

# City of Cordova Multi-Building Condition Assessment: Hollis Heinrichs Park Restroom

#### **Prepared For:**



## Prepared By: COFFMAN ENGINEERS

800 F Street Anchorage, AK 99501

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#### 1. INTRODUCTION

The City of Cordova engaged Coffman Engineers and Burkhart Croft Architects to assess and report on the condition of City-owned buildings and structures to establish a baseline of their current assets, and better forecast future needs.

The team performed a multi-discipline condition assessment of thirteen facilities including:

- 1. Bob Korn Memorial Swimming Pool
- 2. Bidarki Recreation Center
- 3. Eyak Skater's Cabin
- 4. Cordova Jr/Sr High School
- 5. Odiak Pond Gazebo and Boardwalk
- 6. Odiak Camper Park Restroom
- 7. Parks and Recreation Maintenance Shop
- 8. City Maintenance Shop
- 9. Ballfield Restroom / Concession Stand
- 10. Cordova Chamber of Commerce
- 11. Hollis Heinrichs Park Restroom
- 12. Flemning Spit Restroom
- 13. Fire Department Sub Station

The team visited the Prince William Sound Science Center and evaluated the feasibility of relocating the building to a new site.

The team consisted of an architect, civil, structural, mechanical, electrical engineers, and a cost estimator.

Due to the amount of information and quantity of sites, a separate report has been developed for each facility. This report is for the Hollis Heinrichs Park Restroom.

#### 2. EXECUTIVE SUMMARY

The Hollis Heinrichs Park Restroom was evaluated by the team on September 28, 2022. This report provides:

- ▶ A description and assessment of the various building components.
- ▶ A list of deficiencies, ordered by urgency for repair or correction.
- Rough order of magnitude cost estimate for the listed deficiencies, as well as building replacement.
- A routine and preventative maintenance plan.

The Hollis Heinrichs Restroom is in good condition overall. The siding shows signs of aging but is in serviceable condition. Recommendations for the facility are minor and include Americans with Disabilities (ADA) components in the stalls and a lighting improvement.

#### 3. HOLLIS HEINRICHS PARK RESTROOM

#### 3.1. Description and Summary

The restroom incudes a men's and women's room, each with a single stall. There is a room between the toilet rooms for storage. The building has hot water and plumbing. It is used seasonally and winterized in the off season.

#### 3.2. Building Component Assessments

#### 3.2.1. Architectural

#### 3.2.1.1. International Building Code (IBC) Summary

#### Model Code Application

Assessment below is based on the 2021 IBC (current version adopted by the State).

There were no issues with either building construction materials, use, or area found during the inspection. The building is wood framed which puts classification into Type V-B Construction, building area is well below allowable square footage.

#### Occupancy Groups

Toilet Room Areas: All portions of this facility are designated as an "A" Assembly Occupancy. Stand-alone toilet and locker room facilities are an anomaly in the IBC. Public Toilets are generally considered accessory uses within a facility, but when stand-alone match up to the A Occupancy.

#### Egress System

The existing egress system is adequate in terms of number of exit points, exiting logic and egress width. There are single doors out of each of the building areas, no existing deficiencies noted.

#### 3.2.1.2. Accessibility / ADA / ANSI A117 Compliance

#### General

The IBC now references ANSI A117 as the recognized design standard for accessibility concerns.

Existing buildings are exempt from current requirements, so long as owners conduct simple and prudent improvements. Full compliance is directly tied to the size and scope of the proposed projects. The International Existing Building Code (IEBC) drives this level of compliance. For example, the facility can be painted and flooring replaced without making the toilet facilities accessible. However, if there was a building addition or major renovation of the facility then the facility would be required to comply. In existing facilities, enforcement of ADA deficiencies is punitive, and if complaints or claims are made against the facility, the City of Cordova might be required to make a Reasonable Accommodation to correct the deficiency for the public requiring accessibility improvements.

#### **Existing Conditions**

The building has made reasonable accommodations for accessibility. There are small discrepancies in some of the toilet accessories mounting dimensions, but none requiring correction. The approach to the facility is reasonable and the concrete sidewalk is compliant. A vertical grab bar was not installed (a relatively new required of ADA) and one is recommended to be installed.

Install new vertical, 18 inch, grab bar.

#### 3.2.1.3. Building Exterior

The building is clad with a traditional cedar shake throughout is in good condition and no deficiencies were noted. It is starting to show some age, there was the start of some algae growth, but did appear serviceable at time of inspection.

The roofing is a standing seal, exposed fastener roof. From the appearance, it appears this roof was installed recently. No exterior visual deficiencies were noted.

#### 3.2.1.4. Building Interior

#### General

The building interior is in good condition overall.

