



STATE OF NEVADA  
STATE PUBLIC WORKS DIVISION

FACILITY CONDITION ASSESSMENT REPORT FOR:

DEPT OF CORRECTIONS  
THREE LAKES VALLEY CONSERVATION CAMP

SITE #: 9967      THREE LAKES VALLEY CONSERVATION CAMP  
21055 COLD CREEK RD  
INDIAN SPRINGS, NV 89070-0001



Survey Date: 4/19/2022  
Distribution Date: 8/24/2023

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## FACILITY CONDITION ASSESSMENT INTRODUCTION

### PROGRAM

Created under the authority of NRS 341.128. (Legislature, 2022). The State Public Works Division's (SPWD) Facility Condition Assessment (FCA) program periodically inspects all state-owned buildings excluding those owned by the Nevada System of Higher Education (NSHE). Additionally, Nevada Department of Transportation (NDOT) and Legislature buildings are assessed by their own agencies. SPWD FCA personnel conduct interviews with site staff, review documents, and perform walk-throughs to assess the physical condition of the building's components and systems. The outcome of the assessment is a report of the overall site condition and infrastructure findings for the site and building(s) located on the site. The Legislative Commission will be notified if there are any serious concerns reported.

### REPORT

The purpose of the report is to provide a documentary framework to assist the agency and SPWD in optimizing and maintaining the physical condition of the state's building portfolio; develop capital budgets and prioritize resources. Agencies may find it helpful in calculating funding required to meet future budgetary needs. Additionally, it augments SPWDs Capital Improvement Program's (CIP) planning phase.

Projects are identified and categorized under the building management systems listed below (Figure 1.) and assigned a priority (Figure 2.)

FIGURE 1.

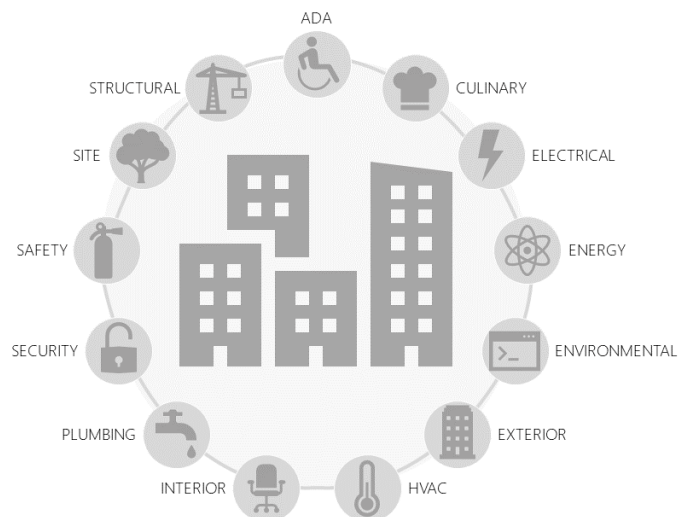
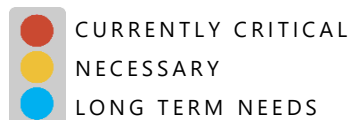


FIGURE 2.



The appendices provide supplementary material for a more comprehensive understanding of priority categorization, cost estimates and facility management standards.

APPENDIX A	PROJECT IDENTIFICATION (ID) CATEGORIES
APPENDIX B	MAINTENANCE PROJECTS AND COST ESTIMATES
APPENDIX C	FACILITY CONDITION INDEX
APPENDIX D	PROJECT PRIORITY CLASSIFICATIONS
APPENDIX E	REFERENCES
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APPENDIX H	REVISION HISTORY

## DISCLAIMER

1. The report was prepared by the SPWD under the authority of [NRS 341.128](#) for use as a planning resource.
2. The report does not guarantee funding and should not be used for budgetary purposes.
3. Qualified individuals should develop the overall project's budget estimate and scope.
4. The actual overall project costs will vary from those reported after the final scope and budgets are developed.
5. This report provides estimated hard costs (construction) and excludes soft costs (project) such as consultant fees, permit fees, and FF&E (furniture, fixtures, equipment).
6. Materials and costs noted here may be affected by new methods of construction, agency projects, and individual projects, as well as pending and proposed Capital Improvement Projects (CIP).
7. The deficiencies outlined in this report were noted in a visual survey, they do not represent the cost of a complete facility renovation or routine maintenance costs.

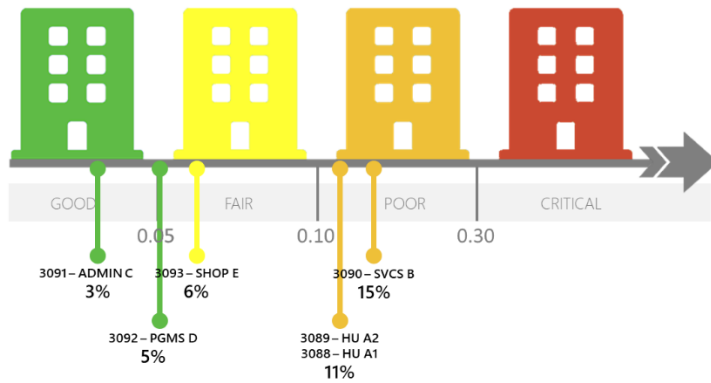
SITE MAP



BLDG #	NAME	YR BUILT	SQ FT
3088	HOUSING UNIT A1	2010	26767
3089	HOUSING UNIT A2	2010	26767
3090	INMATE SERVICES B	2010	23866
3091	NDOC/NDF ADMINISTRATION C	2010	16386
3092	INMATE PROGRAMS D	2010	10838
3093	NDF OFFICE/SHOP E	2010	14685
9967	THREE LAKES VALLEY CONSERVATION CAMP		
07	TOTAL # OF BLDGS		

## FACILITY CONDITION INDEX (FCI)

### GRAPH



FCI is the total cost of necessary building repairs and renewal divided by the current cost of replacing the building. Each building's FCI score reflects the current condition of the building: *good*, *fair*, *poor*, or *critical*. It is normal to see buildings in all stages of condition.

The graph on the left shows the FCI for each building at the THREE LAKES VALLEY CONSERVATION CAMP.

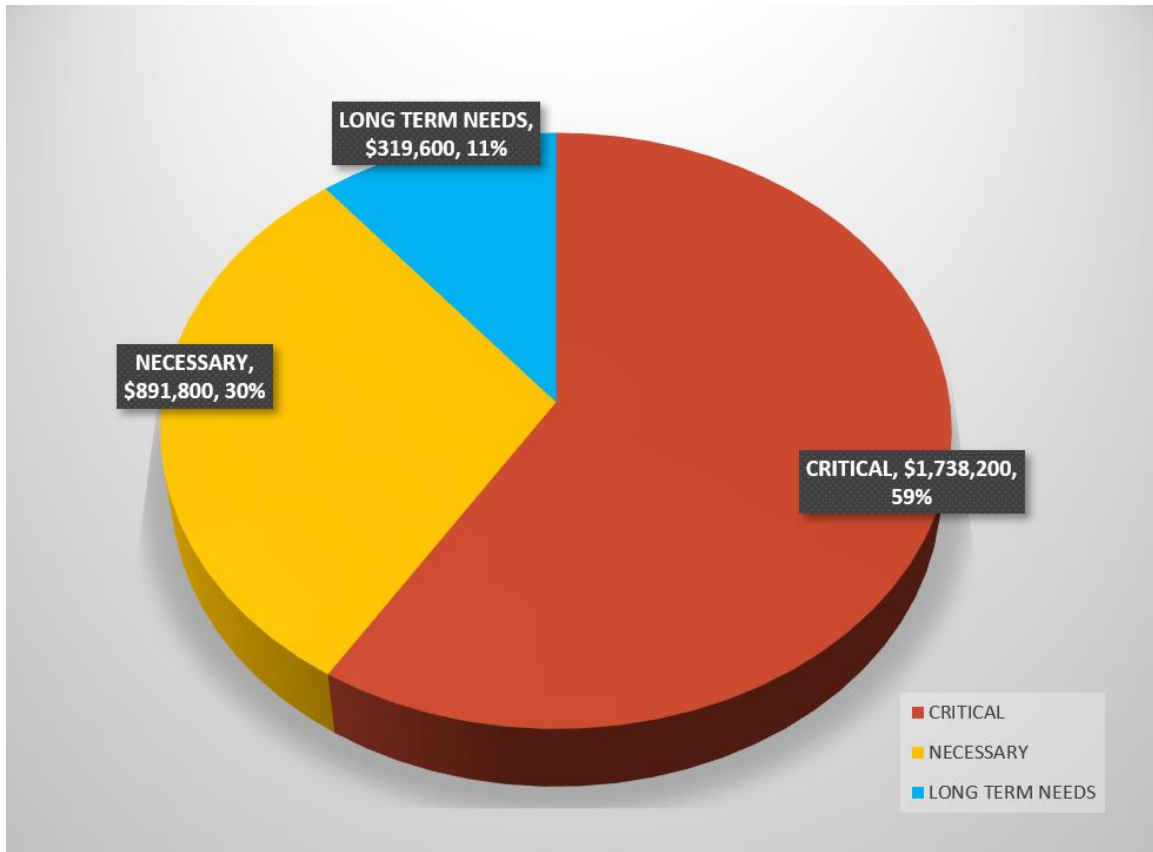
The percentages shown in the graph to the left were calculated using the figures in the report below.

