not included in this project cost. For budgeting purposes, a \$12,000 maintenance fee is suggested.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$824,650

Long-Term Needs

Four to Ten Years

Project Index #: 2090ELE4
Construction Cost \$824,650

ELECTRICAL AND COMMUNICATIONS UPGRADE

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

BUILDING INFORMATION:

Gross Area (square feet): 32,986
Year Constructed: 2000
Exterior Finish 1: 100 # Natural Grey CMU
Exterior Finish 2: #
Number of Levels (Floors): 1 Basement? No
IBC Occupancy Type 1: 100 # I-3
IBC Occupancy Type 2: #
Construction Type: Concrete Masonry & Steel
IBC Construction Type: II-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$524,138	Project Construction Cost per Square Foot	\$123.61
Priority Class 2:	\$2,728,516	Total Facility Replacement Construction Cost	\$11,545,000
Priority Class 3:	\$824,650	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$4,077,304	FCNI:	35%

HOUSING UNIT #3

SPWD Facility Condition Analysis - 2089

Survey Date: 11/1/2016

**HOUSING UNIT #3
BUILDING REPORT**

The Housing Unit #3 is situated along the southeast secured side of High Desert State Prison. The building is constructed of tilt-up concrete walls, concrete floors at lower and upper levels, a concrete slab-on-grade foundation, prefabricated steel frame trusses, metal decking and has a single-ply membrane roof. The building is used to house inmates at the prison.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$2,309,333

Currently Critical

Immediate to Two Years

ADA SHOWER UPGRADE

**Project Index #: 2089ADA4
Construction Cost \$75,000**

This project would provide for three ADA compliant stainless steel shower cabinets to be installed to provide shower facilities for the disabled. Included in this estimate is the installation of three stainless steel ADA compliant shower cabinet units complete with accessible plumbing fixtures, seats, etc. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

ADA TABLE UPGRADE

**Project Index #: 2089ADA1
Construction Cost \$3,000**

Per the United States Access Board and ICC ANSI-A117.1-2009, at least 5 percent of the seating spaces shall be, if fixed seating is provided, a loose seat or open space for a wheelchair. This project would provide funding to remove 3 of the fixed seats, which will allow access for wheel chairs.

COMMUNICATIONS SYSTEM UPGRADE

**Project Index #: 2089SEC1
Construction Cost \$222,500**

This building is equipped with a communications system that at the time of the survey was not working properly. The communications system provides paging, phone communications and communication to inmates. The communications system is an integral component of the notification and safety procedures for the inmates and staff. The system is problematic and replacement parts are no longer available. It is recommended that the communications system be upgraded.

DOOR CONTROLS SYSTEM REPLACEMENT

**Project Index #: 2089SEC3
Construction Cost \$1,438,241**

The control panel/ inmate movement and control system in the housing unit is not working properly. The cell door indicator lights on the control panel are falsely representing the actual status of the cell doors. The officer sometimes cannot tell if the cell door is open or closed. This project would replace the existing secured door control system with a programmable logic controlled system using touch screens for actuation and door status. This project would replace the existing door control system and the outdated wiring. 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 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

DUAL LEVEL DRINKING FOUNTAIN INSTALLATION

**Project Index #: 2089ADA3
Construction Cost \$4,000**

This building contains a water fountain that is not ADA compliant. The 2012 IBC Section 1109.5 states where drinking fountains are provided on an exterior site, on a floor or within a secured area, no fewer than two drinking fountains shall be provided. One shall comply with the requirements for people who use a wheelchair and one shall comply with the requirements for standing persons. This project would provide funding for the purchase and installation of two drinking fountains to meet the ADA requirements.

ELECTRICAL OUTLET & CABLE UPGRADES

Project Index #: 2089SFT5
Construction Cost \$74,592

At the time of the survey the building had residential and commercial cover plates over the electrical outlets and coaxial wires. This poses a safety hazard allowing inmates to remove them and use them as weapons. This could be a safety hazard to inmates and guards. This project would provide for the installation of new security grade cover plates throughout the entire housing unit.

EVAPORATIVE COOLER REPLACEMENT

Project Index #: 2089HVA3
Construction Cost \$4,000

There is a guard stationed on the roof to look out onto the yard. They have one overhead swamp cooler to keep them cool in the warmer months. At the time of the survey the swamp cooler was not working. It is severely scaled and has reached the end of its useful and expected life. This project would provide for a new evaporative cooler to be installed including all required connections to utilities. The estimate includes removal and disposal of the old cooler.

EXHAUST FAN INSTALLATION

Project Index #: 2089HVA1
Construction Cost \$10,000

The mechanical room within the housing unit has plumbing fixtures and drains. Due to moisture in this room, the humidity is very high and there is an increase probability for indoor air quality concern. This project would provide for the purchase and installation of a new commercial grade exhaust fan and the assemblies and will include the connections to utilities.

FIRE ALARM SYSTEM REPLACEMENT

Project Index #: 2089SFT4
Construction Cost \$356,000

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

Project Index #: 2089SFT3
Construction Cost \$9,000

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

ROOF HATCH REPLACEMENT

Project Index #: 2089SFT6
Construction Cost \$10,000

The roof hatches are original to the building and have reached the end of their 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 the removal and the disposal of the existing roof hatches and for the purchase and installation of new roof hatches.

