

City of **Snohomish**

Facility Condition Assessment *Volume 2: Facility Details Report*



Prepared by MENG Analysis, December 2023

Facility Summary

City of Snohomish
 Boys and Girls Club
 Boys and Girls Club

402 Second Street
 Snohomish, WA 98290

Facility Size - Gross S.F.	16,440
Year Of Original Construction	2003
Facility Use Type	Boys and Girls Club
Construction Type	Light
# of Floors	1
Energy Source	Gas
Year Of Last Renovation	2003
Historic Register	No



		Total Project Cost	Total Project Cost Present Value
Weighted Avg Condition Score	2.8		
Facility Condition Index (FCI)	0.16	Observed Deficiencies 2023 - 2028	\$519,000
Current Replacement Value (CRV)	\$6,165,000	Predicted Renewal Budget 2029 - 2042	\$1,810,000
Beginning Budget Year	2023	Opportunities	\$906,000
Escalation	5%		N/A
Discount Rate	1.5%		

Facility Condition Summary

CMU and light steel-framed roof gym, with wood-framed program spaces including office, activity, multi-purpose with kitchen, game room, teen room, and others. No flat roof access, hampering roof maintenance, resulting in roof leak. Unable to access roof, but reportedly is the original torch down system. Though insulated, the thermal envelope is compromised in several locations - specifically at access to attic mechanical equipment platforms. Mostly original 2003, but some newer finishes including gym wood floor refinished in 2023, and newer carpeting and paint in some areas inside. Aged and failing HVAC equipment - specifically cooling is failed for 6 of 7 zones. Gym ventilation installed but not used. Portable fans are being used in this building without operable windows. Minimal outside air only, with no economizer (free cooling). Aging and insufficient plumbing, including no staff restroom, no staff kitchenette, no hot water tempering at restroom lavatories, undersized kitchen, with refrigerator blocking egress pathway, no ADA drinking fountain, no water bottle filler and so forth - a mix of deficiencies and opportunities. Fire sprinkler and fire alarm are present. Power is 120/240V, single-phase with no standby or emergency power. Lighting is newer LED in gym and original T8 fluorescent elsewhere - all with manual control. Mix of older and newer low voltage systems, with recently upgraded high-speed fiber-optic data service, but failed and obsolete electronic security.

Facility Summary

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Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
A Substructure			2.0			
A10 Foundations						
A1030 Slab On Grade	2003	2003	2	LS	07/07/23	Concrete slab on grade, no issues reported and no visible cracking.
B Shell			2.6			
B10 Superstructure						
B1020 Roof Construction	2003	2003	3	LS	07/07/23	Plywood roof decking on wood trusses at sloped roofs. Steel joists on gym roof. Attic at sloped roof areas are cold attic spaces, with the batt insulation placed about 12" above the ceilings. Batt insulation has one face with vapor retarder, on the ceiling side. Cannot locate vents for attic at sloped roof areas; further investigation is recommended. Gym roof leaks in one location, just near the north exterior downspout - suspect the downspout was backed up with debris as the gym roof is inaccessible without a lift.
B20 Exterior Closure						
B2010 Exterior Walls	2003	2003	2	LS	07/07/23	Load-bearing split-face CMU.
B2020 Exterior Windows	2003	2003	2	LS	07/07/23	Fixed, double-glazed, aluminum windows with no broken seals.
B2030 Exterior Doors	2003	2003	2	LS	07/07/23	Aluminum storefront; doors need to have new weatherstripping installed. The front door and side door were exchanged, making the security system unusable; staff reported they get a "door open" alarm if they try to set it. Other exit doors are all hollow metal doors and frames.

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B Shell				2.6			
B30 Roofing							
B3010 Roof Coverings	2003	2003	4	LS	07/07/23	Torch down at gym roof is rolled up vertically onto back of parapet wall. Staff reports there was a leak near the downspout on the north at one of the parapet vertical seams. Sloped metal roof color is bleached in some areas. Extreme mildew on the south side where the trees overhang, minor maintenance to address.	
B3020 Roof Openings	2003	2003	2	LS	07/07/23	At sloped metal roofing, all vents to roof appear to be well flashed and there are no reports or signs of water leaks. Attic above ceilings is not accessible except through the ACT ceiling and a plywood smoke door. Creating this access was likely an afterthought, as the insulation and vapor retarder has been severely compromised in these two locations. The scuppers from the upper gym roof likely need to be maintained more often to keep them clear of debris.	
B3030 Projections	2003	2003	2	LS	07/07/23	Porch canopies; structural steel with metal roof deck and standing seam metal roofing.	
C Interiors				2.4			
C10 Interior Construction							
C1010 Partitions	2003	2023	2	LS	07/07/23	CMU walls at gym, wood stud with gypsum board elsewhere. Staff reports ants on wall between gym and game room, worse in spring and summer. Operable partition is in poor condition; it does not open easily. Interior relites are fire rated wire glass, all in good condition.	
C1020 Interior Doors	2003	2023	3	LS	07/07/23	Stained wood doors (20-minute-rated in corridors) have worn finishes, hardware is functional, rekeyed locks in 2023. Overhead coiling door in kitchen is operable. Overhead coiling door in admin office is in good condition and is connected to the fire alarm system.	

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C Interiors			2.4			
C10 Interior Construction						
C1030 Fittings	2003	2003	3	LS	07/07/23	Acoustical panels in gym, cubbies and display case in corridor, tackboards in corridor and activity rooms.
C30 Interior Finishes						
C3010 Wall Finishes	2003	2023	2	LS	07/07/23	Walls repainted in 2023.
C3020 Floor Finishes	2003	2023	2	LS	07/07/23	Gym floor was redone in 2023. Recarpeted admin. VCT corridors and activity rooms is in good condition except where door stops are not lifted prior to closing doors.
C3030 Ceiling Finishes	2003	2003	3	LS	07/07/23	Mostly ACT with some stains, nicks, and cuts. Some gypsum board in good condition.
D Services			3.4			
D20 Plumbing						
D2010 Plumbing Fixtures	2003	2003	4	DCS	07/07/23	Men's restroom includes two floor-mounted water closets, two wall-mounted urinals, and four lavatories. One urinal is failed (minor maintenance to replace), all with manual trim (faucets and flush valves), women's similar with additional water closets (no urinals). No staff restroom; no shower; no deep sink. Stainless steel kitchen sink in the arts and crafts room, but without grip trap - minor maintenance to install. Stainless steel pot wash sink, and hand-wash sink in kitchen, but no prep sink. Single-height (non-ADA) drinking fountain, no bottle filler - minor maintenance to replace.
D2020 Domestic Water Distribution	2003	2003	3	DCS	07/07/23	Approximately 1.5-inch city water service energy to copper tubing distribution; two 2003 American 50-gallon, 35 mbh gas-fired, standard-efficiency domestic hot water heaters with expansion tanks, seismic straps, but no circulating pumps or hot water pipe insulation (in space) - minor maintenance to add one or both.

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D Services				3.4			
D20 Plumbing							
D2030 Sanitary Waste	2003	2003	3	DCS	07/07/23	Non-metallic ABS drain, waste, and vent piping where observed. Most tested fixtures flush and drain well, a few are slow or non-functional, specifically one of the boy's urinals - minor maintenance to clean out lines and restore full flow to slow fixtures. Floor drains with trap primers.	
D2040 Rain Water Drainage	2003	2003	3	DCS	07/07/23	Flat gym roof drains to scuppers and downspouts, blocked by leaves in winter, resulting in roof leaks - minor maintenance to keep roof clean and drains clear. Metal gutter and downspout serving sloped metal roof; some areas reportedly plug and spill during heavy rain, minor maintenance to keep gutters clean.	
D2090 Other Plumbing Systems	2003	2003	3	DCS	07/07/23	Kitchen pot-wash sink grease waste drain to in-floor grease interceptor, with signs of leakage at floor penetration - minor maintenance to seal leak and to periodically pump and clean the grease interceptor.	
D30 HVAC							
D3010 Energy Supply	2003	2003	3	DCS	07/07/23	Natural gas to each of the seven forced-air furnaces, two gym unit heaters, and two domestic hot water tanks.	
D3020 Heat Generating Systems	2003	2003	3	DCS	07/07/23	Two gas-fired Reznor unit heaters in the gym.	
D3030 Cooling Generating Systems	2003	2003	5	DCS	07/07/23	Seven split-Dx cooling system outside condensing units, six 2003 and one 2015. Condensing unit capacities range from 1.5-ton to 5-ton cooling. No operable windows and no ceiling fans.	

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D Services			3.4			
D30 HVAC						
D3040 HVAC Distribution Systems	2003	2003	3	DCS	07/07/23	Heat and vent only for gym with no cooling. Two outside air intake motorized louvers at east wall with one center ceiling exhaust fan and no service to west half of gym. At time of site visit, the gym heat and vent system was disabled with automatic timer control partially disabled - minor maintenance to restore function to operate during occupied hours. Forced-air fully-ducted heating and cooling, with minimum outside air only to seven furnace zones, all with MERV-8 filters, but with incorrect size filter in larger units - minor maintenance to replace with correct size. One bathroom exhaust fan. One kitchen residential range hood exhausting to outside.
D3050 Terminal and Package Units	2003	2003	3	DCS	07/07/23	Seven 2003 high-efficiency Trane gas-fired furnaces, five in utility rooms and two in attic space. Furnace range in capacity from 60,000 to 120,000 mbh heat input for heating.
D3060 Controls and Instrumentation	2003	2003	3	DCS	07/07/23	Programmable thermostats - minor maintenance to replace when associated furnaces are replaced.
D3090 Other HVAC Systems and Equipment	2003	2003	3	DCS	07/07/23	Kitchen electric range with residential hood. Switch is broken - minor maintenance to replace.

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D Services			3.4			
D40 Fire Protection						
D4010 Fire Protection Sprinkler Systems	2003	2003	3	DCS	07/07/23	<p>Four-inch service to backflow preventer, joined by four-inch fire department connection underground from yard, with base of riser pressure near 60 psig. Four-inch dry-pipe valve with about 45 psig dry-side pressure, and riser-mounted air compressor and compressed air receiver tank. The entire building is dry-pipe protected, with piping mains, sub-mains, and laterals in the cold attic. The interstitial space between the bottom chord insulated roof trusses and acoustic ceiling is not protected - further investigation suggested to determine if this meets code.</p> <p>There are several doors cut through apparent attic draft stops or fire separations for HVAC service that may not meet code requirements - further investigation suggested to assure the integrity of building fire/life safety configuration. Further noting significant storage materials blocking access to gas-fired appliances, fire sprinkler riser, electrical distribution panels and others - minor maintenance to keep access clear and combustibles separated from flame or spark sources.</p>
D4030 Fire Protection Specialties	2003	2003	3	DCS	07/07/23	<p>Several fire extinguishers, two AED cabinets, one with and one without AED - minor maintenance to replace missing AED.</p>
D50 Electrical						
D5010 Electrical Service and Distribution	2003	2003	3	DCS	07/07/23	<p>Siemens 120/240V, single-phase double 200A distribution panels in the storage and electrical room at gym, with 200A feeder breaker to remote Panel B in the storage room near the kitchen. Only a few spaces remain among the panels. No issues reported.</p>
D5020 Lighting and Branch Wiring	2003	2003	3	DCS	07/07/23	<p>2022 LED lighting at gym with manual control. 2003 T8 fluorescent lighting with manual control elsewhere.</p>

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D Services				3.4			
D50 Electrical							
D5032 Low Voltage Communication	2003	2003	3	DCS	07/07/23	Telephone, but no public address or intercom. Hand-held battery-operated radios are used for most staff communication inside the building, plus at outside playground. A/V for several spaces. Wall-mounted clocks in some spaces.	
D5037 Low Voltage Fire Alarm	2003	2003	3	DCS	07/07/23	Ceiling-mounted smoke detectors and wall-mounted notification devices observed, but not the fire alarm control panel; staff report tested periodically with no issues reported.	
D5038 Low Voltage Security	2003	2003	5	DCS	07/07/23	Two sets of CCTV cameras installed, but reportedly none are functional. Perimeter access control monitoring and intrusion detection is present, but reportedly non-functional.	
D5039 Low Voltage Data	2003	2020	2	DCS	07/07/23	Reportedly all upgraded to high-speed fiber-optic with WiFi throughout installed during the pandemic by Snohomish School District - no issues reported.	
D5090 Other Electrical Systems	2003	2003	3	DCS	07/07/23	Lighted egress and exit signs with individual fixture battery back-up; some failed - minor maintenance to replace batteries. Signs of certain lay-in ceiling light fixtures with battery ballasts.	
E Equipment and Furnishings				3.0			
E10 Equipment							
E1010 Commercial Equipment	2003	2003	3	DCS	07/07/23	Residential appliances at kitchen and makeshift kitchenette. One newer commercial kitchen reach-in cooler. Residential washer and dryer in the main mechanical and utility room. One drink vending machine is located in the main hallway.	
E1020 Institutional Equipment	2003	2003	3	DCS	07/07/23	Minor organizational equipment for certain Boys & Girls Club activities and programs with no issues reported. Includes scoreboard at gym.	

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E Equipment and Furnishings			3.0			
E20 Furnishings						
E2010 Fixed Furnishings	2003	2003	3	LS	07/07/23	All casework is original wood veneer. Countertops in admin area have delaminated and chipped plastic laminate - need to relaminate wood substrate as minor maintenance.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Boys and Girls Club

Facility: Boys and Girls Club

Escalation 5%

Discount Rate 1.5%

B1020	Roof Construction	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	2	\$7,500.00	EA	\$15,000	\$29,000

Deficient Material: Thermal Envelope

Batt insulation with vapor retarder facing material has been cut to allow for attic door access, putting large holes in the building envelope.

Remedial Action:

Add attic access hatches with fold-down ladders to two locations - replace compromised insulation and vapor retarder.

Action Type:

Energy Efficiency



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

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C1010	Partitions	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2024	1	\$30,000.00	EA	\$30,000	\$59,000

Deficient Material: Operable Partition

Operable partition is damaged significantly and components are inoperable.

Remedial Action:

Replace operable partition.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

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Discount Rate 1.5%

D1090	Other Conveying Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	2	\$5,000.00	EA	\$10,000	\$20,000

Deficient Material: Attic access

No permanent attic access to the two HVAC equipment platforms hampering maintenance and eventual replacement of these units.

Remedial Action:

In conjunction with attic located HVAC equipment replacement, construct permanent access.

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Boys and Girls Club

Facility: Boys and Girls Club

Escalation 5%

Discount Rate 1.5%

D2020	Domestic Water Distribution	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2026	2	\$4,500.00	EA	\$9,000	\$18,000

Deficient Material: Domestic Hot Water Heater
Aging domestic hot water heaters.

Remedial Action:
Budget to replace upon failure; upgrade to high-efficiency at the same time.

Action Type:
Energy Efficiency



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Boys and Girls Club

Facility: Boys and Girls Club

Escalation 5%

Discount Rate 1.5%

D3020	Heat Generating Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2028	2	\$8,000.00	EA	\$16,000	\$31,000

Deficient Material: Unit heater
Aging gym unit heaters.

Remedial Action:
Budget to replace upon failure.

Action Type:
Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

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Escalation 5%

Discount Rate 1.5%

D3030	Cooling Generating Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	6	\$7,000.00	EA	\$42,000	\$82,000

Deficient Material: Condensing units

Six failed condensing units and/or associated refrigerant piping.

Remedial Action:

Replace failed units immediately.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

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Escalation 5%

Discount Rate 1.5%

D3040	HVAC Distribution Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	16,440	\$3.50	SF	\$57,540	\$113,000

Deficient Material: Ductwork

Some damage or missing duct insulation, duct leakage detected in several locations, reports of uneven or insufficient heating and cooling, no apparent test, adjust, and balance (TAB) settings on observed balancing dampers.

Remedial Action:

Inspect, test, and repair ductwork, including Re-TAB to design requirements.

Action Type:

Energy Efficiency



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Boys and Girls Club

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Escalation 5%

Discount Rate 1.5%

D3050	Terminal and Package Units	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2026	6	\$11,500.00	EA	\$69,000	\$135,000

Deficient Material: Furnaces
Aging gas-fired furnaces.

Remedial Action:
Replace in kind with new high-efficiency type, including inside cooling coil.

Action Type:
Energy Efficiency



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

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Escalation 5%

Discount Rate 1.5%

D5038	Low Voltage Security	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	16,440	\$1.00	SF	\$16,440	\$32,000

Deficient Material: **Electronic security**

Existing CCTV, perimeter monitoring, and intrusion detection systems all failed.

Remedial Action:

Renew the electronic security system.

Action Type:

Other



Facility Summary

City of Snohomish

Boys and Girls Club

Boys and Girls Club Infrastructure

402 Second Street
Snohomish, WA 98290

Facility Condition Summary

Site includes parking, skate park to north, parking to west between Centennial Trail and the Boys & Girls Club building and west lawn. Generally good condition with minimal vandalism. City utilities, SnoPUD single-phase power, and Puget Sound Energy natural gas.

Facility Summary

City of Snohomish
Boys and Girls Club
Boys and Girls Club Infrastructure

402 Second Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
G Sitework						
G30 Site Civil / Mechanical Utilities						
G3010 Water Supply	2003	2003	2	DCS	06/23/23	City water and fire services with unclear irrigation.
G3020 Sanitary Sewer	2003	2003	2	DCS	06/23/23	City sewer with no observed grease interceptor.
G3030 Storm Sewer	2003	2003	2	DCS	06/23/23	Storm water to city storm service at street, with several oil/water separators serving the west parking lot catch basins.
G3050 Cooling Distribution	2003	2003	3	DCS	06/23/23	Three fenced condensing unit areas, some fencing is damaged from vandalism, minor maintenance to repair. Some debris inside the fenced enclosures is lightly fouling the condensing units, minor maintenance to keep clean.
G3060 Fuel Distribution	2003	2003	3	DCS	06/23/23	Puget Sound Energy natural gas meter No. 629777 with 1,000 cfm capacity and no seismic shut-off valve, minor maintenance to install.
G40 Site Electrical utilities						
G4010 Electrical Distribution	2003	2003	3	DCS	06/23/23	SnoPUD single-phase power meter No. 137495 (22-276-873) entering from SE.
G4020 Site Lighting	2003	2003	3	DCS	06/23/23	Site lighting is minimal. The main entry sign up-lights are failed, minor maintenance to repair or replace.
G4030 Site Communications and Security	2003	2003	3	DCS	06/23/23	Data to be determined, CCTV cameras at building perimeter with several cameras vandalized, minor maintenance to replace.

Deficiency Repair Cost Markups By System

2023 - 2028

City of Snohomish
 Site: Boys and Girls Club

Escalation 5%
 Discount Rate 1.5%

Facility	System	Direct Construction Cost	Contingency 20%	Contractor's OH & P 20%	Project Soft Cost 36%	Total Project Cost	Total Project Cost (Present Value)
Boys and Girls Club	B10 Superstructure	\$15,000	\$3,000	\$3,600	\$7,776	\$29,000	\$30,000
	C10 Interior Construction	\$30,000	\$6,000	\$7,200	\$15,552	\$59,000	\$61,000
	D10 Vertical Transportation	\$10,000	\$2,000	\$2,400	\$5,184	\$20,000	\$20,000
	D20 Plumbing	\$9,000	\$1,800	\$2,160	\$4,666	\$18,000	\$20,000
	D30 HVAC	\$184,540	\$36,908	\$44,290	\$95,666	\$361,000	\$390,000
	D50 Electrical	\$16,440	\$3,288	\$3,946	\$8,522	\$32,000	\$32,000
	Facility Total	\$264,980	\$52,996	\$63,595	\$137,366	\$519,000	\$553,000
	Site Total	\$264,980	\$52,996	\$63,595	\$137,366	\$519,000	\$553,000

Opportunity Summary By Subsystem

City of Snohomish

Site: Boys and Girls Club

Total Site Opportunity Cost: **\$2,022,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: Boys and Girls Club System: Roofing							\$24,000
B3020	Roof Openings	No access to attic or upper gym flat roof.					
		Add exterior caged ladder on south side of gym from inside the locked HVAC enclosure. Include fall protection system for upper and lower roof. Add two attic access hatches on interior, with fold-down ladders.	1.00	\$12,500.00	LS	\$12,500	\$24,000
Facility: Boys and Girls Club System: Plumbing							\$147,000
D2010	Plumbing Fixtures	No staff restroom, no staff kitchenette, no shower, no utility deep sink, no prep sink in kitchen.					
		Install staff restroom, kitchenette, shower, deep sink prep sink, and others to support modern Boys & Girls Club standards.	1.00	\$75,000.00	LS	\$75,000	\$147,000
Facility: Boys and Girls Club System: HVAC							\$252,000
D3030	Cooling Generating Systems	Minimal air circulation in gym with portable box fans in use.					
		Install ceiling fans.	4.00	\$6,500.00	EA	\$26,000	\$51,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Opportunity Summary By Subsystem

City of Snohomish

Site: Boys and Girls Club

Total Site Opportunity Cost: **\$2,022,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
D3040	HVAC Distribution Systems	No full economizer for free cooling and improved ventilation.	7.00	\$9,500.00	EA	\$66,500	\$130,000
D3060	Controls and Instrumentation	Standalone programmable thermostats, not networked.	16,440.00	\$1.00	SF	\$16,440	\$32,000
D3090	Other HVAC Systems and Equipment	Minimal cooking capability with light-duty residential range hood.	1.00	\$20,000.00	LS	\$20,000	\$39,000
Facility: Boys and Girls Club System: Electrical							\$483,000
D5010	Electrical Service and Distribution	120/240V single-phase power with all but a few distribution panel spaces full.	1.00	\$50,000.00	LS	\$50,000	\$98,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Opportunity Summary By Subsystem

City of Snohomish

Site: Boys and Girls Club

Total Site Opportunity Cost: **\$2,022,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost	
D5020	Lighting and Branch Wiring	Fluorescent lighting with manual control (except LED at gym).	Upgrade to LED with automatic control.	12,000.00	\$14.00	SF	\$168,000	\$329,000
D5032	Low Voltage Communication	No public address or intercom, with staff using radios for communication.	Install an intercom system, with integral public address capability.	16,440.00	\$1.00	SF	\$16,440	\$32,000
D5038	Low Voltage Security	No card-key access.	Install card-key access per city standard.	16,440.00	\$0.75	SF	\$12,330	\$24,000

Facility:	Boys and Girls Club Infrastructure	
System:	Site Electrical utilities	\$1,057,000

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost	
G4010	Electrical Distribution	No generator.	Install generator, say 50 kW capacity.	1.00	\$85,000.00	LS	\$85,000	\$166,000
	No electric vehicle charging.	Install two dual-head electric vehicle charging stations with rough-in for two more.	2.00	\$15,000.00	EA	\$30,000	\$59,000	
	Roof with good solar exposure.	Install PV system of 50 kW capacity.	50.00	\$8,500.00	EA	\$425,000	\$832,000	

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Opportunity Summary By Subsystem

City of Snohomish

Site: Boys and Girls Club

Total Site Opportunity Cost: **\$2,022,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility:	Boys and Girls Club Infrastructure						
System:	Other Site Construction						\$59,000
G9090	Other Site Systems						
	Minimal site development with few amenities for Boys & Girls Club, other than the adjacent park and skate park.	Install outdoor classroom, raised bed learning garden, outdoor kinder play area, and similar.	3.00	\$10,000.00	EA	\$30,000	\$59,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Facility Summary

City of Snohomish
Carnegie Library
Carnegie Library

105 Cedar Avenue
Snohomish, WA 98290

Facility Size - Gross S.F. 4,080
Year Of Original Construction 1910
Facility Use Type Library
Construction Type Heavy
of Floors 2
Energy Source Electric
Year Of Last Renovation 2020
Historic Register No



		Total Project Cost	Total Project Cost Present Value
Weighted Avg Condition Score	2.5		
Facility Condition Index (FCI)	0.10	Observed Deficiencies 2023 - 2028 \$49,000	\$51,000
Current Replacement Value (CRV)	\$1,367,000	Predicted Renewal Budget 2029 - 2042 \$481,000	\$730,000
Beginning Budget Year	2023	Opportunities \$170,000	N/A
Escalation	5%		
Discount Rate	1.5%		

Facility Condition Summary

Constructed in 1910 and donated by Andrew Carnegie, this building has been amazingly restored to its former glory and is now used as a community event center. The tile roofing was replaced in 2012 and reportedly included a seismic upgrade. Most of the other major systems were extensively upgraded in 2020. Two forced-air heat pump furnace HVAC systems, one each for main floor and basement areas, both with economizer, but unclear relief air path. Four modernized restrooms. No fire sprinkler, but alarm is present. Modern three-phase 208V power with substantial 800A capacity, but no standby generator. Exterior connectors for farmers market and other outside special event support. LED lighting with automatic controls. Data service.

Facility Summary

City of Snohomish
Carnegie Library
Carnegie Library

105 Cedar Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
A Substructure			2.3			
A10 Foundations						
A1010 Standard Foundations	1910	1910	3	TRB	06/15/23	Original heavy concrete foundations, no signs of settlement or issues.
A1030 Slab On Grade	1910	2020	2	TRB	06/15/23	Original concrete slab on grade in daylight basement was completely removed and repoured in 2021.
A20 Basements						
A2020 Basement Walls	1910	1910	2	TRB	06/15/23	Painted cast-in-place concrete, no issues reported.
B Shell			2.7			
B10 Superstructure						
B1010 Floor Construction	1910	1910	3	TRB	06/15/23	Wood strip flooring on sub floor on hewn timber joists and beams. Some added structural elements in 2020.
B1020 Roof Construction	1910	1910	3	TRB	06/15/23	Condition not accessible or observable, but it was reported that a seismic upgrade did occur in 2012. No visible condition issues evident from ground.
B20 Exterior Closure						
B2010 Exterior Walls	1910	1910	3	TRB	06/15/23	Heavy cast concrete walls with inset glazed tile ornamentation in areas. Concrete painted in 2020.
B2020 Exterior Windows	1910	1910	3	TRB	06/15/23	Original historic wood windows with single-glazed float glass uppers, lower basement windows appear to have been reglazed with thermally-insulated panes. Painted exterior and stained interior. Lead-based paint may be present.

Facility Summary

City of Snohomish
Carnegie Library
Carnegie Library

105 Cedar Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
B Shell				2.7			
B20 Exterior Closure							
B2030 Exterior Doors	1910	2020	2	TRB	06/15/23	New stained wood doors with vision glass in wood frames, except hollow metal door and frame at basement egress stair. Concealed door closer hardware at basement level door has blown out of the head of the door, minor maintenance to repair or replace.	
B30 Roofing							
B3010 Roof Coverings	1910	2012	2	TRB	06/15/23	Clay tile roof replaced in 2012.	
B3020 Roof Openings	1910	2012	3	TRB	06/15/23	Skylight over entry mezzanine, inaccessible for visual observation during survey, but assumed in fair condition with no issues reported and 2012 reroof.	
B3030 Projections	1910	2020	3	TRB	06/15/23	Painted eave soffits with painted heavy wood ornamental soffit rakes and attic venting. Minor maintenance to remove cobweb and dirt accumulation. Ornamental (plaster?) dental relief below.	
C Interiors				2.4			
C10 Interior Construction							
C1010 Partitions	1910	2020	2	TRB	06/15/23	New gypsum on wood stud toilet room walls where toilet rooms expanded and infilled on upper and basement floors. Original remaining assumed to be lath on plaster on wood studs.	
C1020 Interior Doors	1910	1910	3	TRB	06/15/23	Historic original wood doors with leaded glass, stained and showing historic patina. Some newer doors (new toilet rooms) are wood in wood frames with concealed closers and lever hardware.	

Facility Summary

City of Snohomish
 Carnegie Library
 Carnegie Library

105 Cedar Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
C Interiors			2.4			
C10 Interior Construction						
C1030 Fittings	1910	2020	3	TRB	06/15/23	Original tall ornamental wood base. Tall window curtains and roll-down blinds appear to have been replaced in 2020. Painted steel handrails at basement egress stair. Stainless handrails at ADA toilet rooms (met ADA standards at time of renovation, but no vertical handrails present per current ADA code) - minor maintenance to install.
C20 Staircases						
C2010 Stair Construction	1910	2020	2	TRB	06/15/23	Concrete at basement egress stair.
C30 Interior Finishes						
C3010 Wall Finishes	1910	2020	2	TRB	06/15/23	Painted walls, stained wood trim elements.
C3020 Floor Finishes	1910	2020	3	TRB	06/15/23	Painted wood at original wood strip flooring upstairs with some chips and wear evident, carpet in the basement. Sheet goods in the restrooms.
C3030 Ceiling Finishes	1910	2020	3	TRB	06/15/23	Painted plaster and gypsum.
D Services			2.0			
D10 Vertical Transportation						
D1010 Elevators and Lifts	1910	2020	2	DCS	06/15/23	One Graventa ADA lift at main entry with 750-lb capacity and three stops (ground, main, and basement levels). Minor maintenance opportunity to install a low-profile roof over the lift to reduce maintenance, rust, and corrosion over time; for example a translucent polycarbonate cover.

Facility Summary

City of Snohomish
Carnegie Library
Carnegie Library

105 Cedar Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services				2.0			
D20 Plumbing							
D2010 Plumbing Fixtures	1910	2020	2	DCS	06/15/23	Four restrooms, each with pressure-assist flush water closet and lavatory. Lavatory faucet lever operation is complicated by the mirror directly above - minor maintenance to adjust the mirror to eliminate interference. Two kitchenettes, one larger and one smaller. Janitor closet with floor sink. Dual-height (ADA) refrigerated drinking fountain with filtered water bottle filler.	
D2020 Domestic Water Distribution	1910	2020	2	DCS	06/15/23	Estimated 1.5-inch copper water service entry to copper distribution. One A.O. Smith electric 50-gallon domestic hot water heater including seismic straps, expansion tanks, and Grundfos recirculation pump. No issues reported.	
D2030 Sanitary Waste	1910	2020	2	DCS	06/15/23	Cast iron drain, waste, and vent (DW&V) piping, including restroom floor drains with hydraulic trap primers. Tested fixtures all flush and drain well. No disposals as kitchenette sinks, but strainers are provided to assist in keeping debris out of DW&V piping.	
D2040 Rain Water Drainage	1910	2020	2	DCS	06/15/23	Concealed roof gutters draining to scupper boxes, then metallic piping down to site storm with no issues reported, except possible concern regarding floor drain at lower level entry at bottom of stairs - further investigation suggested to assure minimal risk of flooding.	
D30 HVAC							
D3030 Cooling Generating Systems	1910	2020	2	DCS	06/15/23	Two York condensing units outside to NE; one 5-ton for upper floor, one 4-ton for lower floor. Two ceiling fans at upper floor meeting room.	

Facility Summary

City of Snohomish
Carnegie Library
Carnegie Library

105 Cedar Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
D Services			2.0			
D30 HVAC						
D3040 HVAC Distribution Systems	1910	2020	2	DCS	06/15/23	Two main HVAC systems; five-ton for upper level and four-ton for lower level, complete with full economizer for free cooling. Relief air path is somewhat unclear, apparent relief louver at SW corner of building near grade - minor maintenance to confirm. Both supply air plenums include an electronic air scrubber, which appears to be ionizing-type, which may have been installed to reduce COVID-19 risk. If these units produce ozone, they may cause more harm than good. Consider replacing with portable HEPA air purifiers during high-risk events. Four bathroom ceiling exhaust fans. Dedicated exhaust fan for the custodial room and adjacent spaces. Galvanized sheet metal duct. Upper floor wood supply air diffusers are suffering damage from chair weight - minor maintenance to armor those in high-risk areas.
D3050 Terminal and Package Units	1910	2020	2	DCS	06/15/23	Two York heat pump furnaces in lower level (basement) mechanical room, including electric resistance back-up (auxiliary) heat and 4-inch filters; the filters fit poorly in the filter modules - minor maintenance to improve fit to reduce bypass (unfiltered) air. Four King electric wall heaters; one in each restroom with on-board manual control.
D3060 Controls and Instrumentation	1910	2020	2	DCS	06/15/23	Programmable thermostats for each of the two HVAC systems, plus restroom exhaust fan control interlocked with the lighting.
D40 Fire Protection						
D4030 Fire Protection Specialties	1910	2020	2	DCS	06/15/23	Fire extinguishers and AEDs.
D50 Electrical						
D5010 Electrical Service and Distribution	1910	2020	2	DCS	06/15/23	Siemens 208V, three-phase power with 800A main panel which serves the major HVAC equipment, with 400A feeder to distribution Panel A in turn powering lighting, receptacles, and miscellaneous circuits.

Facility Summary

City of Snohomish
Carnegie Library
Carnegie Library

105 Cedar Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services				2.0			
D50 Electrical							
D5020 Lighting and Branch Wiring	1910	2020	2	DCS	06/15/23	LED light fixtures throughout, plus one historic chandelier in the main meeting room, reportedly from the Everett Carnegie Library. Low-voltage lighting control system including occupancy sensors and photocell control. Receptacles with GFI in required locations (restrooms and kitchenettes). Several floor receptacles in open areas.	
D5032 Low Voltage Communication	1910	2020	2	DCS	06/15/23	Modern A/V support including QSC touch screen control panels, with head-end rack in basement mechanical room; no issues reported.	
D5037 Low Voltage Fire Alarm	1910	2020	2	DCS	06/15/23	Honeywell Fire-lite MS-9600 addressable fire alarm control panel with detection and notification devices throughout.	
D5038 Low Voltage Security	1910	2020	2	DCS	06/15/23	Card-key access; CCTV inside and out; and intrusion detection system with no issues reported.	
D5039 Low Voltage Data	1910	2020	2	DCS	06/15/23	WiFi antenna(s), Comcast medium-speed data to basement mechanical room MDF rack, but no cooling.	
D5090 Other Electrical Systems	1910	2020	2	DCS	06/15/23	Battery mini-inverters for emergency lighting.	
E Equipment and Furnishings				3.0			
E10 Equipment							
E1010 Commercial Equipment	1910	2020	2	DCS	06/15/23	Residential kitchen appliances at kitchenettes.	
E1020 Institutional Equipment	1910	2020	3	DCS	06/15/23	City Council basement meeting room audio/video (A/V) recording and broadcast equipment appears to be set up on a temporary basis, but is being used on a regular basis. Cables and devices appear to be a trip hazard and potentially with substandard performance.	

Facility Summary

City of Snohomish
Carnegie Library
Carnegie Library

105 Cedar Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
E Equipment and Furnishings			3.0			
E20 Furnishings						
E2010 Fixed Furnishings	1910	2020	2	TRB	06/15/23	Cast solid surfacing break area counters on wood base cabinets.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Carnegie Library

Facility: Carnegie Library

Escalation 5%

Discount Rate 1.5%

E1020	Institutional Equipment	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	1	\$25,000.00	LS	\$25,000	\$49,000

Deficient Material: Council A/V equipment

Apparent disintegrated council meeting audio/video support system, with poor wire management resulting in trip hazards and suspected reliability issues.