The toilet floors are exposed concrete and the walls are clad with a plastic reinforced panel. Fixtures are stainless steel. There are both a men's and women's single toilet rooms and a mechanical/electrical room connecting them. The building has a small overhang protecting the doors, and pedestrian approach.

The mechanical/electrical building is sheathing with plywood. The plywood itself appears to have heavy water damage. No active water leaks were observed. At this time the assumption is being made that the roof did indeed leak at one point, possibly the same cedar shake was installed at the roof at some point. After the roofing was replaced, the roof leaks were corrected, and the leaks were stopped. This is just an assumption based on our inspection. If facility staff still has issues with water infiltration, some sheathing should be removed at this location to inspect the condition of the wood studs.





Fig. 1. Rear Elevation

Fig. 2. Front Elevation

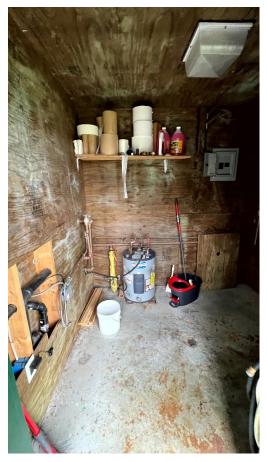


Fig. 3. Mechanical / Electrical Room

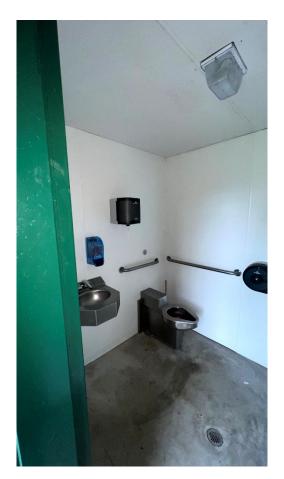


Fig. 4. Typical Toilet Room

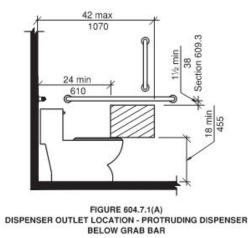


Fig. 5. ADA Compliance Graphic

#### 3.2.2. Structural

The Heinrichs Park Restroom is a wood frame, gable roof structure, approximately 24-feet wide by 10-feet deep. A 4-foot roof extension provides cover over the restroom and mechanical room doors at the west gable end.

The building is founded on a flat concrete slab foundation which also serves as entrance floor and supports 4x4 wood posts under the roof extension.

The structure is in good condition, only requiring continued maintenance.



Fig. 6. Heinrichs Park West Elevation



Fig. 8. Heinrichs Park North Elevation.



Fig. 7. Heinrichs Park East Elevation



Fig. 9. Heinrichs Park South Elevation

#### 3.2.3. Civil

The Heinrichs Park Restroom facility is located near the entrance to the Odiak Pond boardwalk trail, at 300 Chase Avenue. The restroom is accessed by an asphalt sidewalk and concrete apron.

The Owner stated that the restroom facility is on City water and sewer service and reported no issues with the services. Exterior utilities were not observed as part of this inspection.

The concrete apron at the entrance to the facility is in adequate condition. The restroom entrances and path are not ADA accessible. See architectural for more information on interior accessibility. See Figure 10.

Drainage around the facility appears to be adequate with no indication of ponding or exterior dilapidation due to runoff.



Fig. 10. Concrete apron

#### 3.2.4. Mechanical

There is no mechanical equipment in this facility.

#### 3.2.5. Plumbing

The building has domestic cold water from the city water supply. There is an electric hot water heater for the lavatories.

#### 3.2.6. Fire Protection

There is no fire protection required in this facility.

#### 3.2.7. Electrical

The facility is served by a 120/240V, single phase, 3-wire electrical service provided by Cordova Electric Co-op. A combination disconnect meter main with two integral disconnect breakers is mounted to the exterior of the restrooms. One breaker is 100A rated, 2-pole and feeds the main panelboard for the facility. The other breaker is 20A rated, single pole. It is unknown what the single pole breaker feeds. It is assumed it feeds the water heater located in the electrical/mechanical room.

There are no arc flash labels on the electrical panels and equipment. It is recommended that an Arc Flash Risk Assessment be performed on power systems for employee safety and compliance with The Occupational Safety and Health Administration (OSHA) regulations. OSHA requires that employers provide a place of employment which is free from recognized hazards that are likely to cause death or serious physical harm to employees. OSHA also requires that employers employ safety-related work practices to prevent electrical shock or other injuries resulting from direct or indirect electrical contact.

The branch circuit panelboard for the facility is located within the electrical/mechanical room. The panel is 125A, 120/240V, single phase, 3-wire rated and appears to be in good condition. Loads for the facility include lighting, receptacles, and the hot water heater.