SPRINKLER HEAD REPLACEMENT

Project Index #: 2089SFT2
Construction Cost \$40,000

The existing fire suppression sprinkler heads are an older style and are susceptible to damage and misuse by the inmates. Inmates have tied strings to the sprinkler heads and have broken them in the past. This project recommends that all of the fire sprinkler heads in all cells be removed and replaced with a new state of the art tamper-resistant sprinkler heads.

Project Index #: 2089ADA2
Construction Cost \$60,000

TDD INSTALLATION

The Housing Unit is not equipped with a TDD. In order to comply with ADA requirements it is recommended to install a TDD system in the Housing Unit. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

Project Index #: 2089STR1
Construction Cost \$3,000

WALKWAY RAILING

The perimeter roof walkway guardrail is failing. The railing is loose or not attached and is posing a potential safety problem. This project recommends an assessment be performed by a Structural Engineer to determine the cause and provide a design solution. Future projects will be based on the design solution recommendation.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$3,580,275

Necessary - Not Yet Critical Two to Four Years

Project Index #: 2089SEC2
Construction Cost \$421,875

CELL DOORS, LOCKS AND CONTROLS REPLACEMENT

The Housing Unit was constructed in 2000. The cell doors, locks and controls are original to the building and have been problematic due to inmate abuse and age. This project would provide for installing new cell doors, locks and controls. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2089PLM2
Construction Cost \$504,000

CELL WATER CONTROL SYSTEMS REPLACEMENT

This building is equipped with cell water control systems that are outdated and should be scheduled for replacement. Problems exist with the current water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. It is recommended to replace the water control systems. This project includes the replacement of the water controllers, piping, valves, access panels and all connections to the existing utilities.

Project Index #: 2089PLM4
Construction Cost \$50,000

COMPUTER WATER CONTROL SYSTEM REPLACEMENT

This building is equipped with a computer water control system that is outdated and should be scheduled for replacement. Problems exist with the current computer water control system. It is increasingly difficult to find software updates and experienced repairmen to service the equipment. This project recommends the installation of a new computer water control system for the building. This system will monitor and control the water for all fixtures throughout the building. New electronic sensors will be installed on each water control system.

Project Index #: 2089ELE1
Construction Cost \$5,000

ELECTRICAL TRANSFORMER REPLACEMENT

The 50 kVA electrical transformer that provides services to the building was damaged at the time of inspection and does not function properly. This project recommends replacing the electrical transformer.

Project Index #: 2089EXT0
Construction Cost \$445,000

EXTERIOR FINISHES

It is important to maintain the finish, weather resistance and appearance of the building. This project would provide for caulking all control joints and penetrations on a cyclical basis. The metal doors and window frames should also be sanded and painted a on a cyclical basis.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

HVAC EQUIPMENT REPLACEMENT

Project Index #: 2089HVA2
Construction Cost \$667,500

The air handlers, fan coils and related equipment are original to the building, dating back to 2000. The equipment has consistent problems and has reached its expected life span. This project recommends the replacement of all air handlers, fan coils, ventilation equipment and exhaust fans. It is recommended that this project be implemented in the next 2-3 years to avoid possible failure and emergency funding for replacement.

INTERIOR FINISHES

Project Index #: 2089INT1
Construction Cost \$445,000

The interior finishes are in fair condition. It is recommended that the interior walls and floors be painted or sealed at least once in the next four to six years. Prior to painting or sealing, all surfaces should be repaired and prepped. An epoxy-based paint should be utilized in wet areas for durability.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

JANITORS CLOSET REPAIRS

Project Index #: 2089INT3
Construction Cost \$1,400

The mop sink in the Janitors Closet is mounted adjacent to CMU and is showing signs of water damage. This project would provide 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.

LIGHTING UPGRADE

Project Index #: 2089ENR1
Construction Cost \$356,000

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. Any electrical wiring upgrades are not included in this estimate.

ROOF REPLACEMENT

Project Index #: 2089EXT2
Construction Cost \$667,500

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 2000. 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.

SHOWER WATER CONTROL SYSTEMS REPLACEMENT

Project Index #: 2089PLM3
Construction Cost \$15,000

This building is equipped with shower water control systems that are outdated and should be scheduled for replacement. Problems exist with the current shower water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. This project includes the replacement of the shower water controllers, piping, valves, access panels, shower heads and all connections to the existing utilities.

WATER HEATER REPLACEMENT

Project Index #: 2089PLM1
Construction Cost \$2,000

There are two 18 gallon electric water heaters in the building. The average life span of a water heater is eight to ten years. With the passage of time and constant use, these units are showing signs of wear and should be scheduled for replacement in the next 2-3 years. It is recommended that two new electric water heaters be installed. Removal and disposal of the existing equipment is included in this estimate.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$300,000

Long-Term Needs

Four to Ten Years

Project Index #: 2089INT5

Construction Cost \$300,000

SHOWER UPGRADE

There are twelve shower stalls in the building that are showing signs of failure and should be scheduled for repair or replacement. This project would provide for twelve stainless steel shower cabinets to be installed to provide shower facilities for the housing unit. Removal and disposal of the existing materials is included in the estimate.