Remedial Action:

Install proper council meeting A/V support system, specifically including trip-free wire management system.

Action Type:

Significant Operational Impact



Facility Summary

City of Snohomish

Carnegie Library

Carnegie Library Infrastructure

105 Cedar Avenue
Snohomish, WA 98290

Facility Condition Summary

Completely redeveloped in 2020, the historic site houses the former Carnegie library which is now a community and event center, an asphalt parking lot, concrete plazas and walkways, lawn, mature trees, and a timber frame shed structure protecting a historic 600-year-old growth log.

City water, sewer, and irrigation, but no fire protection. All-electric building and site with SnoPUD power - no natural gas. High-speed Comcast cable data, but not city standard fiber-optic. CCTV monitoring.

Facility Summary

City of Snohomish
Carnegie Library
Carnegie Library Infrastructure

105 Cedar Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments	
G Sitework							
G20 Site Improvements							
G2010	Roadways	1910	2020	2	TRB	06/15/23	Limited area of asphalt drive into parking lot.
G2020	Parking Lots	1910	2020	2	TRB	06/15/23	Asphalt lot with fresh-looking parking striping, two ADA stalls provided, but missing ADA pole-mounted signs and one to be designated as van accessible (minor maintenance to add required signage).
G2030	Pedestrian Paving	1910	2020	2	TRB	06/15/23	All new concrete walkways and plazas, including curb cuts with tactile warning to ADA parking. New concrete entry stairs to main and basement levels with cast non-slip safety nosing on treads. Precast concrete on steel egress stair.
G2040	Site Development	1910	2020	2	TRB	06/15/23	New flagpole and relocated war memorial monument. Open air cedar roof canopy on timber structure protecting historic 600-year-old growth stump.
G2050	Landscaping	1910	2020	2	TRB	06/15/23	Irrigated lawn and perimeter flowerbeds, substantial American Elm and European Beech trees in addition to new street trees, some shrubs. The European Beech has a substantial pocket where several large branches converge (can lead to rot and failure); recommend contacting a certified arborist to review the condition as a main branch failure caused by an unseen rot pocket could cause life safety issues, property damage, and related liability.

Facility Summary

City of Snohomish
Carnegie Library
Carnegie Library Infrastructure

105 Cedar Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
G Sitework							
G30 Site Civil / Mechanical Utilities							
G3010 Water Supply	1910	2020	3	DCS	06/15/23	City water meter appears older and 5/8- or 3/4-inch entering from west, with no apparent backflow prevention - minor maintenance to install. Newer irrigation meter to south to 2020 irrigation system, with some valve hand vaults flooded, and the basement stairwell soaked from apparent overirrigation - minor maintenance to tune-up the irrigation system. No fire service.	
G3020 Sanitary Sewer	1910	2020	2	DCS	06/15/23	City sewer with no issues reported. Porta potty on-site assumed for farmers market support.	
G3030 Storm Sewer	1910	2020	2	DCS	06/15/23	Reportedly, 2020 on-site storm water detention vault in landscape lawn area to SW.	
G3050 Cooling Distribution	1910	2020	2	DCS	06/15/23	Condensing units on pad at grade to NE with no issues reported. Minor ongoing maintenance to keep tree leaves and other debris away from the condensing units.	
G40 Site Electrical utilities							
G4010 Electrical Distribution	1910	2020	2	DCS	06/15/23	Power underground from street to utility pad-mounted 12.5 kV to 208V three-phase power with 75 kVA capacity at NE corner of the building, and Snohomish PUD meter No. 1000142790 at the north wall of the building. No renewable energy, emergency generator, or electric vehicle charging; however, there are several receptacles for power to seasonal farmers market events.	
G4020 Site Lighting	1910	2020	2	DCS	06/15/23	2020 LED up-lighting in multiple landscape planter beds, with 2023 bark covering up multiple fixtures - minor maintenance to clear back bark to allow up-lights to function. No other observed site lighting, except for City street lighting and building entry lights - no issues reported.	

Facility Summary

City of Snohomish
 Carnegie Library
 Carnegie Library Infrastructure

105 Cedar Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
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G Sitework

G40 Site Electrical utilities

G4030	Site Communications and Security	1910	2020	2	DCS	06/15/23	Comcast cable data service entry observed, but unclear if this is the primary service; no plain old telephone service (POTS) observed; no high-speed fiber-optic service observed; no issues reported. CCTV cameras at building perimeter with no other site electronic security observed.
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Deficiency Repair Cost Markups By System

2023 - 2028

City of Snohomish

Site: Carnegie Library

Escalation 5%
Discount Rate 1.5%

Facility	System		Direct Construction Cost	Contingency 20%	Contractor's OH & P 20%	Project Soft Cost 36%	Total Project Cost	Total Project Cost (Present Value)
Carnegie Library	E10 Equipment		\$25,000	\$5,000	\$6,000	\$12,960	\$49,000	\$51,000
		Facility Total	\$25,000	\$5,000	\$6,000	\$12,960	\$49,000	\$51,000
		Site Total	\$25,000	\$5,000	\$6,000	\$12,960	\$49,000	\$51,000

Opportunity Summary By Subsystem

City of Snohomish

Site: Carnegie Library

Total Site Opportunity Cost: **\$513,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost	
Facility: Carnegie Library System: Exterior Closure							\$106,000	
B2020	Exterior Windows	Energy inefficient single-glazed float glass.	Consider retrofitting existing wood windows and replacing glazing with thermally insulated glass for energy efficiency and thermal comfort.	18.00	\$3,000.00	EA	\$54,000	\$106,000
Facility: Carnegie Library System: Fire Protection							\$64,000	
D4010	Fire Protection Sprinkler Systems	No fire sprinkler.	Install wet-pipe fire sprinkler.	4,080.00	\$8.00	SF	\$32,640	\$64,000
Facility: Carnegie Library Infrastructure System: Site Civil / Mechanical Utilities							\$294,000	
G3020	Sanitary Sewer	Porta potty for farmers market support.	Install permanent restroom facility with drinking fountain for farmers market operators and patrons.	1.00	\$150,000.00	LS	\$150,000	\$294,000
Facility: Carnegie Library Infrastructure System: Site Electrical utilities							\$49,000	
G4010	Electrical Distribution	No electric vehicle (EV) charging stations.	Install two double EV charging stations.	2.00	\$12,500.00	EA	\$25,000	\$49,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Facility Summary

City of Snohomish

City Hall

City Hall

166 Union Avenue
Snohomish, WA 98290

Facility Size - Gross S.F.	9,000
Year Of Original Construction	1937
Facility Use Type	City Hall
Construction Type	Heavy
# of Floors	1
Energy Source	Gas
Year Of Last Renovation	1968
Historic Register	No



		Total Project Cost	Total Project Cost Present Value
Weighted Avg Condition Score	2.6		
Facility Condition Index (FCI)	0.11	Observed Deficiencies 2023 - 2028	\$980,000
Current Replacement Value (CRV)	\$5,850,000	Predicted Renewal Budget 2029 - 2042	\$2,166,000
Beginning Budget Year	2023	Opportunities	\$1,160,000
Escalation	5%		N/A
Discount Rate	1.5%		

Facility Condition Summary

The building was built by the federal government as the Snohomish Post Office to high standards, with concrete, steel and masonry walls, main floor and primary roof structure, and secondary roof to east is wood-framed with cupola. It was purchased by the city and has been modernized over the years, but with little of no upgrade to the thermal envelope, and loss of natural ventilation and daylighting to the main first floor office area. Upgraded from steam radiators and natural ventilation to forced-air heating and cooling. In 2015, the post office loading dock to SE was converted to an office addition. In 2020, a limited seismic upgrade tied the high roof to the exterior walls and all the roof coverings were replaced. Overall, this building should stand another century with continued good maintenance and periodic improvements, noting some improvements are suggested sooner, such as adding fire sprinkler, fire alarm, and full ADA accessibility.

Facility Summary

City of Snohomish
 City Hall
 City Hall

166 Union Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Survey or	Survey Date	Comments
A Substructure			2.0			
A10 Foundations						
A1010 Standard Foundations	1937	1937	2	LS	06/22/23	Cast-in-place concrete, no signs of stress, cracking, or ground water intrusion.
A1030 Slab On Grade	1937	1937	2	LS	06/22/23	Basement slab, no signs of stress, cracking, or ground water intrusion.
A20 Basements						
A2020 Basement Walls	1937	1937	2	LS	06/22/23	Cast-in-place concrete. IT office in basement.
B Shell			2.5			
B10 Superstructure						
B1010 Floor Construction	1937	1937	2	LS	06/22/23	Concrete with hardwood flooring over basement slab on grade.
B1020 Roof Construction	1937	1990	2	LS	06/22/23	Wood roof with steel beams and bracing. Seismic retrofit in 2020 tied walls to roof. 18" thick brick walls with evidence of old roof leaks prior to new metal roof installation.
B20 Exterior Closure						
B2010 Exterior Walls	1937	2015	3	LS	06/22/23	Paint on the exterior trim is peeling. Brick at upper three feet where seismic upgrade was completed was either tuck pointed and/or removed and reinstalled. Joints show poor workmanship. Original plaster on inside of exterior walls in good shape. Exterior walls at addition are in good shape, EIFS has no issues, brick at addition was toothed into existing original brick column.

Facility Summary

City of Snohomish
 City Hall
 City Hall

166 Union Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date Last	Score	Surveyor	Survey Date	Comments
B Shell			2.5			
B20 Exterior Closure						
B2020 Exterior Windows	1937	2015	3	LS	06/22/23	Single-glazed (lead) glass. Wood window frames and sashes are rotting and the paint is peeling, most are painted shut. Original sliding mechanism is still in place, unknown if it is operational. Clerestory windows are painted shut. 2015 windows at addition are double-glazed with the same mullion pattern as original windows.
B2030 Exterior Doors	1937	1937	2	LS	06/22/23	Vestibule doors are original, although the exterior has been replaced.
B30 Roofing						
B3010 Roof Coverings	1937	2020	2	LS	06/22/23	New metal and flat roofing. Membrane roof over 2015 office addition. Roof leaked during replacement; roof drains to parking lot, then drains to north side. No roof access from inside the building. Wood soffit trim is rotting, minor maintenance to restore.
B3020 Roof Openings	1937	1937	2	LS	06/22/23	Penetrations are well flashed. The overflow drains are capped.
C Interiors			2.2			
C10 Interior Construction						
C1010 Partitions	1937	2015	2	LS	06/22/23	Enclosed loading dock for office space.
C1020 Interior Doors	1937	1937	2	LS	06/22/23	Stained wood doors.
C1030 Fittings	1937	1937	2	LS	06/22/23	Chair rail in conference room.
C20 Staircases						
C2010 Stair Construction	1937	1937	2	LS	06/22/23	Original concrete stairs, not ADA accessible.

Facility Summary

City of Snohomish
 City Hall
 City Hall

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 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date Last	Score	Surveyor	Survey Date	Comments
C Interiors			2.2			
C20 Staircases						
C2020 Stair Finishes	1937	1937	3	LS	06/22/23	Paint is peeling from basement steps.
C30 Interior Finishes						
C3010 Wall Finishes	1937	1937	2	LS	06/22/23	Plaster/paint at the upper level. Concrete/paint at basement.
C3020 Floor Finishes	1937	1937	3	LS	06/22/23	Carpet over original hardwood at upper level. Painted concrete and some carpet at basement.
C3030 Ceiling Finishes	1937	1937	2	LS	06/22/23	Suspended acoustical tile at upper level. Plaster/paint at basement.
D Services			3.1			
D20 Plumbing						
D2010 Plumbing Fixtures	1937	1968	3	DCS	06/22/23	Fixtures of various ages at men's and women's restrooms, custodial sink, and kitchenette.
D2020 Domestic Water Distribution	1937	1968	3	DCS	06/22/23	Mix of older galvanized and newer copper piping, with rust and corrosion evident at older piping and at water closet tanks. Older piping insulated with asbestos. 1997 electric hot water heater, minor maintenance to replace upon failure.
D2030 Sanitary Waste	1937	1968	3	DCS	06/22/23	Mostly original cast iron drain and waste piping, with some observed galvanized vent to roof piping. While there is concern regarding the aging piping, no specific issues were reported or observed.

Facility Summary

City of Snohomish
 City Hall
 City Hall

166 Union Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date Last	Score	Surveyor	Survey Date	Comments
D Services			3.1			
D20 Plumbing						
D2040 Rain Water Drainage	1937	1968	3	DCS	06/22/23	Roof drains from concealed gutter serving the peaked metal roof to east to building interior with cast iron to storm; from center flat membrane roof to roof drains to storm; and from newer west flat membrane roof to roof drains as well; with a few minor variations. Reportedly, there have been past leaks from the cast iron roof drain leaders. The new SW office addition primary drain appears not installed, with ponding water draining via the overflow drain - minor maintenance to complete installation of the drain.
D30 HVAC						
D3010 Energy Supply	1937	1968	3	DCS	06/22/23	Black iron natural gas piping to rooftop gas-pack HVAC unit rusting - minor maintenance to clean and preserve (paint).
D3020 Heat Generating Systems	1937	1968	4	DCS	06/22/23	The original Kewanee 700 mbh steam boiler is abandoned in place in the basement, as is the asbestos-insulated steam piping throughout the building. The original cast iron steam radiators are also present in most occupied main floor spaces.
D3030 Cooling Generating Systems	1937	2015	2	DCS	06/22/23	Three roof-top split-Dx condensing units to west; two 2.5-ton multi-zone units serving the addition office area ceiling cassettes, and one 1.5-ton unit serving the basement data server room. The server room system has a pinhole leak - minor maintenance to find and repair. One at-grade split-Dx condensing unit to south serving the basement archive room furnace system. The main office area rooftop gas-pack unit has on-board Dx cooling.

Facility Summary

City of Snohomish

City Hall

City Hall

166 Union Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
D Services			3.1			
D30 HVAC						
D3040 HVAC Distribution Systems	1937	1998	3	DCS	06/22/23	<p>Forced-air HVAC system for main floor office area with rooftop packaged unit and ductwork mostly in the ceiling space. The addition of full-height privacy glass at main floor perimeter private office walls has eliminated the return air path, compromising the integrity of the HVAC system design, reducing thermal comfort and indoor air quality. While the rooftop packaged unit has an apparent full-size economizer (free cooling) air intake, there is no sign of the associated relief air path. General exhaust fan for the restrooms. The basement archives area is served by a fully ducted Carrier high-efficiency furnace with split-Dx cooling, but no outside air, other than minor from the original basement vents to north, open directly to outside; no economizer (free cooling). Almost no ventilation for the basement meeting room(s) and IT work room. Apparent dedicated outside air system for the SE office addition area, but without heat recovery ventilation.</p> <p>The main office packaged unit includes a "Catalyst Efficiency Enhancing Controller" from "Transformative Wave Technologies," but this company appears to appear to be closed, and little information can be found on this system. However, from the control instructions, it appears there is no "catalyst" in the Catalyst controller - and it may instead be a form of variable speed drive for the supply fan motor. Further investigation into the function of this unit is suggested as minor maintenance. Reportedly, the packaged unit also includes an air scrubber device, but this was not directly observed during the site visit - minor maintenance to confirm this is installed and operating properly to reduce airborne contagion risk.</p>
D3050 Terminal and Package Units	1937	2015	2	DCS	06/22/23	<p>One 12.5-ton rooftop gas-pack unit with 250 mbh gas furnace, serving the main floor office area. The unit is on sleepers, with no apparent tie-down to structure - minor maintenance to better anchor to prevent movement in heavy winds or seismic event. Five ductless-split ceiling cassettes at the SE office addition. Two through-wall packaged terminal air conditioning units at main floor; one at the postmaster office (recently replaced), and another at the lunch room (failed and abandoned in place, minor maintenance to fully demolish if no longer needed).</p>

Facility Summary

City of Snohomish
 City Hall
 City Hall

166 Union Avenue
 Snohomish, WA 98290

Facility Components

Systems		Original System Date	Renewal Date Last	Score	Surveyor	Survey Date	Comments
D Services				3.1			
D30	HVAC						
D3060	Controls and Instrumentation	1937	2015	3	DCS	06/22/23	Multiple standalone programmable thermostats with poor coordination with each other in several locations and multiple complaints from occupants.
D40	Fire Protection						
D4030	Fire Protection Specialties	1937	2014	3	DCS	06/22/23	Fire extinguisher, AED in bag on hook.
D50	Electrical						
D5010	Electrical Service and Distribution	1937	1968	4	DCS	06/22/23	Mix of older and newer conduits, feeders, and panels, with 240V wild-leg three-phase power service. Multiple older panels used as splice panels to connect older wiring to newer panels. No apparent modern circuit coordination and no apparent surge protection.
D5020	Lighting and Branch Wiring	1937	1968	3	DCS	06/22/23	Mix of older and newer branch wiring, devices, and fixtures. Obsolete, ungrounded receptacles are present in older areas; few or no receptacles are provided on walls in some spaces; aged wiring in walls and ceilings; mix of older and newer light fixtures, but with most lamps reportedly upgraded to LED. Mostly manual lighting controls, except automatic at SE addition.
D5032	Low Voltage Communication	1937	2014	3	DCS	06/22/23	Mix of older and newer communications, including apparently abandoned plain old telephone service, CATV, newer VoIP telephone, and smart TVs in conference areas.
D5037	Low Voltage Fire Alarm	1937	1968	4	DCS	06/22/23	Several battery-operated smoke and carbon monoxide alarms.
D5038	Low Voltage Security	1937	2018	3	DCS	06/22/23	Card-key access and CCTV.
D5039	Low Voltage Data	1937	2015	3	DCS	06/22/23	High-speed fiber-optic data to makeshift server room in basement with uninterruptible power supply and failing cooling system.

Facility Summary

City of Snohomish
 City Hall
 City Hall

166 Union Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services				3.1			
D50 Electrical							
D5090	Other Electrical Systems	1937	2014	3	DCS	06/22/23	Several battery-backed egress light fixtures.
E Equipment and Furnishings				3.0			
E10 Equipment							
E1010	Commercial Equipment	1937	2014	3	DCS	06/22/23	Office equipment and kitchen appliances.
E1020	Institutional Equipment	1937	2014	3	DCS	06/22/23	Minimal specialized equipment with no issues reported.
E20 Furnishings							
E2010	Fixed Furnishings	1937	2000	2	LS	06/22/23	Casework is all wood.
F Special Construction							
F10 Special Construction							
F1010	Special Structures	1937	1937	3	LS	06/22/23	Cupola wood construction shows signs of leaks over the years.
F1020	Integrated Construction	1937	1937	2	LS	06/22/23	Cast-in-place concrete vault with metal door for records storage.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: City Hall

Facility: City Hall

Escalation 5%

Discount Rate 1.5%

B2020	Exterior Windows	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2024	23	\$3,000.00	EA	\$69,000	\$135,000

Deficient Material: Historic Wood Windows

Original historic wood windows need rehabilitation.

Remedial Action:

Restore historic wood windows per the Standards and Guidelines for Preservation, Rehabilitation, Restoration & Reconstruction. Add storm window on exterior for future preservation.

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: City Hall

Facility: City Hall

Escalation 5%

Discount Rate 1.5%

B3020	Roof Openings	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	3	\$1,750.00	EA	\$5,250	\$10,000

Deficient Material: **Overflow Drains**

Overflow drains are plugged.

Remedial Action:

Remove caps and open drains, ensure proper pipe connections, and replace grates over drains.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: City Hall

Facility: City Hall

Escalation 5%

Discount Rate 1.5%

D1090	Other Conveying Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	1	\$10,000.00	LS	\$10,000	\$20,000

Deficient Material: Roof access
No permanent roof access.

Remedial Action:
Install roof access.

Action Type:
Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: City Hall

Facility: City Hall

Escalation 5%

Discount Rate 1.5%

D2020	Domestic Water Distribution	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	9,000	\$10.00	SF	\$90,000	\$176,000

Deficient Material: Galvanized pipe

Galvanized and other older obsolete pipe materials with rust and corrosion; asbestos pipe insulation.

Remedial Action:

Remediate asbestos and replace domestic water piping with modern copper and/or PEX.

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: City Hall

Facility: City Hall

Escalation 5%

Discount Rate 1.5%

D2030	Sanitary Waste	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2028	9,000	\$1.50	SF	\$13,500	\$26,000

Deficient Material: Waste piping

While no specific issues were reported or observed, the waste piping is aged.

Remedial Action:

Budget to selectively replace sections of waste piping if issues arise.

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: City Hall

Facility: City Hall

Escalation 5%

Discount Rate 1.5%

D2040	Rain Water Drainage	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2027	9,000	\$1.00	SF	\$9,000	\$18,000

Deficient Material: Roof Drain

While no specific current issues are reported, the 1937 and/or 1968 cast iron roof drain piping is aged.

Remedial Action:

Budget to selectively replace cast iron roof drain piping upon sign of leakage.

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: City Hall

Facility: City Hall

Escalation 5%

Discount Rate 1.5%

D3020	Heat Generating Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2026	9,000	\$3.00	SF	\$27,000	\$53,000

Deficient Material: Steam heat

The original steam heating boiler, piping, and radiators includes asbestos insulation, and the equipment and piping takes up valuable space.

Remedial Action:

Abate asbestos and demolish the abandoned steam heating system; noting certain portions of the system may be kept for historical purposes.

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: City Hall

Facility: City Hall

Escalation 5%

Discount Rate 1.5%

D3040	HVAC Distribution Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	1	\$10,000.00	LS	\$10,000	\$20,000

Deficient Material: Economizer

No apparent economizer relief air path for the main floor HVAC system.

Remedial Action:

Install economizer relief per code.

Action Type:

Energy Efficiency



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: City Hall

Facility: City Hall

Escalation 5%

Discount Rate 1.5%

D3040	HVAC Distribution Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	5	\$1,000.00	EA	\$5,000	\$10,000

Deficient Material: Return air

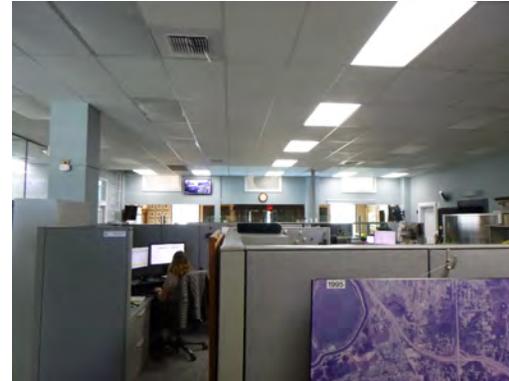
No apparent return air path from main floor perimeter private office with full-height glass partition, other than minimal from slightly undercut doors.

Remedial Action:

Install proper relief air path from each office space.

Action Type:

Code Issue



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: City Hall

Facility: City Hall

Escalation 5%

Discount Rate 1.5%

D3040	HVAC Distribution Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1	\$15,000.00	LS	\$15,000	\$29,000

Deficient Material: Ventilation

No ventilation for basement archives and adjacent space HVAC system, or related economizer.

Remedial Action:

Install ventilation and economizer for basement archives HVAC system per code.

Action Type:

Code Issue



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: City Hall

Facility: City Hall

Escalation 5%

Discount Rate 1.5%

D3050	Terminal and Package Units	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	5	\$7,500.00	EA	\$37,500	\$73,000

Deficient Material: Ceiling cassettes

Ceiling cassettes at SE office addition are so dysfunctional that staff are installing deflection covers and taking other measures in attempt to achieve reasonable comfort. Reportedly, the controls have never worked, and the addition of one or more unanticipated walls have violated the integrity of the HVAC design.

Remedial Action:

Fully evaluate the ductless split ceiling cassette system, including controls and office space dividing partitions, and devise modifications and/or replacements to achieve reasonable comfort for occupants without use of aftermarket devices. At the same time, consider proper operation of the directly related dedicated ventilation system for this area.

Action Type:

Energy Efficiency



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: City Hall

Facility: City Hall

Escalation 5%

Discount Rate 1.5%

D4010	Fire Protection Sprinkler Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	9,000	\$7.00	SF	\$63,000	\$123,000

Deficient Material: Fire Sprinkler
No fire sprinkler.

Remedial Action:
Install fire sprinkler.

Action Type:
Life Safety



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: City Hall

Facility: City Hall

Escalation 5%

Discount Rate 1.5%

D5010	Electrical Service and Distribution	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2026	9,000	\$5.00	SF	\$45,000	\$88,000

Deficient Material: Electrical distribution

Mix of older and newer conduits, feeders, and panels, with 240V wild-leg three-phase power service. Multiple older panels used as splice panels to connect older wiring to newer panels. No apparent modern circuit coordination and no apparent surge protection.

Remedial Action:

Upgrade all to modern 208V, three-phase power with fully-engineered electrical system.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: City Hall

Facility: City Hall

Escalation 5%

Discount Rate 1.5%

D5020	Lighting and Branch Wiring	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	9,000	\$6.00	SF	\$54,000	\$106,000

Deficient Material: Branch wiring and devices.
Aged and obsolete wiring and devices, including ungrounded receptacles.

Remedial Action:
Replace aged and obsolete wiring and devices.

Action Type:
Code Issue



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: City Hall

Facility: City Hall

Escalation 5%

Discount Rate 1.5%

D5037	Low Voltage Fire Alarm	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	9,000	\$5.25	SF	\$47,250	\$93,000

Deficient Material: Fire alarm
No fire alarm.

Remedial Action:
Install networked (addressable) fire alarm system.

Action Type:
Life Safety



Facility Summary

City of Snohomish
City Hall
City Hall Infrastructure

166 Union Avenue
Snohomish, WA 98290

Facility Condition Summary

Rectangular site downtown with City Hall building, surrounded by sidewalk to east, parking areas north and south, and narrow drive aisle to east. Trash enclosure and electrical service entry to SW. Some landscaping at front, grass area at west, and benches in front off public sidewalk. Wood stair access to adjacent engineering building to south. City utilities, including SnoPUD wild-leg three-phase 240V electrical service, Puget Sound Energy natural gas, and high-speed fiber-optic data service. Insufficient parking for staff and City Hall patrons. Partial flooding at street to east during heavy rain.

Facility Summary

City of Snohomish
 City Hall
 City Hall Infrastructure

166 Union Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments	
G Sitework							
G20 Site Improvements							
G2020	Parking Lots	1937	1937	3	LS	06/22/23	Asphalt, drainage is catch basin which discharges to Union Street - issues on north side. Staff reports not enough parking. ADA spaces are non-compliant. Recommend a complete ADA evaluation to determine extent of non-compliance.
G2030	Pedestrian Paving	1937	1937	3	LS	06/22/23	Concrete sidewalk and pavers at bench.
G2040	Site Development	1937	1937	3	LS	06/22/23	Flagpole and bench on pavers.
G2050	Landscaping	1937	1937	2	LS	06/22/23	Mature pin oak trees. The west side oak is being held together with a chain.
G30 Site Civil / Mechanical Utilities							
G3010	Water Supply	1937	1968	3	DCS	06/22/23	City water with 1-inch service line and 5/8-inch meter with no issues reported outside the building. No fire sprinkler service. Past irrigation is abandoned in place.
G3020	Sanitary Sewer	1937	1968	3	DCS	06/22/23	City sewer with no issues reported.
G3030	Storm Sewer	1937	1968	3	DCS	06/22/23	Catch basins and roof drains to north piped to one center north catch basin with automatic sump pump, in turn pumping to curb at street off NE corner of building, flooding that area - minor maintenance to coordinate with the city to better convey the storm water away from this area. Similar problem at SE side of site, with similar minor maintenance to improve drainage at street.

Facility Summary

City of Snohomish
 City Hall
 City Hall Infrastructure

166 Union Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
G Sitework							
G30 Site Civil / Mechanical Utilities							
G3050 Cooling Distribution	2019	2019	2	DCS	06/22/23	One condensing unit at grade to south serving the basement archives space - minor ongoing maintenance to keep landscape shrubs away from the condensing unit.	
G3060 Fuel Distribution	1937	1968	3	DCS	06/22/23	Puget Sound Energy gas meter No. 779619 with 1,000 cfh capacity, missing seismic shut-off valve - minor maintenance to install. The original fuel oil storage tank was removed when the office addition was added in 2015.	
G40 Site Electrical utilities							
G4010 Electrical Distribution	1937	1968	4	DCS	06/22/23	SnoPUD 120/240V, wild-leg three-phase power overhead from aged pole and rusty pot transformer at alley to south, to pole and service at trash enclosure to SW, with meter No. 5973098 (1000142055).	
G4020 Site Lighting	1937	2020	2	DCS	06/22/23	100-watt LED outside lighting heads on poles at parking areas. Several other specialty fixtures at building exterior and main entry pole lamps, also presumed with LED lamps.	
G4030 Site Communications and Security	1937	2015	2	DCS	06/22/23	High-speed data service in turn sub-feeding adjacent engineering building with low-speed Ethernet data service. Several CCTV cameras at building perimeter.	
G90 Other Site Construction							
G9010 Service and Pedestrian Tunnels	1937	1968	3	DCS	06/22/23	Exterior stairwell to basement at south side, partially covered by canopy to reduce flooding. One floor drain at the bottom of the stairwell.	

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: City Hall

Facility: City Hall Infrastructure

Escalation 5%

Discount Rate 1.5%

G2050	Landscaping	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	1	\$5,000.00	LS	\$5,000	\$10,000

Deficient Material: Pin Oak Tree

Large branches of tree split are split. An arborist was called in and a large chain was fastened and stretched between them, preventing the branches from falling down.

Remedial Action:

Remove the tree.

Action Type:

Life Safety



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: City Hall

Facility: City Hall Infrastructure

Escalation 5%

Discount Rate 1.5%

G4010	Electrical Distribution	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2026	1	\$25,000.00	LS	\$25,000	\$49,000

Deficient Material: Electrical service

Wild-leg three-phase power from rusty transformer overhead to outside power service entry and meter.

Remedial Action:

Coordinate with PUD to bring modern 208V, three-phase power the building.

Action Type:

Significant Operational Impact



Deficiency Repair Cost Markups By System

2023 - 2028

City of Snohomish

Site: City Hall

Escalation 5%
Discount Rate 1.5%

Facility	System	Direct Construction Cost	Contingency 20%	Contractor's OH & P 20%	Project Soft Cost 36%	Total Project Cost	Total Project Cost (Present Value)
City Hall	B20 Exterior Closure	\$69,000	\$13,800	\$16,560	\$35,770	\$135,000	\$140,000
	B30 Roofing	\$5,250	\$1,050	\$1,260	\$2,722	\$10,000	\$10,000
	D10 Vertical Transportation	\$10,000	\$2,000	\$2,400	\$5,184	\$20,000	\$21,000
	D20 Plumbing	\$112,500	\$22,500	\$27,000	\$58,320	\$220,000	\$240,000
	D30 HVAC	\$94,500	\$18,900	\$22,680	\$48,989	\$185,000	\$195,000
	D40 Fire Protection	\$63,000	\$12,600	\$15,120	\$32,659	\$123,000	\$123,000
	D50 Electrical	\$146,250	\$29,250	\$35,100	\$75,816	\$287,000	\$304,000
	Facility Total	\$500,500	\$100,100	\$120,120	\$259,459	\$980,000	\$1,033,000
City Hall Infrastructure	G20 Site Improvements	\$5,000	\$1,000	\$1,200	\$2,592	\$10,000	\$10,000
	G40 Site Electrical utilities	\$25,000	\$5,000	\$6,000	\$12,960	\$49,000	\$54,000
	Facility Total	\$30,000	\$6,000	\$7,200	\$15,552	\$59,000	\$64,000
	Site Total	\$530,500	\$106,100	\$127,320	\$275,011	\$1,039,000	\$1,097,000

Opportunity Summary By Subsystem

City of Snohomish

Site: City Hall

Total Site Opportunity Cost: **\$22,345,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: City Hall System: Roofing							\$10,000
B3010	Roof Coverings						
	No roof access hatch.	Add roof access hatch to the low roof.	1.00	\$5,000.00	EA	\$5,000	\$10,000
Facility: City Hall System: Vertical Transportation							\$294,000
D1010	Elevators and Lifts						
	No ADA access to basement.	Install lift to basement for both ADA access, and to improve operational functionality.	1.00	\$150,000.00	LS	\$150,000	\$294,000
Facility: City Hall System: Plumbing							\$98,000
D2010	Plumbing Fixtures						
	No locker room or shower.	Install locker room with shower.	1.00	\$50,000.00	LS	\$50,000	\$98,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Opportunity Summary By Subsystem

City of Snohomish

Site: City Hall

Total Site Opportunity Cost: \$22,345,000

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: City Hall System: HVAC							\$364,000
D3030	Cooling Generating Systems						
	Original manual operable windows and main floor clerestory operable windows, mostly closed and sealed off, but could be restored to service.	Fully service and restore operable windows and clerestory operable windows to service, for use by occupants during favorable weather days, guided by a red-light/green-light optimal ventilation mode indication system (red = close windows; green = ok to open windows).	9,000.00	\$10.00	SF	\$90,000	\$176,000
D3040	HVAC Distribution Systems						
	Apparent dedicated outside air ventilation for the SW office addition, but no observed heat recovery device.	Add heat recovery device to SE office addition, if not already.	1.00	\$15,000.00	LS	\$15,000	\$29,000
D3060	Controls and Instrumentation						
	Standalone programmable thermostats with no remote monitoring.	Upgrade to networked direct digital control to better monitor and control the City Hall HVAC system.	9,000.00	\$9.00	SF	\$81,000	\$159,000

Note: Cost estimates shown include project markups, but exclude escalation.