DATA

SITE #: 9967

SURVEY DT	BLDG #	NAME	YR BUILT	SQ FT	PRIORITY CLASSES			PR CLASS	COST TO REPLACE	FCI
					CRITICAL (1) COST	NECESSARY (2) COST	LONG TERM (3) COST			
4/19/2022	9967	THREE LAKES VALLEY CONSERVATION CAMP			\$0	\$0	\$319,600	\$319,600	0%	
4/19/2022	3091	NDOC/NDF ADMINISTRATION C	2010	16386	\$15,000	\$15,000	\$196,600	\$226,600	\$8,193,000	3%
4/19/2022	3092	INMATE PROGRAMS D	2010	10838	\$15,000	\$71,400	\$205,000	\$291,400	\$5,419,000	5%
4/19/2022	3093	NDF OFFICE/SHOP E	2010	14685	\$15,000	\$142,800	\$280,200	\$438,000	\$7,342,500	6%
4/19/2022	3088	HOUSING UNIT A1	2010	26767	\$836,600	\$321,300	\$307,670	\$1,465,570	\$13,383,500	11%
4/19/2022	3089	HOUSING UNIT A2	2010	26767	\$836,600	\$321,300	\$361,200	\$1,519,100	\$13,383,500	11%
4/19/2022	3090	INMATE SERVICES B	2010	23866	\$20,000	\$20,000	\$1,920,200	\$1,960,200	\$12,768,300	15%
			TOTALS:	119,309	\$1,738,200	\$891,800	\$3,590,470	\$6,220,470	\$60,489,800	10%

## COST BREAKDOWN BY PRIORITY



The percentages shown in the chart above were calculated using the figures in the PROJECTS BY PRIORITY section listed below. The chart above represents costs for the entire site.

PRIORITY CLASS	DESCRIPTION	TARGET RESPONSE TIME IN YEARS
1	Currently Critical	Immediate to 2
2	Necessary – Not Yet Critical	2 to 4
3	Long Term Needs	4 to 10



PROJECTS BY PRIORITY

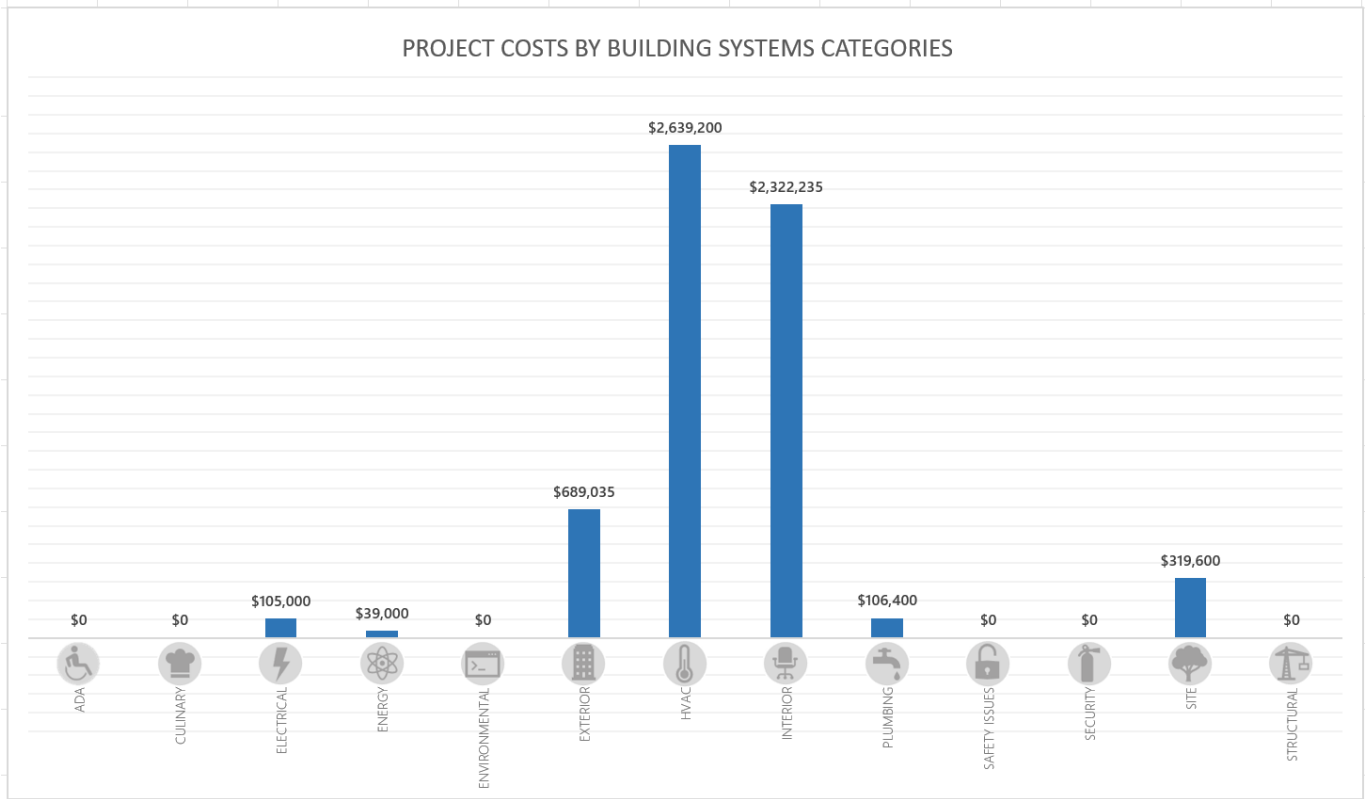
<b>PRIORITY 1 – CURRENTLY CRITICAL</b>			
<b>BLDG #</b>	<b>PROJECT #</b>	<b>DESC</b>	<b>COST</b>
3088	3088ELE1	ARC FLASH and ELECTRICAL COORDINATION STUDY	20,000.00
3088	3088INT2	SHOWERS REFURBISHMENT	816,600.00
3089	3089ELE1	ARC FLASH and ELECTRICAL COORDINATION STUDY	20,000.00
3089	3089INT2	SHOWERS REFURBISHMENT	816,600.00
3090	3090ELE1	ARC FLASH and ELECTRICAL COORDINATION STUDY	20,000.00
3091	3091ELE1	ARC FLASH and ELECTRICAL COORDINATION STUDY	15,000.00
3092	3092ELE1	ARC FLASH and ELECTRICAL COORDINATION STUDY	15,000.00
3093	3093ELE1	ARC FLASH and ELECTRICAL COORDINATION STUDY	15,000.00
			<b>\$1,738,200.00</b>
<b>PRIORITY 2 – NECESSARY, NOT YET CRITICAL</b>			
<b>BLDG #</b>	<b>PROJECT #</b>	<b>DESC</b>	<b>COST</b>
3088	3088HVA1	AIR HANDLER REFURBISHMENT	285,600.00
3088	3088PLM1	WATER TREATMENT SYSTEM REPLACEMENT	20,000.00
3088	3088PLM2	WATER HEATER REPLACEMENT	15,700.00
3089	3089HVA1	AIR HANDLER REFURBISHMENT	285,600.00
3089	3089PLM1	WATER TREATMENT SYSTEM REPLACEMENT	20,000.00
3089	3089PLM2	WATER HEATER REPLACEMENT	15,700.00
3090	3090PLM1	WATER TREATMENT SYSTEM REPLACEMENT	20,000.00
3091	3091PLM1	WATER TREATMENT SYSTEM REPLACEMENT	15,000.00
3092	3092HVA1	AIR HANDLER REFURBISHMENT	71,400.00
3093	3093HVA1	AIR HANDLER REFURBISHMENT	142,800.00
			<b>\$891,800.00</b>
<b>PRIORITY 3 – LONG TERM NEEDS</b>			
<b>BLDG #</b>	<b>PROJECT #</b>	<b>DESC</b>	<b>COST</b>
3088	3088EXT1	EXTERIOR FINISHES	133,835.00
3088	3088HVA2	HVAC EQUIPMENT REPLACEMENT	40,000.00
3088	3088INT1	INTERIOR FINISHES	133,835.00
3089	3089EXT1	EXTERIOR FINISHES	160,600.00
3089	3089HVA2	HVAC EQUIPMENT REPLACEMENT	40,000.00
3089	3089INT1	INTERIOR FINISHES	160,600.00
3090	3090EXT1	EXTERIOR FINISHES	143,200.00
3090	3090HVA1	CENTRAL PLANT REPLACEMENT	1,483,800.00
3090	3090HVA2	CULINARY REFRIGERATION EQUIPMENT REPLACEMENT	150,000.00
3090	3090INT1	INTERIOR FINISHES	143,200.00
3091	3091EXT1	EXTERIOR FINISHES	98,300.00
3091	3091INT1	INTERIOR FINISHES	98,300.00
3092	3092ENR1	EXTERIOR LIGHTING UPGRADE	15,000.00