BUILDING INFORMATION:

Gross Area (square feet): 44,500
Year Constructed: 2000
Exterior Finish 1: 100 # Tilt-Up Concrete
Exterior Finish 2: #
Number of Levels (Floors): 2 Basement? No
IBC Occupancy Type 1: 100 # I-3
IBC Occupancy Type 2: #
Construction Type: Tilt-Up Concrete & Steel
IBC Construction Type: II-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$2,309,333	Project Construction Cost per Square Foot	\$139.09
Priority Class 2:	\$3,580,275	Total Facility Replacement Construction Cost	\$15,575,000
Priority Class 3:	\$300,000	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$6,189,608	FCNI:	40%

HOUSING UNIT #4

SPWD Facility Condition Analysis - 2088

Survey Date: 11/1/2016

**HOUSING UNIT #4
BUILDING REPORT**

The Housing Unit #4 is situated along the southeast secured side of High Desert State Prison. The building is constructed of tilt-up concrete walls, concrete floors at lower and upper levels, a concrete slab-on-grade foundation, prefabricated steel frame trusses, metal decking and has a single-ply membrane roof. The building is used to house inmates at the prison.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$2,304,833

Currently Critical

Immediate to Two Years

ADA SHOWER UPGRADE

Project Index #: 2088ADA4

Construction Cost \$75,000

This project would provide for three ADA compliant stainless steel shower cabinets to be installed to provide shower facilities for the disabled. Included in this estimate is the installation of three stainless steel ADA compliant shower cabinet units complete with accessible plumbing fixtures, seats, etc. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

ADA TABLE UPGRADE

Project Index #: 2088ADA1

Construction Cost \$3,000

Per the United States Access Board and ICC ANSI-A117.1-2009, at least 5 percent of the seating spaces shall be, if fixed seating is provided, a loose seat or open space for a wheelchair. This project would provide funding to remove 3 of the fixed seats, which will allow access for wheel chairs.

COMMUNICATIONS SYSTEM UPGRADE

Project Index #: 2088SEC2

Construction Cost \$222,500

This building is equipped with a communications system that at the time of the survey was not working properly. The communications system provides paging, phone communications and communication to inmates. The communications system is an integral component of the notification and safety procedures for the inmates and staff. The system is problematic and replacement parts are no longer available. It is recommended that the communications system be upgraded.

DOOR CONTROLS SYSTEM REPLACEMENT

Project Index #: 2088SEC4

Construction Cost \$1,438,241

The control panel/ inmate movement and control system in the housing unit is not working properly. The cell door indicator lights on the control panel are falsely representing the actual status of the cell doors. The officer sometimes cannot tell if the cell door is open or closed. This project would replace the existing secured door control system with a programmable logic controlled system using touch screens for actuation and door status. This project would replace the existing door control system and the outdated wiring. 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 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

ELECTRICAL OUTLET & CABLE UPGRADES

Project Index #: 2088SFT5

Construction Cost \$74,592

At the time of the survey the building had residential and commercial cover plates over the electrical outlets and coaxial wires. This poses a safety hazard allowing inmates to remove them and use them as weapons. This could be a safety hazard to inmates and guards. This project would provide for the installation of new security grade cover plates throughout the entire housing unit.

Project Index #: 2088HVA3

Construction Cost \$4,000

EVAPORATIVE COOLER REPLACEMENT

There is a guard stationed on the roof to look out onto the yard. They have one overhead swamp cooler to keep them cool in the warmer months. At the time of the survey the swamp cooler was not working. It is severely scaled and has reached the end of its useful and expected life. This project would provide for a new evaporative cooler to be installed including all required connections to utilities. The estimate includes removal and disposal of the old cooler.

Project Index #: 2088HVA1

Construction Cost \$10,000

EXHAUST FAN INSTALLATION

The mechanical room within the housing unit has plumbing fixtures and drains. Due to moisture in this room, the humidity is very high and there is an increase probability for indoor air quality concern. This project would provide for the purchase and installation of a new commercial grade exhaust fan and the assemblies and will include the connections to utilities.

Project Index #: 2088SFT4

Construction Cost \$356,000

FIRE ALARM SYSTEM REPLACEMENT

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

Project Index #: 2088SFT3

Construction Cost \$9,000

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

Project Index #: 2088SFT6

Construction Cost \$10,000

ROOF HATCH REPLACEMENT

The roof hatches are original to the building and have reached the end of their 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 the removal and the disposal of the existing roof hatches and for the purchase and installation of new roof hatches.

Project Index #: 2088SFT2

Construction Cost \$40,000

SPRINKLER HEAD REPLACEMENT

The existing fire suppression sprinkler heads are an older style and are susceptible to damage and misuse by the inmates. Inmates have tied strings to the sprinkler heads and have broken them in the past. This project recommends that all of the fire sprinkler heads in all cells be removed and replaced with a new state of the art tamper-resistant sprinkler heads.

Project Index #: 2088ADA2

Construction Cost \$60,000

TDD INSTALLATION

The Housing Unit is not equipped with a TDD. In order to comply with ADA requirements it is recommended to install a TDD system in the Housing Unit. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

Project Index #: 2088STR1
Construction Cost \$2,500

WALKWAY RAILING

The perimeter roof walkway guardrail is failing. The railing is loose or not attached and is posing a potential safety problem. This project recommends an assessment be performed by a Structural Engineer to determine the cause and provide a design solution. Future projects will be based on the design solution recommendation.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$3,880,275

Necessary - Not Yet Critical Two to Four Years

Project Index #: 2088SEC3
Construction Cost \$421,875

CELL DOORS, LOCKS AND CONTROLS REPLACEMENT

The Housing Unit was constructed in 2000. The cell doors, locks and controls are original to the building and have been problematic due to inmate abuse and age. This project would provide for installing new cell doors, locks and controls. Removal and disposal of the existing equipment is included in this estimate.