Opportunity Summary By Subsystem

City of Snohomish

Site: City Hall

Total Site Opportunity Cost: **\$22,345,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: City Hall System: Electrical							\$394,000
D5020	Lighting and Branch Wiring						
	Mostly LED retrofit (drop-in) lamps in older fluorescent fixtures, with mostly manual lighting controls.	Upgrade to native LED fixtures and add automatic lighting controls.	9,000.00	\$14.00	SF	\$126,000	\$247,000
D5039	Low Voltage Data						
	Makeshift basement IT space with makeshift server room and failing cooling system.	Develop a purpose designed and built space for IT support, with appropriate Uptime Institute features including power quality and reliability, ventilation, cooling, and related features.	1.00	\$75,000.00	LS	\$75,000	\$147,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Opportunity Summary By Subsystem

City of Snohomish

Site: City Hall

Total Site Opportunity Cost: **\$22,345,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: City Hall Infrastructure							
System: Site Improvements							\$20,524,000
G2040 Site Development							
	The City expressed interest in exploring the option of developing a new civic campus, which would include the Public Works Office Building, Police Department, Engineering Office, and City Hall. For the purposes of this rough estimate, site work is not included as this is undefined until a basic pre-design is completed. The estimate also omits property acquisition costs. It is possible that some of the cost may be offset by selling existing buildings which would be replaced with new.	Develop a new civic campus, based on the PACE City of Snohomish Public Works Office Feasibility Study Dated June 16, 2023 for the PW Office Building and the July 24, 2023 Unit Cost Estimate Allowances by ProDims for the Police Department, Engineer and City Hall Buildings. See separate one-page high level estimate from Prodim's dated 11/9/23.	1.00	\$10,479,847.00	LS	\$10,479,847	\$20,524,000
Facility: City Hall Infrastructure							
System: Site Electrical utilities							\$661,000
G4010 Electrical Distribution							
	No standby generator.	Install standby generator and automatic transfer switch.	1.00	\$100,000.00	LS	\$100,000	\$196,000
	No electric vehicle (EV) charging.	Install two EV charging stations.	2.00	\$12,500.00	EA	\$25,000	\$49,000
	Open roof area with good solar exposure.	Install 25-kW photovoltaic system.	25.00	\$8,500.00	EA	\$212,500	\$416,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Facility Summary

City of Snohomish

Claytown Park

Claytown Park Infrastructure

329 Avenue I
Snohomish, WA 98290

Facility Condition Summary

Claytown Park is a children's pocket park developed in 1991 after a former residence burned down. It includes play structures, bench, and picnic table amenities replaced in 2013. ADA access issues to play area and bark chip play surfacing degraded. Site water with meter to hose bib. Irrigation system is damaged and abandoned in place. Signs of past low-voltage lighting or irrigation system controls. No site lighting, other than minor from street lights.

Facility Summary

City of Snohomish
 Claytown Park
 Claytown Park Infrastructure

329 Avenue I
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
G Sitework						
G20 Site Improvements						
G2030 Pedestrian Paving	1991	2013	4	TRB	07/05/23	Exposed aggregate concrete sidewalks around play pit, broken sections, settlement, and potential trip hazards. Play surface wood chips have eroded, degraded, and have been compacted.
G2040 Site Development	1991	2013	2	TRB	07/05/23	2013 powder-coated and plastic play structures. One guardrail support on the bridge is cracked and in need of immediate repair or replacement, and two cars missing from the racing board, minor maintenance to replace of repair. Dual swing set, rocking rocket, and plastic climbing tunnel. Powder-coated metal benches and picnic tables set on concrete slabs, powder-coated signage. Painted perimeter fencing and gates, some corrosion and paint degradation and gates showing wear and tear. Gates in need of maintenance tuning.
G2050 Landscaping	1991	2013	2	TRB	07/05/23	Well maintained perimeter shrubs and trees. Grass lawn area.
G30 Site Civil / Mechanical Utilities						
G3010 Water Supply	1991	2013	4	DCS	07/05/23	Aged residential 5/8-inch water meter in hand vault to hose bib in hand vault. Irrigation system is abandoned on site.
G3030 Storm Sewer	1991	2013	3	DCS	07/05/23	Apparent water detention inside barked play equipment area; no observed catch basins or underground storm water.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Claytown Park

Facility: Claytown Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2030	Pedestrian Paving	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	700	\$15.00	SF	\$10,500	\$21,000

Deficient Material: Pedestrian Paving

Sidewalks settling and some trip hazards and cracks. Short concrete ramp added into play area, but not ADA compliant with settlement separation from sidewalk and chip surfacing erosion leaving a 3-4" drop on edges.

Remedial Action:

Remove and repour concrete surfaces with a full extension of the ADA access into play area to below play chip surfacing.

Action Type:

ADA



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Claytown Park

Facility: Claytown Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2030	Pedestrian Paving	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	2,450	\$12.00	SF	\$29,400	\$58,000

Deficient Material: Play Surfacing

Play surface wood chips have eroded, degraded, and been compacted.

Remedial Action:

Prep existing grade, import new wood chips, and distribute evenly. Consider alternative for installing rubber safety play surface.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Claytown Park

Facility: Claytown Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G3010	Water Supply	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1	\$5,000.00	LS	\$5,000	\$10,000

Deficient Material: Irrigation
Irrigation system is failed and abandoned in place.

Remedial Action:
Replace irrigation system per city parks standard.

Action Type:
Significant Operational Impact



Deficiency Repair Cost Markups By System

2023 - 2028

City of Snohomish

Site: Claytown Park

Escalation 5%

Discount Rate 1.5%

Facility	System	Direct Construction Cost	Contingency 20%	Contractor's OH & P 20%	Project Soft Cost 36%	Total Project Cost	Total Project Cost (Present Value)
Claytown Park Infrastructure	G20 Site Improvements	\$39,900	\$7,980	\$9,576	\$20,684	\$79,000	\$79,000
	G30 Site Civil / Mechanical Utilities	\$5,000	\$1,000	\$1,200	\$2,592	\$10,000	\$10,000
	Facility Total	\$44,900	\$8,980	\$10,776	\$23,276	\$89,000	\$89,000
	Site Total	\$44,900	\$8,980	\$10,776	\$23,276	\$89,000	\$89,000

Opportunity Summary By Subsystem

City of Snohomish

Site: Claytown Park

Total Site Opportunity Cost: **\$29,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: Claytown Park Infrastructure System: Site Civil / Mechanical Utilities							\$29,000
G3010	Water Supply	No drinking or dog fountain.					
		Install city parks standard drinking and dog fountain.	1.00	\$15,000.00	LS	\$15,000	\$29,000

Facility Summary

City of Snohomish
 Engineering Building
 Engineering Building

112 Union Avenue
 Snohomish, WA 98290

Facility Size - Gross S.F.	1,960
Year Of Original Construction	1909
Facility Use Type	Engineering Building
Construction Type	Medium
# of Floors	1
Energy Source	Gas
Year Of Last Renovation	1976
Historic Register	No



			Total Project Cost	Total Project Cost Present Value
Weighted Avg Condition Score	2.3			
Facility Condition Index (FCI)	0.08	Observed Deficiencies 2023 - 2028	\$47,000	\$47,000
Current Replacement Value (CRV)	\$1,176,000	Predicted Renewal Budget 2029 - 2042	\$317,000	\$477,000
Beginning Budget Year	2023	Opportunities		N/A
Escalation	5%			
Discount Rate	1.5%			

Facility Condition Summary

Over 100-year-old building, originally a telephone company operations center, then local newspaper, followed by septic tank service company, purchased by the city in 2009. The building includes a partial basement, 1/3 west end only, and wood stairs. The city added a thin brick and stone veneer in the front to somewhat match City Hall. The wood paneling inside is dated, but in good condition. The basement walls and finishes, except for the windows noted, are in good condition. HVAC was mostly replaced in 2020 with modern gas-fired furnace, split-Dx cooling (air conditioning), and heat recovery ventilation. Some of the original steam radiators are abandoned in place. Plumbing is mostly aged but functional. No ADA elevator or lift to the basement. No fire sprinkler and failed fire alarm. Power is aged and minimally functional. Data is from adjacent City Hall. Newer card-key access, but otherwise minimal electronic security. VoIP telephone system.

Facility Summary

City of Snohomish
 Engineering Building
 Engineering Building

112 Union Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
A Substructure			2.6			
A10 Foundations						
A1010 Standard Foundations	1909	1909	3	LS	06/22/23	Concrete.
A1030 Slab On Grade	1909	1909	3	LS	06/22/23	Original concrete slab on grade.
A20 Basements						
A2020 Basement Walls	1909	1909	2	LS	06/22/23	Painted concrete, no signs of leaking. Crawlspace has no ventilation, dirt floor, and no insulation.
B Shell			2.1			
B10 Superstructure						
B1010 Floor Construction	1909	1909	2	LS	06/22/23	Wood construction at floor level, slab on grade in basement. Wide checks in column, minor maintenance to replace.
B1020 Roof Construction	1909	1909	2	LS	06/22/23	Wood construction, rough cut 2x6 decking. Blown fiberglass insulation on suspended ceiling.
B20 Exterior Closure						
B2010 Exterior Walls	1909	1909	2	LS	06/22/23	Wood with stucco and wood siding at east and west walls. Thin brick veneer front of veneer stone wainscot at south wall.
B2020 Exterior Windows	1909	1909	3	LS	06/22/23	Wood windows at front (street) side appear to be original wood with new trim. Wood needs to be sanded and painted as minor maintenance. Aluminum double-pane windows at rear of building. Aluminum windows at basement.

Facility Summary

City of Snohomish
Engineering Building
Engineering Building

112 Union Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
B Shell				2.1			
B20 Exterior Closure							
B2030 Exterior Doors	1909	1909	2	LS	06/22/23	Wood door at front. Copper/steel doors at back and basement.	
B30 Roofing							
B3010 Roof Coverings	1909	2020	1	LS	06/22/23	PVC or TPO membrane roofing.	
B3020 Roof Openings	1909	2020	2	LS	06/22/23	Vents along roof edges serve as ventilation for overbuild at parapet - not open to inside of building.	
C Interiors				2.2			
C10 Interior Construction							
C1010 Partitions	1909	1909	2	LS	06/22/23	2x4 with 1/8" wood paneling on each side.	
C1020 Interior Doors	1909	1909	3	LS	06/22/23	Residential-grade wood doors.	
C20 Staircases							
C2010 Stair Construction	1909	1909	3	LS	06/22/23	Wood interior stairs to basement and concrete exit stair from basement - neither are code-compliant.	
C2020 Stair Finishes	1909	1909	3	LS	06/22/23	Paint on wood peeling, chipping, and worn.	
C30 Interior Finishes							
C3010 Wall Finishes	1909	1909	2	LS	06/22/23	12x12 perforated acoustical tiles have been glued above the paneling from about five feet high to ceiling. Basement walls are painted concrete; paint is in good condition except where boiler was removed.	
C3020 Floor Finishes	1909	1909	2	LS	06/22/23	Carpet. Some sheet vinyl in back office.	

Facility Summary

City of Snohomish
Engineering Building
Engineering Building

112 Union Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
C Interiors			2.2			
C30 Interior Finishes						
C3030 Ceiling Finishes	1909	1909	2	LS	06/22/23	12x12 perforated acoustical tiles have been glued to gypsum board mounted to 2x6 ceiling construction in the front 2/3 of the building. The back 1/3 is plaster on wood structure.
D Services			2.7			
D20 Plumbing						
D2010 Plumbing Fixtures	1909	1976	3	DCS	06/22/23	Mix of older and newer; including two restrooms and kitchenette; tank-type floor-mounted water closets.
D2020 Domestic Water Distribution	1909	1976	3	DCS	06/22/23	Mix of older and some newer copper water distribution; no issues reported. 2016 30-gallon electric hot water heater. Seismic strap is crooked and may be missing expansion tank, also missing hot water pipe insulation - minor maintenance to correct and add.
D2030 Sanitary Waste	1909	1976	3	DCS	06/22/23	Mix of older and newer cast iron and maybe other materials for drain, waste, and vent piping; aged but functional with tested fixtures flushing and draining ok, and no reported issues.
D2040 Rain Water Drainage	1909	1976	3	DCS	06/22/23	The entire roof slopes to one metal gutter and downspout, in turn flowing to basement stairwell roof extension gutter, with downspout in turn draining to the adjacent City Hall parking lot. This may not meet code for separate parcels. If reconfiguration is needed for the Engineering Building roof to drain to direct to city storm service, this may not be trivial, as the roof drain is to the rear, but the city storm service is at the front of this zero-lot line on three sides property.
D30 HVAC						
D3010 Energy Supply	1909	1976	3	DCS	06/22/23	Natural gas piping to basement furnace.

Facility Summary

City of Snohomish
 Engineering Building
 Engineering Building

112 Union Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services				2.7			
D30 HVAC							
D3030 Cooling Generating Systems	1909	2020	2	DCS	06/22/23	Condensing unit outside at grade.	
D3040 HVAC Distribution Systems	1909	2020	2	DCS	06/22/23	Replaced heating hot water radiators with Barron forced-air gas furnace with split-Dx cooling; includes modern heat recovery ventilation (HRV) sub-system tied directly into main furnace system supply & return duct in basement - there are several small filters in this unit requiring quarterly cleaning; the PVC air intake and exhaust piping outside to north may benefit from insect screens to reduce debris entering the HRV - minor maintenance to install if not already. Bathroom exhaust fans; one small ceiling exhaust fan at former basement darkroom (now furnace area).	
D3050 Terminal and Package Units	1909	2020	2	DCS	06/22/23	Barron gas furnace with split-Dx cooling coil at basement.	
D3060 Controls and Instrumentation	1909	2020	2	DCS	06/22/23	Programmable thermostat.	
D40 Fire Protection							
D4030 Fire Protection Specialties	1909	1976	3	DCS	06/22/23	Fire extinguisher.	
D50 Electrical							
D5010 Electrical Service and Distribution	1909	1976	3	DCS	06/22/23	Mix of old knife switch disconnect and one 1976 Square D 120/240V, single-phase estimated 100A distribution panel - no issues reported. Minor maintenance to replace the knife switch is a modern breaker-type service entry disconnect.	
D5020 Lighting and Branch Wiring	1909	1976	3	DCS	06/22/23	Pendant and surface-mounted fluorescent fixtures retrofitted with LED lamps; mostly manual controls - minor maintenance to install limited automatic controls.	
D5032 Low Voltage Communication	1909	1976	3	DCS	06/22/23	Mix of older and newer, but with modern VoIP telephone handsets, no issues reported.	

Facility Summary

City of Snohomish
 Engineering Building
 Engineering Building

112 Union Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services				2.7			
D50 Electrical							
D5037	Low Voltage Fire Alarm	1909	1976	5	DCS	06/22/23	Fire alarm abandoned in place.
D5038	Low Voltage Security	1909	1976	4	DCS	06/22/23	Newer card key access, but older failed intrusion detection - minor maintenance to restore coverage.
D5039	Low Voltage Data	1909	1976	3	DCS	06/22/23	Ethernet from City Hall and distributed to workstations.
D5090	Other Electrical Systems	1909	1976	4	DCS	06/22/23	Exit placards, with no apparent emergency lighting - minor maintenance to install wall-mounted battery-backed bug-eye combination egress pathway illumination and lighted exit signs.
E Equipment and Furnishings				3.0			
E10 Equipment							
E1010	Commercial Equipment	1909	1976	3	DCS	06/22/23	Office equipment and kitchenette appliances.
E20 Furnishings							
E2010	Fixed Furnishings	1909	1909	2	LS	06/22/23	Wood casework.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Engineering Building

Facility: Engineering Building

Escalation 5%

Discount Rate 1.5%

A2020	Basement Walls	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2024	1	\$8,500.00	LS	\$8,500	\$17,000

Deficient Material: Crawlspace
Crawlspace has no ventilation or insulation.

Remedial Action:
Add vents to crawlspace and insulate.

Action Type:
Energy Efficiency



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Engineering Building

Facility: Engineering Building

Escalation 5%

Discount Rate 1.5%

B2020	Exterior Windows	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	2	\$2,500.00	EA	\$5,000	\$10,000

Deficient Material: **Basement Windows**
Aluminum wire glass windows with broken glass.

Remedial Action:
Replace aluminum windows with solid wall or ventilation louvers.

Action Type:
Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Engineering Building

Facility: Engineering Building

Escalation 5%

Discount Rate 1.5%

D5037	Low Voltage Fire Alarm	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1,960	\$5.25	SF	\$10,290	\$20,000

Deficient Material: Fire alarm
Abandoned fire alarm.

Remedial Action:
Install new.

Action Type:
Life Safety



Facility Summary

City of Snohomish

Engineering Building

Engineering Building Infrastructure

112 Union Avenue
Snohomish, WA 98290

Facility Condition Summary

Over 100-year-old building with zero-lot lines north, south, and east, but landlocked landscaped area to west. The site is immediately south of City Hall. City utilities including water, sewer, PUD power, Puget Sound Energy gas, and data from adjacent City Hall. There are no roadways or parking areas associated with this building. There is a back yard that has a picnic table.

Facility Summary

City of Snohomish
 Engineering Building
 Engineering Building Infrastructure

112 Union Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
G Sitework						
G20 Site Improvements						
G2040 Site Development	1909	1909	3	LS	06/22/23	Picnic table in back yard.
G2050 Landscaping	1909	1909	2	LS	06/22/23	Lawn in back yard, some minimal landscaping.
G30 Site Civil / Mechanical Utilities						
G3010 Water Supply	1909	1976	3	DCS	06/22/23	City water from 5/8-inch meter; no fire or irrigation services.
G3020 Sanitary Sewer	1909	1976	3	DCS	06/22/23	Gravity side sewer to city service at street.
G3030 Storm Sewer	1909	1976	4	DCS	06/22/23	Roof water drains to adjacent City Hall property to north; no apparent storm service at yard - minor maintenance to pipe roof drain to street to east.
G3050 Cooling Distribution	1909	1976	3	DCS	06/22/23	Condensing unit at grade to north, and may be on neighboring City Hall property; the unit is subject to heavy tree debris - minor ongoing maintenance to keep clear.
G3060 Fuel Distribution	1909	1976	3	DCS	06/22/23	Puget Sound Energy natural gas meter No. 616796 with 250 cfh capacity and no seismic shut-off valve - minor maintenance to install.
G40 Site Electrical utilities						
G4010 Electrical Distribution	1909	1976	3	DCS	06/22/23	Aged overhead power service from aged SnoPUD pole-mounted single-phase pot transformer to old meter No. 430944 (96-357-920) with 3-wire configuration, then feeds down to aged knife switch in basement. If standby power is added to adjacent City Hall, consider running an emergency power feed to this building as minor maintenance.

Facility Summary

City of Snohomish
 Engineering Building
 Engineering Building Infrastructure

112 Union Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
G Sitework							
G40 Site Electrical utilities							
G4020 Site Lighting	1909	1976	3	DCS	06/22/23	Site lighting primarily from adjacent properties and street lighting, and building light fixtures and main and rear entries.	
G4030 Site Communications and Security	1909	1976	3	DCS	06/22/23	Low-speed Ethernet data service underground to and from adjacent City Hall to north.	
G90 Other Site Construction							
G9010 Service and Pedestrian Tunnels	1909	1976	3	DCS	06/22/23	Exterior stairwell to basement.	

Deficiency Repair Cost Markups By System

2023 - 2028

City of Snohomish

Site: Engineering Building

Escalation 5%

Discount Rate 1.5%

Facility	System	Direct Construction Cost	Contingency 20%	Contractor's OH & P 20%	Project Soft Cost 36%	Total Project Cost	Total Project Cost (Present Value)
Engineering Building	A20 Basements	\$8,500	\$1,700	\$2,040	\$4,406	\$17,000	\$17,000
	B20 Exterior Closure	\$5,000	\$1,000	\$1,200	\$2,592	\$10,000	\$10,000
	D50 Electrical	\$10,290	\$2,058	\$2,470	\$5,334	\$20,000	\$20,000
	Facility Total	\$23,790	\$4,758	\$5,710	\$12,333	\$47,000	\$47,000
	Site Total	\$23,790	\$4,758	\$5,710	\$12,333	\$47,000	\$47,000

Facility Summary

City of Snohomish
 Ferguson Park and Boat Launch
 Ferguson Park Restroom

1330 Ferguson Park Road
 Snohomish, WA 98290

Facility Size - Gross S.F.	625
Year Of Original Construction	1984
Facility Use Type	Restroom Building
Construction Type	Medium
# of Floors	1
Energy Source	Electric
Year Of Last Renovation	1984
Historic Register	No



		Total Project Cost	Total Project Cost Present Value	
Weighted Avg Condition Score	3.0			
Facility Condition Index (FCI)	0.14	Observed Deficiencies 2023 - 2028	\$32,000	\$35,000
Current Replacement Value (CRV)	\$72,000	Predicted Renewal Budget 2029 - 2042	\$27,000	\$39,000
Beginning Budget Year	2023	Opportunities	\$43,000	N/A
Escalation	5%			
Discount Rate	1.5%			

Facility Condition Summary

Restroom facility with one of each gender separated by a narrow plumbing utility room. It was formerly a campground restroom and shower facility, but the shower portion of the facility has been walled off. Roofing needs cleaning.

HVAC is electric wall heater for the plumbing chase, with ceiling exhaust fans for the men's and women's restrooms. Plumbing is detention-type flushing fixtures and lavatories. The original showers are sealed off and abandoned in place. No fire sprinkler. Power is 120/240V, single-phase 100A. Lighting is fluorescent in chase and LED in restrooms. Low voltage systems are limited to maglock restrooms doors.

Facility Summary

City of Snohomish
 Ferguson Park and Boat Launch
 Ferguson Park Restroom

1330 Ferguson Park Road
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
A Substructure			3.0			
A10 Foundations						
A1010 Standard Foundations	1984	1984	3	TRB	06/16/23	Standard concrete footings, evidence of past settlement (cracking in back wall CMU), but does not seem to have moved since the structure was last painted.
A1030 Slab On Grade	1984	1984	3	TRB	06/16/23	Concrete slab on grade.
B Shell			3.1			
B10 Superstructure						
B1020 Roof Construction	1984	1984	3	TRB	06/16/23	Wood trusses, insulation blankets at ceiling level (cold attic). Potential water damage of insulation and ceiling above inaccessible shower areas below where exhaust vents disconnected (see D3040 HVAC Distribution Systems).
B20 Exterior Closure						
B2010 Exterior Walls	1984	1984	3	TRB	06/16/23	Painted concrete masonry units. Section in back has vertical cracking near the center of the wall, appears to have been filled and painted over, no additional movement in cracking evident since last painting. Paint damaged from fire on the base of the wall.
B2030 Exterior Doors	1984	1984	4	TRB	06/16/23	Metal doors and frames and hardware have taken significant abuse with attempted break-ins. Hinges missing screws and door and frame damage.
B30 Roofing						
B3010 Roof Coverings	1984	1996	3	TRB	06/16/23	Standing seam roofing in need of cleaning, including gutters now supporting new plant growth.

Facility Summary

City of Snohomish
 Ferguson Park and Boat Launch
 Ferguson Park Restroom

1330 Ferguson Park Road
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
B Shell			3.1			
B30 Roofing						
B3030 Projections	1984	1984	3	TRB	06/16/23	Painted eaves with vent strips.
C Interiors			3.0			
C10 Interior Construction						
C1010 Partitions	1984	1984	3	TRB	06/16/23	High-density polyethylene (plastic) toilet partitions at women's restroom, damaged hinge hardware from abuse, minor maintenance to repair/replace. Stainless in men's (recently reconstructed after arson vandalism).
C1030 Fittings	1984	1984	3	TRB	06/16/23	Stainless grab bars in ADA toilet stalls (predate vertical bars, option to add to meet current ADA).
C30 Interior Finishes						
C3010 Wall Finishes	1984	1984	3	TRB	06/16/23	Painted CMU and plywood. Men's room recently refinished.
C3030 Ceiling Finishes	1984	1984	3	TRB	06/16/23	Painted gypsum.
D Services			3.0			
D20 Plumbing						
D2010 Plumbing Fixtures	1984	1984	3	DCS	06/16/23	Stainless steel detention-type, vandal-resistant flushing fixtures and lavatories with remote pneumatic control trim. Original campground showers are closed-off and inoperable. High-efficiency jet-type hand dryers in men's and women's restrooms. Original central liquid soap dispenser system appears abandoned in place, in favor of point-of-use dispenses at lavatories.

Facility Summary

City of Snohomish
 Ferguson Park and Boat Launch
 Ferguson Park Restroom

1330 Ferguson Park Road
 Snohomish, WA 98290

Facility Components

Systems		Original System Date	Renewal Date Last	Score	Surveyor	Survey Date	Comments
D Services				3.0			
D20 Plumbing							
D2020	Domestic Water Distribution	1984	1984	3	DCS	06/16/23	Service entry via pressure regulating valve, but no apparent backflow prevention - minor maintenance to install. Copper water distribution; no hot water heater.
D2030	Sanitary Waste	1984	1984	3	DCS	06/16/23	Non-metallic ABS drain, waste, and vent piping. Tested fixtures flush and drain ok, with some slightly slow - minor maintenance to adjust water pressure and/or flush valve controls at flushing fixtures, and clean traps at lavatory drains. Floor drains, but no observed trap primers.
D2040	Rain Water Drainage	1984	1984	3	DCS	06/16/23	Metal gutter and downspout to grade, full of tree debris with plants growing in the gutters - minor maintenance to clean.
D30 HVAC							
D3040	HVAC Distribution Systems	1984	1984	4	DCS	06/16/23	Exhaust fans for men's and women's restrooms. The exhaust ducts may be disconnected at the attic from their rooftop exhaust jacks and both jack exhaust fan hood covers are missing, potentially allowing rain water to enter the attic space - minor maintenance to reconnect duct and replace missing caps.
D3050	Terminal and Package Units	1984	1984	3	DCS	06/16/23	One electric wall heater with on-board manual thermostat in the plumbing chase for freeze protection heating.
D40 Fire Protection							
D4030	Fire Protection Specialties	1984	1984	4	DCS	06/16/23	Garden hose with no observed fire extinguishers - minor maintenance to install.
D50 Electrical							
D5010	Electrical Service and Distribution	1984	1984	3	DCS	06/16/23	GE 120/240V, 100A distribution panel.

Facility Summary

City of Snohomish
 Ferguson Park and Boat Launch
 Ferguson Park Restroom

1330 Ferguson Park Road
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services				3.0			
D50 Electrical							
D5020	Lighting and Branch Wiring	1984	2020	3	DCS	06/16/23	Relatively new LED lighting in men's and women's restrooms, with damage to in the women's restroom - minor maintenance to repair or replace. Obsolete T-12 fluorescent fixtures in plumbing chase - minor maintenance to replace with LED.
D5038	Low Voltage Security	1984	2000	3	DCS	06/16/23	Men's and women's restroom doors on maglock system with mechanical timer.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Ferguson Park and Boat Launch

Facility: Ferguson Park Restroom

Escalation 5%

Discount Rate 1.5%

B2030	Exterior Doors	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	3	\$5,500.00	EA	\$16,500	\$32,000

Deficient Material: Doors and Door Hardware

Metal doors and frames and hardware have taken significant abuse with attempted break-ins. Hinges missing screws and door and frame damage.

Remedial Action:

Replace doors and hardware, repair frames.

Action Type:

Significant Operational Impact



Facility Summary

City of Snohomish

Ferguson Park and Boat Launch

Ferguson Park Infrastructure

1330 Ferguson Park Road
Snohomish, WA 98290

Facility Condition Summary

The site was formerly a campground and the date of conversion to a city park is uncertain. The waterfront area of the park contains a recently redeveloped boat launch area and includes a fishing dock. The upper portion of the lot houses a playground area, restroom building and covered open air picnic shelter. Roadways are in poor condition with significant base failure on the boat launch drive with roadway cracking and slumping towards the adjacent marsh, and major potholing of drive and parking areas on the upper portion of the park.

City water and sewer, including a sanitary lift station operated by Public Works serving the park and adjacent community properties. Storm is collected and directed to the lake, with poor performance due to roadway settlement below catch basin heights, resulting in seasonal localized flooding. Power is from Snohomish PUD metered at the restroom building; a separate service powers the Public Works lift station, which also includes a fenced propane-fired generator. Lighting is from PUD-provided pole-mounted street lights. No telecom or data service, and no site electronic security.

Facility Summary

City of Snohomish
 Ferguson Park and Boat Launch
 Ferguson Park Infrastructure

1330 Ferguson Park Road
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments	
G Sitework							
G20 Site Improvements							
G2010	Roadways	1984	2005	4	TRB	06/16/23	Asphalt drives aged and in various states of degradation. Entry drive to boat launch is experiencing significant settlement adjacent to the length of the marsh and is failing with very substantial cracks as roadway is slumping into the marsh.
G2020	Parking Lots	1984	1984	4	TRB	06/16/23	A combination of lot types, including gravel and asphalt parking areas. ADA parking at boat launch is newer. ADA parking near play area is in poor condition with faded paint and has no ADA signage. Other parking near play area has significant potholes and dramatic degradation.
G2030	Pedestrian Paving	2005	2005	4	TRB	06/16/23	Asphalt pathways and built-up asphalt bumps. Degradation and root uplift (trip hazards) inhibit ADA access. No ADA access to play area surface.
G2040	Site Development	1984	2005	3	TRB	06/16/23	Interpretive signage at the lake front (wood canopy protecting lake information), concrete and granite benches, metal park benches, 1/4 court basketball with post-mounted basket and backstop, bike racks, metal picnic tables, and disc golf. Playground with plastic play structure, swing set in bark chip play surface area ringed by low cast-in-place concrete retaining walls (bark chips need to be raked). Block retaining walls around picnic shelter.
G2050	Landscaping	1984	1984	2	TRB	06/16/23	Mature park native scape and lawn areas with wildflower mix. Regular maintenance at lake to keep lily pads and mill foil at bay.

Facility Summary

City of Snohomish
 Ferguson Park and Boat Launch
 Ferguson Park Infrastructure

1330 Ferguson Park Road
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
G Sitework						
G30 Site Civil / Mechanical Utilities						
G3010 Water Supply	1984	2005	3	DCS	06/16/23	City water with apparent 3/4-inch service to the restroom building; no irrigation system. The drinking fountain adjacent to the restroom building is removed with underground piping abandoned in place.
G3020 Sanitary Sewer	1984	2005	3	DCS	06/16/23	Sanitary sewer from restroom building gravity flow to Public Works lift station by boat launch with no issues reported.
G3030 Storm Sewer	1984	2005	4	DCS	06/16/23	Storm water system with multiple catch basins adjacent subsiding grade, resulting in standing water.
G3060 Fuel Distribution	1984	2005	3	DCS	06/16/23	Propane tank for Public Works standby generator.
G40 Site Electrical utilities						
G4010 Electrical Distribution	1984	2005	3	DCS	06/16/23	Power to restroom building delivered at 120/240V, single-phase with SnoPUD meter No. 329247. Separate meter to Public Works generator enclosure, in turn sub-fed to Public Works waste water lift station by boat launch.
G4020 Site Lighting	1984	2005	3	DCS	06/16/23	Multiple SnoPUD LED light fixtures on utility poles.
G90 Other Site Construction						
G9090 Other Site Systems	1984	2005	2	TRB	06/16/23	Newer floating fishing dock with plastic walk surface. Some holes in panels at end of dock, minor maintenance to replace broken panels. Covered picnic shelter with metal roof on timber frame.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Ferguson Park and Boat Launch

Facility: Ferguson Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2010	Roadways	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	3,000	\$25.00	SF	\$75,000	\$147,000

Deficient Material: Asphalt Road

Entry drive to boat launch is experiencing significant settlement adjacent to the length of the marsh and is failing with very substantial cracks as roadway is slumping into the marsh.

Remedial Action:

Excavate and rebuild and properly compact road base course. Overexcavation, imported rock, and geotextile fabric course may be required to stabilize road base along marsh, with assumed poor bearing soils, high groundwater, and moisture movement.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Ferguson Park and Boat Launch

Facility: Ferguson Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2020	Parking Lots	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	4,000	\$8.00	SF	\$32,000	\$63,000

Deficient Material: Asphalt Paving

Asphalt drive and parking near play area has significant potholes and dramatic degradation.

Remedial Action:

Remove asphalt and base course, import structural fill, compact, and repave.

Action Type:

ADA



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Ferguson Park and Boat Launch

Facility: Ferguson Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2030	Pedestrian Paving	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1	\$5,000.00	LS	\$5,000	\$10,000

Deficient Material: ADA Access

No ADA access to play area surface (very steep ramp does not meet slope requirements).

Remedial Action:

Revise access and build ADA-compliant access ramp into play area surface.

Action Type:

ADA



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Ferguson Park and Boat Launch

Facility: Ferguson Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2030	Pedestrian Paving	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	1	\$15,000.00	LS	\$15,000	\$29,000

Deficient Material: Asphalt Pathways

Asphalt pathways and built-up asphalt bumps. Degradation and root uplift (trip hazards) inhibit ADA access.

Remedial Action:

Grind asphalt and trim roots and patch in locations no longer ADA-compliant or that offer trip hazards.

Action Type:

ADA



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Ferguson Park and Boat Launch

Facility: Ferguson Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2040	Site Development	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	4	\$1,500.00	EA	\$6,000	\$12,000

Deficient Material: Play Apparatus

Sections of plastic play structure wearing out. Slide edges beginning to chip and wear, hole burned in side of tunnel slide by vandalism, other section with a gap is a hazard to kids. Section of tube slide is not available for replacement.

Remedial Action:

If sections of play structure with wear and damage are not replaceable, consider specialty restoration (plastics specialty, auto shop, or boat repair specialty company).

Action Type:

Life Safety



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Ferguson Park and Boat Launch

Facility: Ferguson Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G3010	Water Supply	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	1	\$5,000.00	EA	\$5,000	\$10,000

Deficient Material: Drinking fountain
 Drinking fountain missing.

Remedial Action:
 Replace missing drinking fountain.

Action Type:
 Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Ferguson Park and Boat Launch

Facility: Ferguson Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G3030	Storm Sewer	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	5	\$10,000.00	EA	\$50,000	\$98,000

Deficient Material: Storm

Site settlement has left multiple storm water catch basins above grade, resulting in localized flooding.

Remedial Action:

Regrade site and/or lower catch basins to fully drain park surfaces.

Action Type:

Significant Operational Impact



Deficiency Repair Cost Markups By System

2023 - 2028

City of Snohomish

Site: Ferguson Park and Boat Launch

Escalation 5%

Discount Rate 1.5%

Facility	System	Direct Construction Cost	Contingency 20%	Contractor's OH & P 20%	Project Soft Cost 36%	Total Project Cost	Total Project Cost (Present Value)
Ferguson Park Infrastructure	G20 Site Improvements	\$133,000	\$26,600	\$31,920	\$68,947	\$261,000	\$264,000
	G30 Site Civil / Mechanical Utilities	\$55,000	\$11,000	\$13,200	\$28,512	\$108,000	\$111,000
	Facility Total	\$188,000	\$37,600	\$45,120	\$97,459	\$369,000	\$375,000
Ferguson Park Restroom	B20 Exterior Closure	\$16,500	\$3,300	\$3,960	\$8,554	\$32,000	\$35,000
	Facility Total	\$16,500	\$3,300	\$3,960	\$8,554	\$32,000	\$35,000
Site Total		\$204,500	\$40,900	\$49,080	\$106,013	\$401,000	\$410,000

Opportunity Summary By Subsystem

City of Snohomish

Site: Ferguson Park and Boat Launch

Total Site Opportunity Cost: **\$141,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: Ferguson Park Infrastructure System: Site Electrical utilities							\$98,000
G4030	Site Communications and Security						
	No site electronic security, other than standalone, non-networked maglock doors at restroom building.	Collaborate with the police department to develop a park security plan, incorporating appropriate electronic security, including CCTV.	1.00	\$50,000.00	LS	\$50,000	\$98,000
Facility: Ferguson Park Restroom System: Plumbing							\$33,000
D2010	Plumbing Fixtures						
	Closed-off showers.	Recommission showers after site vandalism issues are resolved.	2.00	\$8,500.00	EA	\$17,000	\$33,000
Facility: Ferguson Park Restroom System: HVAC							\$10,000
D3050	Terminal and Package Units						
	Heavily-insulated attic, but no heat in men's and women's rooms; only the plumbing chase is heated.	Add electric wall heater to semi-heat the men's and women's restrooms to improve year-round functionality.	2.00	\$2,500.00	EA	\$5,000	\$10,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Facility Summary

City of Snohomish

Fischer Park

Fischer Park Infrastructure

1214 Madrona Drive
Snohomish, WA 98290

Facility Condition Summary

Pocket park at end of life, not ADA-compliant with aging systems and play equipment safety concerns. Perimeter chain link fencing, wood chip play surfacing, and playground equipment for ages 5-12, consisting of a timber big toy with climbing bars, tire swing, metal slide, a two-seat swing set, and spring-mounted metal rocking horse. The park also includes a wood picnic table. Landscaping consists of lawn only.