Lighting for the entire facility appears to be incandescent fixtures, all ceiling mounted. A photocell for control of the exterior lighting was not located.



Fig. 11. Electrical Service Disconnect/Meter



Fig. 13. Electrical/Mechanical Room



Fig. 12. Branch Circuit Panelboard for Facility



Fig. 14. Typical Bathroom Light Fixture

#### 3.2.8. Deficiencies and Recommendations

The total building replacement cost is \$156,322. The total cost of all recommended deficiencies is \$11,617.

#### 3.2.9. Phase 1 Code Compliance Recommendations

1. **ADA Accessibility.** Install a new vertical 18-inch grab bar and relocate toilet dispenser in both stalls.

Estimated Cost: \$2,054

#### 3.2.10. Phase 2

2. **Lighting upgrade.** Replace all incandescent lights with ceiling mounted vandal resistant, wet location listed LED light fixtures. This includes replacement of three interior lights and one exterior light. Install a photocell for daylight control of the exterior light fixture.

Estimated Cost: \$6,419

3. **Arc Flash Risk Assessment.** Recommend an Arc Flash Risk Assessment is performed on power systems for employee safety and compliance with OSHA regulations. Install arc flash hazard labels to all panels and equipment per NEC 110.16.

Estimated Cost: \$3,144

Total cost Phase 2: \$9,600

APPENDIX A – EQUIPMENT CONDITION AND LIFE EXPECTANCY					

	Major HVAC Equipment List						
Equipment	Description	Age (yrs)	Life Expectancy (yrs) <sup>1</sup>	Notes			
	American Water Heater Company, model unknown	Unknown	15	Unit appears to be in good condition, no visible signs of corrosion.			

<sup>1.</sup> Life expectancy is based on the American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) 2019 Applications Handbook, Chapter 38, Table 4: Comparison of Service Life Estimates. These values are based on historical survey data, and are heavily dependent on maintenance, usage, cycling, and application, but form a basis to accompany site observation notes.

APPENDIX B – ROUTINE MAINTENANCE TASKS					

	Water Heater Maintenance								
Item No.	Inspection Task	Maintenance Task	Frequency	Recommended Action					
	Mechanical								
а	Check water pressure.	Verify and adjust for proper pressure.	Monthly	Repair or replace.					
b	Check control water pressure.	Verify and adjust for proper pressure.	Monthly	Repair or replace.					
С	Check thermal expansion tank.	Verify tank is working correctly, pressurized, and no damage.	Monthly	Repair or replace.					
d	Inspect T&P relief valve.	Inspect and verify that valve is functioning properly.	Quarterly	Repair or replace.					
e	Drain and flush tank.	Drain tank and verify water is clean. If milky, drain entire tank and refill.	Annually	Repair or replace.					
f	Check anode rod.	Inspect and verify that anode rod is function and doesn't have significant damage/wear.	Annually	Repair or replace.					

APPENDIX C – COST ESTIMATE	

### MULTI-BUILDING CONDITION ASSESSMENTS CONSTRUCTION COST ESTIMATE

#### CITY OF CORDOVA HOLLIS HEINRICHS PARK RESTROOM CORDOVA, ALASKA

#### PREPARED FOR:

Coffman Engineering 800 F Street Anchorage, Alaska 99501

February 8, 2023



DATE: 2/8/2023

HMS Project No.: 22130-K

#### NOTES REGARDING THE PREPARATION OF THIS ESTIMATE

#### **DRAWINGS AND DOCUMENTS**

Level of Documents: Condition assessment narrative

Date: Undated

Provided By: Coffman Engineers of Anchorage, Alaska

#### **RATES**

Pricing is based on current material, equipment and freight costs.

Labor Rates: A.S. Title 36 working 60 hours per week

Premium Time: 16.70% (included with unit rates)

Subcontractor Mark-Up: 35.00%

General Requirements,

Overhead, and Profit: 45.00% Estimator's Contingency: 30.00% Unique Market Risk: 5.00%

Escalation to Summer 2024

at 7.91% per Annum (16 Months): 10.55% A/E Design Fee: 12.00%

#### **BIDDING ASSUMPTIONS**

Contract: Standard construction contract without restrictive bidding clauses

Bidding Situation: Competitive bid assumed

Start of Construction: Summer 2024

Note: Quantities, qualities, and conditions are assumed when not directly

provided in narrative, or obvious from available drawings.