3092	3092EXT1	EXTERIOR FINISHES	65,000.00
3092	3092HVA2	HVAC EQUIPMENT REPLACEMENT	60,000.00
3092	3092INT1	INTERIOR FINISHES	65,000.00
3093	3093ENR1	EXTERIOR LIGHTING UPGRADE	24,000.00
3093	3093EXT1	EXTERIOR FINISHES	88,100.00
3093	3093HVA2	HVAC EQUIPMENT REPLACEMENT	80,000.00
3093	3093INT1	INTERIOR FINISHES	88,100.00
9967	9967SIT2	CRACK FILL & SEAL ASPHALT PAVING	319,600.00
			<b>\$3,590,470.00</b>
		<b>GRAND TOTAL</b>	<b>\$6,220,470.00</b>

# CONSTRUCTION PROJECT PORTFOLIO BY SITE/BUILDING

## DISCLAIMER

- The deficiencies outlined in this report were noted in a visual survey, they do not represent the cost of a complete facility renovation or routine maintenance costs.



## 9967 THREE LAKES VALLEY CONSERVATION CAMP

Three Lakes Valley Conservation Camp is located about 48 miles north of Las Vegas near the town of Indian Springs. The facility is on the West side of Highway 95 on Cold Creek Road just past Southern Desert Correctional Center. This is a minimum-security facility that is supervised by the warden of SDCC. The camp was completely rebuilt in 2009 under CIP 07-C05.



**9967 THREE LAKES VALLEY CONSERVATION CAMP**

PRIORITY #: 3

PROJECT #: 9967SIT2

CONST COST: \$319,600.00

**CRACK FILL & SEAL ASPHALT PAVING**

It is important to maintain the asphalt concrete paving on the site. This project would provide for minor crack filling and sealing of the paving site wide including access roads, parking areas and the maintenance yard. 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. 415,000 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 05/01/2013. It has been amended accordingly to reflect conditions observed during the most recent survey date of 04/19/2022.

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

PRIORITY CLASS	\$0.00
PRIORITY CLASS	\$0.00
PRIORITY CLASS	\$319,600.00
<b>GRAND TOTAL:</b>	<b>\$319,600.00</b>

3093 NDF OFFICE/SHOP E  
**CONCRETE MASONRY UNITS & STEEL**

IBC CONS TYPE:	II-B	YEAR:	2010
IBC OCC TYPE 1:	100% S-1	SQ FT:	14,685
IBC OCC TYPE 2:	0%	LEVEL(s):	1
EXT FINISH 1 :	100% Painted Stucco / EIFS	BSMT?:	No
EXT FINISH 2 :	0%	FIRE SUPP:	100 %

The NDF Office/Shop is a concrete masonry unit and steel framed structure with a single-ply roofing system on a concrete foundation. The HVAC system is comprised of 4 rooftop packaged heat pump units and two large hot water heating and evaporative cooling air handlers. The building contains a large shop area, restrooms, offices and mezzanine storage areas. The facility has fire sprinklers and a fire alarm and detection system.



**3093 NDF OFFICE/SHOP E**

PRIORITY #: 1

PROJECT #: 3093ELE1

CONST COST: \$15,000.00

**ARC FLASH and ELECTRICAL COORDINATION STUDY**

Arc flash and electrical breaker coordination studies have not been performed or it has been more than 5 years since the last coordination study. Safety requirements for maintenance personnel and the latest electrical code require coordination studies to be verified and performed every 5 years, along with arc flash labeling on all electrical panels. This project will perform the required coordination study, evaluation, adjustments and labeling for the building's electrical distribution system.





**3093 NDF OFFICE/SHOP E**

PRIORITY #: 2

PROJECT #: 3093HVA1

CONST COST: \$142,800.00

**AIR HANDLER REFURBISHMENT**

A visual survey of the two evaporatively cooled air handling units (AHU's) are failing prematurely and reducing their expected life. Lack of maintenance has caused the heating coil to plug with mineral scale due to moisture carry-over from the evaporative cooling section. Moisture carry-over is indicative of air velocities well above the unit specifications caused by a lack of air balance. The severe degree of scaling renders coil cleaning ineffective and a complete replacement of the heating coil is recommended.

Additionally, the AHU's exterior surfaces are



showing signs of corrosion likely caused by the same moisture carry-over. This project will fund the removal and replacement of the heating coils, a full AHU maintenance rehabilitation, new blow-down controls on the evaporative sump, water treatment (Nu-Calgon slow dissolving scale and corrosion inhibitor) and air balance. With proper maintenance, this project should restore the AHU to its expected useful life.

**3093 NDF OFFICE/SHOP E**

PRIORITY #: 3

PROJECT #: 3093EXT1

CONST COST: \$88,100.00

**EXTERIOR FINISHES**

The exterior finishes were in fair condition. It is important to maintain the finish, weather resistance and appearance of the building. This project would provide funding to protect the exterior of the building excluding the roof. Included in the cost is power washing, priming and painting and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be painted in the next 4 - 6 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.



**3093 NDF OFFICE/SHOP E**

PRIORITY #: 3

PROJECT #: 3093ENR1

CONST COST: \$24,000.00

**EXTERIOR LIGHTING UPGRADE**

The building mounted wall pack lights appear to be original to the building. These fixtures have high pressure sodium (HPS) lamps and are less efficient. This project would provide for the replacement of the existing wall pack fixtures with LED wall packs using the existing wiring.



**3093 NDF OFFICE/SHOP E**

PRIORITY #: 3

PROJECT #: 3093HVA2

CONST COST: \$80,000.00

**HVAC EQUIPMENT REPLACEMENT**

There are 3 rooftop packaged HVAC heat pump units and 2 mini splits installed in 2010 recommended to be replaced in the next 10 years. Included in this estimate are new curb adapters, crane and rigging for removal and installation and all required connections to utilities.



**3093 NDF OFFICE/SHOP E**

PRIORITY #: 3

PROJECT #: 3093INT1

CONST COST: \$88,100.00

**INTERIOR FINISHES**

The interior finishes were in good condition. It is recommended that the interior walls and ceilings be painted at least once in the next 7 - 9 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure. Prior to painting, all surfaces should be repaired and prepped. An epoxy-based paint should be utilized in wet areas for durability.



**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

PRIORITY CLASS	\$15,000.00
PRIORITY CLASS	\$142,800.00
PRIORITY CLASS	\$280,200.00
<b>GRAND TOTAL:</b>	<b>\$438,000.00</b>

Project Construction Cost per Square Foot:	\$29.83
Total Facility Replacement Construction Cost:	\$7,342,000.00
Facility Replacement Cost per Square Foot:	\$500.00
<b>FCI:</b>	<b>6%</b>

## 3092 INMATE PROGRAMS D

### CONCRETE MASONRY UNITS & STEEL

IBC CONS TYPE:	II-B	YEAR:	2010
IBC OCC TYPE 1:	80% A-3	SQ FT:	10,838
IBC OCC TYPE 2:	20% B	LEVEL(s):	1
EXT FINISH 1 :	100% Painted Stucco / EIFS	BSMT? :	No
EXT FINISH 2 :	0%	FIRE SUPP:	100 %

The Inmate Programs building is a concrete unit masonry and steel framed structure with a single-ply roofing system on a concrete foundation. The HVAC system is comprised of 3 rooftop packaged heat pump units and a large hot water heating and evaporative cooling air handler. The building contains a large gymnasium, the chapel, a multi-purpose room, storage areas and staff and inmate restrooms as well a several offices for search and property storage. The facility has fire sprinklers as well as a fire alarm and smoke detection system.