Former HOA park turned over to the City; not designed or maintained to City Park standards.

Facility Summary

City of Snohomish
Fischer Park
Fischer Park Infrastructure

1214 Madrona Drive
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
G Sitework						
G20 Site Improvements						
G2030 Pedestrian Paving	1990	1990	4	TRB	06/15/23	Cast-in-place concrete walks, significant spalling at gate, settlement and weathering. No ADA access from public street.
G2040 Site Development	1990	1990	5	TRB	06/15/23	Single metal trash can and wood top and seat picnic bench on metal frame anchored to concrete in fair condition. Chain link perimeter fencing at end of life with bent and impacted fence fabric, rusting posts, and rusting wire on gate. No ADA access to play area, play surface and toys not ADA-accessible or -compliant. Wood chip surfacing well past end of life and no longer in compliance with play surface impact ratings. Deep pits and puddles from wear in play traffic areas and now with mixed gravel exposed. Sections of perimeter retainer curbs rotting. Play systems past useful life and not up to modern play equipment safety standards. Two-swing rusting metal swing set with rubber seats and chains, weathered timber climbing big toy with stainless metal slide, tire swing on chains, monkey bars, and ships wheel (loose connections and screws loose). Spring-mounted cast metal rocking horse (spring assembly may not meet current safety standards). Park rules signage scratched and damaged.
G2050 Landscaping	1990	1990	3	TRB	06/15/23	Lawn, with some weeds. Maintenance recommended.
G30 Site Civil / Mechanical Utilities						
G3010 Water Supply	1990	1990	4	DCS	06/15/23	Water service is turned off with drinking fountain missing and irrigation system non-functional.
G3030 Storm Sewer	1990	1990	3	DCS	06/15/23	Sheet flow to street, but no apparent drainage for the play toy depressed wood chip area - minor maintenance to install or restore drain.

Facility Summary

City of Snohomish
 Fischer Park
 Fischer Park Infrastructure

1214 Madrona Drive
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
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G Sitework

G40 Site Electrical utilities

G4020 Site Lighting	1990	1990	3	DCS	06/15/23	Minimal site lighting from City street LED lamp on pole; park is closed at dark.
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Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Fischer Park

Facility: Fischer Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2030	Pedestrian Paving	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2023	205	\$25.00	SF	\$5,125	\$10,000

Deficient Material: Cast in Place Concrete

Cast-in-place concrete walks, significant spalling at gate, settlement and weathering.

Remedial Action:

Demo and replace concrete surfacing.

Action Type:

Life Safety



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Fischer Park

Facility: Fischer Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2040	Site Development	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2024	300	\$35.00	LF	\$10,500	\$21,000

Deficient Material: Fencing and Gates

Chain link perimeter fencing at end of life with bent and impacted fence fabric, rusting posts, and rusting wire on gate.

Remedial Action:

Demo and replace with galvanized or powder-coated system.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Fischer Park

Facility: Fischer Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2040	Site Development	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	3	\$10,000.00	EA	\$30,000	\$59,000

Deficient Material: Play Equipment

Play systems past useful life, not ADA accessible, and not up to modern play equipment safety standards. Two-swing rusting metal swing set with rubber seats and chains, weathered timber climbing big toy with stainless metal slide, tire swing on chains, monkey bars, and ships wheel (loose connections and screws loose). Spring-mounted cast metal rocking horse (spring assembly may not meet current safety standards).

Remedial Action:

Remove and replace play equipment with modern safety rated and ADA accessible play systems.

Action Type:

ADA



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Fischer Park

Facility: Fischer Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2040	Site Development	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	2,115	\$30.00	SF	\$63,450	\$124,000

Deficient Material: Play Surfacing

No ADA access to play area, play surface not ADA-accessible or -compliant. Wood chip surfacing well past end of life and no longer in compliance with play surface impact ratings. Deep pits from wear in play traffic areas and now with mixed gravel. Sections of perimeter retainer curbs rotting.

Remedial Action:

Remove and replace curbs and play surfacing. Prep and replace with ADA-accessible and safety impact compliant play surfacing.

Action Type:

Life Safety



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Fischer Park

Facility: Fischer Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G3010	Water Supply	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	1	\$10,000.00	LS	\$10,000	\$20,000

Deficient Material: Water Service

Water service is turned off with drinking fountain missing and irrigation system non-functional.

Remedial Action:

Replace drinking fountain, restore water service, and renew the irrigation system.

Action Type:

Other



Deficiency Repair Cost Markups By System

2023 - 2028

City of Snohomish

Site: Fischer Park

Escalation 5%

Discount Rate 1.5%

Facility	System	Direct Construction Cost	Contingency 20%	Contractor's OH & P 20%	Project Soft Cost 36%	Total Project Cost	Total Project Cost (Present Value)
Fischer Park Infrastructure	G20 Site Improvements	\$109,075	\$21,815	\$26,178	\$56,544	\$214,000	\$214,000
	G30 Site Civil / Mechanical Utilities	\$10,000	\$2,000	\$2,400	\$5,184	\$20,000	\$20,000
	Facility Total	\$119,075	\$23,815	\$28,578	\$61,728	\$234,000	\$234,000
	Site Total	\$119,075	\$23,815	\$28,578	\$61,728	\$234,000	\$234,000

Facility Summary

City of Snohomish
Hill Park
Hill Park Restroom

1610 Park Avenue
Snohomish, WA 98290

Facility Size - Gross S.F. 500
Year Of Original Construction 1996
Facility Use Type Restroom Building
Construction Type Light
of Floors 1
Energy Source Electric
Year Of Last Renovation 1996
Historic Register No



		Total Project Cost	Total Project Cost Present Value
Weighted Avg Condition Score	3.1		
Facility Condition Index (FCI)	0.15	Observed Deficiencies 2023 - 2028	\$113,000
Current Replacement Value (CRV)	\$58,000	Predicted Renewal Budget 2029 - 2042	\$20,000
Beginning Budget Year	2023	Opportunities	\$432,000
Escalation	5%		N/A
Discount Rate	1.5%		

Facility Condition Summary

Prefabricated metal restroom structure with each gender flanking a central plumbing/storage/maintenance room. The system is significantly aged and may be considered to be at the end of useful life. It is now subject to significant vandalism and, due to ongoing issues with vandalism, the restrooms are closed and two porta potties have been provided.

HVAC is an electric wall heater for the plumbing chase room and natural ventilation only for men's and women's restrooms. Plumbing includes heavy-duty vandal-resistant fixtures, but intense vandalism has damaged the building, finishes, and fixtures to the point of closure. Power is 120/240V single-phase with 100A capacity, down-rated to 60A, and sub-feeding adjacent Upper Shelter structure. Lighting is a mix of newer LED wall sconces and natural daylighting. Maglock doors on timer, but no other electronic security.

Facility Summary

City of Snohomish
Hill Park
Hill Park Restroom

1610 Park Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments	
A Substructure			3.0				
A10 Foundations							
A1010	Standard Foundations	1996	1996	3	TRB	06/16/23	Standard concrete, no issues reported.
A1030	Slab On Grade	1996	1996	3	TRB	06/16/23	Concrete slab on grade.
B Shell			3.1				
B10 Superstructure							
B1020	Roof Construction	1996	1996	3	TRB	06/16/23	Prefabricated steel on light-gauge steel framing. Some unsightly spot oxidization of steel elements observed.
B20 Exterior Closure							
B2010	Exterior Walls	1996	1996	3	TRB	06/16/23	Painted pre-fabricated metal skin. Numerous areas of past graffiti tagging painted over, but patchy.
B2020	Exterior Windows	1996	1996	3	TRB	06/16/23	Open venting with painted wire mesh and areas with polycarbonate added (presumably for wind protection).
B2030	Exterior Doors	1996	1996	4	TRB	06/16/23	Hollow metal doors and frames, some warping damage due to attempted break-ins, doors stick in frames.
B30 Roofing							
B3010	Roof Coverings	1996	2015	3	TRB	06/16/23	Standing seam metal roof.

Facility Summary

City of Snohomish
 Hill Park
 Hill Park Restroom

1610 Park Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
C Interiors				3.6			
C10 Interior Construction							
C1010	Partitions	1996	1996	4	TRB	06/16/23	High-density polyethylene toilet partitions, worn and doors don't shut correctly (hinge and hardware issues).
C1030	Fittings	1996	1996	3	TRB	06/16/23	Stainless grab bars at ADA stalls (met code at the time), update to current ADA code by optionally installing vertical grab bars.
C30 Interior Finishes							
C3010	Wall Finishes	1996	1996	4	TRB	06/16/23	Stainless installed in men's restroom, women's original galvanized metal (paint was sand blasted and stripped off in 2015), but significant areas of corrosion. Daylight visible through exterior and interior wall panel joints into adjacent plumbing/storage room. Graffiti and evidence of past graffiti covered over.
D Services				3.0			
D20 Plumbing							
D2010	Plumbing Fixtures	1996	1996	3	DCS	06/16/23	Vandal-resistant fixture and trim (faucets and flush valves) with some vandal damage. All fixtures off due to restrooms being closed. Most fixtures and trim appear they should be operable with service and repair as needed. Flushing fixtures have electronic controls at men's and manual controls at women's. Faucets are mechanical metering type. One electric hand air-dryer in each restroom. One outside shower and foot-wash with Acorn pneumatic actuators - currently non-functional. One stainless steel outside drinking fountain.
D2020	Domestic Water Distribution	1996	1996	3	DCS	06/16/23	Copper domestic water to plumbing fixtures; no domestic hot water. No observed backflow prevention - minor maintenance to install.
D2030	Sanitary Waste	1996	1996	3	DCS	06/16/23	Non-metallic ABS drain, waste, and vent piping. Floor drains at men's and women's restrooms, but no observed trap primers.

Facility Summary

City of Snohomish
Hill Park
Hill Park Restroom

1610 Park Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services				3.0			
D20 Plumbing							
D2040 Rain Water Drainage	1996	1996	3	DCS	06/16/23	Metal gutter and downspout to storm - minor ongoing maintenance to keep gutters clear and free flowing.	
D30 HVAC							
D3040 HVAC Distribution Systems	1996	1996	3	DCS	06/16/23	Natural ventilation for the California-sourced pre-engineered metal building, but blocked-off entirely for the plumbing chase space, and about half blocked-off for the men's and women's restrooms, violating the design intent of the building, which is also not insulated.	
D3050 Terminal and Package Units	1996	1996	3	DCS	06/16/23	One electric resistance wall heater in the plumbing chase space including on-board manual thermostat.	
D40 Fire Protection							
D4030 Fire Protection Specialties	1996	1996	5	DCS	06/16/23	Garden hose, but with no water supply; no observed fire extinguishers - minor maintenance to install at plumbing chase room.	
D50 Electrical							
D5010 Electrical Service and Distribution	1996	1996	3	DCS	06/16/23	Cutler Hammer 120/240V single-phase 100A power panel with 60A main breaker, and 60A breaker sub-feeding adjacent Upper Shelter structure. Minor maintenance to review circuit coordination - the main should have more capacity than sub-fed panel feeds.	
D5020 Lighting and Branch Wiring	1996	1996	3	DCS	06/16/23	Apparent LED retrofit wall sconce lighting on mechanical timer; minimal branch wiring.	
D5038 Low Voltage Security	1996	1996	3	DCS	06/16/23	Maglock door control, currently damaged at men's room door due to vandalism, but minor maintenance to repair.	

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Hill Park

Facility: Hill Park Restroom

Escalation 5%

Discount Rate 1.5%

B2010	Exterior Walls	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	1,120	\$5.00	SF	\$5,600	\$11,000

Deficient Material: Painted Metal

Numerous areas of past graffiti tagging painted over, but patchy.

Remedial Action:

Repaint entire structure.

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Hill Park

Facility: Hill Park Restroom

Escalation 5%

Discount Rate 1.5%

B2030	Exterior Doors	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	2	\$4,500.00	EA	\$9,000	\$18,000

Deficient Material: Doors and Door Hardware

Some warping damage due to attempted break-ins and vandalism abuse, doors stick in frames.

Remedial Action:

Remove the replace doors and hardware.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Hill Park

Facility: Hill Park Restroom

Escalation 5%

Discount Rate 1.5%

C1010	Partitions	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	2	\$3,500.00	EA	\$7,000	\$14,000

Deficient Material: Toilet Partitions

High-density polyethylene toilet partitions, worn and doors don't shut correctly (hinge and hardware issues). Graffiti carved and burned in.

Remedial Action:

Remove and replace with a system and hardware that can withstand heavy abuse.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Hill Park

Facility: Hill Park Restroom

Escalation 5%

Discount Rate 1.5%

C3010	Wall Finishes	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	880	\$15.00	SF	\$13,200	\$26,000

Deficient Material: Metal Walls

Significant areas of corrosion. Daylight visible through exterior and interior wall panel joints, and into adjacent plumbing/storage room.

Remedial Action:

Remove oxidation and coat. Consider adding stainless panels over walls in women's room for appearance, sanitation, and to avoid real or perceived privacy issues from next room.

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Hill Park

Facility: Hill Park Restroom

Escalation 5%

Discount Rate 1.5%

D2010	Plumbing Fixtures	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	12	\$1,000.00	EA	\$12,000	\$24,000

Deficient Material: Fixtures & trim

Fixtures and trim with variety of vandalism and wear and tear damage.

Remedial Action:

Fully service and restore all fixtures to operable condition, after vandalism issue is solved.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Hill Park

Facility: Hill Park Restroom

Escalation 5%

Discount Rate 1.5%

D3040	HVAC Distribution Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	500	\$20.00	SF	\$10,000	\$20,000

Deficient Material: Ventilation

No ventilation for plumbing chase space and approximately half the design ventilation for the men's and women's restrooms. Additionally, the chase space has been fitted with a heater to semi-heat the space, but without any observed insulation.

Remedial Action:

Ventilate all spaces per code. Insulate heated spaces, like the plumbing chase room, per code.

Action Type:

Code Issue



Facility Summary

City of Snohomish
 Hill Park
 Lower Shelter Pole Building

1610 Park Avenue
 Snohomish, WA 98290

Facility Size - Gross S.F. 800
 Year Of Original Construction 1986
 Facility Use Type Picnic Shelter
 Construction Type Light
 # of Floors 1
 Energy Source
 Year Of Last Renovation 1986
 Historic Register No



		Total Project Cost	Total Project Cost Present Value
Weighted Avg Condition Score	3.4		
Facility Condition Index (FCI)	0.15	Observed Deficiencies 2023 - 2028 \$34,000	\$36,000
Current Replacement Value (CRV)	\$76,000	Predicted Renewal Budget 2029 - 2042 \$21,000	\$26,000
Beginning Budget Year	2023	Opportunities \$20,000	N/A
Escalation	5%		
Discount Rate	1.5%		

Facility Condition Summary

Long open air picnic shelter with standing seam metal roofing on exposed wood trusses, on heavy timber frame. Volunteer construction by the Snohomish Sportsmen's Club and Tillicum Kiwanis in 1986. The sub-grade appears to be settling, causing slab cracking and a slight tilt to the structure.

No fire sprinkler, alarm or extinguishers. Original power service has been removed due to vandalism, but conduit and light fixture bases remain installed.

Facility Summary

City of Snohomish
 Hill Park
 Lower Shelter Pole Building

1610 Park Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
A Substructure			4.0			
A10 Foundations						
A1030 Slab On Grade	1986	1986	4	TRB	06/16/23	Concrete slab on grade, with downhill erosion or hillside slump settlement causing settlement to the structure. The slab has cracked down the middle from the undermining of the slab. The slab is also the foundation for the timber posts and is now causing the entire structure to lean slightly downhill towards the lake and warp the roofline and fascia. If left unchecked, further settlement could endanger the structure.
B Shell			3.0			
B10 Superstructure						
B1020 Roof Construction	1986	1986	3	TRB	06/16/23	Wood trusses on timber frame posts and columns. Volunteer built and there are some areas of concern with the craftsmanship and structural connections of members. Further recommendations for seismic strengthening the connections by a structural engineer are advisable.
B30 Roofing						
B3010 Roof Coverings	1986	1986	3	TRB	06/16/23	Standing seam metal roofing covered in moss, debris, and dirt. Cleaning recommended.
D Services			4.0			
D50 Electrical						
D5020 Lighting and Branch Wiring	1986	1986	4	DCS	06/16/23	Branch wiring conduit and light fixtures bases are installed, but non-functional - minor maintenance to complete demolition.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Hill Park

Facility: Lower Shelter Pole Building

Escalation 5%

Discount Rate 1.5%

A1030	Slab On Grade	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2024	1	\$9,000.00	LS	\$9,000	\$18,000

Deficient Material: Concrete Slab on Grade

Concrete slab on grade, with downhill erosion or hillside slump settlement causing settlement to the structure. The slab has cracked down the middle from the undermining of the slab. The slab is also the foundation for the timber posts and is now causing the entire structure to lean slightly downhill towards the lake and warp the roof line and fascia.

Remedial Action:

Slab jack the concrete slab-on-grade (and structure) back up to level. Consider also adding a retaining wall on the downhill side to thwart further future grade slump/settlement.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Hill Park

Facility: Lower Shelter Pole Building

Escalation 5%

Discount Rate 1.5%

B1020	Roof Construction	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2027	1	\$8,000.00	LS	\$8,000	\$16,000

Deficient Material: Roof Framing

There are some areas of concern with the craftsmanship and structural connections of members.

Remedial Action:

Further recommendations for seismic strengthening the connections by a structural engineer are advisable.

Action Type:

Life Safety



Facility Summary

City of Snohomish
Hill Park
Upper Shelter Pole Building

1610 Park Avenue
Snohomish, WA 98290

Facility Size - Gross S.F. 1,500
Year Of Original Construction 1995
Facility Use Type Picnic Shelter
Construction Type Light
of Floors 1
Energy Source Electric
Year Of Last Renovation 1995
Historic Register No



		Total Project Cost	Total Project Cost Present Value
Weighted Avg Condition Score	3.1		
Facility Condition Index (FCI)	0.14	Observed Deficiencies 2023 - 2028 \$20,000	\$21,000
Current Replacement Value (CRV)	\$142,000	Predicted Renewal Budget 2029 - 2042 \$37,000	\$45,000
Beginning Budget Year	2023	Opportunities	N/A
Escalation	5%		
Discount Rate	1.5%		

Facility Condition Summary

Long open air picnic shelter with standing seam metal roofing on exposed wood trusses, on heavy timber frame. Volunteer construction by the Snohomish Sportsmen's Club and Tillicum Kiwanis in 1995.

Plumbing water is sub-fed from adjacent restroom building to a single utility sink, which includes an electric tank-type hot water heater. No fire sprinkler or alarm. Power is 120/240V, single-phase sub-fed from the restroom building, powering receptacles, with the original lighting system removed due to vandalism.

Facility Summary

City of Snohomish
 Hill Park
 Upper Shelter Pole Building

1610 Park Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
A Substructure			3.0			
A10 Foundations						
A1030 Slab On Grade	1995	1995	3	TRB	06/16/23	Concrete slab on grade which also appears to be the foundation for the timber post anchors.
B Shell			3.0			
B10 Superstructure						
B1020 Roof Construction	1995	1995	3	TRB	06/16/23	Exposed wood trusses on heavy timber post and beams.
B20 Exterior Closure						
B2010 Exterior Walls	1995	1995	3	TRB	06/16/23	Painted wood board and batten, paint faded and weathered in areas, and interior face of screen wall tagged with graffiti on unfinished wood.
B30 Roofing						
B3010 Roof Coverings	1995	2015	3	TRB	06/16/23	Standing seam metal roofing.
C Interiors						
C10 Interior Construction						
C1030 Fittings	1995	1995	3	TRB	06/16/23	Wood seat built between several posts is weathered and sagging. Continue to monitor and replace if condition worsens.
D Services			3.6			
D20 Plumbing						
D2010 Plumbing Fixtures	1995	1995	3	DCS	06/16/23	One utility sink.

Facility Summary

City of Snohomish
 Hill Park
 Upper Shelter Pole Building

1610 Park Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services				3.6			
D20 Plumbing							
D2020 Domestic Water Distribution	1995	1995	3	DCS	06/16/23	Water sub-fed from adjacent restroom building to the utility sink, including one 20-gallon GE 2013 electric hot water heater, which appears turned-off and abandoned in place - minor maintenance to demolish or restore to service as needed.	
D2030 Sanitary Waste	1995	1995	3	DCS	06/16/23	Plumbing waste piping to site waste water system. The sink drains ok, with no issues reported, other than misuse by vandals. Confirm proper venting is provided, such as by under-counter Studor island vent as minor maintenance.	
D2040 Rain Water Drainage	1995	1995	3	DCS	06/16/23	Metal gutter and downspouts to grade, but with downspout missing at back of structure - minor maintenance to replace. Minor maintenance to connect downspouts to storm as needed.	
D40 Fire Protection							
D4030 Fire Protection Specialties	1995	1995	5	DCS	06/16/23	Garden hose but no fire extinguishers. Minor maintenance to install in protective cabinets.	
D50 Electrical							
D5010 Electrical Service and Distribution	1995	1995	3	DCS	06/16/23	One distribution panel sub-fed from adjacent restroom building via 60A circuit. The panel supplies about seven sets of receptacles, which includes ground fault interruption (GFI) protection.	
D5020 Lighting and Branch Wiring	1995	1995	4	DCS	06/16/23	Light work boxes installed along the lower chord of the roof trusses, but the fixtures have been removed due to vandalism - minor maintenance to reinstall after the vandalism problem is solved.	

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Hill Park

Facility: Upper Shelter Pole Building

Escalation 5%

Discount Rate 1.5%

A1030	Slab On Grade	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2024	1	\$5,000.00	LS	\$5,000	\$10,000

Deficient Material: Other

Settlement of adjacent asphalt or uplift of the slab edge has created a significant trip hazard at the end adjacent to the restroom.

Remedial Action:

Sawcut asphalt and install new asphalt ramp to provide ADA-accessible route between shelter and restrooms.

Action Type:

ADA



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Hill Park

Facility: Upper Shelter Pole Building

Escalation 5%

Discount Rate 1.5%

B2010	Exterior Walls	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2027	1	\$5,000.00	LS	\$5,000	\$10,000

Deficient Material: Wood Siding

Painted wood board and batten, paint faded and weathered in areas, and interior face of screen wall tagged with graffiti on unfinished wood.

Remedial Action:

Repaint entire structure, including interior screen wall face.

Action Type:

Other



Facility Summary

City of Snohomish

Hill Park

Hill Park Infrastructure

1610 Park Avenue
Snohomish, WA 98290

Facility Condition Summary

City lakeside park featuring two fishing docks, a restroom building, two covered picnic shelters, a playground, lawn areas, beachfront, numerous picnic benches, and walking trails through a cedar forest.

City water and sewer, with sewer to on-site Public Works lift station. SnoPUD power to restroom building, in turn sub-feeding the adjacent upper shelter; no power to lower shelter and separate service to Public Works lift station. Storm swale with outfall to lake, but most of the site sheet flows to the lake, except paved areas to rain gardens, then to the lake. Natural gas to Public Works lift station generator. No telecom observed onsite, but available at street. No site electronic security. The restroom building is closed for public use due to excessive vandalism - in place are two porta potties.

Facility Summary

City of Snohomish
 Hill Park
 Hill Park Infrastructure

1610 Park Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
G Sitework						
G20 Site Improvements						
G2010 Roadways	1980	1996	3	TRB	06/16/23	Asphalt drives with speed bumps. Past cracks sealed, maintenance top coat or fog coat recommended to prolong life of system.
G2020 Parking Lots	1980	2020	3	TRB	06/16/23	Asphalt parking lot restriped last year, reconfigured and provided 2 ADA parking stalls in 2021, although van accessible sign designation of one is missing.
G2030 Pedestrian Paving	1980	1996	3	TRB	06/16/23	Asphalt pathways, both routes to fishing dock have non-ADA-compliant surface settlement. Concrete ramp to fishing dock and lower shelter. Lower shelter ADA path side slope concerns. Wood chip pathways through site with pressure treated borders.
G2040 Site Development	1980	1996	3	TRB	06/16/23	Newer play structure in play area with chain link fencing. Various metal picnic benches on concrete pads. Lake interpretive signage integrated under wood canopy structure. Masonry pit barbecue,
G2050 Landscaping	1980	1980	3	TRB	06/16/23	Lawn areas, cedar tree grove, other substantial and established trees, some underbrush near amenities is overgrowing, but minor maintenance to cut back.
G30 Site Civil / Mechanical Utilities						
G3010 Water Supply	1986	1996	3	DCS	06/16/23	City water from street to reported meter in tree grove near street, then down to restroom building, in turn sub-feeding the adjacent Upper Shelter; no service to the Lower Shelter; no freestanding drinking fountains. No irrigation or fire protection service. Concern regarding water service line through heavily-rooted tree grove - review water bill and check site periodically for excessive leakage as the water service line continues to age.

Facility Summary

City of Snohomish
 Hill Park
 Hill Park Infrastructure

1610 Park Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
G Sitework						
G30 Site Civil / Mechanical Utilities						
G3020 Sanitary Sewer	1986	1996	3	DCS	06/16/23	Restroom building gravity drains to on-site Public Works lift station, with no current issues reported. The Upper Shelter sink also drains to the same system.
G3030 Storm Sewer	1986	1996	3	DCS	06/16/23	Portions of site and potentially adjacent neighborhood drain to swale to south, in turn draining to the lake. Reportedly, lack of past maintenance has damaged swale functionality.
G3060 Fuel Distribution	1986	1996	3	DCS	06/16/23	Natural gas to Public Works waste water lift station with no issues reported.
G40 Site Electrical utilities						
G4010 Electrical Distribution	1986	1996	3	DCS	06/16/23	Power underground to pad-mounted transformer, then underground to restroom building served at 120/240V, single-phase with SnoPUD meter No. 329247, in turn sub-feeding adjacent Upper Shelter structure. Reportedly, in the past, a separate meter served the Lower Shelter, but due to vandalism, this service has been removed. Conduit, receptacles, and several light fixture bases have been abandoned in place - minor maintenance to complete demolition. Separate overhead power service to the Public Work sanitary lift station, also on-site, but separately maintained.
G4020 Site Lighting	1986	1996	3	DCS	06/16/23	Approximately five site light fixtures on poles provided by SnoPUD, primarily for roadways and parking area. Additionally, there are several lights on the restroom building exterior.

Facility Summary

City of Snohomish
Hill Park
Hill Park Infrastructure

1610 Park Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
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G Sitework

G90 Other Site Construction

G9090	Other Site Systems	1980	1996	3	TRB	06/16/23	Two fishing docks, one newer floating dock to the north, and heavily-used, pile-supported, wood Robert S. Keaton Memorial Fishing Dock (south dock), which has a number of rotten piles near the far end and the structure wobbles uncomfortably. It is assumed by staff that at least the last three or four piles are no longer structurally sound. The last 20' of decking replaced in 2018, but some boards are rotten and broken.
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Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Hill Park

Facility: Hill Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2030	Pedestrian Paving	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2023	2	\$2,500.00	EA	\$5,000	\$10,000

Deficient Material: Asphalt Paving

Asphalt pathways, both routes to fishing dock have non-ADA-compliant surface settlement.

Remedial Action:

Demo, prep, compact, and repour ADA pathway routes to dock and lower shelter.

Action Type:

ADA



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Hill Park

Facility: Hill Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2030	Pedestrian Paving	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1	\$5,000.00	LS	\$5,000	\$10,000

Deficient Material: Concrete Sidewalk

Lower shelter ADA path side slope concerns including tree uplift.

Remedial Action:

Demo and repour access walk to lower shelter to meet ADA side slope requirements.

Action Type:

ADA



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Hill Park

Facility: Hill Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G3030	Storm Sewer	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	1	\$10,000.00	LS	\$10,000	\$20,000

Deficient Material: Storm swale

Reportedly, the storm water swale is permanently damaged, resulting in poor treatment and reduced retention.

Remedial Action:

Redevelop the storm water swale.

Action Type:

Code Issue



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Hill Park

Facility: Hill Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G9090	Other Site Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2024	4	\$4,000.00	EA	\$16,000	\$31,000

Deficient Material: Other

Robert S. Keaton Memorial Fishing Dock (south dock), which has a number of rotten piles near the far end and the structure wobbles uncomfortably. It is assumed by staff that at least the last three or four piles are no longer structurally sound.

Remedial Action:

Investigate extent of pile rot, remove and replace old failed piles, add lateral bracing to further reduce side sway.

Action Type:

Life Safety



Deficiency Repair Cost Markups By System

2023 - 2028

City of Snohomish

Site: Hill Park

Escalation 5%
Discount Rate 1.5%

Facility	System	Direct Construction Cost	Contingency 20%	Contractor's OH & P 20%	Project Soft Cost 36%	Total Project Cost	Total Project Cost (Present Value)
Hill Park Infrastructure	G20 Site Improvements	\$10,000	\$2,000	\$2,400	\$5,184	\$20,000	\$20,000
	G30 Site Civil / Mechanical Utilities	\$10,000	\$2,000	\$2,400	\$5,184	\$20,000	\$21,000
	G90 Other Site Construction	\$16,000	\$3,200	\$3,840	\$8,294	\$31,000	\$32,000
	Facility Total	\$36,000	\$7,200	\$8,640	\$18,662	\$71,000	\$73,000
Hill Park Restroom	B20 Exterior Closure	\$14,600	\$2,920	\$3,504	\$7,569	\$29,000	\$30,000
	C10 Interior Construction	\$7,000	\$1,400	\$1,680	\$3,629	\$14,000	\$15,000
	C30 Interior Finishes	\$13,200	\$2,640	\$3,168	\$6,843	\$26,000	\$26,000
	D20 Plumbing	\$12,000	\$2,400	\$2,880	\$6,221	\$24,000	\$24,000
	D30 HVAC	\$10,000	\$2,000	\$2,400	\$5,184	\$20,000	\$20,000
Facility Total	\$56,800	\$11,360	\$13,632	\$29,445	\$113,000	\$115,000	
Lower Shelter Pole Building	A10 Foundations	\$9,000	\$1,800	\$2,160	\$4,666	\$18,000	\$18,000
	B10 Superstructure	\$8,000	\$1,600	\$1,920	\$4,147	\$16,000	\$18,000
	Facility Total	\$17,000	\$3,400	\$4,080	\$8,813	\$34,000	\$36,000
Upper Shelter Pole Building	A10 Foundations	\$5,000	\$1,000	\$1,200	\$2,592	\$10,000	\$10,000
	B20 Exterior Closure	\$5,000	\$1,000	\$1,200	\$2,592	\$10,000	\$11,000
	Facility Total	\$10,000	\$2,000	\$2,400	\$5,184	\$20,000	\$21,000
Site Total		\$119,800	\$23,960	\$28,752	\$62,104	\$238,000	\$245,000

Opportunity Summary By Subsystem

City of Snohomish

Site: Hill Park

Total Site Opportunity Cost: \$550,000

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: Hill Park Infrastructure System: Site Electrical utilities							\$98,000
G4030	Site Communications and Security						
	No site electronic security and excessive site vandalism. Apparent data service available at main road.	Install site electronic security in conjunction with security plan developed with City police department.	1.00	\$50,000.00	LS	\$50,000	\$98,000
Facility: Hill Park Restroom System: Plumbing							\$212,000
D2010	Plumbing Fixtures						
	Damaged vandal-resistant fixtures and trim.	Upgrade to correctional-facility-grade fixture and trim to provide some degree of functionality while somewhat better able to resist the City's unusually aggressive vandals.	12.00	\$9,000.00	EA	\$108,000	\$212,000
Facility: Hill Park Restroom System: HVAC							\$220,000
D3040	HVAC Distribution Systems						
	The pre-engineered metal building form California may be fine for California weather, but not for Pacific Northwest weather.	If the City intent is to use the restroom building in all seasons, or even in shoulder seasons, replace the PEMB with a building engineered for Pacific Northwest all-season use.	500.00	\$225.00	SF	\$112,500	\$220,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Opportunity Summary By Subsystem

City of Snohomish

Site: Hill Park

Total Site Opportunity Cost: **\$550,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: Lower Shelter Pole Building							
System: Electrical							\$20,000
D5010	Electrical Service and Distribution						
	Power service removed due to vandalism.	Restore power after vandalism problem has been solved.	1.00	\$5,000.00	LS	\$5,000	\$10,000
D5020	Lighting and Branch Wiring						
	Branch wiring conduit and light fixtures bases are installed, but non-functional.	Replace missing wiring and devices (receptacles) and missing light fixture components to restore original function, after site vandalism issue is solved.	1.00	\$5,000.00	LS	\$5,000	\$10,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Page 2 of 2

Facility Summary

City of Snohomish

Morgantown Park

Morgantown Park Infrastructure

200 Long Street
Snohomish, WA 98290

Facility Condition Summary

A river frontage park offering a children's playground area, half basketball court, walking trails, and other amenities like horseshoe and informal timber river access stairs. Water service to drinking fountain; no irrigation system; no site lighting.