#### **EXCLUDED COSTS**

- 1. Administrative and management costs
- 2. Furniture, furnishings and equipment (except those specifically included)
- 3. Remediation of contaminated soils or abatement of any hazardous materials

DATE: 2/8/2023

HMS Project No.: 22130-K

#### **NOTES REGARDING THE PREPARATION OF THIS ESTIMATE (Continued)**

#### **GENERAL**

When included in HMS Inc.'s scope of services, opinions or estimates of probable construction costs are prepared on the basis of HMS Inc.'s experience and qualifications and represent HMS Inc.'s judgment as a professional generally familiar with the industry. However, since HMS Inc. has no control over the cost of labor, materials, equipment or services furnished by others, over contractor's methods of determining prices, or over competitive bidding or market conditions, HMS Inc. cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from HMS Inc.'s opinions or estimates of probable construction cost.

This estimate assumes escalation based on a 12-month rolling average of the U.S. Consumer Price Index. HMS Inc. will continue to monitor this, as well as other international, domestic and local events, and the resulting construction climate, and will adjust costs and contingencies as deemed appropriate.

Due to the lingering effects of the COVID-19 pandemic on the global supply chain and labor market, as well as ongoing geopolitical impacts to energy prices, HMS Inc. has included an additional contingency titled 'Unique Market Risk'. This amount provided for in the estimate will be adjusted as the situation continues to change and the effect on construction pricing becomes better understood.

DATE: 2/8/2023

HMS Project No.: 22130-K

#### **CONDITION ASSESSMENT GENERAL COST SUMMARY**

TOTAL BUILDING REPLACEMENT	\$ 156,322
DEFICIENCIES	11,617

DATE: 2/8/2023

HMS Project No.: 22130-K

#### **CONDITION ASSESSMENT COST SUMMARY**

Total
\$ 2,054
6,419
3,144
\$ 11,617

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DATE: 2/8/2023

TOTAL BUILDING REPLACEMENT	QUANTITY	UNIT	UNIT RATE \$	TOTAL \$
Demolish restroom	2,000	CF	0.65	1,300
New restroom	200	SF	220.00	44,000
Load and haul debris	3	LDS	650.00	1,950
SUBTOTAL:				\$ 47,250
Subcontractor's Overhead and Profit on Material and Labor	35.00%			16,538
SUBTOTAL:				\$ 63,788
General Requirements, Overhead, and Profit	45.00%			28,705
Estimator's Contingency	30.00%			27,748
Unique Market Risk	5.00%			6,012
Escalation to Summer 2024 at 7.91% per Annum (16 Months)	10.55%			13,320
A/E Design Fee	12.00%			16,749

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CODE COMPLIANCE RECOMMENDATIONS  Deficiency 1 - New Grab Bar	QUANTITY	UNIT	UNIT RATE \$	TOTAL \$
Remove and salvage 42" grab bar	2	EA	20.00	40
Remove and salvage toilet paper dispenser	2	EA	20.00	40
Remove FRP	64	SF	1.30	83
Install grab bar blocking	12	LF	3.60	43
New FRP	64	SF	6.60	422
Reinstall 42" grab bar	2	EA	35.00	70
New 18" grab bar	2	EA	50.00	100
Reinstall toilet paper dispenser	2	EA	20.00	40
SUBTOTAL:				\$ 838
General Requirements, Overhead, and Profit	45.00%			377
Estimator's Contingency	30.00%			365
Unique Market Risk	5.00%			79
Escalation to Summer 2024 at 7.91% per Annum (16 Months)	10.55%			175
A/E Design Fee	12.00%			220

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PHASE 1  Deficiency 2 - Lights	QUANTITY	UNIT	UNIT RATE \$	TOTAL \$
Demolish fixture	4	EA	70.00	280
Exterior LED with photocell, wall mounted	1	EA	510.00	510
Wet location LED, ceiling mounted	2	EA	575.00	1,150
SUBTOTAL:				\$ 1,940
Subcontractor's Overhead and Profit on Material and Labor	35.00%			679
SUBTOTAL:				\$ 2,619
General Requirements, Overhead, and Profit	45.00%			1,179
Estimator's Contingency	30.00%			1,139
Unique Market Risk	5.00%			247
Escalation to Summer 2024 at 7.91% per Annum (16 Months)	10.55%			547
A/E Design Fee	12.00%			688

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DATE: 2/8/2023

PHASE 1	QUANTITY	UNIT	UNIT RATE	TOTAL
Deficiency 3 - Replace Electrical Panel			\$	\$
Perform arc flash assessment on existing electrical service and distribution equipment	1	LOT	950.00	950
SUBTOTAL:				\$ 950
Subcontractor's Overhead and Profit on Material and Labor	35.00%			333
SUBTOTAL:				\$ 1,283
General Requirements, Overhead, and Profit	45.00%			577
Estimator's Contingency	30.00%			558
Unique Market Risk	5.00%			121
Escalation to Summer 2024 at 7.91% per Annum (16 Months)	10.55%			268
A/E Design Fee	12.00%			337