Project Index #: 2088PLM2
Construction Cost \$504,000

CELL WATER CONTROL SYSTEMS REPLACEMENT

This building is equipped with cell water control systems that are outdated and should be scheduled for replacement. Problems exist with the current water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. It is recommended to replace the water control systems. This project includes the replacement of the water controllers, piping, valves, access panels and all connections to the existing utilities.

Project Index #: 2088PLM4
Construction Cost \$50,000

COMPUTER WATER CONTROL SYSTEM REPLACEMENT

This building is equipped with a computer water control system that is outdated and should be scheduled for replacement. Problems exist with the current computer water control system. It is increasingly difficult to find software updates and experienced repairmen to service the equipment. This project recommends the installation of a new computer water control system for the building. This system will monitor and control the water for all fixtures throughout the building. New electronic sensors will be installed on each water control system.

Project Index #: 2088ELE1
Construction Cost \$5,000

ELECTRICAL TRANSFORMER REPLACEMENT

The 50 kVA electrical transformer that provides services to the building was damaged at the time of inspection and does not function properly. This project recommends replacing the electrical transformer.

Project Index #: 2088EXT1
Construction Cost \$445,000

EXTERIOR FINISHES

It is important to maintain the finish, weather resistance and appearance of the building. This project would provide for caulking all control joints and penetrations on a cyclical basis. The metal doors and window frames should also be sanded and painted a on a cyclical basis.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2088HVA2
Construction Cost \$667,500

HVAC EQUIPMENT REPLACEMENT

The air handlers, fan coils and related equipment are original to the building, dating back to 2000. The equipment has consistent problems and has reached its expected life span. This project recommends replacement of the air handlers, fan coils, ventilation equipment and exhaust fans. It is recommended that this project be implemented in the next 2-3 years to avoid possible failure and emergency funding for replacement.

Project Index #: 2088INT1
Construction Cost \$445,000

INTERIOR FINISHES

The interior finishes are in fair condition. It is recommended that the interior walls and floors be painted or sealed at least once in the next 2-3 years. Prior to painting or sealing, all surfaces should be repaired and prepped. An epoxy-based paint should be utilized in wet areas for durability.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2088INT3
Construction Cost \$1,400

JANITORS CLOSET REPAIRS

The mop sink in the Janitors Closet is mounted adjacent to CMU and is showing signs of water damage. This project would provide 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 #: 2088ENR1
Construction Cost \$356,000

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

Project Index #: 2088EXT2
Construction Cost \$667,500

ROOF REPLACEMENT

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 2000. 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 #: 2088INT2
Construction Cost \$300,000

SHOWER UPGRADE

There are twelve shower stalls in the building that are showing signs of failure and should be scheduled for repair or replacement. This project would provide for twelve stainless steel shower cabinets to be installed to provide shower facilities for the housing units. Removal and disposal of the existing materials is included in the estimate.

Project Index #: 2088PLM3
Construction Cost \$15,000

SHOWER WATER CONTROL SYSTEMS REPLACEMENT

The showers do not have water control systems in place. It is recommended to install new water control systems within the next 2-3 years. Installing water control systems will reduce the water usage in the building. This project includes the installation of new water controllers, piping, valves, access panels, shower heads and all connections to the existing utilities.

Project Index #: 2088PLM1
Construction Cost \$2,000

WATER HEATER REPLACEMENT

There are two 18 gallon electric water heaters in the building. The average life span of a water heater is eight to ten years. With the passage of time and constant use, these units are showing signs of wear and should be scheduled for replacement in the next 2-3 years. It is recommended that two new electric water heaters be installed. Removal and disposal of the existing equipment is included in this estimate.

BUILDING INFORMATION:

Gross Area (square feet): 44,500
Year Constructed: 2000
Exterior Finish 1: 100 # Tilt-Up Concrete
Exterior Finish 2: #
Number of Levels (Floors): 2 Basement? No
IBC Occupancy Type 1: 100 # I-3
IBC Occupancy Type 2: #
Construction Type: Tilt-Up Concrete & Steel
IBC Construction Type: II-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$2,304,833	Project Construction Cost per Square Foot	\$138.99
Priority Class 2:	\$3,880,275	Total Facility Replacement Construction Cost	\$15,575,000
Priority Class 3:	\$0	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$6,185,108	FCNI:	40%

HOUSING UNIT #2

SPWD Facility Condition Analysis - 2087

Survey Date: 11/1/2016

**HOUSING UNIT #2
BUILDING REPORT**

The Housing Unit #2 is situated along the west/north secured side of High Desert State Prison. The building is constructed of tilt-up concrete walls, concrete floors at lower and upper levels, a concrete slab-on-grade foundation, prefabricated steel frame trusses, metal decking and has a single-ply membrane roof. The building is used to house inmates at the prison.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$2,309,333

Currently Critical

Immediate to Two Years

ADA SHOWER UPGRADE

Project Index #: 2087ADA4

Construction Cost \$75,000

This project would provide for three ADA compliant stainless steel shower cabinets to be installed to provide shower facilities for the disabled. Included in this estimate is the installation of three stainless steel ADA compliant shower cabinet units complete with accessible plumbing fixtures, seats, etc. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

ADA TABLE UPGRADE

Project Index #: 2087ADA1

Construction Cost \$3,000

Per the United States Access Board and ICC ANSI-A117.1-2009, at least 5 percent of the seating spaces shall be, if fixed seating is provided, a loose seat or open space for a wheelchair. This project would provide funding to remove 3 of the fixed seats, which will allow access for wheel chairs.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

COMMUNICATIONS SYSTEM UPGRADE

Project Index #: 2087SEC1

Construction Cost \$222,500

This building is equipped with a communications system that at the time of the survey was not working properly. The communications system provides paging, phone communications and communication to inmates. The communications system is an integral component of the notification and safety procedures for the inmates and staff. The system is problematic and replacement parts are no longer available. It is recommended that the communications system be upgraded.