Facility Summary

City of Snohomish
Morgantown Park
Morgantown Park Infrastructure

200 Long Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
G Sitework						
G20 Site Improvements						
G2030 Pedestrian Paving	1985	1997	3	TRB	07/05/23	Asphalt pathways, older style concrete ADA ramp into play area with settlement of settlement at base of ramp of 2" (no longer ADA compliant access).
G2040 Site Development	1985	1997	3	TRB	07/05/23	Children's play structures, half basketball court. Precoated metal trash, benches, and picnic tables mounted on concrete pads. Timber horseshoe pit and timber stairs to water beginning to degrade (past Eagle Scout project).
G2050 Landscaping	1985	1997	3	TRB	07/05/23	Mature trees, grass, rain garden planting.
G30 Site Civil / Mechanical Utilities						
G3010 Water Supply	1985	1997	4	DCS	07/05/23	Water meter buried in dirt at meter box to north serving one drinking and dog fountain adjacent to play toy area; reportedly turned off during the pandemic, but not restored to service. Minor maintenance to clean dirt out of meter box, service drinking fountain and restore service. No irrigation system.
G3030 Storm Sewer	1985	1997	3	DCS	07/05/23	French drain serving the low area of the upper play area, assume drains to river, no issues reported. A rain garden is marked along the path to the river, but with unclear influent or effluent streams, maybe from street above and overflowing to river below.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Morgantown Park

Facility: Morgantown Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2030	Pedestrian Paving	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	2,800	\$12.00	SF	\$33,600	\$66,000

Deficient Material: Play Surfacing

Wood chip play surfacing degraded and compacted. Erosion has exposed the edge of the ADA access ramp.

Remedial Action:

Prep and refill play area with new wood chip play surface. Consider extending concrete ramp slope deeper to below chip surface to maintain access when future chips degrade. Consider alternative rubberized play surfacing instead of wood chips.

Action Type:

ADA



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Morgantown Park

Facility: Morgantown Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2040	Site Development	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2027	1,500	\$4.00	SF	\$6,000	\$12,000

Deficient Material: Basketball Courts

Sub-surface settlement at court is causing cracking and weed intrusion of play surface.

Remedial Action:

Fill and seal cracks, recoat court with new surfacing and game striping.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Morgantown Park

Facility: Morgantown Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2040	Site Development	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1	\$18,000.00	EA	\$18,000	\$35,000

Deficient Material: Play Apparatus

Play structure is degrading with finish surfacing peeling off and exposing corroded steel. System is not up to current accessibility play structure standards.

Remedial Action:

Replace playground equipment with new full access play systems (ADA-compliant).

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Morgantown Park

Facility: Morgantown Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2040	Site Development	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1	\$10,000.00	LS	\$10,000	\$20,000

Deficient Material: Play Equipment

Timbers rotting in the horseshoe pits with exposed corroded reinforcing steel bars. Stairs to river constructed at the same time are beginning to degrade.

Remedial Action:

Replace horseshoe pit structure. Backfill and repair stairs and continue monitoring for degradation.

Action Type:

Life Safety



Deficiency Repair Cost Markups By System

2023 - 2028

City of Snohomish

Site: Morgantown Park

Escalation 5%

Discount Rate 1.5%

Facility	System	Direct Construction Cost	Contingency 20%	Contractor's OH & P 20%	Project Soft Cost 36%	Total Project Cost	Total Project Cost (Present Value)
Morgantown Park Infrastructure	G20 Site Improvements	\$67,600	\$13,520	\$16,224	\$35,044	\$133,000	\$134,000
	Facility Total	\$67,600	\$13,520	\$16,224	\$35,044	\$133,000	\$134,000
	Site Total	\$67,600	\$13,520	\$16,224	\$35,044	\$133,000	\$134,000

Opportunity Summary By Subsystem

City of Snohomish

Site: Morgantown Park

Total Site Opportunity Cost: **\$20,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: Morgantown Park Infrastructure System: Site Civil / Mechanical Utilities							\$20,000
G3010	Water Supply	City water to site and river adjacent, but no irrigation system.					
		Install city water supplied irrigation system to upper developed park play area.	1.00	\$10,000.00	LS	\$10,000	\$20,000

Note: Cost estimates shown include project markups, but exclude escalation.

Facility Summary

City of Snohomish
 Pilchuck Park
 Pilchuck Park Restroom

169 Cypress Avenue
 Snohomish, WA 98290

Facility Size - Gross S.F. 720
 Year Of Original Construction 1976
 Facility Use Type Restroom Building
 Construction Type Light
 # of Floors 1
 Energy Source Electric
 Year Of Last Renovation 1976
 Historic Register No



		Total Project Cost	Total Project Cost Present Value
Weighted Avg Condition Score	3.3		
Facility Condition Index (FCI)	0.19	Observed Deficiencies 2023 - 2028	\$158,000
Current Replacement Value (CRV)	\$83,000	Predicted Renewal Budget 2029 - 2042	\$25,000
Beginning Budget Year	2023	Opportunities	N/A
Escalation	5%		
Discount Rate	1.5%		

Facility Condition Summary

Pre-fabricated metal restroom facility with men's and women's sides separated by a central storage/plumbing/maintenance room. Generally, the structure has exceeded its expected useful life and is the constant target of vandalism. Although indicated as ADA accessible, there are no ADA-compliant stalls (stalls with grab bars installed are sub-standard-sized to be compliant with ADA). Electric wall heater for plumbing chase. The natural ventilation openings are mostly covered over with polycarbonate panels, sharply reducing natural ventilation. Vandal-resistant plumbing fixtures with remote operated flush valve trim. No fire sprinkler or alarm. Power is 480V primarily for ballfield lighting and irrigation pump house, with 120/240V single-phase transformer and distribution panel for restroom building itself. Original fluorescent fixtures retrofitted with LED lamps. Time-click mag-lock men's and women's room entry doors.

Facility Summary

City of Snohomish
 Pilchuck Park
 Pilchuck Park Restroom

169 Cypress Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments	
A Substructure			3.0				
A10 Foundations							
A1010	Standard Foundations	1976	1976	3	TRB	07/05/23	Cast-in-place concrete.
A1030	Slab On Grade	1976	1976	3	TRB	07/05/23	Exposed slab on grade, minor cracking, stained.
B Shell			3.2				
B10 Superstructure							
B1020	Roof Construction	1976	1976	3	TRB	07/05/23	Steel deck on steel frame.
B20 Exterior Closure							
B2010	Exterior Walls	1976	1976	3	TRB	07/05/23	Painted steel panel on steel frame, paint at end of life with graffiti.
B2020	Exterior Windows	1976	1976	3	TRB	07/05/23	Painted steel mesh in wood frames, some with polycarbonate panels.
B2030	Exterior Doors	1976	1976	4	TRB	07/05/23	Painted hollow metal doors and frames at restrooms, frames heavily corroded, restroom door panels bent from break-in attempt abuse. Sliding pair of doors on barn hardware at central storage/electrical/plumbing space.
B30 Roofing							
B3010	Roof Coverings	1976	1976	4	TRB	07/05/23	Prefinished standing seam metal roof, in need of cleaning. No leaks reported, but has exceeded expected useful life.
B3030	Projections	1976	1976	3	TRB	07/05/23	Painted steel eaves.

Facility Summary

City of Snohomish
 Pilchuck Park
 Pilchuck Park Restroom

169 Cypress Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
C Interiors				4.0			
C10 Interior Construction							
C1010	Partitions	1976	1995	4	TRB	07/05/23	High-density polyethylene (HDPE) toilet partitions, ADA indicated, but only one stall in each gender with grab bars, and stall dimensions do not meet ADA requirements. Some minor maintenance to remove graffiti.
C1030	Fittings	1976	1995	5	TRB	07/05/23	Stainless grab bars. Sanitary dispensers and other wall-mounted elements damaged or destroyed from vandalism.
C30 Interior Finishes							
C3010	Wall Finishes	1976	2010	3	TRB	07/05/23	Interior walls marred by graffiti, stainless panels on some walls as splash guards.
C3030	Ceiling Finishes	1976	1976	3	TRB	07/05/23	Painted steel structure.
D Services				3.1			
D20 Plumbing							
D2010	Plumbing Fixtures	1976	1976	3	DCS	07/05/23	Mostly original vandal-resistant stainless steel water closets, urinals, and lavatories. The flushing fixtures have newer hardwired infrared-controlled flush valves. Lavatory faucets are newer mechanical metering type. All fixtures need minor maintenance to clean and restore full function. No drinking fountain at restroom building - minor maintenance to install. Some original fixtures have been removed to provide ADA access and to reduce the number of fixtures subject to vandalism and/or needing cleaning, specifically at the women's room. Wall-mounted electric hand-dryer in the men's and women's room - the one in the men's room needs work as minor maintenance to repair or replace control.
D2020	Domestic Water Distribution	1976	1976	3	DCS	07/05/23	Mostly original copper water distribution to fixtures; no domestic hot water. No apparent backflow preventer - minor maintenance to install.

Facility Summary

City of Snohomish
 Pilchuck Park
 Pilchuck Park Restroom

169 Cypress Avenue
 Snohomish, WA 98290

Facility Components

Systems		Original System Date	Renewal Date Last	Score	Surveyor	Survey Date	Comments
D Services				3.1			
D20 Plumbing							
D2030	Sanitary Waste	1976	1976	3	DCS	07/05/23	Mostly original ABS drain, waste, and vent piping. Most tested fixtures flush and drain ok, but a few are slow, specifically the women's lavatory sink - reportedly due to park users washing off feet or shoes in the lavatory sink. Undersized floor drains with no apparent trap primers, but no issues are reported.
D2040	Rain Water Drainage	1976	1976	4	DCS	07/05/23	Metal roof drip edge sheet-falls to grade - minor maintenance to install metal gutter and downspout to grade.
D30 HVAC							
D3040	HVAC Distribution Systems	1976	1976	4	DCS	07/05/23	Most of the natural ventilation openings have been covered over by polycarbonate panels, reducing or eliminating code-required ventilation. Minor maintenance to remove panels and restore ventilation; may require insulation of the plumbing chase if this is to be heated in the winter.
D3050	Terminal and Package Units	1976	1995	3	DCS	07/05/23	One estimated 2-kW electric wall heater with on-board manual thermostat in plumbing chase space presumed for freeze-protection heating.
D50 Electrical							
D5010	Electrical Service and Distribution	1976	1976	3	DCS	07/05/23	Original 480V, three-phase Cutler Hammer 225A main distribution panel, with most circuits for field lighting, plus irrigation pump house, public works sanitary lift station, and 15-kW 120/240V single-phase "Hevi-Duty" transformer for 100A 120/240V distribution panel for restroom building loads - this panel is in poor condition, minor maintenance to replace. Other panels may have five to ten years remaining life with good maintenance.
D5020	Lighting and Branch Wiring	1976	1976	3	DCS	07/05/23	Original fluorescent fixtures with newer LED drop-in replacement lamps. 1976 ballfield lighting control.

Facility Summary

City of Snohomish
 Pilchuck Park
 Pilchuck Park Restroom

169 Cypress Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services				3.1			
D50 Electrical							
D5032	Low Voltage Communication	1976	1995	3	DCS	07/05/23	Radio antenna for public works lift station telemetry.
D5038	Low Voltage Security	1976	2000	3	DCS	07/05/23	Men's and women's restroom entry doors on Assa Abloy magnetic lock time-of-day control with no issues reported, other than periodic vandalism.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Restroom

Escalation 5%

Discount Rate 1.5%

B2010	Exterior Walls	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	1,200	\$8.00	SF	\$9,600	\$19,000

Deficient Material: Paint
Paint at end of life with graffiti.

Remedial Action:
Prep and repaint structure.

Action Type:
Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Restroom

Escalation 5%

Discount Rate 1.5%

B2030	Exterior Doors	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	2	\$5,500.00	EA	\$11,000	\$22,000

Deficient Material: Doors and Frames

Restroom painted hollow metal doors and frames, frames heavily corroded, restroom door panels bent from break-in attempt abuse.

Remedial Action:

Remove and replace restroom frames, doors, and hardware with heavy-duty abuse-resistant systems.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Restroom

Escalation 5%

Discount Rate 1.5%

B3010	Roof Coverings	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	950	\$22.00	SF	\$20,900	\$41,000

Deficient Material: Standing Seam Metal

Prefinished standing seam, in need of cleaning. No leaks reported, but has exceeded expected useful life.

Remedial Action:

Remove and replace roofing.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Restroom

Escalation 5%

Discount Rate 1.5%

C1010	Partitions	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2023	2	\$10,000.00	EA	\$20,000	\$39,000

Deficient Material: Partitions

ADA indicated, but only one stall in each gender with grab bars, and stall dimensions do not meet ADA requirements.

Remedial Action:

Full reconfiguration upgrade of toilet rooms to full ADA compliance (including fixture relocation to allow for fully compliant interior space configuration).

Action Type:

ADA



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Restroom

Escalation 5%

Discount Rate 1.5%

C1030	Fittings	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1	\$5,000.00	LS	\$5,000	\$10,000

Deficient Material: Toilet Accessories

Toilet dispensers and other wall-mounted elements damaged from vandalism.

Remedial Action:

Replace toilet accessories with new.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Restroom

Escalation 5%

Discount Rate 1.5%

C3010	Wall Finishes	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2023	1,200	\$5.00	SF	\$6,000	\$12,000

Deficient Material: Paint
Interior walls marred by graffiti.

Remedial Action:
Repaint interiors.

Action Type:
Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Restroom

Escalation 5%

Discount Rate 1.5%

D5020	Lighting and Branch Wiring	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2026	1	\$7,500.00	LS	\$7,500	\$15,000

Deficient Material: Field lighting control
Aged relay-type ballfield lighting control.

Remedial Action:
Budget to replace upon failure.

Action Type:
Significant Operational Impact



Facility Summary

City of Snohomish

Pilchuck Park

Pilchuck Park Infrastructure

169 Cypress Avenue
Snohomish, WA 98290

Facility Condition Summary

A river frontage park offering a children's playground, two tennis courts, a basketball court, two ballfields and a third former ballfield, now used for multiple field sports. The site also has a prefabricated steel restroom building, CMU block irrigation pump house, and a prefabricated wood shed for sports equipment storage. There is also a BBQ area and a sand volleyball court. Maintenance staff were notified at the time of the site visit that the sand court was infested with in-ground yellow jacket nests. The access road has just been reconstructed due to significant riverbank corrosion, and has caused the loss of the only ADA access path from the parking area to the fields and play area below. City water to restroom building and drinking fountains, fed from city fire main serving the site, including fire hydrants. Irrigation system with pump house for Pilchuck River water, currently failed and planed for replacement during summer 2023. Sewer to onsite city public works sanitary lift station. SnoPUD 480V three-phase power to restroom building to power Ball Field No. 1 lighting, and the irrigation pump. No site electronic security.

Facility Summary

City of Snohomish
 Pilchuck Park
 Pilchuck Park Infrastructure

169 Cypress Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments	
G Sitework							
G20 Site Improvements							
G2010	Roadways	1976	2023	1	TRB	07/05/23	Entry asphalt drive was just relocated June 2023 due to riverbank erosion (bank stabilization work yet to occur by others).
G2020	Parking Lots	1976	1976	4	TRB	07/05/23	Asphalt parking lots cracking, weed growth, areas of root upheaval, areas of settlement, ponding water, speed bumps cracking, and paint striping weathering. Only two ADA stalls indicated (non-compliant for number of stalls and no required signage nor van accessible stall designation). Concrete curbs broken.
G2030	Pedestrian Paving	1976	1976	3	TRB	07/05/23	Site circulation pathways generally consist of asphalt pathways with the exception of timber stairs from the main entrance descending into the park. There are no ADA-compliant access pathways from the right of way, or from the parking areas to the park amenities.
G2040	Site Development	1976	1976	3	TRB	07/05/23	Steel vehicular security gate, two baseball fields, one multipurpose field, newer backstops, and outfield fencing installed on two fields in the early 1990s. Fields include covered dugouts. Field No. 1 includes a storage building, but with no reported utility service. Uncovered basketball court, sand volleyball court, affixed steel BBQ, 1997 powder-coated steel benches mounted in concrete, kids play area (circa 1990s and relocated to current location out of the floodplain).
G2050	Landscaping	1976	1976	3	TRB	07/05/23	Mature trees, lawn, bank side underbrush, significant invasive species including blackberry on hillside backing ballfields and Japanese knotweed along the riverbank.

Facility Summary

City of Snohomish
 Pilchuck Park
 Pilchuck Park Infrastructure

169 Cypress Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
G Sitework						
G30 Site Civil / Mechanical Utilities						
G3010 Water Supply	1976	1976	3	DCS	07/05/23	City water main service fire hydrants along paved drive, with branches to meters for the restroom building and assumed for drinking fountains, which have mostly been vandalized and removed. One remains at the parking lot, but has been shut down since the pandemic. At least one frost-free utility yard hydrant. Irrigation system with pump station adjacent to Pilchuck River, reportedly including water-right; pump is 20-hp, supplying 4-inch distribution main to field.
G3020 Sanitary Sewer	1976	1976	3	DCS	07/05/23	Sanitary waste from restroom building to city public works maintained and operated lift station with no issues reported, other than odors near lift station.
G3030 Storm Sewer	1976	1976	3	DCS	07/05/23	Network of catch basins and piping under paved roadway and parking lot discharging direct to Pilchuck riser immediately upstream of the irrigation pump house river intake area - no issues reported. No reported playfield under-drain system, noting the Snohomish and/or Pilchuck Rivers often flood the entire sportsfield and volleyball pit areas.
G40 Site Electrical utilities						
G4010 Electrical Distribution	1976	1976	3	DCS	07/05/23	SnoPUD medium voltage power underground from west to restroom building to east, with newer 112.5 kVA pad-mounted 480V, three-phase transformer to meter No. 125213.
G4020 Site Lighting	1976	1976	3	DCS	07/05/23	Eight original reinforced concrete Ball Field No. 1 light poles, each with at least six original light fixtures, but with 2022 high-intensity discharge (HID) lamps and ballasts. Each pole also includes a 2022 pedestrian pathway illumination LED light fixture. One new metal pole LED fixture illuminating the paved area around the restroom building, but otherwise minimal site lighting, excepting exterior wall-packs at either end of the restroom building.

Facility Summary

City of Snohomish
 Pilchuck Park
 Pilchuck Park Infrastructure

169 Cypress Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
G Sitework							
G40 Site Electrical utilities							
G4030 Site Communications and Security	1976	1976	4	DCS	07/05/23	Radio antenna for the sanitary lift station. Minor maintenance to install cellular-based CCTV monitoring cameras at the restroom and/or irrigation pump house structures.	
G90 Other Site Construction							
G9090 Other Site Systems	1976	2019	3	TRB	07/05/23	2019 prefabricated wood shed with composition shingle roof, used as storage for baseball maintenance equipment. 1976 CMU pump house structure with prefinished standing seam metal roof.	

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2020	Parking Lots	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2023	38,000	\$8.00	SF	\$304,000	\$595,000

Deficient Material: Asphalt Parking Lots

Asphalt parking lots, potholes, standing water, cracking, weed growth, areas of root upheaval, areas of settlement, speed bumps cracking, and paint striping weathering. Only two ADA stalls indicated, but no required signage nor van accessible stall designation.

Remedial Action:

Cut, excavate, fill, and compact areas of root intrusion, potholes, and settlement, and patch. Apply a top coat to the entire lot. Designate ADA parking in numbers and locations to meet or exceed current code and provide required signage.

Action Type:

ADA



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2020	Parking Lots	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	240	\$25.00	LF	\$6,000	\$12,000

Deficient Material: Concrete Curb
Concrete curbs broken.

Remedial Action:
Demo and replace concrete curbs.

Action Type:
Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2030	Pedestrian Paving	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1,000	\$30.00	SF	\$30,000	\$59,000

Deficient Material: ADA Access

Steep site pedestrian pathways from the parking areas to the playfields and playgrounds predate ADA and do not meet current slope or evenness requirements for ADA access.

Remedial Action:

Provide new ADA access ramps to all play and recreation amenity areas.

Action Type:

ADA



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2030	Pedestrian Paving	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1,300	\$30.00	SF	\$39,000	\$76,000

Deficient Material: ADA Access

The north ADA access path from parking lot to tennis courts, basketball courts, and baseball fields was demolished during the road realignment, but was not reconstructed.

Remedial Action:

Provide accessible route reconnecting the north park playfields to the parking.

Action Type:

ADA



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2030	Pedestrian Paving	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	300	\$20.00	SF	\$6,000	\$12,000

Deficient Material: ADA Access

ADA ramp serving the restroom building is non-compliant.

Remedial Action:

Demo, reconfigure access route and parking, and reconstruct ADA parking and accessible pathway to access to the restrooms.

Action Type:

ADA



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2030	Pedestrian Paving	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	1,800	\$20.00	SF	\$36,000	\$71,000

Deficient Material: Asphalt Pathways

The north asphalt path serving the area between the playground and the ballfields has slumped, and has significant cracks and weed growth, and the side slope is not ADA accessible.

Remedial Action:

Demo and reconstruct accessible pathway.

Action Type:

ADA



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2040	Site Development	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	3	\$4,500.00	EA	\$13,500	\$26,000

Deficient Material: Metal Benches

Park bench vandalized. One BBQ stand missing BBQ, other BBQ appears to be at end of life.

Remedial Action:

Demo and replace amenities.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2040	Site Development	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	1	\$12,000.00	LS	\$12,000	\$24,000

Deficient Material: Play Apparatus

Play structure damage. Walk bridge coating missing with exposed steel grate corrosion occurring. Holes burned into the side of the tube slide, other areas of graffiti, some missing bolts, spring teeter totter bolts spring base plates loose.

Remedial Action:

Conduct tightening and attachment repairs by maintenance staff, other components may need to be replaced, or removed and shipped off-site for repairs if component replacement parts are not longer available.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2040	Site Development	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2023	4,900	\$12.00	SF	\$58,800	\$115,000

Deficient Material: Play Area

Play chip surface has degraded and compacted, and ADA access ramp is broken and non-compliant.

Remedial Action:

Replace ADA access with fully-compliant ADA access path descending fully into base of play area. Prep and replace play chip surfacing. Alternatively, consider replacing play chips with rubberized play area safety and accessible surfacing.

Action Type:

ADA



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G2050	Landscaping	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2024	1	\$20,000.00	LS	\$20,000	\$39,000

Deficient Material: Invasive Species

Japanese knotweed, a significant riparian invasive species, have overtaken the native riverbank landscape. Himalayan blackberry bushes infest the west hillside facing the baseball field.

Remedial Action:

Eradicate invasive species, prioritizing proper removal of the Japanese knotweed.

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G3010	Water Supply	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	4	\$5,000.00	EA	\$20,000	\$39,000

Deficient Material: Drinking fountains

All but one drinking fountain vandalized and removed; only one remains, but currently non-functional.

Remedial Action:

Restore all missing drinking fountains and restore service to the one currently remaining.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Pilchuck Park

Facility: Pilchuck Park Infrastructure

Escalation 5%

Discount Rate 1.5%

G3010	Water Supply	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1	\$10,000.00	LS	\$10,000	\$20,000

Deficient Material: Irrigation

The irrigation system pump and portions of distribution to Field No. 1 are failed.

Remedial Action:

Replace pump system and failed portions of irrigation distribution.

Action Type:

Significant Operational Impact



Deficiency Repair Cost Markups By System

2023 - 2028

City of Snohomish
Site: Pilchuck Park

Escalation 5%
Discount Rate 1.5%

Facility	System	Direct Construction Cost	Contingency 20%	Contractor's OH & P 20%	Project Soft Cost 36%	Total Project Cost	Total Project Cost (Present Value)
Pilchuck Park Infrastructure	G20 Site Improvements	\$525,300	\$105,060	\$126,072	\$272,316	\$1,029,000	\$1,036,000
	G30 Site Civil / Mechanical Utilities	\$30,000	\$6,000	\$7,200	\$15,552	\$59,000	\$61,000
	Facility Total	\$555,300	\$111,060	\$133,272	\$287,868	\$1,088,000	\$1,097,000
Pilchuck Park Restroom	B20 Exterior Closure	\$20,600	\$4,120	\$4,944	\$10,679	\$41,000	\$41,000
	B30 Roofing	\$20,900	\$4,180	\$5,016	\$10,835	\$41,000	\$42,000
	C10 Interior Construction	\$25,000	\$5,000	\$6,000	\$12,960	\$49,000	\$49,000
	C30 Interior Finishes	\$6,000	\$1,200	\$1,440	\$3,110	\$12,000	\$12,000
	D50 Electrical	\$7,500	\$1,500	\$1,800	\$3,888	\$15,000	\$16,000
	Facility Total	\$80,000	\$16,000	\$19,200	\$41,472	\$158,000	\$160,000
	Site Total	\$635,300	\$127,060	\$152,472	\$329,340	\$1,246,000	\$1,257,000

Opportunity Summary By Subsystem

City of Snohomish
Site: Pilchuck Park

Total Site Opportunity Cost: \$637,000

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: Pilchuck Park Infrastructure System: Site Improvements							\$20,000
G2040	Site Development						
	Tennis courts currently striped for temporary pickleball use, with city residents requesting permanent pickleball courts.	Convert one tennis court to two pickleball courts permanently (with fixed nets).	2.00	\$5,000.00	EA	\$10,000	\$20,000
Facility: Pilchuck Park Infrastructure System: Site Civil / Mechanical Utilities							\$343,000
G3010	Water Supply						
	Volleyball players reportedly wash feet in the restroom building sinks, backing up the sink drains with sand.	Install shower and footwash at volleyball pit.	1.00	\$25,000.00	LS	\$25,000	\$49,000
	Only Field No. 1 is irrigated.	Irrigate Field Nos. 2 & 3.	2.00	\$25,000.00	EA	\$50,000	\$98,000
G3030	Storm Sewer						
	Paved roadway and parking draining undetained and untreated into the Pilchuck River.	Install storm water detention and/or treatment for paved areas prior to discharge to river.	1.00	\$100,000.00	LS	\$100,000	\$196,000

Note: Cost estimates shown include project markups, but exclude escalation.

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Opportunity Summary By Subsystem

City of Snohomish
 Site: Pilchuck Park

Total Site Opportunity Cost: \$637,000

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: Pilchuck Park Infrastructure							
System: Site Electrical utilities							\$274,000
G4020 Site Lighting							
	HID lighting at Field No. 1.	Upgrade Field No. 1 to LED and use resulting surplus power distribution system capacity to light Field No. 2.	1.00	\$90,000.00	LS	\$90,000	\$176,000
	Tennis courts fenced, but not lighted.	Light tennis courts.	2.00	\$25,000.00	EA	\$50,000	\$98,000

Note: Cost estimates shown include project markups, but exclude escalation.

Facility Summary

City of Snohomish

Police Station

Police Station

230 Maple Avenue
Snohomish, WA 98290

Facility Size - Gross S.F.	6,800
Year Of Original Construction	1979
Facility Use Type	Police Station
Construction Type	Light
# of Floors	2
Energy Source	Electric
Year Of Last Renovation	1998
Historic Register	No



			Total Project Cost	Total Project Cost Present Value
Weighted Avg Condition Score	3.1			
Facility Condition Index (FCI)	0.17	Observed Deficiencies 2023 - 2028	\$550,000	\$584,000
Current Replacement Value (CRV)	\$3,060,000	Predicted Renewal Budget 2029 - 2042	\$1,204,000	\$1,695,000
Beginning Budget Year	2023	Opportunities	\$628,000	N/A
Escalation	5%			
Discount Rate	1.5%			

Facility Condition Summary

The Snohomish police station was originally constructed as The Bank of Everett in 1979, and was converted to a city police station in 1998 with the inclusion of a single-story addition to the south that includes interview space and three detention cells (now all but one converted into offices). An additional tenant improvement in the central original bank space was completed in 2016. The original portion of the building includes a full basement with tunnel out to former drive-thru service islands, now covered by the jail cell addition. The original attic mechanical mezzanine equipment has been moved to at-grade locations.

HVAC includes two packaged heat pump HVAC systems - one serving the original main floor, the other the jail cell addition. There is currently no service to the basement area. The two main HVAC systems were both non-functioning at time of site visit. Plumbing includes restrooms on the main floor, locker rooms at the basement, and a kitchenette also at the basement. Fire sprinkler is provided for the original basement and the addition, but not the original main floor. Fire alarm is provided throughout, however the system is an obsolete analog (zoned) type. Power is modern 208V, three-phase with 600A capacity, but a makeshift residential-grade 11-kW propane-fired generator with manual transfer switch. Lighting is a mix of newer LED and older fluorescent fixtures with similar mix of newer wireless automatic and older manual controls. Low voltage systems are mix of older and newer, but include high-speed fiber-optic service and several wireless access points (antennas).

Facility Summary

City of Snohomish
Police Station
Police Station

230 Maple Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
A Substructure			3.0			
A10 Foundations						
A1010 Standard Foundations	1979	1979	3	TRB	05/05/23	Concrete stem walls and footings. Also includes the 1990s addition.
A1030 Slab On Grade	1979	1979	3	TRB	05/05/23	Standard concrete slab on grade, with no reported or observed issues.
A20 Basements						
A2020 Basement Walls	1979	1979	3	TRB	05/05/23	Concrete walls. Reported as dry with no issues. No issues observed.
B Shell			3.0			
B10 Superstructure						
B1010 Floor Construction	1979	1979	3	TRB	05/05/23	A combination of precast concrete deck panels, cast-in-place concrete below old vault, and wood joists below restrooms.
B1020 Roof Construction	1979	1979	3	TRB	05/05/23	Wood deck on wood trusses, vented from eave venting. A cold attic with batt insulation above the ceiling area, with large gaps in the insulation coverage.
B20 Exterior Closure						
B2010 Exterior Walls	1979	1979	3	TRB	05/05/23	Brick and painted wood shingle cladding on wood studs (insulation value assumed to be very limited). Weathered wood trim around main entry area. The south exterior wall at the 1998 addition are painted cement composite lap siding. Some areas of water-damaged shingles.

Facility Summary

City of Snohomish
Police Station
Police Station

230 Maple Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
B Shell				3.0			
B20 Exterior Closure							
B2020 Exterior Windows	1979	1979	3	TRB	05/05/23	Original single-glazed units set in wood frames. Windows with bars at detention area (see B2010 Exterior Walls for rotting window trim replacement).	
B2030 Exterior Doors	1979	1979	3	TRB	05/05/23	Original aged and weathered bank wood and glass doors at front entry. Metal doors and frames at the 1998 addition.	
B30 Roofing							
B3010 Roof Coverings	1979	1998	3	TRB	05/05/23	Standing seam roofing on the majority of roofing (no issues or leaks reported). New membrane (2021) at the small low-slope roof above the addition area.	
B3030 Projections	1979	1979	3	TRB	05/05/23	Painted and vented wood soffit entry canopy and eaves.	
C Interiors				3.2			
C10 Interior Construction							
C1010 Partitions	1979	1998	3	TRB	05/05/23	Wood studs, CMU, concrete. Some recent office partition renovations in 2016.	
C1020 Interior Doors	1979	2016	3	TRB	05/05/23	Wood doors and frames at offices, wood restroom doors, and hollow metal doors and frames at circulation areas showing heavy finish wear. Minor maintenance to prep and repaint worn finishes on metal doors and frames, and to clean and restain wood doors. ADA-compliant lever hardware.	
C1030 Fittings	1979	1998	3	TRB	05/05/23	A combination of stained wood base and rubber base. Wood handrail on stair. Horizontal window blinds.	
C20 Staircases							
C2010 Stair Construction	1979	1979	3	TRB	05/05/23	Wood stairs.	

Facility Summary

City of Snohomish
Police Station
Police Station

230 Maple Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
C Interiors			3.2			
C20 Staircases						
C2020 Stair Finishes	1979	2016	3	TRB	05/05/23	Carpet treads and risers, stained wood base.
C30 Interior Finishes						
C3010 Wall Finishes	1979	2016	3	TRB	05/05/23	Painted gypsum typical, spots of wear and tear and some gouges. Basement level finishes mixed and past useful life.
C3020 Floor Finishes	1979	2016	4	TRB	05/05/23	Mix of 2016 carpet in renovation area, rubber tread tiles in the 1998 addition processing area, carpet in interview and offices, exposed concrete in the cell. Mix of VCT and old carpet in basement. All carpet stained and showing traffic wear patterns.
C3030 Ceiling Finishes	1979	2016	3	TRB	05/05/23	Suspended acoustic tile below original ceiling in the front office 2016 renovation. Other areas of glue-up acoustic tile remain from the 1998 addition. Exposed concrete in basement and some suspended acoustic tile. Some areas of damaged and water-stained ceiling tiles from former roof and roof drain leaks; minor maintenance to replace.
D Services			3.2			
D20 Plumbing						
D2010 Plumbing Fixtures	1979	1998	3	DCS	05/05/23	Men's and women's rooms at original main floor. One detention fixture at cell block addition. Men's and women's locker rooms at basement with one shower each, but no sinks. One bathroom at basement. Original kitchenette at basement break room. Sink at basement crime lab. One failed drinking fountain at original main floor level outside restrooms. Mix of some 1979 and mostly 1998 fixtures ranging from fair to good condition. Tank-type water closets are pressure-assist type. All tested fixtures are functional, except the one small drinking fountain - minor maintenance to repair or replace. The jail cells are roughed-in for detention fixtures, but the fixtures are not installed. One combination lavatory and water closet fixture is installed at the shared jail cell area restroom.

Facility Summary

City of Snohomish
Police Station
Police Station

230 Maple Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
D Services			3.2			
D20 Plumbing						
D2020 Domestic Water Distribution	1979	1998	3	DCS	05/05/23	Copper where observed, with several newer electric water heaters. Larger water heaters have expansion tanks but no recirculation pumps. Most observed domestic hot water piping is uninsulated - minor maintenance to install. City water pressure is at 60 psig; there are no observed or reported low water pressure issues. However bottled water is in use, even though water color is clear and there are no obvious odors - consider point-of-use water filters at sinks to eliminate need for bottled water. The addition holding cell rough-in piping is exposed to the space; this may not meet detention cell requirements - minor maintenance to install a vandal-resistant cover if fixtures are not to be installed.
D2030 Sanitary Waste	1979	1979	3	DCS	05/05/23	Mix of cast iron and copper drain, waste, and vent (DW&V) piping, with basement level draining to the original ejector station, with failing pump - see D2090 Other Plumbing Systems. Tested fixtures flush and drain well with no issues reported. Restrooms have floor drains, but no observed trap primers; however there are no odor complaints.
D2040 Rain Water Drainage	1979	1998	2	DCS	05/05/23	Metal gutters and downspouts to storm at original and to grade at addition, with concealed gutters at original. Assume foundation drainage system leading to the observed basement sump pump.
D2090 Other Plumbing Systems	1979	1979	4	DCS	05/05/23	Failing basement sanitary ejector pump system. Assumed foundation drainage sump pump in riser room; this may also be simply for floor drains, including the sprinkler riser main drain floor drain - further investigation suggested to determine the exact function of the small sump pump and ensure its operability as minor maintenance.
D30 HVAC						
D3020 Heat Generating Systems	1979	1979	4	DCS	05/05/23	Electric duct heater abandoned in place in the attic. Multiple electric baseboard heaters under windows at original main floor spaces, also reported as abandoned in place. Electric fireplace on wall in reception area.