**3092 INMATE PROGRAMS D**

PRIORITY #: 1  
PROJECT #: 3092ELE1  
CONST COST: \$15,000.00

**ARC FLASH and ELECTRICAL COORDINATION STUDY**

Arc flash and electrical breaker coordination studies have not been performed or it has been more than 5 years since the last coordination study. Safety requirements for maintenance personnel and the latest electrical code require coordination studies to be verified and performed every 5 years, along with arc flash labeling on all electrical panels. This project will perform the required coordination study, evaluation, adjustments and labeling for the building's electrical distribution system.





**3092 INMATE PROGRAMS D**

PRIORITY #: 2

PROJECT #: 3092HVA1

CONST COST: \$71,400.00

**AIR HANDLER REFURBISHMENT**

A visual survey of the evaporatively cooled air handling unit (AHU's) is failing prematurely and reducing its expected life. Lack of maintenance has caused the heating coil to plug with mineral scale due to moisture carry-over from the evaporative cooling section. Moisture carry-over is indicative of air velocities well above the unit specifications caused by a lack of air balance.



The severe degree of scaling renders coil cleaning ineffective and a complete replacement of the heating coil is recommended. Additionally, the AHU's exterior surfaces are showing signs of corrosion likely caused by the same moisture carry-over. This project will fund the removal and replacement of the heating coil, a full AHU maintenance rehabilitation, new blow-down controls on the evaporative sump, water treatment (Nu-Calgon slow dissolving scale and corrosion inhibitor) and air balance. With proper maintenance, this project should restore the AHU to its expected useful life.

**3092 INMATE PROGRAMS D**

PRIORITY #: 3

PROJECT #: 3092EXT1

CONST COST: \$65,000.00

**EXTERIOR FINISHES**

The exterior finishes were in fair condition. It is important to maintain the finish, weather resistance and appearance of the building. This project would provide funding to protect the exterior of the building excluding the roof. Included in the cost is power washing, priming and painting and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be painted in the next 4 - 6 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.



**3092 INMATE PROGRAMS D**

PRIORITY #: 3

PROJECT #: 3092ENR1

CONST COST: \$15,000.00

**EXTERIOR LIGHTING UPGRADE**

The building mounted wall pack lights appear to be original to the building. These fixtures have high pressure sodium (HPS) lamps and are less efficient. This project would provide for the replacement of the existing wall pack fixtures with LED wall packs using the existing wiring.



**3092 INMATE PROGRAMS D**

PRIORITY #: 3

PROJECT #: 3092HVA2

CONST COST: \$60,000.00

**HVAC EQUIPMENT REPLACEMENT**

There are 4 rooftop packaged HVAC heat pump units and 1 mini split installed in 2010 recommended to be replaced in the next

10 years. Included in this estimate are new curb adapters, crane and rigging for removal and installation and all required connections to utilities.



**3092 INMATE PROGRAMS D**

PRIORITY #: 3

PROJECT #: 3092INT1

CONST COST: \$65,000.00

**INTERIOR FINISHES**

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



**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

PRIORITY CLASS	\$15,000.00
PRIORITY CLASS	\$71,400.00
PRIORITY CLASS	\$205,000.00
<b>GRAND TOTAL:</b>	<b>\$291,400.00</b>

Project Construction Cost per Square Foot:	\$26.89
Total Facility Replacement Construction Cost:	\$5,419,000.00
Facility Replacement Cost per Square Foot:	\$500.00
<b>FCI:</b>	<b>5%</b>

# 3091 NDOC/NDF ADMINISTRATION C

## CONCRETE MASONRY UNITS & STEEL

IBC CONS TYPE:	II-B	YEAR:	2010
IBC OCC TYPE 1:	100% B	SQ FT:	16,386
IBC OCC TYPE 2:	0%	LEVEL(s):	1
EXT FINISH 1 :	100% Painted Stucco / EIFS	BSMT?	No
EXT FINISH 2 :	0%	FIRE SUPP:	100 %

The Administration building is a concrete masonry unit and steel framed structure with a single-ply roofing system on a concrete foundation. The HVAC system is comprised of a large rooftop mounted chilled & hot water air handling unit. The building contains offices, meeting spaces and training for forestry and corrections activities including visitation. It has ADA complaint restrooms including inmate restrooms, conference rooms and training areas. The facility has a fire sprinkler system as well as a fire alarm and detection system.



**3091 NDOC/NDF ADMINISTRATION C**

PRIORITY #: 1

PROJECT #: 3091ELE1

CONST COST: \$15,000.00

**ARC FLASH and ELECTRICAL COORDINATION STUDY**

Arc flash and electrical breaker coordination studies have not been performed or it has been more than 5 years since the last coordination study. Safety requirements for maintenance personnel and the latest electrical code require coordination studies to be verified and performed every 5 years, along with arc flash labeling on all electrical panels. This project will perform the required coordination study, evaluation, adjustments and labeling for the building's electrical distribution system.





**3091 NDOC/NDF ADMINISTRATION C**

PRIORITY #: 2

PROJECT #: 3091PLM1

CONST COST: \$15,000.00

**WATER TREATMENT SYSTEM REPLACEMENT**

The existing water softening treatment system in the building was not operational at the time of the survey. 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 replace the existing water softener / treatment system with new equipment.



**3091 NDOC/NDF ADMINISTRATION C**

PRIORITY #: 3

PROJECT #: 3091EXT1

CONST COST: \$98,300.00

**EXTERIOR FINISHES**

The exterior finishes were in good condition. It is important to maintain the finish, weather resistance and appearance of the building. This project would provide funding to protect the exterior of the building excluding the roof. Included in the cost is power washing, priming and painting and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be painted in the next 7 - 9 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.



**3091 NDOC/NDF ADMINISTRATION C**

PRIORITY #: 3

PROJECT #: 3091INT1

CONST COST: \$98,300.00

**INTERIOR FINISHES**

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



**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

PRIORITY CLASS	\$15,000.00
PRIORITY CLASS	\$15,000.00
PRIORITY CLASS	\$196,600.00
<b>GRAND TOTAL:</b>	<b>\$226,600.00</b>

Project Construction Cost per Square Foot:	\$13.83
Total Facility Replacement Construction Cost:	\$8,193,000.00
Facility Replacement Cost per Square Foot:	\$500.00
<b>FCI:</b>	<b>3%</b>

## 3090 INMATE SERVICES B

### CONCRETE MASONRY UNITS & STEEL

IBC CONS TYPE:	II-B	YEAR:	2010
IBC OCC TYPE 1:	50% B	SQ FT:	23,866
IBC OCC TYPE 2:	50% A-2	LEVEL(s):	1
EXT FINISH 1 :	100% Painted Stucco / EIFS	BSMT?	No
EXT FINISH 2 :	0%	FIRE SUPP:	0 %

The Inmate Services Building is a concrete masonry unit and steel framed structure with a single-ply roofing system on a concrete foundation. The building contains a mechanical central plant providing chilled water to this building and the Administration building. It also provides heating hot water to all six buildings on the campus via an underground piping system. The facility contains culinary and dining operations, laundry, inmate store, intake and central plant. It has restrooms which are mostly ADA compliant, fire sprinklers and a fire alarm and detection system.



**3090 INMATE SERVICES B**

PRIORITY #: 1

PROJECT #: 3090ELE1

CONST COST: \$20,000.00

**ARC FLASH and ELECTRICAL COORDINATION STUDY**

Arc flash and electrical breaker coordination studies have not been performed or it has been more than 5 years since the last coordination study. Safety requirements for maintenance personnel and the latest electrical code require coordination studies to be verified and performed every 5 years, along with arc flash labeling on all electrical panels. This project will perform the required coordination study, evaluation, adjustments and labeling for the building's electrical distribution system.