DOOR CONTROLS SYSTEM REPLACEMENT

Project Index #: 2087SEC3

Construction Cost \$1,438,241

The control panel/ inmate movement and control system in the housing unit is not working properly. The cell door indicator lights on the control panel are falsely representing the actual status of the cell doors. The officer sometimes cannot tell if the cell door is open or closed. This project would replace the existing secured door control system with a programmable logic controlled system using touch screens for actuation and door status. This project would replace the existing door control system and the outdated wiring. 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 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2087ADA3

Construction Cost \$4,000

DUAL LEVEL DRINKING FOUNTAIN INSTALLATION

This building contains a water fountain that is not ADA compliant. The 2012 IBC Section 1109.5 states where drinking fountains are provided on an exterior site, on a floor or within a secured area, no fewer than two drinking fountains shall be provided. One shall comply with the requirements for people who use a wheelchair and one shall comply with the requirements for standing persons. This project would provide funding for the purchase and installation of two drinking fountains to meet the ADA requirements.

Project Index #: 2087SFT5

Construction Cost \$74,592

ELECTRICAL OUTLET & CABLE UPGRADES

At the time of the survey the building had residential and commercial cover plates over the electrical outlets and coaxial wires. This poses a safety hazard allowing inmates to remove them and use them as weapons. This could be a safety hazard to inmates and guards. This project would provide for the installation of new security grade cover plates throughout the entire housing unit.

Project Index #: 2087HVA3

Construction Cost \$4,000

EVAPORATIVE COOLER REPLACEMENT

There is a guard stationed on the roof to look out onto the yard. They have one overhead swamp cooler to keep them cool in the warmer months. At the time of the survey the swamp cooler was not working. It is severely scaled and has reached the end of its useful and expected life. This project would provide for a new evaporative cooler to be installed including all required connections to utilities. The estimate includes removal and disposal of the old cooler.

Project Index #: 2087HVA1

Construction Cost \$10,000

EXHAUST FAN INSTALLATION

The mechanical room within the housing unit has plumbing fixtures and drains. Due to moisture in this room, the humidity is very high and there is an increase probability for indoor air quality concern. This project would provide for the purchase and installation of a new commercial grade exhaust fan and the assemblies and will include the connections to utilities.

Project Index #: 2087SFT4

Construction Cost \$356,000

FIRE ALARM SYSTEM REPLACEMENT

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

Project Index #: 2087SFT3

Construction Cost \$9,000

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

Project Index #: 2087SFT6

Construction Cost \$10,000

ROOF HATCH REPLACEMENT

The roof hatches are original to the building and have reached the end of their 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 the removal and the disposal of the existing roof hatches and for the purchase and installation of new roof hatches.

SPRINKLER HEAD REPLACEMENT

**Project Index #: 2087SFT2
Construction Cost \$40,000**

The existing fire suppression sprinkler heads are an older style and are susceptible to damage and misuse by the inmates. Inmates have tied strings to the sprinkler heads and have broken them in the past. This project recommends that all of the fire sprinkler heads in all cells be removed and replaced with a new state of the art tamper-resistant sprinkler heads.

TDD INSTALLATION

**Project Index #: 2087ADA2
Construction Cost \$60,000**

The Housing Unit is not equipped with a TDD. In order to comply with ADA requirements it is recommended to install a TDD system in the Housing Unit. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

WALKWAY RAILING

**Project Index #: 2087STR1
Construction Cost \$3,000**

The perimeter roof walkway guardrail is failing. The railing is loose or not attached and is posing a potential safety problem. This project recommends an assessment be performed by a Structural Engineer to determine the cause and provide a design solution. Future projects will be based on the design solution recommendation. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$3,580,275

Necessary - Not Yet Critical Two to Four Years

CELL DOORS, LOCKS AND CONTROLS REPLACEMENT

**Project Index #: 2087SEC2
Construction Cost \$421,875**

The Housing Unit was constructed in 2000. The cell doors, locks and controls are original to the building and have been problematic due to inmate abuse and age. This project would provide for installing new cell doors, locks and controls. Removal and disposal of the existing equipment is included in this estimate.

CELL WATER CONTROL SYSTEMS REPLACEMENT

**Project Index #: 2087PLM2
Construction Cost \$504,000**

This building is equipped with cell water control systems that are outdated and should be scheduled for replacement. Problems exist with the current water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. It is recommended to replace the water control systems. This project includes the replacement of the water controllers, piping, valves, access panels and all connections to the existing utilities.

COMPUTER WATER CONTROL SYSTEM REPLACEMENT

**Project Index #: 2087PLM4
Construction Cost \$50,000**

This building is equipped with a computer water control system that is outdated and should be scheduled for replacement. Problems exist with the current computer water control system. It is increasingly difficult to find software updates and experienced repairmen to service the equipment. This project recommends the installation of a new computer water control system for the building. This system will monitor and control the water for all fixtures throughout the building. New electronic sensors will be installed on each water control system.