Facility Summary

City of Snohomish
 Police Station
 Police Station

230 Maple Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
D Services			3.2			
D30 HVAC						
D3040 HVAC Distribution Systems	1979	1998	3	DCS	05/05/23	Three HVAC systems: 1) Original main floor forced-air heating and cooling from outside at-grade packaged heat pump unit, 2) Original basement forced-air heating and cooling with ductwork in place but associated packaged unit missing, and 3) Addition forced-air heating and cooling from outside at-grade packaged heat pump unit. Dedicated exhaust fans for bath, shower, and locker rooms. Ductwork is a mix of galvanized sheet metal and factory-insulated flex-duct. Neither the original main floor, nor addition systems were operable at time of site visit - see D3060 Controls and Instrumentation. The addition packaged unit outside air intake is poorly located - see G3040 Heating Distribution. The original main floor area return air system is unclear from some areas. Most exhaust fans and grilles are dirty, some noisy - minor maintenance to clean, and replace as needed. It appears the original HVAC system includes two air handling units on the mezzanine, but this equipment has been demolished in favor of outside at-grade equipment. Portable fans in use throughout, due to combination of no operable windows, non-functioning HVAC system, and typically overheated officers in full patrol gear.
D3050 Terminal and Package Units	1979	2010	2	DCS	05/05/23	Two newer packaged heat pumps; Trane unit to east serves the addition to south, York unit to west serves the main floor original building. The basement packaged unit is missing. Several aged electric wall heaters for bathrooms and several other spaces.
D3060 Controls and Instrumentation	1979	1998	3	DCS	05/05/23	Original main floor and addition area HVAC systems, inoperable at time of site visit - minor maintenance to troubleshoot controls and restore HVAC service. HVAC controls include two programmable thermostats with Pelican wireless remote monitoring; bathroom and other exhaust fans are manually controlled. Unclear economizer controls - minor maintenance to troubleshoot and repair, which should also reduce energy use.

Facility Summary

City of Snohomish
Police Station
Police Station

230 Maple Avenue
Snohomish, WA 98290

Facility Components

Systems		Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
D Services				3.2			
D30	HVAC						
D3090	Other HVAC Systems and Equipment	1979	1998	3	DCS	05/05/23	Basement crime lab exhaust system in place - minor maintenance to service and restore operability. Portable dehumidifier in basement archives area in absence of HVAC system packaged unit.
D40	Fire Protection						
D4010	Fire Protection Sprinkler Systems	1979	1998	3	DCS	05/05/23	Fire sprinkler at original basement and addition, but not at original main floor.
D4030	Fire Protection Specialties	1979	1998	2	DCS	05/05/23	Fire extinguishers, first aid kit, and AED.
D50	Electrical						
D5010	Electrical Service and Distribution	1979	1979	3	DCS	05/05/23	Mostly original with Square D main distribution panel (MDP) 208V, 3-phase, 600A capacity supplying three original Square D (DP-1, -2, & -3) and one newer panel (DP-4), plus large attic duct heater. The original distribution panels, conduit, and wire are all aging but functional with five to ten years remaining life with continued good maintenance. The basement main electrical area has excessive stored materials blocking access - minor maintenance to clean.
D5020	Lighting and Branch Wiring	1979	1998	3	DCS	05/05/23	Mix of older fluorescent with manual control and newer LED with wireless automatic control, plus several original fixtures retrofitted with LED lamps. Some original fixtures have failed ballasts and/or lamps - minor maintenance to repair or upgrade to LED. Some newer wireless lighting control devices have been removed from their wall holders - minor maintenance to reinstall on wall plates.
D5032	Low Voltage Communication	1979	1998	3	DCS	05/05/23	Mix of older public address (PA), largely abandoned plain old telephone service, cable TV, and newer police Plycom digital telephone, police radio, and digital/smart TVs.

Facility Summary

City of Snohomish
Police Station
Police Station

230 Maple Avenue
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services				3.2			
D50 Electrical							
D5037	Low Voltage Fire Alarm	1979	1998	4	DCS	05/05/23	Obsolete zoned analog fire alarm system with fire alarm control panel in basement back workroom and remote annunciator at main entry lobby.
D5038	Low Voltage Security	1979	1998	3	DCS	05/05/23	The existing system includes main entry door card-key access control and limited intrusion detection, which reportedly is not in use. 2016 cipher locks on several interior doors.
D5039	Low Voltage Data	1979	1998	3	DCS	05/05/23	Newer system supporting King County Sheriff; older system serving minimal City needs. High-speed fiber-optic data service. Separate basement workrooms house each tenant's data racks, but neither have cooling (see D3030 Cooling Generating Systems to add cooling, especially with the basement HVAC system not currently functional). Wireless access point (WAP) antennas provide WiFi service in occupied areas.
D5090	Other Electrical Systems	1979	1998	4	DCS	05/05/23	Obsolete generator and manual transfer switch - see G4010 Electrical Distribution for generator replacement. Failed or failing emergency lighting, minor maintenance to replace dead emergency lighting batteries and replace older fixtures with new.
E Equipment and Furnishings				3.0			
E10 Equipment							
E1010	Commercial Equipment	1979	1998	3	DCS	05/05/23	Aged original appliances at basement kitchenette, but newer at main floor kitchenette.
E1020	Institutional Equipment	1979	1998	3	DCS	05/05/23	Minimal police operations and training support equipment - no issues reported.

Facility Summary

City of Snohomish
 Police Station
 Police Station

230 Maple Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
E Equipment and Furnishings			3.0			
E20 Furnishings						
E2010 Fixed Furnishings	1979	1998	3	TRB	05/05/23	A mix of fixed plastic laminate furnishings (wall-mounted office storage cabinets, break area casework, intake area casework, and older break room and former evidence lab casework in the basement).
F Special Construction						
F10 Special Construction						
F1010 Special Structures	1979	1998	3	DCS	05/05/23	Tunnel, jail cells, and bank vault, without door.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station

Escalation 5%

Discount Rate 1.5%

B1020	Roof Construction	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	4,064	\$3.00	SF	\$12,192	\$24,000

Deficient Material: Insulation

Numerous large areas missing attic insulation coverage.

Remedial Action:

For energy efficiency and thermal comfort, reinstall all missing insulation. Consider upgrading entire insulation system to meet or exceed R-49 (current code). Also, insulate all exposed ductwork run through attic space.

Action Type:

Energy Efficiency



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station

Escalation 5%

Discount Rate 1.5%

B2010	Exterior Walls	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	1	\$20,000.00	LS	\$20,000	\$39,000

Deficient Material: Siding

Moisture and other damage to paint and shingle siding above roof at gable and northeast corner. Areas remain unfinished where prior outdoor canopy was removed. Sealant at cement fiber seams failing. The south 1998 addition cell windows and door trims are rotten and falling apart.

Remedial Action:

Replace cell window and door frame trim and reseal seams at lap siding, including replacing door and window frames. Replace damaged shingles, prime, and repaint walls where repair work occurred.

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station

Escalation 5%

Discount Rate 1.5%

B2010	Exterior Walls	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2026	1	\$10,000.00	LS	\$10,000	\$20,000

Deficient Material: Wood Trim

Portions of entry area wood trim, entry doors, and window frames are weathered and stained. Some cracked panels.

Remedial Action:

Repair or replace cracked trim, strip, restain, and seal (varnish) exposed wood elements. Consider replacing with alternative modern-looking systems along with a window replacement project, if occurring.

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station

Escalation 5%

Discount Rate 1.5%

C3010	Wall Finishes	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2028	1	\$5,000.00	LS	\$5,000	\$10,000

Deficient Material: Gypsum Wall Board and Paint

Areas of wear and tear and some gouges at upper floor.

Remedial Action:

Spot prep, patch, and touch up paint in high-traffic doorways and other spots with damage.

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station

Escalation 5%

Discount Rate 1.5%

C3010	Wall Finishes	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	1	\$25,000.00	LS	\$25,000	\$49,000

Deficient Material: Painted Gypsum Wall Board

No recent modernization and a mix of damaged wall and paint finishes at lower floor.

Remedial Action:

Repair and refinish walls at lower floor.

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station

Escalation 5%

Discount Rate 1.5%

C3020	Floor Finishes	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2028	3,000	\$12.00	SF	\$36,000	\$71,000

Deficient Material: Carpet

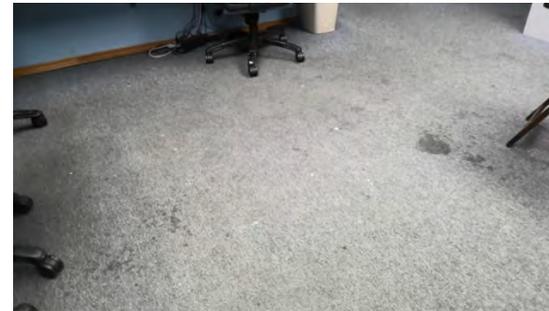
Broadloom carpet significantly stained and worn in many areas and showing heavy traffic wear patterns.

Remedial Action:

Recommend replacing carpet with more durable carpet tile.

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station

Escalation 5%

Discount Rate 1.5%

C3020	Floor Finishes	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	2,810	\$12.00	SF	\$33,720	\$66,000

Deficient Material: Vinyl Composite Tile (VCT) and Carpet

Lower floor a mix of stained VCT and carpeting past useful life.

Remedial Action:

Remove and refinish lower floor finishes.

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station

Escalation 5%

Discount Rate 1.5%

D2090	Other Plumbing Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	1	\$10,000.00	LS	\$10,000	\$20,000

Deficient Material: Ejector pump

The basement sanitary ejector pump system is increasingly binding-up and failing to pump.

Remedial Action:

Renew the sanitary ejector pump system.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station

Escalation 5%

Discount Rate 1.5%

D3020	Heat Generating Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2026	10	\$500.00	EA	\$5,000	\$10,000

Deficient Material: Electric resistance heat

Electric duct heater in attic and multiple electric baseboard heaters in original main floor space all abandoned in place, non-functional, and no longer needed.

Remedial Action:

Demolish abandoned heaters.

Action Type:

Energy Efficiency



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station

Escalation 5%

Discount Rate 1.5%

D3030	Cooling Generating Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	2	\$9,500.00	EA	\$19,000	\$37,000

Deficient Material: Communications Cooling

With the basement HVAC system abandoned in place, there is no cooling for the two basement data and comm areas for City and sheriff.

Remedial Action:

Provide ductless-split Dx cooling for data and comm room spaces.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station

Escalation 5%

Discount Rate 1.5%

D3040	HVAC Distribution Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	3,000	\$7.00	SF	\$21,000	\$41,000

Deficient Material: Ductwork

Unclear return air path from multiple original main floor areas; one large ceiling return is located near the main entry, but 2016 walls have been constructed, potentially blocking return air flow. Additionally, older spaces appear to have light fixture return air bezels, but to unsealed attic space.

Remedial Action:

Investigate, test, and restore return air path; conduct test, adjust, and balance (TAB) to restore design air flows to original main floor HVAC system spaces.

Action Type:

Code Issue



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station

Escalation 5%

Discount Rate 1.5%

D3050	Terminal and Package Units	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1	\$25,000.00	LS	\$25,000	\$49,000

Deficient Material: Packaged unit

The basement packaged unit is missing, hence currently no HVAC service to the basement, which includes several spaces regularly used, such as the men's and women's locker rooms.

Remedial Action:

Install basement HVAC system packaged heat pump unit.

Action Type:

Code Issue



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station

Escalation 5%

Discount Rate 1.5%

D4010	Fire Protection Sprinkler Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	3,000	\$7.00	SF	\$21,000	\$41,000

Deficient Material: Fire Sprinkler
No fire sprinkler at original main floor area.

Remedial Action:
Extend existing fire sprinkler system to cover the original main floor area, plus entry canopy.

Action Type:
Life Safety



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station

Escalation 5%

Discount Rate 1.5%

D5037	Low Voltage Fire Alarm	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	6,800	\$5.50	SF	\$37,400	\$73,000

Deficient Material: Fire alarm
 Obsolete zoned analog fire alarm system.

Remedial Action:
 Replace with modern addressable digital system.

Action Type:
 Life Safety



Facility Summary

City of Snohomish

Police Station

Police Station Infrastructure

230 Maple Avenue
Snohomish, WA 98290

Facility Condition Summary

Lot containing an asphalt parking lot in front and parking area behind, connected with an asphalt drive (asphalt surfaces are at end of life) and a police station. Landscaping is limited to street trees, lawn, and some ornamental shrubs.

City water and sewer including fire sprinkler service; irrigation service is disconnected; site storm to City storm at street. All electric with SnoPUD 208V, three-phase power and no natural gas; however, bottled propane is the fuel source for the 11-kW generator. Newer site LED lighting and newer CCTV cameras at building perimeter. While plain old telephone service is observed; high-speed fiber-optic data service is provided.

Facility Summary

City of Snohomish
 Police Station
 Police Station Infrastructure

230 Maple Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments	
G Sitework							
G20 Site Improvements							
G2020	Parking Lots	1979	1990	4	TRB	05/05/23	Asphalt parking lots and related site loop drive circulation showing significant alligatoring, potholes, broken pavement, settled areas, and standing water. Concrete curbs are breaking and rising in areas; minor maintenance to replace. Paint striping is in fair condition, however the single demarked ADA parking stall signage does not also contain designation as van accessible (see G2030 Pedestrian Paving for ADA access curb ramp issue).
G2030	Pedestrian Paving	1979	1979	4	TRB	05/05/23	1979 exposed aggregate, some root up-welling, settlement tripping hazards, wood strips rotten or missing, and areas of spalling. Sidewalk rising at the public walk interface is a trip hazard and non-ADA-compliant. Cross slope of asphalt built-up ADA ramp at parking exceeds slope requirements.
G2040	Site Development	1979	1990	3	TRB	05/05/23	Flag pole, monument sign, five-foot-tall chain link fencing with vinyl privacy slats along south and east property, damaged and at end of life. On-site parking is limited and not secure, and there are reports of past vandalism and disabling of police vehicles.
G2050	Landscaping	1979	1990	3	TRB	05/05/23	Mature street trees, landscape boulders, lawn areas, bark, and some ornamental shrubs.

Facility Summary

City of Snohomish
 Police Station
 Police Station Infrastructure

230 Maple Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
G Sitework						
G30 Site Civil / Mechanical Utilities						
G3010 Water Supply	1979	1979	3	DCS	05/05/23	City water with estimated 1-inch meter at sidewalk grass strip and reportedly recently tested backflow prevention, but this device was not observed. City fire service with backflow preventer in vault to NE, and immediately adjacent fire department connection. An irrigation service appears present at SE corner of site, but meter is removed and service disconnected - reportedly the irrigation is intentionally abandoned in place, with landscape allowed to brown during summer and early fall. Water pressure is 60 psig at basement level riser.
G3020 Sanitary Sewer	1979	1979	3	DCS	05/05/23	City sewer with no issues reported related to site sewer.
G3030 Storm Sewer	1979	1979	3	DCS	05/05/23	Parking lot catch basins piped to City storm service at street with no issues reported. 1979 building downspouts are piped to storm, with at least one clean-out damaged - minor maintenance to repair. Downspouts at addition discharge to grade and are damaging the building siding.
G3040 Heating Distribution	1979	2021	4	DCS	05/05/23	The addition packaged unit was recently relocated from the roof to at-grade inside the trash enclosure, supported by sleepers direct on asphalt pad and parking lot stop log attempting to separate trash receptacles from the packaged unit. Outside air intake is less than one foot above the relatively dirty grade and immediately adjacent to trash receptacles. The original building basement HVAC equipment appears to have been relocated from the attic mezzanine to the outside SW mechanical enclosure, then later demolished entirely, leaving no HVAC service to the basement. The original main floor HVAC equipment was relocated from the attic to the SW mechanical enclosure, and is somewhat more functional than the more recent addition equipment relocation to SE.

Facility Summary

City of Snohomish
 Police Station
 Police Station Infrastructure

230 Maple Avenue
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
G Sitework						
G30 Site Civil / Mechanical Utilities						
G3060 Fuel Distribution	1998	1998	4	DCS	05/05/23	Two 20-gallon propane tanks in SW mechanical yard for generator. The tanks are freestanding and immediately adjacent to the generator and HVAC packaged unit - minor maintenance to relocate the tanks at least 10 feet from ignition sources and more permanently anchor.
G40 Site Electrical utilities						
G4010 Electrical Distribution	1979	1979	3	DCS	05/05/23	SnoPUD power from street underground to service entry at SW mechanical yard, with meter No. 125182; service entry is down to main distribution panel in basement. One 11-kW propane-fired residential-grade standby generator in sheet metal enclosure in SW mechanical yard. Separate underground electrical service to the T-Mobile cellular equipment yard on the east side of the police station; meter No. 356688.
G4020 Site Lighting	1979	2016	3	DCS	05/05/23	Aging parking lot light poles, but with modern LED heads. Several pedestrian paving light fixtures aging but functional. Mix of recessed can lights and surface-mount box lights at main entry and other canopies, with mostly LED lamps. Analog time clock observed, but building exterior lights are on during daylight hours - minor maintenance to set controls as needed. No issues reported regarding site illumination levels.
G4030 Site Communications and Security	1979	1989	3	DCS	05/05/23	Original plain old telephones service. Newer high-speed fiber-optic service with no issues reported. Newer building perimeter CCTV cameras. T-Mobile has a wireless network antenna array on a large telephone pole east of building, with related telecom equipment yard immediately adjacent to the building to east - no issues reported.
G90 Other Site Construction						
G9010 Service and Pedestrian Tunnels	1979	1979	3	DCS	05/05/23	Service tunnel from the original basement to the former bank drive-thru island, now covered by the jail cell addition. The tunnel was observed dry, with no issues reported.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station Infrastructure

Escalation 5%

Discount Rate 1.5%

G2020	Parking Lots	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	12,431	\$12.00	SF	\$149,172	\$292,000

Deficient Material: Asphalt

Asphalt parking lots and related site loop drive circulation showing significant alligating, potholes, broken pavement, settled areas, and standing water.

Remedial Action:

Demolish, regrade, compact, and repave lot and drive.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station Infrastructure

Escalation 5%

Discount Rate 1.5%

G2030	Pedestrian Paving	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2023	2,000	\$22.00	SF	\$44,000	\$86,000

Deficient Material: Concrete Walks

Concrete walks at building nearing end of useful life. Some root up-welling and settlement tripping hazards, wood strips rotten or missing, areas of spalling.

Remedial Action:

Remove and replace with all new concrete walks. Include ADA-compliant curb ramp at west end.

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station Infrastructure

Escalation 5%

Discount Rate 1.5%

G2030	Pedestrian Paving	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	300	\$50.00	SF	\$15,000	\$29,000

Deficient Material: Curb Ramp

The site development predates ADA, and a built-up asphalt curb ramp was installed to provide access from the ADA parking stall. However, the cross slope of the built-up ADA curb ramp at parking exceeds allowable slope requirements.

Remedial Action:

Demo curb ramp and adjacent raised concrete flag plaza and reconfigure to provide new ADA-compliant access to the building from the parking.

Action Type:

ADA



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station Infrastructure

Escalation 5%

Discount Rate 1.5%

G2040	Site Development	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2027	305	\$30.00	LF	\$9,150	\$18,000

Deficient Material: Chain-link Fencing

Five-foot-tall chain link fencing, with vinyl privacy slats along south and east property. Chain link fencing is damaged in areas and vinyl privacy slats damaged, weathered, and at end of life.

Remedial Action:

Remove and replace damaged sections of chain link fence fabric, remove and replace all privacy slats.

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station Infrastructure

Escalation 5%

Discount Rate 1.5%

G3030	Storm Sewer	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	2	\$8,000.00	EA	\$16,000	\$31,000

Deficient Material: Storm

No storm service to 1998 addition downspouts, resulting in damage to building siding.

Remedial Action:

Connect downspouts at addition to site storm system; repair damage to building siding.

Action Type:

Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station Infrastructure

Escalation 5%

Discount Rate 1.5%

G3040	Heating Distribution	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	1	\$10,000.00	LS	\$10,000	\$20,000

Deficient Material: Packaged unit

The addition packaged unit is on sleepers, on pavement, with outside air intake inches above dirty, moldy grade, immediately adjacent to trash receptacles, and inside the trash enclosure.

Remedial Action:

Reconfigure site to locate trash at least 10 feet from addition HVAC system outside air intake; provide proper pad or supports for the packaged unit, ensuring good maintenance access.

Action Type:

Code Issue



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Police Station

Facility: Police Station Infrastructure

Escalation 5%

Discount Rate 1.5%

G4010	Electrical Distribution	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	1	\$85,000.00	LS	\$85,000	\$166,000

Deficient Material: Generator

Aging residential-grade 11-kW propane-fired standby generator with manual transfer switch in basement.

Remedial Action:

Replace with modern diesel generator and automatic transfer switch, upsized to carry sufficient load to allow for police operation during emergencies - assume 35-kW generator.

Action Type:

Life Safety



Deficiency Repair Cost Markups By System

2023 - 2028

City of Snohomish
Site: Police Station

Escalation 5%
Discount Rate 1.5%

Facility	System	Direct Construction Cost	Contingency 20%	Contractor's OH & P 20%	Project Soft Cost 36%	Total Project Cost	Total Project Cost (Present Value)
Police Station	B10 Superstructure	\$12,192	\$2,438	\$2,926	\$6,320	\$24,000	\$24,000
	B20 Exterior Closure	\$30,000	\$6,000	\$7,200	\$15,552	\$59,000	\$64,000
	C30 Interior Finishes	\$99,720	\$19,944	\$23,933	\$51,695	\$196,000	\$213,000
	D20 Plumbing	\$10,000	\$2,000	\$2,400	\$5,184	\$20,000	\$20,000
	D30 HVAC	\$70,000	\$14,000	\$16,800	\$36,288	\$137,000	\$141,000
	D40 Fire Protection	\$21,000	\$4,200	\$5,040	\$10,886	\$41,000	\$44,000
	D50 Electrical	\$37,400	\$7,480	\$8,976	\$19,388	\$73,000	\$78,000
	Facility Total	\$280,312	\$56,062	\$67,275	\$145,314	\$550,000	\$584,000
Police Station Infrastructure	G20 Site Improvements	\$217,322	\$43,464	\$52,157	\$112,660	\$425,000	\$428,000
	G30 Site Civil / Mechanical Utilities	\$26,000	\$5,200	\$6,240	\$13,478	\$51,000	\$55,000
	G40 Site Electrical utilities	\$85,000	\$17,000	\$20,400	\$44,064	\$166,000	\$178,000
		Facility Total	\$328,322	\$65,664	\$78,797	\$170,202	\$642,000
	Site Total	\$608,634	\$121,727	\$146,072	\$315,516	\$1,192,000	\$1,245,000

Opportunity Summary By Subsystem

City of Snohomish
 Site: Police Station

Total Site Opportunity Cost: \$1,171,000

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost	
Facility: Police Station System: Exterior Closure							\$245,000	
B2020	Exterior Windows	Single-pane windows are not energy efficient, and only the interior reception lobby has bullet-resistant glazing (modern police stations often have bullet-resistant glazing at all windows).	Replace all windows with bullet-resistant double-pane (thermally insulated) glazed units and thermally broken frames.	5.00	\$25,000.00	EA	\$125,000	\$245,000
Facility: Police Station System: Vertical Transportation							\$294,000	
D1010	Elevators and Lifts	Large basement under original building with stair access only.	Install lift to facilitate access to basement.	1.00	\$150,000.00	LS	\$150,000	\$294,000
Facility: Police Station System: Plumbing							\$20,000	
D2010	Plumbing Fixtures	While a nice staff break area has been formed on the upper level, there is no plumbing support.	Plumb main floor break area with sink and refrigerator ice-maker.	1.00	\$10,000.00	LS	\$10,000	\$20,000
Facility: Police Station System: Electrical							\$69,000	
D5020	Lighting and Branch Wiring	Original aged light fixtures with manual control at portions of original building.	Upgrade original fixtures to LED with automatic lighting control.	2,500.00	\$14.00	SF	\$35,000	\$69,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Opportunity Summary By Subsystem

City of Snohomish

Site: Police Station

Total Site Opportunity Cost: \$1,171,000

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: Police Station Infrastructure							
System: Site Improvements							\$98,000
G2040 Site Development							
	Non-secure parking for police vehicles. Five-foot chain link fence on two sides is not security-grade.	Add automatic vehicular security gates with operators and security-rated fencing (maintain portion of lot for public access).	1.00	\$50,000.00	LS	\$50,000	\$98,000
Facility: Police Station Infrastructure							
System: Site Electrical utilities							\$445,000
G4010 Electrical Distribution							
	No electric vehicle charging stations.	Install one double-head charging station, with rough-in for one additional.	1.00	\$15,000.00	EA	\$15,000	\$29,000
	Metal roof with good solar exposure and no current renewable energy system.	Install 25-kW photovoltaic system on south-sloping metal roof.	25.00	\$8,500.00	EA	\$212,500	\$416,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Facility Summary

City of Snohomish
Public Works Shop Site
Mechanics Building

1801 First Street
Snohomish, WA 98290

Facility Size - Gross S.F.	5,040
Year Of Original Construction	1980
Facility Use Type	Mechanics Shop - Public Works
Construction Type	Light
# of Floors	2
Energy Source	Electric
Year Of Last Renovation	1980
Historic Register	No



		Total Project Cost	Total Project Cost Present Value
Weighted Avg Condition Score	3.3		
Facility Condition Index (FCI)	0.18	Observed Deficiencies 2023 - 2028	\$847,000
Current Replacement Value (CRV)	\$1,260,000	Predicted Renewal Budget 2029 - 2042	\$407,000
Beginning Budget Year	2023	Opportunities	\$703,000
Escalation	5%		N/A
Discount Rate	1.5%		

Facility Condition Summary

Pre-engineered metal building with both gable-end manufacturer's end cap destroyed by birds, with birds reportedly nesting inside the structure. This light-duty building has been modified multiple times over the years and the shop floor concrete slab-on-grade is cracking. Storm water floods the shop floor and other ground floor areas. The lower level has two restrooms (the only ones on site), a two-story maintenance bay, a storage room, a laundry/shower room, and one office space. There is a wood structure in the center of the space that staff reports was where a stair to the mezzanine used to be. There are two steel exterior stairs to the upper level. The upper level contains offices and a common area. It appears the upper level offices were created by enclosing a mezzanine in the original building. It is unknown if there was any structural analysis done to make the changes to the upper level. The structural columns of the lower level stair infill are bearing on the 4" concrete slab, and there is a base plate that was cut in half to fit these columns in. The staff reports the lower level floods with heavy rains, and there is evidence of water intrusion all along the exterior wall outside the restrooms. This building has reached the end of its useful life and is programmatically obsolete. Many building systems are similarly at end of life and/or obsolete, with a few exceptions, such as the relatively new high-speed data server and the recently installed heat pump furnace.

Facility Summary

City of Snohomish
Public Works Shop Site
Mechanics Building

1801 First Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
A Substructure			5.0			
A10 Foundations						
A1030 Slab On Grade	1980	1980	5	LS	06/21/23	Concrete has multiple large and long cracks. Floods with heavy rain.
B Shell			5.0			
B10 Superstructure						
B1010 Floor Construction	1980	2000	5	LS	06/21/23	Wood on wood joists at upper floor; the mezzanine was enclosed circa 2000. Structure is sitting on concrete slab with no foundation or pier for support.
B1020 Roof Construction	1980	1980	3	LS	06/21/23	Pre-engineered metal building.
B20 Exterior Closure						
B2010 Exterior Walls	1980	1980	3	LS	06/21/23	Pre-engineered metal building with bag insulation. Translucent panels along the top of the north side have been covered with bag insulation. Exterior siding has holes where fasteners are missing. Rust and corrosion. Dents from cars parking too close and faded color.
B2020 Exterior Windows	1980	1980	3	LS	06/21/23	Double-glazed aluminum windows, one seal on upper story office window is broken. Wood trim on exterior has lost all protective paint and is rotting.
B2030 Exterior Doors	1980	1980	5	LS	06/21/23	Hollow metal doors in hollow metal frames, missing weatherstripping, no paint which has led to excessive rusting. Wood trim on exterior has lost all protective paint and is rotting. Overhead coiling doors with missing or loose weatherstripping.

Facility Summary

City of Snohomish
Public Works Shop Site
Mechanics Building

1801 First Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
B Shell			5.0			
B30 Roofing						
B3010 Roof Coverings	1980	1980	4	LS	06/21/23	Metal roof ridge cap at each gable end is missing closure piece, which has created a pest and bird problem. There is a current roof leak.
B3020 Roof Openings	1980	1980	4	LS	06/21/23	Exhaust openings with reported leaks, minor maintenance to address.
C Interiors			4.0			
C10 Interior Construction						
C1010 Partitions	1980	1980	3	LS	06/21/23	Upper level walls are wood stud construction with gypsum board and painted finish. Lower level walls are 2x4 construction with a range of unfinished gypsum board in vehicle maintenance bay, to painted plywood, and tile wainscot in women's restroom.
C1020 Interior Doors	1980	1980	3	LS	06/21/23	Upper level has residential wood doors that are more recent and in decent shape. Lower level doors are a variety of styles from residential aluminum sliding glass patio doors to hollow core wood doors. Wood doors show signs of water damage and are not durable enough for this building's use.
C20 Staircases						
C2010 Stair Construction	1980	1980	5	LS	06/21/23	Galvanized steel posts and beams. The only stairs to the upper level are both on the exterior. Both are galvanized steel that is rusting. There is no ADA access to the second floor offices. The columns to the south stair do not have all four bolts in the base plates, with one column only having one bolt. In addition, this stair has a hole in one structural column.
C2020 Stair Finishes	1980	1980	5	LS	06/21/23	Galvanized steel expanded treads, no risers, galvanized steel railing. The east exit stair on the exterior is badly rusted, with moss and peeling paint. See C2010 Stair Construction for replacement.

Facility Summary

City of Snohomish
Public Works Shop Site
Mechanics Building

1801 First Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
C Interiors				4.0			
C30 Interior Finishes							
C3010 Wall Finishes	1980	1980		3	LS	06/21/23	Upper level walls are wood stud construction with gypsum board and painted finish, and are in good condition. Lower level walls are 2x4 construction with unfinished gypsum board and some painted CMU in vehicle maintenance bay, FRP in restrooms, painted plywood in hallways, overall in fair condition.
C3020 Floor Finishes	1980	1980		5	LS	06/21/23	Upper level includes painted plywood and carpet (installed 2019). Paint is almost completely worn off plywood floor. Lower level includes painted concrete and vinyl tile in restrooms, worn and deteriorated.
C3030 Ceiling Finishes	1980	1980		3	LS	06/21/23	Upper level includes bagged insulation underside of roof deck, some suspended acoustical tiles in the offices, in good condition. Lower level includes unfinished drywall in storage room, textured painted drywall in restrooms, in poor condition.
D Services				2.6			
D20 Plumbing							
D2010 Plumbing Fixtures	1980	2000		3	DCS	06/21/23	Mix of older and newer fixtures including pressure-assist, tank-type, wall-mounted water closets that were falling off the walls, but have been braced by custom bowl support wood blocks. Urinal with automatic flush valve in the men's room, one-piece shower in the laundry room blocked by custodial supplies, plastic deep sinks for men's room lavatory, but porcelain wall-mounted for women's room. Kitchenette at upper level including deep sink, and newer single-height drinking fountain with filtered-water bottle filler. One eyewash, but no observed safety shower at vehicle shop bay.
D2020 Domestic Water Distribution	1980	2000		3	DCS	06/21/23	Mix of older copper and newer PEX tubing, with 2014 Rheem domestic hot water heater - minor maintenance to insulate all hot water piping.

Facility Summary

City of Snohomish
Public Works Shop Site
Mechanics Building

1801 First Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services				2.6			
D20 Plumbing							
D2030 Sanitary Waste	1980	1980	3	DCS	06/21/23	Drain, waste, and vent piping to site side sewer with no issues reported; tested fixtures flush and drain well. However, no floor drains on ground floor, making periodic flooding and post-flood clean-up more difficult.	
D2040 Rain Water Drainage	1980	1980	3	DCS	06/21/23	Metal gutter and downspout to storm to west and to grade to east, contributing to building flooding. Some downspouts are damaged - minor maintenance to repair or replace.	
D2090 Other Plumbing Systems	1980	2022	3	DCS	06/21/23	New IR 5-hp shop air compressor in lean-to shed to south, with distribution piping to shop. Shop vehicle fluids system, largely abandoned in place, with manual use inside the shop.	
D30 HVAC							
D3020 Heat Generating Systems	1980	2000	3	DCS	06/21/23	One electric forced-air furnace at the vehicle maintenance shop, with 4-inch filter retrofitted to the recirculating air intake in an attempt to improve indoor air quality. While some waste oil is generated on-site, the quantity does not appear to be enough, and the heating load is not high enough to justify investment in a waste oil heating furnace.	
D3030 Cooling Generating Systems	1980	2022	1	DCS	06/21/23	2022 Trane 4-ton heat pump condensing unit outside at grade to north at wash pad.	
D3040 HVAC Distribution Systems	1980	2022	2	DCS	06/21/23	The office area HVAC system was replaced in 2022, including heat pump furnace, mixed-air plenum with return and fixed outside air and filter, and spiral galvanized steel duct to served spaces. Bathroom ceiling exhaust fans; smoking office ceiling exhaust fan; mezzanine crew room area side wall propeller exhaust fan. No full economizer.	

Facility Summary

City of Snohomish
Public Works Shop Site
Mechanics Building

1801 First Street
Snohomish, WA 98290

Facility Components

Systems		Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
D Services				2.6			
D30 HVAC							
D3050	Terminal and Package Units	1980	2022	2	DCS	06/21/23	2022 split-Dx heat pump furnace at mezzanine serving the office area; includes COVID-19 era UV treatment downstream of furnace. Newer stainless steel electric wall heaters at men's and women's rooms. Aged (1980) shop electric resistance heater.
D3060	Controls and Instrumentation	1980	2022	2	DCS	06/21/23	Programmable thermostat for heat pump furnace. Simpler manual controls elsewhere, such as for exhaust fans.
D3090	Other HVAC Systems and Equipment	1980	1980	4	DCS	06/21/23	One side-wall propeller exhaust fan for shop, with no high/low ventilation, and no make-up air system. Positive pressure engine exhaust hose, but through-wall connection is boarded over, so hose is routed under the roll-up door. No CO or NOx monitoring alarms or control.
D40 Fire Protection							
D4030	Fire Protection Specialties	1980	1980	2	DCS	06/21/23	Fire extinguishers, AED, and first aid kit in cabinets.
D50 Electrical							
D5010	Electrical Service and Distribution	1980	1980	4	DCS	06/21/23	Two Cutler-Hammer 120/240V, single-phase 200A side-by-side distribution panels, aged and appearing over-loaded with multiple twinned circuit spaces and missing retaining fasteners; no observed surge suppression.
D5020	Lighting and Branch Wiring	1980	2000	3	DCS	06/21/23	Mix of older and newer fixtures, with mix of T8 fluorescent, some CFL, and newer LED drop-in replacement tubes at shop; all with manual control.
D5032	Low Voltage Communication	1980	2010	2	DCS	06/21/23	Newer VoIP telephone; abandoned plain old telephone service.
D5037	Low Voltage Fire Alarm	1980	2000	4	DCS	06/21/23	Battery-operated smoke detectors.