**3090 INMATE SERVICES B**

PRIORITY #: 2

PROJECT #: 3090PLM1

CONST COST: \$20,000.00

**WATER TREATMENT SYSTEM REPLACEMENT**

The existing water softening treatment system in the building was not operational at the time of the survey. 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 replace the existing water softener / treatment system with new equipment.



**3090 INMATE SERVICES B**

PRIORITY #: 3

PROJECT #: 3090HVA1

CONST COST: \$1,483,800.00

**CENTRAL PLANT REPLACEMENT**

Most of the major components of the HVAC central plant are original equipment and are approximately 12 years old. The equipment is halfway through its serviceable life and should be planned for replacement.

Replacement equipment will be more reliable, efficient, and will include code-required safety provisions that are not currently installed. The temperature controls will be upgraded to improve energy efficiency. This project will replace the

existing central plant equipment including chiller, cooling tower, chilled water heat exchanger, boilers, water heaters and associated pumps and accessories.





**3090 INMATE SERVICES B**

PRIORITY #: 3

PROJECT #: 3090HVA2

CONST COST: \$150,000.00

**CULINARY REFRIGERATION EQUIPMENT REPLACEMENT**

The culinary refrigeration systems for the walk-in coolers and freezers have reached the mid-point of their expected life and should be planned for replacement in the next 10 years. This project will replace the refrigeration components of the walk-in freezer and coolers. Removal of existing equipment and connection to the required utilities is included in this estimate.



**3090 INMATE SERVICES B**

PRIORITY #: 3

PROJECT #: 3090EXT1

CONST COST: \$143,200.00

**EXTERIOR FINISHES**

The exterior finishes were in good condition. It is important to maintain the finish, weather resistance and appearance of the building. This project would provide funding to protect the exterior of the building excluding the roof. Included in the cost is power washing, priming and painting and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be painted in the next 7 - 9 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.



**3090 INMATE SERVICES B**

PRIORITY #: 3

PROJECT #: 3090INT1

CONST COST: \$143,200.00

**INTERIOR FINISHES**

The interior finishes are in fair condition. It is recommended that the interior walls and ceilings be painted 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.



**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

PRIORITY CLASS	\$20,000.00
PRIORITY CLASS	\$20,000.00
PRIORITY CLASS	\$1,920,200.00
<b>GRAND TOTAL:</b>	<b>\$1,960,200.00</b>

Project Construction Cost per Square Foot:	\$82.13
Total Facility Replacement Construction Cost:	\$12,768,000.00
Facility Replacement Cost per Square Foot:	\$535.00
<b>FCI:</b>	<b>15%</b>

## 3089 HOUSING UNIT A2

### CONCRETE MASONRY UNITS & STEEL

IBC CONS TYPE:	II-B	YEAR:	2010
IBC OCC TYPE 1:	100% I-3	SQ FT:	26,767
IBC OCC TYPE 2:	0%	LEVEL(s):	2
EXT FINISH 1 :	100 % Painted Stucco / EIFS	BSMT?	No
EXT FINISH 2 :	0%	FIRE SUPP:	100 %

The housing unit is a concrete masonry unit and steel framed structure with a single-ply roofing system on a concrete foundation. The HVAC system is comprised of 4 large hot water heating and evaporative cooling air handlers. It is a two-level dormitory style housing unit with restrooms and showers, day room areas and control room for correctional officers all on the ground floor. The facility is fully sprinklered and has a fire alarm and detection system.



**3089 HOUSING UNIT A2**

PRIORITY #: 1  
PROJECT #: 3089ELE1  
CONST COST: \$20,000.00

**ARC FLASH and ELECTRICAL COORDINATION STUDY**

Arc flash and electrical breaker coordination studies have not been performed or it has been more than 5 years since the last coordination study. Safety requirements for maintenance personnel and the latest electrical code require coordination studies to be verified and performed every 5 years, along with arc flash labeling on all electrical panels. This project will perform the required coordination study, evaluation, adjustments and labeling for the building's electrical distribution system.



**3089 HOUSING UNIT A2**

PRIORITY #: 1

PROJECT #: 3089INT2

CONST COST: \$816,600.00

**SHOWERS REFURBISHMENT**

Some of the 20 shower stalls in the Housing Unit are damaged allowing water penetration into the wall cavities behind the shower units. Water in the wall cavity facilitates mold growth. Stainless steel shower liners are recommended.

Additionally, paint is peeling from the walls and ceilings due to apparent lack of ventilation. This project scope includes demolition of the existing showers and installation of stainless-steel shower enclosures. Upgraded exhaust ventilation, epoxy flooring, wall and ceiling paint and new shower fixtures are included in this estimate.



**3089 HOUSING UNIT A2**

PRIORITY #: 2

PROJECT #: 3089HVA1

CONST COST: \$285,600.00

**AIR HANDLER REFURBISHMENT**

A visual survey of the evaporatively cooled air handling units (AHU's) are failing prematurely and reducing their expected life. Lack of maintenance has caused the heating coil to plug with mineral scale due to moisture carry-over from the evaporative cooling section. Moisture carry-over is indicative of air velocities well above the unit specifications caused by a lack of air balance. The severe degree of scaling renders coil cleaning ineffective and a complete replacement of the heating coil is recommended.

Additionally, the AHU's exterior surfaces are

showing signs of corrosion likely caused by the same moisture carry-over. This project will fund the removal and replacement of the heating coil, a full AHU maintenance rehabilitation, new blow-down controls on the evaporative sump, water treatment (Nu-Calgon slow dissolving scale and corrosion inhibitor) and air balance. With proper maintenance, this project should restore the AHU to its expected useful life.





**3089 HOUSING UNIT A2**

PRIORITY #: 2

PROJECT #: 3089PLM2

CONST COST: \$15,700.00

**WATER HEATER REPLACEMENT**

There are two 130-gallon propane 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 - 4 years. It is recommended that two new propane fired water heaters be installed. This estimate includes 100 feet of gas pipe, fittings, couplers, and labor for installation. Removal and disposal of the existing equipment is included in this estimate.



**3089 HOUSING UNIT A2**

PRIORITY #: 2

PROJECT #: 3089PLM1

CONST COST: \$20,000.00

**WATER TREATMENT SYSTEM REPLACEMENT**

The existing water softening treatment system in the building was not operational at the time of the survey. 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 replace the existing water softener / treatment system with new equipment.



**3089 HOUSING UNIT A2**

PRIORITY #: 3

PROJECT #: 3089EXT1

CONST COST: \$160,600.00

**EXTERIOR FINISHES**

The exterior finishes were in good condition. It is important to maintain the finish, weather resistance and appearance of the building. This project would provide funding to protect the exterior of the building excluding the roof. Included in the cost is power washing, priming and painting and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be painted in the next 7 - 9 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.



**3089 HOUSING UNIT A2**

PRIORITY #: 3

PROJECT #: 3089HVA2

CONST COST: \$40,000.00

**HVAC EQUIPMENT REPLACEMENT**

There are 2 rooftop packaged HVAC heat pump units installed in 2010 recommended to be replaced in the next 10 years. Included in this estimate are new curb adapters, crane and rigging for removal and installation and all required connections to utilities.