ELECTRICAL TRANSFORMER REPLACEMENT

**Project Index #: 2087ELE1
Construction Cost \$5,000**

The 50 kVA electrical transformer that provides services to the building was damaged at the time of inspection and does not function properly. This project recommends replacing the electrical transformer.

Project Index #: 2087EXT1
Construction Cost \$445,000

EXTERIOR FINISHES

It is important to maintain the finish, weather resistance and appearance of the building. This project would provide for caulking all control joints and penetrations on a cyclical basis. The metal doors and window frames should also be sanded and painted a on a cyclical basis.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2087HVA2
Construction Cost \$667,500

HVAC EQUIPMENT REPLACEMENT

The air handlers, fan coils and related equipment are original to the building, dating back to 2000. The equipment has consistent problems and has reached its expected life span. This project recommends the replacement of all air handlers, fan coils, ventilation equipment and exhaust fans. It is recommended that this project be implemented in the next 2-3 years to avoid possible failure and emergency funding for replacement.

Project Index #: 2087INT1
Construction Cost \$445,000

INTERIOR FINISHES

The interior finishes are in fair condition. It is recommended that the interior walls and floors be painted or sealed at least once in the next 2-3 years. Prior to painting or sealing, all surfaces should be repaired and prepped. An epoxy-based paint should be utilized in wet areas for durability.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2087INT3
Construction Cost \$1,400

JANITORS CLOSET REPAIRS

The mop sink in the Janitors Closet is mounted adjacent to CMU and is showing signs of water damage. This project would provide 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 #: 2087ENR1
Construction Cost \$356,000

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

Project Index #: 2087EXT2
Construction Cost \$667,500

ROOF REPLACEMENT

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 2000. 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 #: 2087PLM3
Construction Cost \$15,000

SHOWER WATER CONTROL SYSTEMS REPLACEMENT

This building is equipped with shower water control systems that are outdated and should be scheduled for replacement. Problems exist with the current shower water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. This project includes the replacement of the shower water controllers, piping, valves, access panels, shower heads and all connections to the existing utilities.

Project Index #: 2087PLM1
Construction Cost \$2,000

WATER HEATER REPLACEMENT

There are two 18 gallon electric water heaters in the building. The average life span of a water heater is eight to ten years. With the passage of time and constant use, these units are showing signs of wear and should be scheduled for replacement in the next 2-3 years. It is recommended that two new electric water heaters be installed. Removal and disposal of the existing equipment is included in this estimate.

PRIORITY CLASS 3 PROJECTS **Total Construction Cost for Priority 3 Projects: \$300,000**
Long-Term Needs **Four to Ten Years**

SHOWER UPGRADE

Project Index #: 2087INT2
Construction Cost \$300,000

There are twelve shower stalls in the building that are showing signs of failure and should be scheduled for repair or replacement. This project would provide for twelve stainless steel shower cabinets to be installed to provide shower facilities for the housing units. Removal and disposal of the existing materials is included in the estimate.

BUILDING INFORMATION:

Gross Area (square feet): 44,500
Year Constructed: 2000
Exterior Finish 1: 100 # Tilt-Up Concrete
Exterior Finish 2: #
Number of Levels (Floors): 2 Basement? No
IBC Occupancy Type 1: 100 # I-3
IBC Occupancy Type 2: #
Construction Type: Tilt-Up Concrete & Steel
IBC Construction Type: II-A
Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$2,309,333	Project Construction Cost per Square Foot	\$139.09
Priority Class 2:	\$3,580,275	Total Facility Replacement Construction Cost	\$15,575,000
Priority Class 3:	\$300,000	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$6,189,608	FCNI:	40%

HOUSING UNIT #1

SPWD Facility Condition Analysis - 2086

Survey Date: 11/1/2016

**HOUSING UNIT #1
BUILDING REPORT**

The Housing Unit #1 is situated along the west/ north secured side of High Desert State Prison. The building is constructed of tilt-up concrete walls, concrete floors at lower and upper levels, a concrete slab-on-grade foundation, prefabricated steel frame trusses, metal decking and has a single-ply membrane roof. The building is used to house inmates at the prison.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$2,309,333

Currently Critical

Immediate to Two Years

ADA SHOWER UPGRADE

**Project Index #: 2086ADA1
Construction Cost \$75,000**

This project would provide for three ADA compliant stainless steel shower cabinets to be installed to provide shower facilities for the disabled. Included in this estimate is the installation of three stainless steel ADA compliant shower cabinet units complete with accessible plumbing fixtures, seats, etc. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

ADA TABLE UPGRADE

**Project Index #: 2086ADA4
Construction Cost \$3,000**

Per the United States Access Board and ICC ANSI-A117.1-2009, at least 5 percent of the seating spaces shall be, if fixed seating is provided, a loose seat or open space for a wheelchair. This project would provide funding to remove 3 of the fixed seats, which will allow access for wheel chairs.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

COMMUNICATIONS SYSTEM UPGRADE

**Project Index #: 2086SEC2
Construction Cost \$222,500**

This building is equipped with a communications system that at the time of the survey was not working properly. The communications system provides paging, phone communications and communication to inmates. The communications system is an integral component of the notification and safety procedures for the inmates and staff. The system is problematic and replacement parts are no longer available. It is recommended that the communications system be upgraded.