Facility Summary

City of Snohomish
Public Works Shop Site
Mechanics Building

1801 First Street
Snohomish, WA 98290

Facility Components

Systems		Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services					2.6			
D50 Electrical								
D5038	Low Voltage Security	1980	2010	3	DCS	06/21/23	Several CCTV cameras.	
D5039	Low Voltage Data	1980	2010	2	DCS	06/21/23	High-speed fiber-optic data service to server at lower level office - consider relocation to a dedicated server room as minor maintenance.	
D5090	Other Electrical Systems	1980	2000	3	DCS	06/21/23	Exit sign placards; several battery-backed emergency lights, but overall minimal coverage - minor maintenance to add more fixtures.	
E Equipment and Furnishings					3.0			
E10 Equipment								
E1010	Commercial Equipment	1980	2000	3	DCS	06/21/23	Light office equipment and residential-grade washer and dryer and kitchenette appliances.	
E1020	Institutional Equipment	1980	1980	3	DCS	06/21/23	Specialty shop equipment and stored materials mostly at lower level and especially at the vehicle maintenance shop.	
E1030	Vehicular Equipment	1980	2000	3	DCS	06/21/23	Original fixed vehicle lift replaced with mobile lifts, but fix is needed. The cracked and damaged floor makes lift use difficult.	
E20 Furnishings								
E2010	Fixed Furnishings	1980	1980	5	LS	06/21/23	Casework is all painted stick-built plywood. Casework is cracked, broken, piecemeal, and insufficient; minor maintenance to replace.	

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Mechanics Building

Escalation 5%

Discount Rate 1.5%

A1030	Slab On Grade	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2028	2,800	\$25.00	SF	\$70,000	\$137,000

Deficient Material: Concrete

Concrete in vehicle shop shows signs of stress after multiple floods and poor soil bearing.

Remedial Action:

As a temporary solution, add 1-1/2" high-strength, fiber reinforced concrete overlay on existing concrete slab on grade.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Mechanics Building

Escalation 5%

Discount Rate 1.5%

B1010	Floor Construction	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2025	2,000	\$5.00	SF	\$10,000	\$20,000

Deficient Material: Wood Floor

Load-bearing structure is sitting directly on concrete slab with no foundation underneath.

Remedial Action:

Complete a structural analysis to determine if upper level structure is adequate.

Action Type:

Life Safety



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Mechanics Building

Escalation 5%

Discount Rate 1.5%

B2030	Exterior Doors	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2025	4	\$5,500.00	EA	\$22,000	\$43,000

Deficient Material: Hollow Metal Doors

Hollow metal doors and frames rusting excessively. Weatherstripping missing.

Remedial Action:

Replace hollow metal doors and frames. Add weatherstripping.

Action Type:

Energy Efficiency



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Mechanics Building

Escalation 5%

Discount Rate 1.5%

B3010	Roof Coverings	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2028	2,800	\$10.00	SF	\$28,000	\$55,000

Deficient Material: Metal Roof
 Roof leaks at openings and roof is missing end pieces.

Remedial Action:
 Replace roof.

Action Type:
 Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Mechanics Building

Escalation 5%

Discount Rate 1.5%

C1020	Interior Doors	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2025	6	\$4,500.00	EA	\$27,000	\$53,000

Deficient Material: Residential Doors

Residential doors are not appropriately durable for a commercial industrial space.

Remedial Action:

Replace all lower level interior doors with hollow metal commercial grade doors.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Mechanics Building

Escalation 5%

Discount Rate 1.5%

C2010	Stair Construction	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2028	1	\$20,000.00	EA	\$20,000	\$39,000

Deficient Material: Steel Stairs

Stairs are in poor shape and show signs of structural integrity loss.

Remedial Action:

Replace steel stairs.

Action Type:

Life Safety



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Mechanics Building

Escalation 5%

Discount Rate 1.5%

C3020	Floor Finishes	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2024	2,800	\$3.50	SF	\$9,800	\$19,000

Deficient Material: Concrete Floor
Concrete floor finishes are worn and deteriorated.

Remedial Action:
As a temporary solution, add 1-1/2" high-strength, fiber reinforced concrete overlay on existing concrete slab on grade.

Action Type:
Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Mechanics Building

Escalation 5%

Discount Rate 1.5%

D2010	Plumbing Fixtures	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2026	3	\$2,500.00	EA	\$7,500	\$15,000

Deficient Material: Plumbing fixtures & trim
 Several remaining original fixtures and trim approaching end of life.

Remedial Action:
 Replace with modern fixtures.

Action Type:
 Other



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Mechanics Building

Escalation 5%

Discount Rate 1.5%

D2030	Sanitary Waste	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	3	\$3,500.00	EA	\$10,500	\$21,000

Deficient Material: Floor Drains

No floor drains at first floor, worsening flooding and hampering clean-up.

Remedial Action:

Install floor drains.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Mechanics Building

Escalation 5%

Discount Rate 1.5%

D2090	Other Plumbing Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1	\$50,000.00	LS	\$50,000	\$98,000

Deficient Material: Shop Fluids

Shop fluids system at canopy to south is largely abandoned in place, and fluids are dispensed manually inside, creating a fire and health hazard.

Remedial Action:

Reinstall proper shop fluids system, including meeting fire/life safety code requirements.

Action Type:

Life Safety



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Mechanics Building

Escalation 5%

Discount Rate 1.5%

D3090	Other HVAC Systems and Equipment	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	2,800	\$15.00	SF	\$42,000	\$82,000

Deficient Material: Industrial ventilation

Vehicle maintenance shop does not meet code requirements for health and safety - no high/low ventilation other than high-side wall exhaust fan; no make-up air; essentially non-functional vehicle engine exhaust.

Remedial Action:

Install vehicle maintenance shop industrial ventilation, including high/low exhaust, tempered make-up air, vehicle engine exhaust and CO and NOx monitoring and control.

Action Type:

Code Issue



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Mechanics Building

Escalation 5%

Discount Rate 1.5%

D4010	Fire Protection Sprinkler Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	5,040	\$6.00	SF	\$30,240	\$59,000

Deficient Material: Fire Sprinkler
No fire sprinkler.

Remedial Action:
Install fire sprinkler system.

Action Type:
Life Safety



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Mechanics Building

Escalation 5%

Discount Rate 1.5%

D5010	Electrical Service and Distribution	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2026	2	\$25,000.00	EA	\$50,000	\$98,000

Deficient Material: Distribution panels
 Aged and over-loaded distribution panels with no surge suppression.

Remedial Action:
 Replace with modern panels, including surge suppression.

Action Type:
 Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Mechanics Building

Escalation 5%

Discount Rate 1.5%

D5037	Low Voltage Fire Alarm	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	5,040	\$5.00	SF	\$25,200	\$49,000

Deficient Material: Fire alarm
 Battery-operator smoke detectors with local alarm only.

Remedial Action:
 Install city-standard addressable fire alarm system.

Action Type:
 Life Safety



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Mechanics Building

Escalation 5%

Discount Rate 1.5%

E1030	Vehicular Equipment	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	1	\$30,000.00	LS	\$30,000	\$59,000

Deficient Material: Vehicle lift
Original fixed vehicle lift removed.

Remedial Action:
Reinstall fixed vehicle lift at smaller vehicle service bay.

Action Type:
Significant Operational Impact



Facility Summary

City of Snohomish
 Public Works Shop Site
 Parks Storage Pole Building

1801 First Street
 Snohomish, WA 98290

Facility Size - Gross S.F. 2,000
 Year Of Original Construction 1998
 Facility Use Type Parks Storage
 Construction Type Light
 # of Floors 1
 Energy Source Electric
 Year Of Last Renovation 1998
 Historic Register No



		Total Project Cost	Total Project Cost Present Value
Weighted Avg Condition Score	2.5		
Facility Condition Index (FCI)	0.06	Observed Deficiencies 2023 - 2028	\$16,000
Current Replacement Value (CRV)	\$300,000	Predicted Renewal Budget 2029 - 2042	\$74,000
Beginning Budget Year	2023	Opportunities	N/A
Escalation	5%		
Discount Rate	1.5%		

Facility Condition Summary

This is a wood frame structure with metal siding. The parks department uses the space for storage of equipment and tools. Open bays toward NE half, closed bays toward SW half, and lean-to attached to east side. Dirt and gravel floor at open spaces, and concrete slab on grade at enclosed spaces. Power sub-fed from the storage building to west. No plumbing. HVAC is one wall heater and one makeshift electric fireplace.

Facility Summary

City of Snohomish
Public Works Shop Site
Parks Storage Pole Building

1801 First Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
A Substructure			3.0			
A10 Foundations						
A1030 Slab On Grade	1998	1998	3	LS	06/21/23	Concrete slab on grade with a few cracks.
B Shell			2.4			
B10 Superstructure						
B1020 Roof Construction						
	1998	1998	2	LS	06/21/23	Wood frame and bag insulation. Birds have started pecking at the insulation.
B20 Exterior Closure						
B2010 Exterior Walls						
	1998	1998	3	LS	06/21/23	Wood frame, metal siding, and enclosed bay is insulated.
B2020 Exterior Windows						
	1998	1998	2	LS	06/21/23	Double-glazed fiberglass windows.
B2030 Exterior Doors						
	1998	1998	3	LS	06/21/23	Metal clad wood residential-grade doors. Two overhead sectional doors.
B30 Roofing						
B3010 Roof Coverings						
	1998	1998	3	LS	06/21/23	Metal panel roof covering.
C Interiors			3.0			
C10 Interior Construction						
C1020 Interior Doors						
	1998	1998	3	LS	06/21/23	One wood door.
C1030 Fittings						
	1998	1998	3	LS	06/21/23	Wood shelves.

Facility Summary

City of Snohomish
Public Works Shop Site
Parks Storage Pole Building

1801 First Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
C Interiors				3.0			
C30 Interior Finishes							
C3010 Wall Finishes	1998	1998		3	LS	06/21/23	Unfinished gypsum board.
D Services				2.7			
D20 Plumbing							
D2040 Rain Water Drainage	1998	1998		3	DCS	06/21/23	Metal gutter and downspout to grade, resulting in localized flooding at NW corner - minor maintenance to redirect.
D30 HVAC							
D3050 Terminal and Package Units	1998	1998		3	DCS	06/21/23	One 2-kW estimated electric wall heater; one 3-kW estimated makeshift electric fireplace.
D50 Electrical							
D5010 Electrical Service and Distribution	1998	1998		2	DCS	06/21/23	Power sub-fed from storage building to west to one 120/240V, single-phase 60A panel with 40A main breaker.
D5020 Lighting and Branch Wiring	1998	1998		3	DCS	06/21/23	No lighting at open bays, but newer LED lighting at enclosed bays, with manual control.
F Special Construction							
F10 Special Construction							
F1010 Special Structures	1998	1998		3	LS	06/21/23	Partial carport with covered storage. Blackberry bush has grown over through roof.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Parks Storage Pole Building

Escalation 5%

Discount Rate 1.5%

D5037	Low Voltage Fire Alarm	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	2,000	\$4.00	SF	\$8,000	\$16,000

Deficient Material: Fire alarm
No fire alarm.

Remedial Action:
Install fire alarm.

Action Type:
Life Safety



Facility Summary

City of Snohomish
Public Works Shop Site
Storage Pole Building

1801 First Street
Snohomish, WA 98290

Facility Size - Gross S.F. 3,000
Year Of Original Construction 1991
Facility Use Type Storage Pole Building
Construction Type Light
of Floors 1
Energy Source Electric
Year Of Last Renovation 1991
Historic Register No



		Total Project Cost	Total Project Cost Present Value
Weighted Avg Condition Score	4.0		
Facility Condition Index (FCI)	0.20	Observed Deficiencies 2023 - 2028	\$44,000
Current Replacement Value (CRV)	\$480,000	Predicted Renewal Budget 2029 - 2042	\$32,000
Beginning Budget Year	2023	Opportunities	\$29,000
Escalation	5%		N/A
Discount Rate	1.5%		

Facility Condition Summary

This building is a covered storage area for machinery and trucks, with mostly gravel floor, but concrete slab on grade at east enclosed weld shop and portion of one center bay north. The vector truck is stored in the covered west end of the building. The welding shop is in a heated enclosed space on the east end. In between, there are three bays where the equipment is stored. There is a plan to enclose the bay next to the existing vector truck bay for a smaller vector truck. Recommend completing a structural analysis before making more changes to this building. A new wall in this building may help stabilize the structure.

Facility Summary

City of Snohomish
Public Works Shop Site
Storage Pole Building

1801 First Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
A Substructure			2.0			
A10 Foundations						
A1030 Slab On Grade	1991	1991	2	LS	06/21/23	Slab on grade at enclosed weld bay.
B Shell			4.6			
B10 Superstructure						
B1010 Floor Construction	1991	1991	3	LS	06/21/23	Gravel. Slab on grade at weld shop.
B1020 Roof Construction	1991	1991	5	LS	06/21/23	Wood frame pole barn. Two exterior columns (one on each side) have been removed and replaced with a glulam beam spanning the two adjacent beams. A 2x was added to each side of the remaining columns for the beam to bear on, but no additional foundation was added.
B20 Exterior Closure						
B2010 Exterior Walls	1991	1991	4	LS	06/21/23	Weld shop and vactor truck bay on each end are insulated heated spaces. Exterior walls are metal panels. The bottom of the metal panels are dented and missing screws; minor maintenance to address.
B2030 Exterior Doors	1991	1991	4	LS	06/21/23	Overhead sectional garage doors. Most of the rigid insulation has fallen out, minor maintenance to replace. Residential-grade hollow core wood doors are damaged.
B30 Roofing						
B3010 Roof Coverings	1991	1991	5	LS	06/21/23	Metal panel with bag insulation between the joists. Minor maintenance to remove damaged insulation.

Facility Summary

City of Snohomish
Public Works Shop Site
Storage Pole Building

1801 First Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date Last	Score	Surveyor	Survey Date	Comments
C Interiors			3.0			
C30 Interior Finishes						
C3010 Wall Finishes	1991	1991	3	LS	06/21/23	Bag insulation on walls at weld shop and vactor truck bay.
D Services			3.0			
D30 HVAC						
D3050 Terminal and Package Units	1991	2023	2	DCS	06/21/23	Two, 2023, 10-kW estimated electric units heaters at the weld and vactor bays plus one 5-kW estimated unit heater at the vactor bay.
D3060 Controls and Instrumentation	1991	1994	3	DCS	06/21/23	Manual thermostats.
D3090 Other HVAC Systems and Equipment	1991	1991	3	DCS	06/21/23	Weld bench side-wall propeller exhaust with no make-up air other than through doors.
D40 Fire Protection						
D4030 Fire Protection Specialties	1991	1991	3	DCS	06/21/23	Fire extinguishers.
D50 Electrical						
D5010 Electrical Service and Distribution	1991	1991	3	DCS	06/21/23	Dedicated power service from utility to single 120/240V, single-phase 200A distribution panel, which in turn sub-feeds the parks building to east.
D5020 Lighting and Branch Wiring	1991	1991	3	DCS	06/21/23	Fluorescent lighting in weld shop and vactor bays, but LED in open bays. Manual control in enclosed bays, photocell control at open bays.

Facility Summary

City of Snohomish
Public Works Shop Site
Storage Pole Building

1801 First Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
F Special Construction						
F10 Special Construction						
F1010 Special Structures	1991	1994	3	DCS	06/21/23	Network of four conex boxes and interconnecting covered storage sheds includes plywood interior walls, lighting, and ventilation fans. Most are powered from the storage building weld shop panel.
F1020 Integrated Construction	1991	1991	3	LS	06/21/23	Vactor truck bay was extended by about 12' with the same construction type as the existing bay; unknown if it was engineered.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Storage Pole Building

Escalation 5%

Discount Rate 1.5%

B1020	Roof Construction	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1	\$10,000.00	LS	\$10,000	\$20,000

Deficient Material: Wood Structure
Columns replaced with glulam beams.

Remedial Action:
Complete a structural load analysis to determine if the remaining structure is adequate.

Action Type:
Life Safety



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Storage Pole Building

Escalation 5%

Discount Rate 1.5%

D5037	Low Voltage Fire Alarm	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	3,000	\$4.00	SF	\$12,000	\$24,000

Deficient Material: Fire alarm
No fire alarm.

Remedial Action:
Install fire alarm.

Action Type:
Life Safety



Facility Summary

City of Snohomish
 Public Works Shop Site
 Utilities Office Building

1801 First Street
 Snohomish, WA 98290

Facility Size - Gross S.F. 1,440
 Year Of Original Construction 1982
 Facility Use Type Portable Office
 Construction Type Temporary
 # of Floors 1
 Energy Source Electric
 Year Of Last Renovation 2009
 Historic Register No



		Total Project Cost	Total Project Cost Present Value
Weighted Avg Condition Score	2.8		
Facility Condition Index (FCI)	0.11	Observed Deficiencies 2023 - 2028	\$59,000
Current Replacement Value (CRV)	\$324,000	Predicted Renewal Budget 2029 - 2042	\$120,000
Beginning Budget Year	2023	Opportunities	\$133,000
Escalation	5%		N/A
Discount Rate	1.5%		

Facility Condition Summary

Double-wide modular building on blocks and anchored to pavement underneath. Reportedly, this building must be removed by 2027 to meet conditions for temporary use due to proximity to the Snohomish River shoreline. No HVAC system return air path for most spaces when doors are closed. Due to age, the plan is to demolish (not sell) this building in 2027, if not prior.

Facility Summary

City of Snohomish
Public Works Shop Site
Utilities Office Building

1801 First Street
Snohomish, WA 98290

Facility Components

Systems		Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
A Substructure							
A10 Foundations							
A1020	Special Foundations	1982	2009	4	LS	06/21/23	Sitting on rusted jacks on asphalt; add redundant new jacks near existing jacks as minor maintenance. Moved in 2009 and needs to be removed by 2027. Can open crawlspace for flood control.
B Shell				3.0			
B10 Superstructure							
B1010	Floor Construction	1982	1982	3	LS	06/21/23	2x wood, squeaks in many places.
B1020	Roof Construction	1982	1982	3	LS	06/21/23	Wood joists or trusses.
B20 Exterior Closure							
B2010	Exterior Walls	1982	1982	3	LS	06/21/23	2x walls with T1-11 siding on exterior. The nail pattern is showing through the paint on the outside.
B2020	Exterior Windows	1982	1982	3	LS	06/21/23	Double-glazed fiberglass windows.
B2030	Exterior Doors	1982	1982	3	LS	06/21/23	Fiberglass clad wood doors.
B30 Roofing							
B3010	Roof Coverings	1982	1982	3	LS	06/21/23	Torch down bitumen membrane, no reports of roof leaks.
C Interiors				3.0			
C10 Interior Construction							
C1010	Partitions	1982	1982	3	LS	06/21/23	2x4 stud construction.

Facility Summary

City of Snohomish
Public Works Shop Site
Utilities Office Building

1801 First Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
C Interiors				3.0			
C10 Interior Construction							
C1020 Interior Doors	1982	1982		3	LS	06/21/23	Hollow core wood doors.
C20 Staircases							
C2010 Stair Construction	1982	1982		5	LS	06/21/23	Wood stair and ramp outside, not ADA compliant.
C2020 Stair Finishes	1982	1982		4	LS	06/21/23	Glue-down non-slip paper, minor maintenance to replace. No paint.
C30 Interior Finishes							
C3010 Wall Finishes	1982	1982		3	LS	06/21/23	Prefinished FRP.
C3020 Floor Finishes	1982	1982		3	LS	06/21/23	Carpet throughout.
C3030 Ceiling Finishes	1982	2002		3	LS	06/21/23	Suspended acoustical tile ceiling.
D Services				2.4			
D20 Plumbing							
D2040 Rain Water Drainage	1982	2009		3	DCS	06/21/23	Metal gutter and downspout to grade.
D30 HVAC							
D3040 HVAC Distribution Systems	1982	2009		4	DCS	06/21/23	Supply air in inaccessible ceiling space, with supply air diffusers in most spaces, but just duct terminated at screen in middle offices. At least one supply air diffuser stuffed with paper bag and calendar, hampering overall system performance, but not as much as not apparent return air path from all but the two west-most offices (other than through slight door undercuts).

Facility Summary

City of Snohomish
Public Works Shop Site
Utilities Office Building

1801 First Street
Snohomish, WA 98290

Facility Components

Systems		Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services					2.4			
D30 HVAC								
D3050	Terminal and Package Units	1982	2009	3	DCS	06/21/23	Two Bard fully-packaged heat pumps at west exterior wall of each to the two modules; no issues reported, with five to ten years remaining life with continued good maintenance.	
D3060	Controls and Instrumentation	1982	2009	3	DCS	06/21/23	Programmable thermostat - minor maintenance to replace when associated heat pump is replaced. Reportedly, both Bard units are currently controlled by one common thermostat - minor maintenance to split into to north/south zones to potentially improve thermal comfort slightly.	
D40 Fire Protection								
D4030	Fire Protection Specialties	1982	2009	2	DCS	06/21/23	Fire extinguisher in hallway.	
D50 Electrical								
D5010	Electrical Service and Distribution	1982	2009	2	DCS	06/21/23	2009 Square D 120/240V 200A panel fed from 200A disconnect outside at power pole; no issues reported.	
D5020	Lighting and Branch Wiring	1982	2009	2	DCS	06/21/23	Newer surface-mount fluorescent fixtures with manual control - minor maintenance to replace lamps with LED drop-in replacements as fluorescent lamps fail.	
D5032	Low Voltage Communication	1982	2009	2	DCS	06/21/23	VoIP telephone.	
D5037	Low Voltage Fire Alarm	1982	2009	4	DCS	06/21/23	Battery-operated smoke detector; minor maintenance to upgrade to a city standard fire alarm system.	
D5039	Low Voltage Data	1982	2009	2	DCS	06/21/23	High-speed SCADA fiber-optic service for process monitoring. City high-speed fiber-optic data for general business use, reportedly sub-fed from adjacent shop building.	

Facility Summary

City of Snohomish
 Public Works Shop Site
 Utilities Office Building

1801 First Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
E Equipment and Furnishings			3.0			
E10 Equipment						
E1010 Commercial Equipment	1982	2009	3	DCS	06/21/23	Light office equipment.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Utilities Office Building

Escalation 5%

Discount Rate 1.5%

C2010	Stair Construction	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2024	1	\$20,000.00	EA	\$20,000	\$39,000

Deficient Material: Stair and Ramp

Wood stair and ramp outside are not ADA-compliant.

Remedial Action:

Replace stair and ramp with prefabricated metal.

Action Type:

Code Issue



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Utilities Office Building

Escalation 5%

Discount Rate 1.5%

D3040	HVAC Distribution Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	1,440	\$7.00	SF	\$10,080	\$20,000

Deficient Material: Ductwork

Poor return air path, at least one blocked supply air diffuser, at least two supply air ducts terminated with screen instead of diffuser.

Remedial Action:

Provide free and clear flowing supply air paths, provide proper supply air diffusers, ensure adequate free-flowing return air path throughout.

Action Type:

Energy Efficiency



Facility Summary

City of Snohomish
 Public Works Shop Site
 Water/Sewer Storage Pole Building

1801 First Street
 Snohomish, WA 98290

Facility Size - Gross S.F. 1,800
 Year Of Original Construction 1991
 Facility Use Type Water Sewer Storage
 Construction Type Light
 # of Floors 1
 Energy Source Electric
 Year Of Last Renovation 1991
 Historic Register No



		Total Project Cost	Total Project Cost Present Value
Weighted Avg Condition Score	2.9		
Facility Condition Index (FCI)	0.07	Observed Deficiencies 2023 - 2028	\$14,000
Current Replacement Value (CRV)	\$225,000	Predicted Renewal Budget 2029 - 2042	\$32,000
Beginning Budget Year	2023	Opportunities	N/A
Escalation	5%		
Discount Rate	1.5%		

Facility Condition Summary

This pole barn building has a 3/8-inch underside of roof radiant barrier. Dirt floor at the four open bays, concrete slab on grade at enclosed bay to west only. This bay has a mezzanine structure built in half of it. The mezzanine is built of pressure treated wood and is sturdy and in good condition. Lean-to outside west wall on concrete pad.

Facility Summary

City of Snohomish
 Public Works Shop Site
 Water/Sewer Storage Pole Building

1801 First Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
A Substructure			3.0			
A10 Foundations						
A1030 Slab On Grade	1991	1991	3	LS	06/21/23	Slab on grade only at enclosed bay with a few cracks.
B Shell			2.9			
B10 Superstructure						
B1020 Roof Construction	1991	1991	3	LS	06/21/23	Wood trusses and 3/8"-thick rigid insulation with radiant barrier.
B20 Exterior Closure						
B2010 Exterior Walls	1991	1991	3	LS	06/21/23	Wood frame and metal siding.
B2020 Exterior Windows	1991	1995	3	LS	06/21/23	Two windows in the mezzanine, double-glazed fiberglass, fixed over awning.
B2030 Exterior Doors	1991	1991	2	LS	06/21/23	Residential-grade hollow metal doors and overhead sectional door.
B30 Roofing						
B3010 Roof Coverings	1991	1991	3	LS	06/21/23	Metal panel roof covering.
C Interiors			2.0			
C10 Interior Construction						
C1010 Partitions	1991	2007	2	LS	06/21/23	Enclosed bay for electrical services.

Facility Summary

City of Snohomish
Public Works Shop Site
Water/Sewer Storage Pole Building

1801 First Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
C Interiors				2.0			
C20 Staircases							
C2010 Stair Construction	1991	1991		2	LS	06/21/23	Wood stairs to upper floor and wood stairs to mezzanine.
D Services				2.8			
D30 HVAC							
D3040 HVAC Distribution Systems	1991	1991		3	DCS	06/21/23	The enclosed bay to west is naturally ventilated via gable-end vents and operable window; no mechanical ventilation and no heat in this space.
D50 Electrical							
D5010 Electrical Service and Distribution	1991	1991		2	DCS	06/21/23	Circa 2007 Siemens 120/240V, single-phase 200A distribution panel, in turn sub-feeding several of the conex boxes to NW of this building.
D5020 Lighting and Branch Wiring	1991	1991		3	DCS	06/21/23	Reportedly, mostly upgraded to LED lamps.
E Equipment and Furnishings							
E20 Furnishings							
E2010 Fixed Furnishings	1991	1991		2	LS	06/21/23	Built-in wood shelves.
F Special Construction							
F10 Special Construction							
F1010 Special Structures	1991	1992		2	LS	06/21/23	Interior storage mezzanine.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Water/Sewer Storage Pole Building

Escalation 5%

Discount Rate 1.5%

D5037	Low Voltage Fire Alarm	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1,800	\$4.00	SF	\$7,200	\$14,000

Deficient Material: Fire alarm
No fire alarm.

Remedial Action:
Install fire alarm.

Action Type:
Life Safety



Facility Summary

City of Snohomish

Public Works Shop Site

Public Works Shop Site Infrastructure

1801 First Street
Snohomish, WA 98290

Facility Condition Summary

The public works site is the city's original garbage landfill site; the landfill was capped and the public works site was developed above the cap. In 1980, the site is presumed to have opened with one pre-engineered metal building currently known as the shop building. Other permanent and temporary buildings and other site improvements were made over time. The site is subject to liquefaction during earthquakes and flooding during storms and king tides. The current city master plan calls for relocating the entire public works operation to the gravel pit site so the primary public works facility is accessible and functional during natural disasters. In the meantime, the current public works site must function to support ongoing city operations. This is currently limited due to no three-phase power, no standby generator, poor road access, periodic flooding, insufficient administrative areas, limited ADA access, mostly unpaved site, minimal life safety features (e.g., no fire sprinkler or alarm), non-code-compliant MEP systems (e.g., lack of proper industrial ventilation at the vehicle maintenance shop), structural integrity concerns at the shop and pole barn storage buildings, land-use planning requirement to remove the modular building by 2027, and the variety of aging and obsolete systems.

The site includes a paved main access road, mostly fenced site, five permanent buildings (including modular), many conex boxes used as shops and storage, several other out buildings and yard structures, bulk materials storage areas, outside equipment storage areas, wet and dry utilities, excluding natural gas, and certain other improvements. The public works site borders the adjacent waste water collection system CSO lift station, and has a riverfront interconnecting roadway under the adjacent Highway 9 overpass to the city waste water treatment plant to west. Additionally, a publicly accessed nature trail passes directly along the west fence line.

Facility Summary

City of Snohomish
Public Works Shop Site
Public Works Shop Site Infrastructure

1801 First Street
Snohomish, WA 98290

Facility Components

Systems		Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
G Sitework							
G20 Site Improvements							
G2010	Roadways	1980	1980	3	LS	06/21/23	Gravel at all areas except entry drive, reportedly graded/raked about once per month. Office sits on asphalt. Most buildings are just above high water during floods.
G2020	Parking Lots	1980	1980	3	LS	06/21/23	Mostly gravel, no striping.
G2040	Site Development	1980	1980	5	LS	06/21/23	This site is right on the Snohomish River, which is a tidal river that floods occasionally. It was originally a landfill. It has been documented as a site prone to liquefaction with a seismic event. When the river reaches 30' high (critical stage), the city moves all the equipment to keep it from being damaged by impending flooding. Staff reports a previous estimate to demolish this site was approximately \$1M. They have explored an option to move public works to the city-owned gravel pit site, outside city limits, and turn this space into park. A high-level cost estimate was completed which includes sitework and new buildings at an alternate site, but does not include property acquisition costs. This one-page estimate was shared with the City, and the total cost is included in this deficiency.
G2050	Landscaping	1980	1980	2	LS	06/21/23	Some small plants, no irrigation.
G30 Site Civil / Mechanical Utilities							
G3010	Water Supply	1980	1980	3	DCS	06/21/23	An eight-inch ductile iron water main crosses the site from NE to SW with one fire hydrant at the main entry to NE, and branch lines to three service meters near the shop building: estimated 2.5-inch to the service hydrant to fill water and vector trucks, estimated 2-inch for the vehicle wash rack north of the shop building, and 1-inch meter to the shop building itself. No irrigation. No water service to other buildings or out buildings.

Facility Summary

City of Snohomish
Public Works Shop Site
Public Works Shop Site Infrastructure

1801 First Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date Last	Score	Surveyor	Survey Date	Comments
G Sitework						
G30 Site Civil / Mechanical Utilities						
G3020 Sanitary Sewer	1980	2010	2	DCS	06/21/23	Sanitary sewer gravity flow from shop building and vehicle wash rack to off-site CSO lift station to NW; no service to other buildings.
G3030 Storm Sewer	1980	1980	3	DCS	06/21/23	Limited catch basin storm water to oil/water separator to SE, then gravity flow to level spreader on river side of ecology block wall along SE portion of site with no issues reported. Standing water observed in several locations one day after rain. Partial shop building flooding reported along east side during heavy weather. Site flooding via drainage canal along east side of site during heavy rains and king tides.
G3050 Cooling Distribution	1980	2022	4	DCS	06/21/23	The shop building condensing unit is located at the wash rack pad to north of the shop building, and subject to wash spray, dirt, and debris - provide protective screen or relocate as minor maintenance if this becomes problematic.
G40 Site Electrical utilities						
G4010 Electrical Distribution	1980	1980	3	DCS	06/21/23	SnoPUD power from single-phase pot transformers on poles overheat to four powered and metered building services: 1) Shop meter No. 137618 (22-276-996), 2) Modular meter No. 539338 (22-930-581), 3) Storage meter No. 411669 (88-746-345), and 4) Utility meter No. 524038 (93-106-038). All at 120/240V, single phase, and all with a single 200A service panel, except the shop building which has two 200A panels. The storage building subfeeds the parks building to east, which has a 60A panel. The storage building also subfeeds the conex and covered storage farm extending west of the storage building. The far NW conex boxes are subfed from the utility storage building.
G4020 Site Lighting	1980	1980	3	DCS	06/21/23	Mix of PUD pole lights and building exterior wall lights, with mix of mostly LED for PUD and mostly CFL for building exterior fixtures - minor maintenance to upgrade building exterior lamps to LED upon failure.

Facility Summary

City of Snohomish
 Public Works Shop Site
 Public Works Shop Site Infrastructure

1801 First Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
G Sitework							
G40 Site Electrical utilities							
G4030 Site Communications and Security	1980	2010	3	DCS	06/21/23	High-speed fiber-optic connection to CSO and/or wastewater treatment plant for remote SCADA monitoring at the modular building. City-standard high-speed fiber-optic provided to the shop and modular buildings with no issues reported. Plain old telephone service is wired to the shop building, but appears abandoned in place. Several site CCTV monitoring cameras. In recent years, vandalism and theft have resulted in significant loss, adversely impacting public works' ability to serve the public.	
G90 Other Site Construction							
G9090 Other Site Systems	1980	1980	3	DCS	06/21/23	Wide variety of other site systems including powered conex boxes, covered storage structures, storage racks, waste dumpsters, bulk material storage, and others.	

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Public Works Shop Site Infrastructure

Escalation 5%

Discount Rate 1.5%

G2040	Site Development	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2028	1	\$11,309,328.00	LS	\$11,309,328	\$22,148,000

Deficient Material: Location

Site is in a floodplain on an old landfill and prone to liquefaction. See one-page high-level estimate from Prodimis dated 11/9/23 for more detail.

Remedial Action:

Move public works operations to a different site for long-term safe operations. See one-page high-level estimate from Prodimis dated 11/9/23 for more detail.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Public Works Shop Site Infrastructure

Escalation 5%

Discount Rate 1.5%

G3030	Storm Sewer	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	1	\$75,000.00	LS	\$75,000	\$147,000

Deficient Material: Shop building storm

Flooding of shop building during heavy weather, mostly along east side where roof drains drain to grade.

Remedial Action:

Install piped storm water service to shop building east roof drain downspout and several additional catch basins also piped away from building.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Public Works Shop Site Infrastructure

Escalation 5%

Discount Rate 1.5%

G4010	Electrical Distribution	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	1	\$100,000.00	LS	\$100,000	\$196,000

Deficient Material: Generator

No standby generator to power this mission critical site during power outages, such as during storms and natural disasters.