**3089 HOUSING UNIT A2**

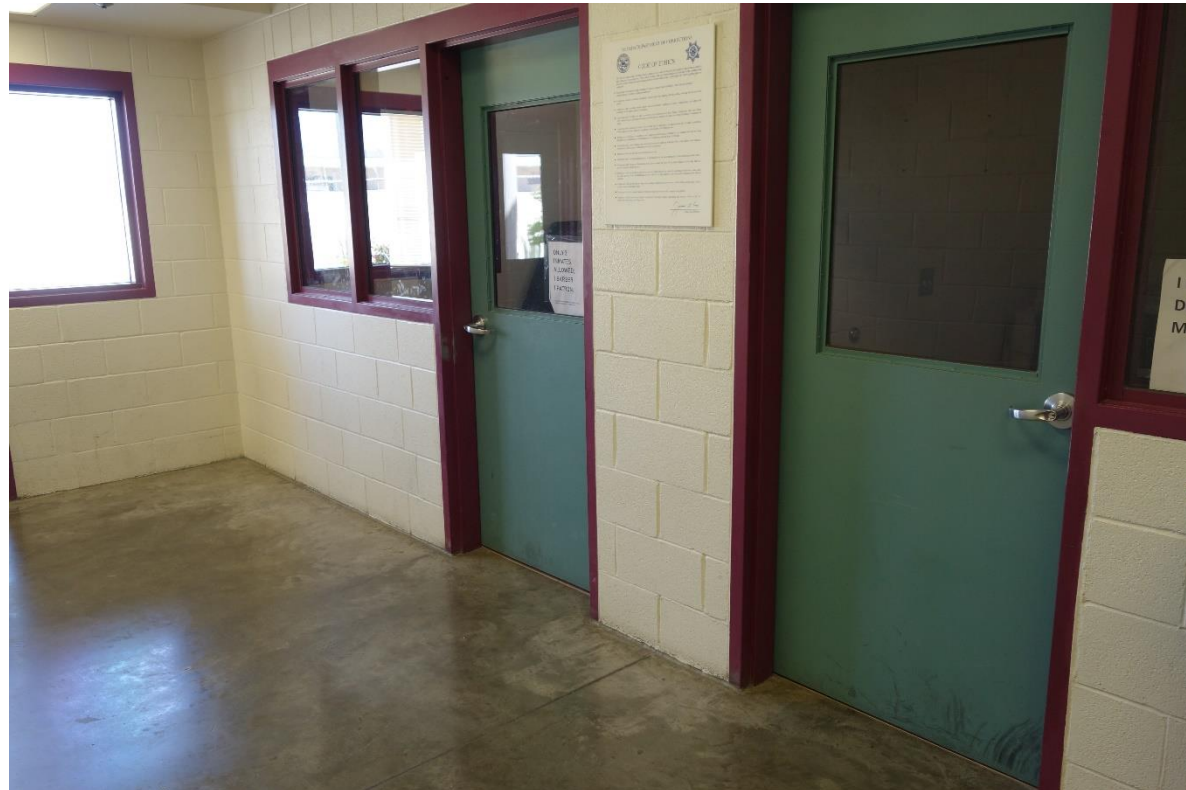
PRIORITY #: 3

PROJECT #: 3089INT1

CONST COST: \$160,600.00

**INTERIOR FINISHES**

The interior finishes are in fair condition. It is recommended that the interior walls and ceilings be painted at least once in the next 4 - 6 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure. Prior to painting, all surfaces should be repaired and prepped. An epoxy-based paint should be utilized in wet areas for durability.



**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

PRIORITY CLASS	\$836,600.00
PRIORITY CLASS	\$321,300.00
PRIORITY CLASS	\$361,200.00
<b>GRAND TOTAL:</b>	<b>\$1,519,100.00</b>

Project Construction Cost per Square Foot:	\$56.75
Total Facility Replacement Construction Cost:	\$13,384,000.00
Facility Replacement Cost per Square Foot:	\$500.00
<b>FCI:</b>	<b>11%</b>

3088 HOUSING UNIT A1  
**CONCRETE MASONRY UNITS & STEEL**

IBC CONS TYPE:	II-B	YEAR:	2010
IBC OCC TYPE 1:	100% I-3	SQ FT:	26,767
IBC OCC TYPE 2:	0%	LEVEL(s):	2
EXT FINISH 1 :	100% Painted Stucco / EIFS	BSMT?	No
EXT FINISH 2 :	0%	FIRE SUPP:	100 %

The housing unit is a concrete masonry unit and steel framed structure with a single-ply roofing system on a concrete foundation. The HVAC system is comprised of 4 large hot water heating and evaporative cooling air handlers. It is a two-level dormitory style housing unit with restrooms and showers, day room areas and control room for correctional officers all on the ground floor. The facility is fully sprinklered and has a fire alarm and detection system.



**3088 HOUSING UNIT A1**

PRIORITY #: 1  
PROJECT #: 3088ELE1  
CONST COST: \$20,000.00

**ARC FLASH and ELECTRICAL COORDINATION STUDY**

Arc flash and electrical breaker coordination studies have not been performed or it has been more than 5 years since the last coordination study. Safety requirements for maintenance personnel and the latest electrical code require coordination studies to be verified and performed every 5 years, along with arc flash labeling on all electrical panels. This project will perform the required coordination study, evaluation, adjustments and labeling for the building's electrical distribution system.





**3088 HOUSING UNIT A1**

PRIORITY #: 1

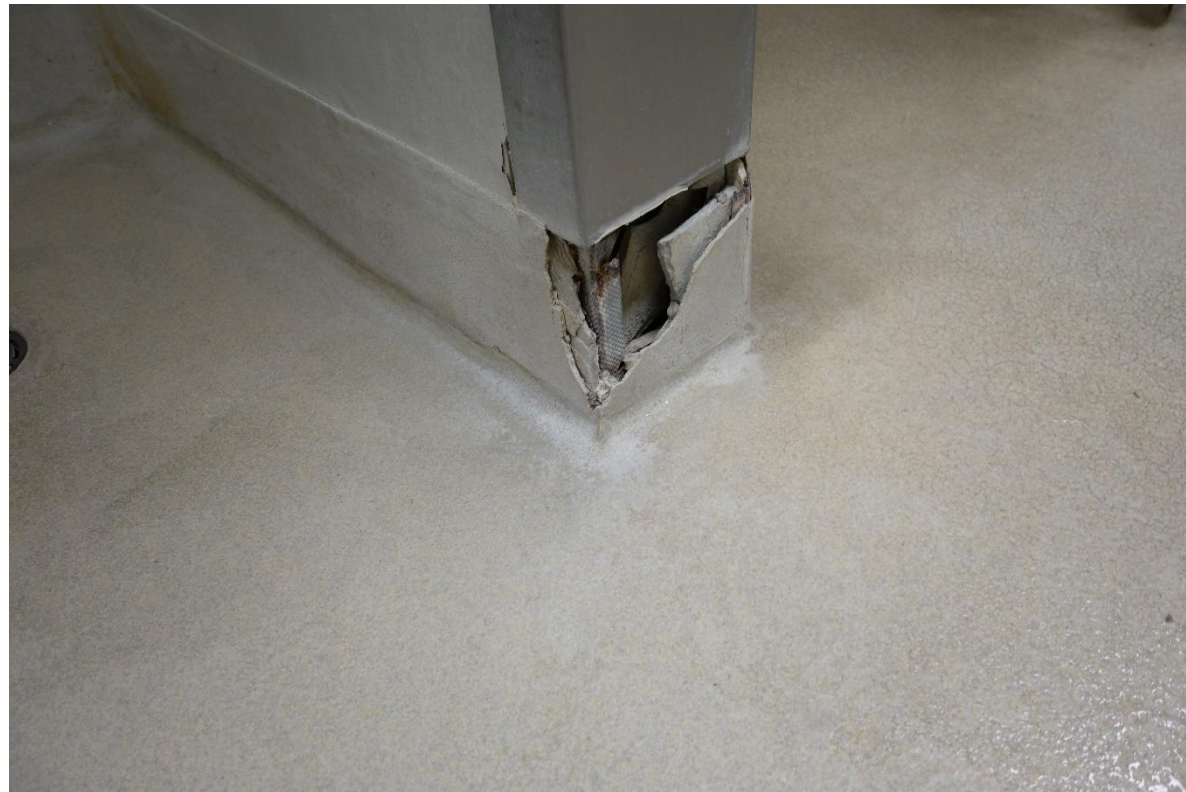
PROJECT #: 3088INT2

CONST COST: \$816,600.00

**SHOWERS REFURBISHMENT**

Some of the 20 shower stalls in the Housing Unit are damaged allowing water penetration into the wall cavities behind the shower units. Water in the wall cavity facilitates mold growth. Stainless steel shower liners are recommended.

Additionally, paint is peeling from the walls and ceilings due to apparent lack of ventilation. This project scope includes demolition of the existing showers and installation of stainless-steel shower enclosures. Upgraded exhaust ventilation, epoxy flooring, wall and ceiling paint and new shower fixtures are included in this estimate.



**3088 HOUSING UNIT A1**

PRIORITY #: 2

PROJECT #: 3088HVA1

CONST COST: \$285,600.00

**AIR HANDLER REFURBISHMENT**

A visual survey of the evaporatively cooled air handling units (AHU's) are failing prematurely and reducing their expected life. Lack of maintenance has caused the heating coil to plug with mineral scale due to moisture carry-over from the evaporative cooling section. Moisture carry-over is indicative of air velocities well above the unit specifications caused by a lack of air balance. The severe degree of scaling renders coil cleaning ineffective and a complete replacement of the heating coil is recommended.