DOOR CONTROL SYSTEM REPLACEMENT

**Project Index #: 2086ELE1
Construction Cost \$1,438,241**

The control panel/ inmate movement and control system in the housing unit is not working properly. The cell door indicator lights on the control panel are falsely representing the actual status of the cell doors. The officer sometimes cannot tell if the cell door is open or closed. This project would replace the existing secured door control system with a programmable logic controlled system using touch screens for actuation and door status. This project would replace the existing door control system and the outdated wiring. 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 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2086ADA2
Construction Cost \$4,000

DUAL LEVEL DRINKING FOUNTAIN INSTALLATION

This building contains a water fountain that is not ADA compliant. The 2012 IBC Section 1109.5 states where drinking fountains are provided on an exterior site, on a floor or within a secured area, no fewer than two drinking fountains shall be provided. One shall comply with the requirements for people who use a wheelchair and one shall comply with the requirements for standing persons. This project would provide funding for the purchase and installation of two drinking fountains to meet the ADA requirements.

Project Index #: 2086SFT2
Construction Cost \$74,592

ELECTRICAL OUTLET & CABLE UPGRADES

At the time of the survey the building had residential and commercial cover plates over the electrical outlets and coaxial wires. This poses a safety hazard allowing inmates to remove them and use them as weapons. This could be a safety hazard to inmates and guards. This project would provide for the installation of new security grade cover plates throughout the entire housing unit.

Project Index #: 2086HVA1
Construction Cost \$4,000

EVAPORATIVE COOLER REPLACEMENT

There is a guard stationed on the roof to look out onto the yard. They have one overhead swamp cooler to keep them cool in the warmer months. At the time of the survey the swamp cooler was not working. It is severely scaled and has reached the end of its useful and expected life. This project would provide for a new evaporative cooler to be installed including all required connections to utilities. The estimate includes removal and disposal of the old cooler.

Project Index #: 2086HVA3
Construction Cost \$10,000

EXHAUST FAN INSTALLATION

The mechanical room within the housing unit has plumbing fixtures and drains. Due to moisture in this room, the humidity is very high and there is an increase probability for indoor air quality concern. This project would provide for the purchase and installation of a new commercial grade exhaust fan and the assemblies and will include the connections to utilities.

Project Index #: 2086SFT3
Construction Cost \$356,000

FIRE ALARM SYSTEM REPLACEMENT

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and due to this, the system no longer complies with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure. When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

Project Index #: 2086SFT4
Construction Cost \$9,000

FIRE SUPPRESSION OBSTRUCTION INVESTIGATION

This building has an automatic fire suppression system. Per NFPA 25 Obstruction Investigation and Prevention an inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. It is recommended that this project be completed within the next year and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

Project Index #: 2086SFT6
Construction Cost \$10,000

ROOF HATCH REPLACEMENT

The roof hatches are original to the building and have reached the end of their 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 the removal and the disposal of the existing roof hatches and for the purchase and installation of new roof hatches.

SPRINKLER HEAD REPLACEMENT

**Project Index #: 2086SFT5
Construction Cost \$40,000**

The existing fire suppression sprinkler heads are an older style and are susceptible to damage and misuse by the inmates. Inmates have tied strings to the sprinkler heads and have broken them in the past. This project recommends that all of the fire sprinkler heads in all cells be removed and replaced with a new state of the art tamper-resistant sprinkler heads.

TDD INSTALLATION

**Project Index #: 2086ADA3
Construction Cost \$60,000**

The Housing Unit is not equipped with a TDD. In order to comply with ADA requirements it is recommended to install a TDD system in the Housing Unit. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards for Accessible Design were used as references for this project.

WALKWAY RAILING

**Project Index #: 2086STR1
Construction Cost \$3,000**

The perimeter roof walkway guardrail is failing. The railing is loose or not attached and is posing a potential safety problem. This project recommends an assessment be performed by a Structural Engineer to determine the cause and provide a design solution. Future projects will be based on the design solution recommendation. This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$3,580,275

Necessary - Not Yet Critical Two to Four Years

CELL DOORS, LOCKS AND CONTROLS REPLACEMENT

**Project Index #: 2086SEC1
Construction Cost \$421,875**

The Housing Unit was constructed in 2000. The cell doors, locks and controls are original to the building and have been problematic due to inmate abuse and age. This project would provide for installing new cell doors, locks and controls. Removal and disposal of the existing equipment is included in this estimate.

CELL WATER CONTROL SYSTEMS REPLACEMENT

**Project Index #: 2086PLM3
Construction Cost \$504,000**

This building is equipped with cell water control systems that are outdated and should be scheduled for replacement. Problems exist with the current water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. It is recommended to replace the water control systems. This project includes the replacement of the water controllers, piping, valves, access panels and all connections to the existing utilities.

COMPUTER WATER CONTROL SYSTEM REPLACEMENT

**Project Index #: 2086PLM4
Construction Cost \$50,000**

This building is equipped with a computer water control system that is outdated and should be scheduled for replacement. Problems exist with the current computer water control system. It is increasingly difficult to find software updates and experienced repairmen to service the equipment. This project recommends the installation of a new computer water control system for the building. This system will monitor and control the water for all fixtures throughout the building. New electronic sensors will be installed on each water control system.

ELECTRICAL TRANSFORMER REPLACEMENT

**Project Index #: 2086ELE2
Construction Cost \$5,000**

The 50 kVA electrical transformer that provides services to the building was damaged at the time of inspection and does not function properly. This project recommends replacing the electrical transformer.

Project Index #: 2086EXT2
Construction Cost \$445,000

EXTERIOR FINISHES

It is important to maintain the finish, weather resistance and appearance of the building. The caulked control joints in the CMU of the exterior surface of this building are uniformly deteriorated and should be removed and the joints re-caulked. The metal doors and window frames should be sanded and painted on a cyclical basis.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2086HVA2
Construction Cost \$667,500

HVAC EQUIPMENT REPLACEMENT

The air handlers, fan coils and related equipment are original to the building, dating back to 2000. The equipment has consistent problems and has reached its expected life span. This project recommends the replacement of all air handlers, fan coils, ventilation equipment and exhaust fans. It is recommended that this project be implemented in the next 2-3 years to avoid possible failure and emergency funding for replacement.

Project Index #: 2086INT1
Construction Cost \$445,000

INTERIOR FINISHES

This project would provide funding to maintain the interior of the building. Included in the cost is painting the walls and ceilings, sealing the exposed masonry, repairing cracks in the masonry and replacing grout and caulk as needed. An epoxy-based paint should be utilized in wet areas for durability. It is recommended that the interior of the building be painted, sealed and repaired in the next 2-3 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion thereof was previously recommended in the FCA report dated 03/17/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 11/01/2016.

Project Index #: 2086INT3
Construction Cost \$1,400

JANITORS CLOSET REPAIRS

The mop sink in the Janitors Closet is mounted adjacent to CMU and is showing signs of water damage. This project would provide 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 #: 2086ENR1
Construction Cost \$356,000

LIGHTING UPGRADE

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. Any electrical wiring upgrades are not included in this estimate.

Project Index #: 2086EXT3
Construction Cost \$667,500

ROOF REPLACEMENT

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 2000. 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 #: 2086PLM2
Construction Cost \$15,000

SHOWER WATER CONTROL SYSTEMS REPLACEMENT

This building is equipped with shower water control systems that are outdated and should be scheduled for replacement. Problems exist with the current shower water control systems. It is increasingly difficult to find replacement parts and experienced repairmen to service the equipment. This project includes the replacement of the shower water controllers, piping, valves, access panels, shower heads and all connections to the existing utilities.

Project Index #: 2086PLM1

Construction Cost \$2,000

WATER HEATER REPLACEMENT

There are two 18 gallon electric water heaters in the building. The average life span of a water heater is eight to ten years. With the passage of time and constant use, these units are showing signs of wear and should be scheduled for replacement in the next 2-3 years. It is recommended that two new electric water heaters be installed. Removal and disposal of the existing equipment is included in this estimate.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$300,000

Long-Term Needs

Four to Ten Years

Project Index #: 2086INT2

Construction Cost \$300,000

SHOWER UPGRADE

There are twelve shower stalls in the building that are showing signs of failure and should be scheduled for repair or replacement. This project would provide for twelve stainless steel shower cabinets to be installed to provide shower facilities for the housing units. Removal and disposal of the existing materials is included in the estimate.

BUILDING INFORMATION:

Gross Area (square feet): 44,500

Year Constructed: 2000

Exterior Finish 1: 100 # Tilt-Up Concrete

Exterior Finish 2: #

Number of Levels (Floors): 2 Basement? No

IBC Occupancy Type 1: 100 # I-3

IBC Occupancy Type 2: #

Construction Type: Tilt-Up Concrete & Steel

IBC Construction Type: II-A

Percent Fire Suppressed: 100 #

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$2,309,333	Project Construction Cost per Square Foot	\$139.09
Priority Class 2:	\$3,580,275	Total Facility Replacement Construction Cost	\$15,575,000
Priority Class 3:	\$300,000	Facility Replacement Cost per Square Foot	\$350
Grand Total:	\$6,189,608	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
Facilities Condition Analysis

515 E. Musser Street, Suite 102
Carson City, Nevada 89701-4263

(775) 684-4141 voice
(775) 684-4142 facsimile



Tower #4 - Building #2177
Description: Exterior finishes.



Housing Unit #7 – Building #2173
Description: Cell water controls system replacement needed.



Housing Unit #7 - Building #2173
Description: Door controls system replacement needed.



Housing Unit #8 - Building #2172
Description: Exterior finishes.



Housing Unit #8 - Building #2172
Description: Evaporative cooler replacement needed.



Security/ Administration - Building #2099
Description: Water heater replacement needed.



Armory/ Emergency Response - Building #2098
Description: Exterior finishes.



Maintenance/ Central Plant - Building #2097
Description: Boiler burner replacement needed.



Maintenance/ Central Plant - Building #2097
Description: HVAC replacement needed.



Sallyport - Building #2096
Description: Egress door upgrade needed.



Administration - Building #2094
Description: Roof replacement needed.



Visitation - Building #2093
Description: Water treatment system replacement needed.



Inmate Services/ Culinary/ Dining - Building #2091
Description: Hot water re-use room remodel needed.



Inmate Services/ Culinary/ Dining - Building #2091
Description: ADA table upgrade needed.



Infirmery/ Intake – Building #2090
Description: Shelves missing proper anchoring.



Infirmery/ Intake – Building #2090
Description: ADA shower upgrade needed.