Additionally, the AHU's exterior surfaces are

showing signs of corrosion likely caused by the same moisture carry-over. This project will fund the removal and replacement of the heating coil, a full AHU maintenance rehabilitation, new blow-down controls on the evaporative sump, water treatment (Nu-Calgon slow dissolving scale and corrosion inhibitor) and air balance. With proper maintenance, this project should restore the AHU to its expected useful life.

**3088 HOUSING UNIT A1**

PRIORITY #: 2

PROJECT #: 3088PLM2

CONST COST: \$15,700.00

**WATER HEATER REPLACEMENT**

There are two 130-gallon propane 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 - 4 years. It is recommended that two new propane fired water heaters be installed. This estimate includes 100 feet of gas pipe, fittings, couplers, and labor for installation. Removal and disposal of the existing equipment is included in this estimate.



**3088 HOUSING UNIT A1**

PRIORITY #: 2

PROJECT #: 3088PLM1

CONST COST: \$20,000.00

**WATER TREATMENT SYSTEM REPLACEMENT**

The existing water softening treatment system in the building was not operational at the time of the survey. 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 replace the existing water softener / treatment system with new equipment.



**3088 HOUSING UNIT A1**

PRIORITY #: 3

PROJECT #: 3088EXT1

CONST COST: \$133,835.00

**EXTERIOR FINISHES**

The exterior finishes were in good condition. It is important to maintain the finish, weather resistance and appearance of the building. This project would provide funding to protect the exterior of the building excluding the roof. Included in the cost is power washing, priming and painting and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be painted in the next 7 - 9 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.



**3088 HOUSING UNIT A1**

PRIORITY #: 3

PROJECT #: 3088HVA2

CONST COST: \$40,000.00

**HVAC EQUIPMENT REPLACEMENT**

There are 2 rooftop packaged HVAC heat pump units installed in 2010 recommended to be replaced in the next 10 years. Included in this estimate are new curb adapters, crane and rigging for removal and installation and all required connections to utilities.



**3088 HOUSING UNIT A1**

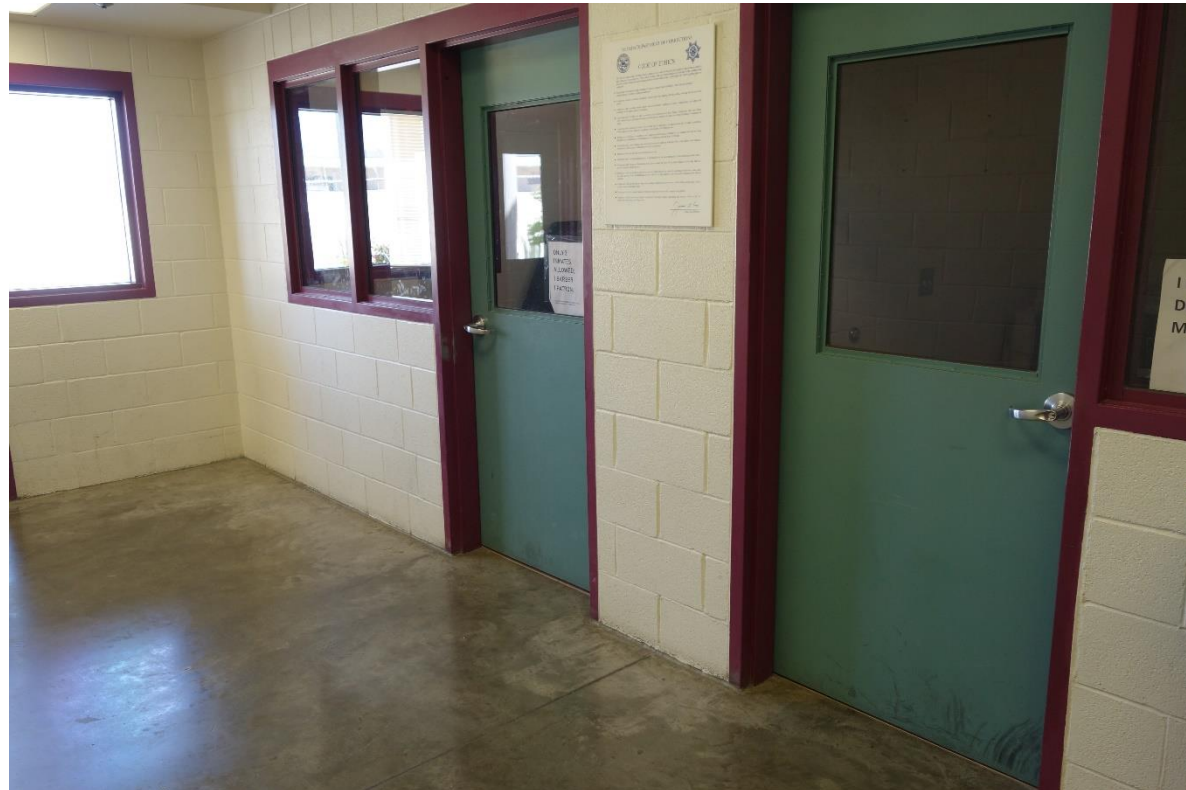
PRIORITY #: 3

PROJECT #: 3088INT1

CONST COST: \$133,835.00

**INTERIOR FINISHES**

The interior finishes are in fair condition. It is recommended that the interior walls and ceilings be painted at least once in the next 4 - 6 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure. Prior to painting, all surfaces should be repaired and prepped. An epoxy-based paint should be utilized in wet areas for durability.



**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

PRIORITY CLASS	\$836,600.00
PRIORITY CLASS	\$321,300.00
PRIORITY CLASS	\$307,670.00
<b>GRAND TOTAL:</b>	<b>\$1,465,570.00</b>

Project Construction Cost per Square Foot:	\$54.75
Total Facility Replacement Construction Cost:	\$13,384,000.00
Facility Replacement Cost per Square Foot:	\$500.00
<b>FCI:</b>	<b>11%</b>



# APPENDICES

## APPENDIX A – PROJECT IDENTIFICATION (ID) CATEGORIES

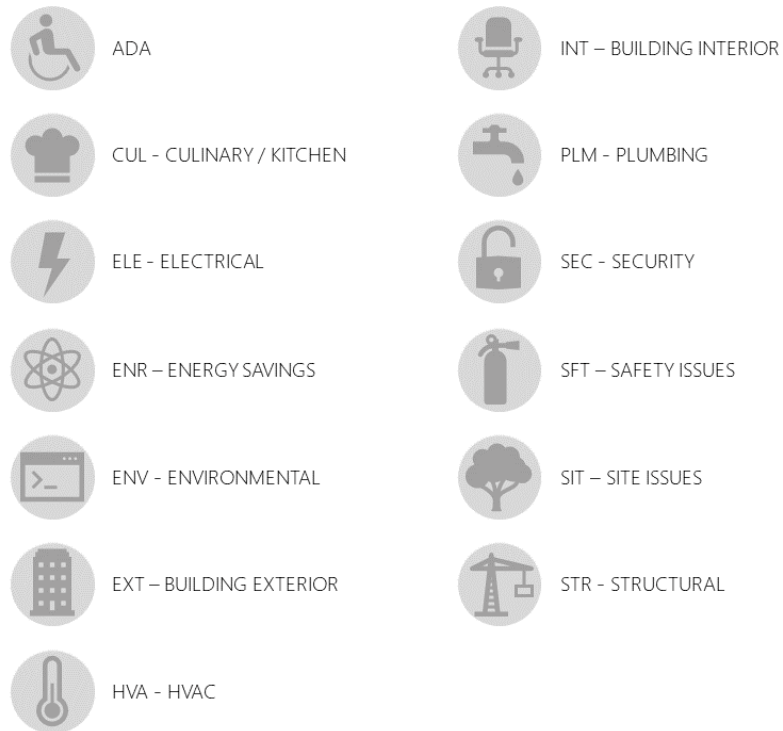
FIGURE 3 is a list of the current building management categories used. The Project ID contains the following:

<SITE #> <BUILDING MANAGEMENT CATEGORY> <ARBITRARY #>

Example: 9999ADA1 and 9999HVA2

## BUILDING MANAGEMENT CATEGORIES

FIGURE 3.



## APPENDIX B – MAINTENANCE PROJECTS AND COST ESTIMATES

### DISCLAIMER

4. The actual overall project costs will vary from those reported after the final scope and budgets are developed.
5. This report provides estimated hard costs (construction) and excludes soft costs (project) such as consultant fees, permit fees, and FF&E (furniture, fixtures, equipment).
6. Materials and costs noted here may be affected by new methods of construction, agency projects, and individual projects, as well as pending and proposed Capital Improvement Projects (CIP).

### MAINTENANCE PROJECTS

- Electrical
- Plumbing
- HVAC
- Painting or remodeling
- Flooring and asphalt
- Fire Alarm

### EXCLUDED

- Furniture
- Program issues
- Space change
- Telecommunications
- Unidentified costs
- Window treatments
- Routine maintenance



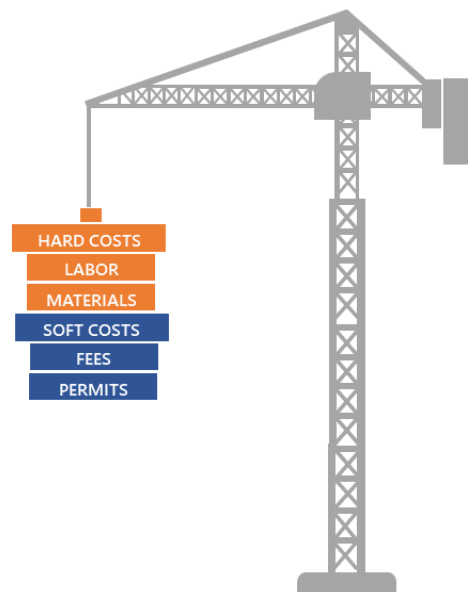
### CURRENT CONSTRUCTION PROJECT COST ESTIMATES (Hard Costs)

Cost estimates are derived from:

- RSMeans Cost Estimating Guide
- Comparable SPWD construction projects
- Contractor pricing, which includes:
  - Labor
  - Location factors
  - Materials
  - Profit
  - Overhead

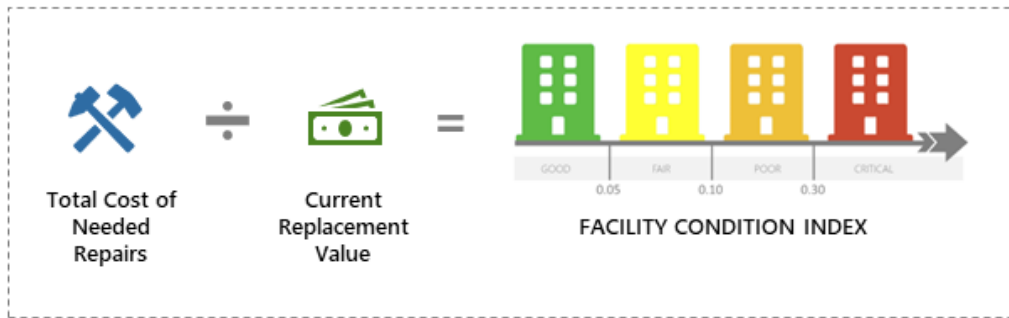
### EXCLUDED – (Soft Costs)

- Project design costs, such as:
  - Project design fees
  - Construction management
  - Special testing and inspections
  - Inflation
  - Permit fees



## APPENDIX C – FACILITY CONDITION INDEX

The calculation is the total cost of needed building repairs divided by the current cost of replacing the building (Wikipedia, n.d.).



**Buildings with an index greater than .50 or 50% are recommended for complete replacement.**

EXAMPLE – BUILDING NEEDS THE FOLLOWING REPAIRS:

### Priority 1 Currently Critical – Immediate to Two Years




ARC FLASH and ELECTRICAL COORDINATION STUDY	\$20,000
DOMESTIC WATER BOILER REPLACEMENT	\$316,700
FIRE ALARM SYSTEM UPGRADE	\$403,700
SEISMIC GAS SHUT-OFF VALVE INSTALLATION	\$6,300
<b>TOTAL</b>	<b>\$746,700</b>

### Priority 2 Necessary – Not Yet Critical – Two to Four Years

CULINARY REFRIGERATION REPLACEMENT	\$800,000
HVAC EQUIPMENT REPLACEMENT	\$545,800
RESTROOM & SHOWER UPGRADE	\$605,100
<b>TOTAL</b>	<b>\$1,950,900</b>

### Priority 3 Long Term Needs – Four to Ten Years

EXTERIOR FINISHES	\$50,000
INTERIOR FINISHES	\$50,000
FLOORING REPLACEMENT	\$150,000
<b>TOTAL</b>	<b>\$200,000</b>

	GRAND TOTAL COST OF NEEDED REPAIRS	\$2,897,600
		DIVIDED BY
	CURRENT REPLACEMENT VALUE	\$11,540,000
		=
		
		0.25 POOR

## APPENDIX D – PROJECT PRIORITY CLASSIFICATIONS

PRIORITY CLASS	DESCRIPTION	TARGET RESPONSE TIME IN YEARS
1	Currently Critical	Immediate to 2

Projects in this category require immediate action to:

- Return a facility to normal operations
- Stop accelerated deterioration
- Address fire and life safety hazards
- Address an ADA requirement

PRIORITY CLASS	DESCRIPTION	TARGET RESPONSE TIME IN YEARS
2	Necessary – Not Yet Critical	2 to 4

Projects in this category require preemptive attention to avoid deterioration, downtime and increased costs.

PRIORITY CLASS	DESCRIPTION	TARGET RESPONSE TIME IN YEARS
3	Long Term Needs	4 to 10

Projects in this category include building systems (e.g., HVAC, electrical, life safety) with a life cycle to assist in future CIP funding, such as:

- Investment planning
- Functional improvements
- Lower priority

## APPENDIX E – REFERENCES

Legislature, N. S. (2022). NRS 341.128. Retrieved from Leg.state.nv.us:  
<https://www.leg.state.nv.us/nrs/nrs-341.html#NRS341Sec128>

Wikipedia. (n.d.). Facility Condition Index (FCI). Retrieved 2022, from Wikipedia The Free Encyclopedia: [https://en.wikipedia.org/wiki/Facility\\_condition\\_index](https://en.wikipedia.org/wiki/Facility_condition_index)

## APPENDIX F – REPORT DISTRIBUTION

### DIVISIONAL CONTACTS

DEPT	DIV	TITLE	CONTACT	EMAIL
NDOC		DIRECTOR	James Dzurenda	jdzurenda@doc.nv.gov
NDOC		CHIEF PLNT OPS	Ralph Wagner	rwagner@doc.nv.gov
NDOC		FAC MGR	Hobie Rose	hrose@doc.nv.gov
NDOC	TLV	MAINT REPAIR SPEC 2	James Dolan	jdolan@doc.nv.gov
CNR		DIRECTOR	James A. Settlemeyer	jsettlemeyer@dcnr.nv.gov
CNR		DEP DIRECTOR	Dominique Etchegoyhen	detchegoyhen@dcnr.nv.gov
CNR	FORESTRY	DIV ADMIN	Kacey Kc	kaceykc@forestry.nv.gov
CNR	FORESTRY	CON CAMP AREA SUP, TLV	Tommy Lewis	tlewis@forestry.nv.gov

### CC'd: STATEWIDE CONTACTS

DEPT	DIV	TITLE
GFO	BUDGET	EXEC BR BGT OFF 1
DCNR	LANDS	DIV ADMIN
DCNR	LANDS	DEP DIV ADMIN
DCNR	LANDS	STATE LAND AGT 4
LEG	LCB	SR PGM ANLST
LEG	LCB	PRINC PGM ANLST
ADMIN	RISK MGT	DIV ADMIN
ADMIN	RISK MGT	INS / LOSS PREV SPEC
ADMIN	RISK MGT	PGM OFF 1
ADMIN	RISK MGT	MA 4
ADMIN	RISK MGT	SFTY SPEC CONSULT

## APPENDIX G – FCA TEAM CONTACT INFORMATION

### DISCLAIMER

1. The report was prepared by the SPWD under the authority of NRS 341.128 for use as a planning resource.

## STATE PUBLIC WORKS DIVISION



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fax: 775.684-4142

Construction Project Coordinator III

**KEN FORBES**

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cell: 775-315-5573

Construction Project Coordinator II

**CAROL MYERS**

c.myers@admin.nv.gov

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cell: 775.690-5134

Administrative Assistant IV

**YADHIRA PIMENTEL**

ypimentel@admin.nv.gov

telephone: 775.684-4126

## APPENDIX H – REVISION HISTORY

VERSION	DATE	AMMENDMENT
1	8/24/2023	Initial.