Remedial Action:

Install standby diesel generator and transfer switches to power mission critical buildings. Alternately, the CSO lift station to NW reportedly has surplus generator capacity that might be sufficient to power the entire public works site during outages.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Facility: Public Works Shop Site Infrastructure

Escalation 5%

Discount Rate 1.5%

G4030	Site Communications and Security	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	1	\$10,000.00	LS	\$10,000	\$20,000

Deficient Material: CPTED

Repeated theft of mission critical tools, materials, and supplies, cost the city directly in terms of stolen tools and materials, and indirectly in terms of loss of service to the city.

Remedial Action:

Coordinate with police and other departments to consider a Crime Prevention Through Environmental Design (CPTED) analysis to improve physical security such as fencing, passive security such as increased site public surveillance, and electronic security to reduce loss. This cost for CPTED study only, not implementation, for which cost may vary widely.

Action Type:

Significant Operational Impact



Deficiency Repair Cost Markups By System

2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Escalation 5%
Discount Rate 1.5%

Facility	System	Direct Construction Cost	Contingency 20%	Contractor's OH & P 20%	Project Soft Cost 36%	Total Project Cost	Total Project Cost (Present Value)
Mechanics Building	A10 Foundations	\$70,000	\$14,000	\$16,800	\$36,288	\$137,000	\$162,000
	B10 Superstructure	\$10,000	\$2,000	\$2,400	\$5,184	\$20,000	\$21,000
	B20 Exterior Closure	\$22,000	\$4,400	\$5,280	\$11,405	\$43,000	\$46,000
	B30 Roofing	\$28,000	\$5,600	\$6,720	\$14,515	\$55,000	\$65,000
	C10 Interior Construction	\$27,000	\$5,400	\$6,480	\$13,997	\$53,000	\$57,000
	C20 Staircases	\$20,000	\$4,000	\$4,800	\$10,368	\$39,000	\$46,000
	C30 Interior Finishes	\$9,800	\$1,960	\$2,352	\$5,080	\$19,000	\$20,000
	D20 Plumbing	\$68,000	\$13,600	\$16,320	\$35,251	\$134,000	\$136,000
	D30 HVAC	\$42,000	\$8,400	\$10,080	\$21,773	\$82,000	\$88,000
	D40 Fire Protection	\$30,240	\$6,048	\$7,258	\$15,676	\$59,000	\$59,000
	D50 Electrical	\$75,200	\$15,040	\$18,048	\$38,984	\$147,000	\$159,000
E10 Equipment	\$30,000	\$6,000	\$7,200	\$15,552	\$59,000	\$61,000	
	Facility Total	\$432,240	\$86,448	\$103,738	\$224,073	\$847,000	\$920,000
Parks Storage Pole Building	D50 Electrical	\$8,000	\$1,600	\$1,920	\$4,147	\$16,000	\$16,000
	Facility Total	\$8,000	\$1,600	\$1,920	\$4,147	\$16,000	\$16,000
Public Works Shop Site Infrastructure	G20 Site Improvements	\$11,309,328	\$2,261,866	\$2,714,239	\$5,862,756	\$22,148,000	\$26,239,000
	G30 Site Civil / Mechanical Utilities	\$75,000	\$15,000	\$18,000	\$38,880	\$147,000	\$152,000
	G40 Site Electrical utilities	\$110,000	\$22,000	\$26,400	\$57,024	\$216,000	\$230,000
	Facility Total	\$11,494,328	\$2,298,866	\$2,758,639	\$5,958,660	\$22,511,000	\$26,621,000
Storage Pole Building	B10 Superstructure	\$10,000	\$2,000	\$2,400	\$5,184	\$20,000	\$20,000
	D50 Electrical	\$12,000	\$2,400	\$2,880	\$6,221	\$24,000	\$24,000
	Facility Total	\$22,000	\$4,400	\$5,280	\$11,405	\$44,000	\$44,000
Utilities Office Building	C20 Staircases	\$20,000	\$4,000	\$4,800	\$10,368	\$39,000	\$41,000
	D30 HVAC	\$10,080	\$2,016	\$2,419	\$5,225	\$20,000	\$20,000
	Facility Total	\$30,080	\$6,016	\$7,219	\$15,593	\$59,000	\$61,000
Water/Sewer Storage Pole Building	D50 Electrical	\$7,200	\$1,440	\$1,728	\$3,732	\$14,000	\$14,000

Deficiency Repair Cost Markups By System

2023 - 2028

City of Snohomish

Site: Public Works Shop Site

Escalation 5%

Discount Rate 1.5%

Facility	System	Direct Construction Cost	Contingency 20%	Contractor's OH & P 20%	Project Soft Cost 36%	Total Project Cost	Total Project Cost (Present Value)
	Facility Total	\$7,200	\$1,440	\$1,728	\$3,732	\$14,000	\$14,000
	Site Total	\$11,993,848	\$2,398,770	\$2,878,524	\$6,217,611	\$23,491,000	\$27,676,000

Opportunity Summary By Subsystem

City of Snohomish

Site: Public Works Shop Site

Total Site Opportunity Cost: **\$4,214,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: Mechanics Building System: Interior Construction							\$41,000
C1020	Interior Doors	Residential doors are not appropriately durable for a commercial industrial space.	6.00	\$3,500.00	EA	\$21,000	\$41,000
Facility: Mechanics Building System: Vertical Transportation							\$294,000
D1010	Elevators and Lifts	No ADA access to the main offices on the upper level.	1.00	\$150,000.00	LS	\$150,000	\$294,000
Facility: Mechanics Building System: Plumbing							\$196,000
D2010	Plumbing Fixtures	No proper men's and women's locker rooms.	2.00	\$50,000.00	EA	\$100,000	\$196,000

Note: Cost estimates shown include project markups, but exclude escalation.

Opportunity Summary By Subsystem

City of Snohomish

Site: Public Works Shop Site

Total Site Opportunity Cost: **\$4,214,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: Mechanics Building System: HVAC							\$24,000
D3040	HVAC Distribution Systems	No economizer for free cooling and increased ventilation air during mild weather.	1.00	\$12,000.00	LS	\$12,000	\$24,000
Facility: Mechanics Building System: Electrical							\$138,000
D5020	Lighting and Branch Wiring	Some remaining fluorescent lighting; all with manual control.	5,040.00	\$14.00	SF	\$70,560	\$138,000
Facility: Mechanics Building System: Furnishings							\$10,000
E2010	Fixed Furnishings	Casework is cracked, broken, piecemeal, and does not provide enough or the right kind of storage needed.	15.00	\$350.00	LF	\$5,250	\$10,000
Facility: Public Works Shop Site Infrastructure System: Site Improvements							\$762,000
G2010	Roadways	Asphalt is deteriorated and has multiple cracks and potholes. Site is mostly gravel.	16,500.00	\$3.50	SF	\$57,750	\$113,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Opportunity Summary By Subsystem

City of Snohomish

Site: Public Works Shop Site

Total Site Opportunity Cost: **\$4,214,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
G2040 Site Development	For the safety of city staff, consider moving the offices to another location. The modular building is scheduled to be decommissioned and removed from the site in April of 2027, at which time the staff needs to be relocated.	Move offices from existing site. Lease a 48'x60' mobile office trailer with restroom. Estimate includes the trailer only, no utilities.	60.00	\$5,520.00	EA	\$331,200	\$649,000
Facility: Public Works Shop Site Infrastructure System: Site Civil / Mechanical Utilities							\$1,592,000
G3010 Water Supply	No fire hydrant inside the public works service yard.	Install new hydrant inside the public works service yard.	1.00	\$20,000.00	LS	\$20,000	\$39,000
	No water service to pole barns or out buildings.	Install water service to all permanent buildings.	450.00	\$40.00	LF	\$18,000	\$35,000
G3030 Storm Sewer	Site floods during heavy rains and king tides.	Install dike to protect site.	1.00	\$500,000.00	LS	\$500,000	\$979,000
G3060 Fuel Distribution	No vehicle fueling.	Add vehicle fueling, including gas and diesel, say 1,000-gallon capacity each from packaged above-grade systems.	2.00	\$125,000.00	EA	\$250,000	\$490,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Opportunity Summary By Subsystem

City of Snohomish

Site: Public Works Shop Site

Total Site Opportunity Cost: **\$4,214,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
G3060 Fuel Distribution	Electric unit heaters for shop spaces.	Install gas service to reduce cost of operating electric heaters.	5,040.00	\$5.00	SF	\$25,200	\$49,000
Facility: Public Works Shop Site Infrastructure System: Site Electrical utilities							\$954,000
G4010 Electrical Distribution	No electric vehicle (EV) charging stations; reportedly the city is not eligible for significant grant money to help purchase EVs, as the city has no EV charging stations.	Install three EV charging stations.	3.00	\$12,500.00	EA	\$37,500	\$73,000
	Good solar access and need for more covered storage; no current renewable energy generation on-site.	Install covered storage using photovoltaic panel arrays - 50-kW array creating about 3,000 sf of covered parking area.	50.00	\$8,500.00	EA	\$425,000	\$832,000
G4030 Site Communications and Security	No powered site access gate with keypad access.	Install motorized main entry gate with keypad access.	1.00	\$25,000.00	LS	\$25,000	\$49,000
Facility: Public Works Shop Site Infrastructure System: Other Site Construction							\$41,000
G9090 Other Site Systems	No access ramps for the classified waste dumpsters.	Install ramps at dumpsters.	3.00	\$7,000.00	EA	\$21,000	\$41,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Opportunity Summary By Subsystem

City of Snohomish

Site: Public Works Shop Site

Total Site Opportunity Cost: \$4,214,000

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: Storage Pole Building							
System: HVAC							\$29,000
D3090 Other HVAC Systems and Equipment	No welding hood.	Install welding hood.	1.00	\$15,000.00	LS	\$15,000	\$29,000
Facility: Utilities Office Building							
System: Staircases							\$35,000
C2010 Stair Construction	Ramp and steps are not ADA compliant.	Replace wood stairs and ramp with ADA-compliant prefabricated aluminum ramp and steps.	1.00	\$18,000.00	EA	\$18,000	\$35,000
Facility: Utilities Office Building							
System: Plumbing							\$98,000
D2010 Plumbing Fixtures	No plumbing service.	If this building is to remain past 2027, upgrade to provide restroom and kitchenette services.	1.00	\$50,000.00	LS	\$50,000	\$98,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Facility Summary

City of Snohomish

Senior Center

Senior Center

506 Fourth Street
Snohomish, WA 98290

Facility Size - Gross S.F.	7,680
Year Of Original Construction	2008
Facility Use Type	Community Center
Construction Type	Light
# of Floors	2
Energy Source	Electric
Year Of Last Renovation	2008
Historic Register	No



			Total Project Cost	Total Project Cost Present Value
Weighted Avg Condition Score	2.2			
Facility Condition Index (FCI)	0.07	Observed Deficiencies 2023 - 2028	\$166,000	\$173,000
Current Replacement Value (CRV)	\$2,688,000	Predicted Renewal Budget 2029 - 2042	\$1,044,000	\$1,686,000
Beginning Budget Year	2023	Opportunities	\$745,000	N/A
Escalation	5%			
Discount Rate	1.5%			

Facility Condition Summary

This modern building was purpose built as a senior center, with offices, restrooms, ballroom, kitchen, craft room, game room, library, and supporting spaces, including partial upper floor office, storage room, and mechanical mezzanine. The building is wood-frame construction over slab on grade, with peaked roof. HVAC is all-electric heat pumps. Plumbing includes restrooms and kitchen, but no showers or tubs. Fire sprinkler and alarm throughout, but no emergency power. Power is single-phase 120/240V with no spare capacity. Lighting was recently upgraded to LED throughout under grant. Low voltage systems include medium-speed data, CATV, and speaker system in ballroom.

Facility Summary

City of Snohomish
 Senior Center
 Senior Center

506 Fourth Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
A Substructure			1.0			
A10 Foundations						
A1030 Slab On Grade	2008	2008	1	LS	06/23/23	Concrete slab on grade.
B Shell			2.2			
B10 Superstructure						
B1010 Floor Construction	2008	2008	2	LS	06/23/23	Wood trusses.
B1020 Roof Construction	2008	2008	2	LS	06/23/23	Scissors truss over dining room. Wood stick frame, blown fiberglass on ceiling, fiberglass batt in walls.
B20 Exterior Closure						
B2010 Exterior Walls	2008	2021	2	LS	06/23/23	CMU with Hardi lap siding, repainted in 2021.
B2020 Exterior Windows	2008	2022	3	LS	06/23/23	Fiberglass clad aluminum windows, 15% have lost seals since the original install and have been replaced. Original windows are JELD-WEN, dated 2008. New sashes dated 2022. There are two sashes in the west room that have broken seals and could be replaced.
B2030 Exterior Doors	2008	2008	2	LS	06/23/23	Hollow metal doors and frames. All exterior doors have automatic operators.
B30 Roofing						
B3010 Roof Coverings	2008	2008	2	LS	06/23/23	Asphalt shingles.
B3020 Roof Openings	2008	2008	2	LS	06/23/23	Dormers and cupola.

Facility Summary

City of Snohomish
 Senior Center
 Senior Center

506 Fourth Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
B Shell			2.2			
B30 Roofing						
B3030 Projections	2008	2008	2	LS	06/23/23	Front porch.
C Interiors			2.0			
C10 Interior Construction						
C1010 Partitions	2008	2008	2	LS	06/23/23	Wood construction with gypsum wall board.
C1020 Interior Doors	2008	2008	2	LS	06/23/23	Wood doors in hollow metal frames.
C1030 Fittings	2008	2008	2	LS	06/23/23	Chair rail and corner guards.
C20 Staircases						
C2010 Stair Construction	2008	2008	2	LS	06/23/23	Wood stairs with wood handrails.
C2020 Stair Finishes	2008	2008	2	LS	06/23/23	Carpet.
C30 Interior Finishes						
C3010 Wall Finishes	2008	2008	2	LS	06/23/23	Painted gypsum board, chair rail, tile in toilet rooms.
C3020 Floor Finishes	2008	2020	2	LS	06/23/23	3'x3' vinyl tiles.
C3030 Ceiling Finishes	2008	2008	2	LS	06/23/23	Painted gypsum board, 12x12 acoustical tiles have been added in several locations. Some of the trim pieces have come loose.

Facility Summary

City of Snohomish
Senior Center
Senior Center

506 Fourth Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services				2.3			
D20 Plumbing							
D2010 Plumbing Fixtures	2008	2008	2	DCS	06/23/23	Men's and women's restrooms with modern fixtures including hands-free infrared control and mixing devices for lavatory faucets. Dual-height (ADA) refrigerated drinking fountains. Stainless steel utility sinks in craft and game rooms. Support for commercial kitchen. No shower.	
D2020 Domestic Water Distribution	2008	2008	2	DCS	06/23/23	Copper at service entry and hot water heater, but PEX otherwise; gas-fired hot water heater recently fully serviced and draft fan replaced; recirculation pump.	
D2030 Sanitary Waste	2008	2008	3	DCS	06/23/23	Drain, waste, and vent piping is mostly ok, with a few fixtures flushing slower than others - assume minor maintenance to clean trap or adjust. Kitchen grease waste backs up.	
D2040 Rain Water Drainage	2008	2008	2	DCS	06/23/23	Metal gutter and downspouts to storm. The original flat roof area has been roofed over to enclose the former mechanical roof well, the new roof area simply drains to the same gutter and downspout system as the rest of the original roof.	
D30 HVAC							
D3010 Energy Supply	2008	2008	2	DCS	06/23/23	Natural gas to kitchen cooking appliances, hot water heater and two fireplaces; capped-off at mechanical mezzanine where rooftop gas-pack units were previously set.	
D3020 Heat Generating Systems	2008	2008	2	DCS	06/23/23	Two natural gas-fired fireplaces, one double-sided at main entry and ballroom, and one at the library.	
D3030 Cooling Generating Systems	2008	2022	2	DCS	06/23/23	2022 main HVAC system outside condensing units, six 3-ton units. Two 1.5-ton units serving ductless splits at the kitchen and upper floor office area.	

Facility Summary

City of Snohomish
Senior Center
Senior Center

506 Fourth Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date Last	Score	Surveyor	Survey Date	Comments
D Services			2.3			
D30 HVAC						
D3040 HVAC Distribution Systems	2008	2022	3	DCS	06/23/23	Forced-air heating, cooling, and ventilation to three main floor zones (north, middle, and south) from three pairs of twinned split-Dx multi-zone Mitsubishi H2 heat pump systems, with minimum only outside air (no economizer) and mix of galvanized steel and factory insulated flex duct, routed through the cold attic serving the spaces below via an all overhead network of supply air diffusers and return air grilles. Filters are MERV-4 or MERV-7. No city-standard UV treatment system. The equipment was recently completely replaced and has not functioned properly, with excessively high power bills since the system was installed - see D3060 Controls and Instrumentation for deficiency. Bathroom exhaust fans, some with marginal performance (poor odor removal).
D3050 Terminal and Package Units	2008	2008	2	DCS	06/23/23	New inside heat pump furnaces. Ductless splits for kitchen and upper floor office.
D3060 Controls and Instrumentation	2008	2022	4	DCS	06/23/23	2022 Mitsubishi proprietary thermostats and packaged controls not yet programmed, with high energy cost.
D3090 Other HVAC Systems and Equipment	2008	2008	4	DCS	06/23/23	Non-rated grease duct and fan inside recently enclosed mechanical mezzanine.
D40 Fire Protection						
D4010 Fire Protection Sprinkler Systems	2008	2008	2	DCS	06/23/23	Wet-pipe fire sprinkler for conditioned spaces, and dry-pipe fire sprinkler for unconditioned spaces, such as attic and front canopy.
D4030 Fire Protection Specialties	2008	2008	2	DCS	06/23/23	Fire extinguishers, AED, and first aid kit.
D4090 Other Fire Protection Systems	2008	2008	2	DCS	06/23/23	Ansul fire protection system for kitchen grease hood.

Facility Summary

City of Snohomish
Senior Center
Senior Center

506 Fourth Street
Snohomish, WA 98290

Facility Components

Systems		Original System Date	Renewal Date Last	Score	Surveyor	Survey Date	Comments
D Services				2.3			
D50 Electrical							
D5010	Electrical Service and Distribution	2008	2008	3	DCS	06/23/23	Residential-grade 120/240V, with two 200A distribution panels, both fully loaded with no further capacity.
D5020	Lighting and Branch Wiring	2008	2008	2	DCS	06/23/23	LED throughout, with mix of manual and automatic control.
D5032	Low Voltage Communication	2008	2008	2	DCS	06/23/23	Public address via phones with unclear operability; A/V system in ballroom.
D5037	Low Voltage Fire Alarm	2008	2008	2	DCS	06/23/23	Modern addressable fire alarm with panel in riser room and remote annunciator at main entry desk.
D5038	Low Voltage Security	2008	2008	2	DCS	06/23/23	Intrusion detection and CCTV.
D5039	Low Voltage Data	2008	2008	3	DCS	06/23/23	Medium-speed service with data service in ballroom closet.
D5090	Other Electrical Systems	2008	2008	3	DCS	06/23/23	Battery-pack combination exit and egress fixtures. No standby generator.
E Equipment and Furnishings				2.0			
E10 Equipment							
E1010	Commercial Equipment	2008	2008	2	DCS	06/23/23	Appliances and office equipment.
E1020	Institutional Equipment	2008	2008	2	DCS	06/23/23	Medium-duty commercial kitchen appliances, and other organizational equipment, such as bingo system.
E20 Furnishings							
E2010	Fixed Furnishings	2008	2008	2	LS	06/23/23	Plastic laminate casework, solid surface countertops.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Senior Center

Facility: Senior Center

Escalation 5%

Discount Rate 1.5%

B2020	Exterior Windows	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2028	15	\$1,000.00	EA	\$15,000	\$29,000

Deficient Material: Aluminum Windows

Windows are losing seals at a quick rate for only being 15 years old. Budget to replace many more of them over the next five years.

Remedial Action:

Replace window sashes with broken seals. Consider using more durable materials to extend the life of the windows.

Action Type:

Energy Efficiency



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Senior Center

Facility: Senior Center

Escalation 5%

Discount Rate 1.5%

D2030	Sanitary Waste	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	1	\$5,000.00	LS	\$5,000	\$10,000

Deficient Material: Grease waste
Grease waste backs up.

Remedial Action:
Clean and service.

Action Type:
Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Senior Center

Facility: Senior Center

Escalation 5%

Discount Rate 1.5%

D3030	Cooling Generating Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1	\$5,000.00	LS	\$5,000	\$10,000

Deficient Material: Condensing unit

Upper floor office area split-Dx condensing unit located inside mechanical mezzanine space.

Remedial Action:

Relocate to outside.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Senior Center

Facility: Senior Center

Escalation 5%

Discount Rate 1.5%

D3040	HVAC Distribution Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	7,680	\$3.50	SF	\$26,880	\$53,000

Deficient Material: TAB

Unclear air flow and balance, with signs of air leakage in attic space and reported high energy use.

Remedial Action:

Conduct test, adjust, and balance and repair as needed to restore design airflows throughout.

Action Type:

Energy Efficiency



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Senior Center

Facility: Senior Center

Escalation 5%

Discount Rate 1.5%

D3060	Controls and Instrumentation	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	7,680	\$1.00	SF	\$7,680	\$15,000

Deficient Material: HVAC controls

2022 HVAC system using upwards of triple past energy cost; new controls not programmed.

Remedial Action:

Program and optimize controls.

Action Type:

Energy Efficiency



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Senior Center

Facility: Senior Center

Escalation 5%

Discount Rate 1.5%

D3090	Other HVAC Systems and Equipment	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1	\$25,000.00	LS	\$25,000	\$49,000

Deficient Material: Grease Exhaust

Non-rated grease duct and fan inside recently enclosed mechanical mezzanine.

Remedial Action:

Correct to met code.

Action Type:

Code Issue



Facility Summary

City of Snohomish

Senior Center

Senior Center Infrastructure

506 Fourth Street
Snohomish, WA 98290

Facility Condition Summary

The site is leased by the city to the senior center, which is an independent non-profit organization. Reportedly, portions of the site are subject to rail right-of-way agreements in conjunction with adjacent Centennial Trail. The site includes roadway access, parking lot, building, and narrow service yard along the west side.

City water, sewer, and fire, but unclear irrigation. A kitchen grease waste interceptor appears present in access road to SE. Storm water detention appears present on site, but details are not clear. SnoPUD power and Puget Sound Energy natural gas. Medium-speed Comcast cable data (not fiber).

Facility Summary

City of Snohomish
 Senior Center
 Senior Center Infrastructure

506 Fourth Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments	
G Sitework							
G20 Site Improvements							
G2020	Parking Lots	2008	2008	2	LS	06/23/23	Asphalt is in great shape, but the ADA spaces are not fully compliant. The parking lot has 44 stalls, and there are 5 spaces marked as accessible.
G2030	Pedestrian Paving	2008	2008	2	LS	06/23/23	Concrete sidewalks.
G2040	Site Development	2008	2008	2	LS	06/23/23	There are two horseshoe pits in the grassy area in front of the building. Staff reports they are no longer used and would like to eventually build a couple of pickleball courts in that location.
G2050	Landscaping	2008	2008	1	LS	06/23/23	Grass and planters around the building, with hanging pots on the porch. Maintained by staff and volunteers.
G30 Site Civil / Mechanical Utilities							
G3010	Water Supply	2008	2008	2	DCS	06/23/23	City water, six-inch fire service, six-inch fire department connection line, unclear irrigation, but no issues reported.
G3020	Sanitary Sewer	2008	2008	3	DCS	06/23/23	City sewer, plus apparent kitchen grease waste interceptor at access road to NE - staff report kitchen grease waste line backups to kitchen.
G3030	Storm Sewer	2008	2008	2	DCS	06/23/23	Roof drains and paved impervious surfaces reportedly drain to an on-site storm water detection vault, then to City storm system at street - no issues reported.

Facility Summary

City of Snohomish
 Senior Center
 Senior Center Infrastructure

506 Fourth Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
G Sitework						
G30 Site Civil / Mechanical Utilities						
G3050 Cooling Distribution	2008	2008	3	DCS	06/23/23	The long narrow service yard to west houses multiple HVAC and kitchen refrigeration outside condensing units. The yard is surrounded by the senior center building to east and commercial building immediately west forming a heat island, in turn reducing the efficiency and performance of the condensing units. The dark green paint on the adjacent commercial building has further negative effect, as does any excessive senior center materials stored in the yard that may impede air flow. Minor maintenance to keep the yard clear of potential air flow blocking materials, including overgrown landscape plants.
G3060 Fuel Distribution	2008	2008	2	DCS	06/23/23	Puget Sound Energy natural gas meter No. 1146619 with 1,000 cfh capacity and no seismic shut-off valve - minor maintenance to install. With recent replacement of gas furnace heat with all-electric heat pump heat, the gas meter is oversized for the reduced load.
G40 Site Electrical utilities						
G4010 Electrical Distribution	2008	2008	3	DCS	06/23/23	Power from street pole down underground to service entry at kitchen delivery apron to SW with meter No. 537472 (57-207-039) at 120/240V, single-phase totaling 400A capacity, which is barely sufficient to meeting recently increased load from change to all-electric HVAC. Further load increases, such as change to all-electric kitchen may require a new service.
G4020 Site Lighting	2008	2008	3	DCS	06/23/23	Several parking lot pole light luminaires with LED lamps.
G4030 Site Communications and Security	2008	2008	3	DCS	06/23/23	Comcast medium-speed data service; apparent traditional CATV, apparent plain old telephone service for legacy system needs. Several CCTV cameras.

Facility Summary

City of Snohomish
 Senior Center
 Senior Center Infrastructure

506 Fourth Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
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G Sitework

G90 Other Site Construction

G9090 Other Site Systems	2008	2008	3	DCS	06/23/23	Two horse shoe pits to SE reportedly in the railroad right-of-way.
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Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Senior Center

Facility: Senior Center Infrastructure

Escalation 5%

Discount Rate 1.5%

G3020	Sanitary Sewer	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	1	\$5,000.00	LS	\$5,000	\$10,000

Deficient Material: Grease interceptor

It appears the grease interceptor has not be recently cleaned and staff report grease waste backups into kitchen floor sink.

Remedial Action:

Pump, clean, and service the grease interceptor and clean out the grease waste piping connecting the building to the interceptor.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Senior Center

Facility: Senior Center Infrastructure

Escalation 5%

Discount Rate 1.5%

G4020	Site Lighting	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	3	\$7,500.00	EA	\$22,500	\$44,000

Deficient Material: Site lighting
Insufficient site lighting for patrons.

Remedial Action:
Install additional site lighting to fully support patrons.

Action Type:
Other



Deficiency Repair Cost Markups By System

2023 - 2028

City of Snohomish
Site: Senior Center

Escalation 5%
Discount Rate 1.5%

Facility	System	Direct Construction Cost	Contingency 20%	Contractor's OH & P 20%	Project Soft Cost 36%	Total Project Cost	Total Project Cost (Present Value)
Senior Center	B20 Exterior Closure	\$15,000	\$3,000	\$3,600	\$7,776	\$29,000	\$35,000
	D20 Plumbing	\$5,000	\$1,000	\$1,200	\$2,592	\$10,000	\$10,000
	D30 HVAC	\$64,560	\$12,912	\$15,494	\$33,468	\$127,000	\$128,000
	Facility Total	\$84,560	\$16,912	\$20,294	\$43,836	\$166,000	\$173,000
Senior Center Infrastructure	G30 Site Civil / Mechanical Utilities	\$5,000	\$1,000	\$1,200	\$2,592	\$10,000	\$10,000
	G40 Site Electrical utilities	\$22,500	\$4,500	\$5,400	\$11,664	\$44,000	\$47,000
	Facility Total	\$27,500	\$5,500	\$6,600	\$14,256	\$54,000	\$57,000
Site Total		\$112,060	\$22,412	\$26,894	\$58,092	\$220,000	\$230,000

Opportunity Summary By Subsystem

City of Snohomish
Site: Senior Center

Total Site Opportunity Cost: \$1,128,000

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: Senior Center System: Staircases							\$78,000
C2010	Stair Construction						
	Exiting from the upper floor office space is a concern, although it currently meets code.	Add a second stair to exit from the second floor office space. They have thought about removing the high windows in that space, adding a door and exit stair to the ground level.	1.00	\$40,000.00	LS	\$40,000	\$78,000
Facility: Senior Center System: Vertical Transportation							\$294,000
D1010	Elevators and Lifts						
	Upper floor with no elevator or lift.	Install lift to upper floor.	1.00	\$150,000.00	LS	\$150,000	\$294,000
Facility: Senior Center System: Electrical							\$319,000
D5010	Electrical Service and Distribution						
	Increasingly obsolete single-phase power system with no remaining capacity for future loads.	Upgrade to 208V, three-phase power at 400A or 600A.	1.00	\$50,000.00	LS	\$50,000	\$98,000
D5020	Lighting and Branch Wiring						
	Mix of manual and automatic lighting controls.	Upgrade to all automatic lighting controls.	7,680.00	\$3.00	SF	\$23,040	\$45,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Opportunity Summary By Subsystem

City of Snohomish
Site: Senior Center

Total Site Opportunity Cost: \$1,128,000

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
D5039 Low Voltage Data	Medium-speed cable data service.	Upgrade to city-standard high-speed fiber service.	1.00	\$5,000.00	LS	\$5,000	\$10,000
D5090 Other Electrical Systems	No standby generator; often senior centers are designated at a place of refuge for the community. Recently installed walk-in cooler and freezer for more on-site refrigerated food storage.	Install standby generator, say 50-kW.	1.00	\$85,000.00	LS	\$85,000	\$166,000

Facility: Senior Center	
System: Equipment	\$39,000

E1020 Institutional Equipment	Mostly manual bingo system.	Upgrade to digital semi-automated bingo system.	1.00	\$20,000.00	LS	\$20,000	\$39,000
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Facility: Senior Center	
System: Furnishings	\$15,000

E2010 Fixed Furnishings	Casework in east and west activity rooms may not be fully ADA compliant.	Complete ADA evaluation.	1.00	\$7,680.00	LS	\$7,680	\$15,000
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Note: Cost estimates shown include project markups, but exclude escalation.

Opportunity Summary By Subsystem

City of Snohomish
Site: Senior Center

Total Site Opportunity Cost: **\$1,128,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: Senior Center Infrastructure System: Site Electrical utilities							\$177,000
G4010	Electrical Distribution						
	Residential grade 120/240V, single phase power with 400A service capacity limiting future improvements.	Coordinate with SnoPUD to upgrade to 208V, three-phase power to support future all-electric kitchen and provide flexibility for future program needs.	1.00	\$50,000.00	LS	\$50,000	\$98,000
	Many senior centers have standby power to provide a place of refuge during community emergencies or severe weather.	Rough-in for portable generator connection with manual transfer switch; participate in city portable generator pool program.	1.00	\$10,000.00	LS	\$10,000	\$20,000
	No electric vehicle charging stations.	Install two double-head electric vehicle charging stations, with rough-in for two more in the future.	2.00	\$15,000.00	EA	\$30,000	\$59,000
Facility: Senior Center Infrastructure System: Other Site Construction							\$206,000
G9090	Other Site Systems						
	Largely unused grass area between roadway and Centennial Trail, and significant interest in more active senior patron outdoor activities, specifically pickleball.	Coordinate with railroad, city, and parks to install three pickleball courts.	3.00	\$35,000.00	EA	\$105,000	\$206,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Facility Summary

City of Snohomish
 Visitor Information Center
 Visitor Information Center

1301 First Street
 Snohomish, WA 98290

Facility Size - Gross S.F. 800
 Year Of Original Construction 2005
 Facility Use Type Visitor Information Center
 Construction Type Light
 # of Floors 1
 Energy Source Electric
 Year Of Last Renovation 2005
 Historic Register No



		Total Project Cost	Total Project Cost Present Value
Weighted Avg Condition Score	2.4		
Facility Condition Index (FCI)	0.08	Observed Deficiencies 2023 - 2028 \$59,000	\$63,000
Current Replacement Value (CRV)	\$300,000	Predicted Renewal Budget 2029 - 2042 \$82,000	\$116,000
Beginning Budget Year	2023	Opportunities \$151,000	N/A
Escalation	5%		
Discount Rate	1.5%		

Facility Condition Summary

The single-story building was constructed in 2005 as a visitor center (emulating the former Burlington Northern train depot) and is now leased as retail space. Roofing consists of composition shingles on steeply-pitched gables, with composite lap siding, wood windows and doors, and a back covered porch deck overlooking the river. Overall, the building is in good condition.

HVAC is one forced-air electric resistance furnace, no permanent air conditioning. Plumbing support for two restrooms and kitchenette. No fire sprinkler; no fire alarm (other than one battery-operated smoke detector). Power is 120/240V single-phase with 200A capacity. Lighting appears to be mostly LED with manual control. Low-voltage systems are minimal.

Facility Summary

City of Snohomish
 Visitor Information Center
 Visitor Information Center

1301 First Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
A Substructure			2.0			
A10 Foundations						
A1010 Standard Foundations	2005	2005	2	TRB	06/15/23	Concrete foundations and footings, passive vented crawlspace with some leaf debris blocking vents (minor maintenance to clean).
A1020 Special Foundations	2005	2005	2	TRB	06/15/23	Concrete piers at deck posts.
B Shell			2.3			
B10 Superstructure						
B1010 Floor Construction	2005	2005	2	TRB	06/15/23	Wood deck on wood joists with batt insulation on underside, vapor barrier on grade in crawlspace.
B1020 Roof Construction	2005	2005	2	TRB	06/15/23	Wood deck on wood trusses, passive ventilation in attic space. Cold attic with insulation laid over ceiling.
B20 Exterior Closure						
B2010 Exterior Walls	2005	2005	2	TRB	06/15/23	Cementitious HardiePlank lap siding on 2x6 wood stud walls.
B2020 Exterior Windows	2005	2005	2	TRB	06/15/23	Thermally glazed operable tall double hung wood windows.
B2030 Exterior Doors	2005	2005	2	TRB	06/15/23	Wood doors with glass and ADA-compliant hardware.
B30 Roofing						
B3010 Roof Coverings	2005	2005	3	TRB	06/15/23	Composition shingle roofing, more regular maintenance to remove leaf debris is recommended.

Facility Summary

City of Snohomish
 Visitor Information Center
 Visitor Information Center

1301 First Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
B Shell				2.3			
B30 Roofing							
B3030 Projections	2005	2005	2	TRB	06/15/23	Back porch and railing overlooking the river, painted ceiling, columns, guardrail, pickets, and painted non-slip traffic coating on deck.	
C Interiors				2.0			
C10 Interior Construction							
C1010 Partitions	2005	2005	2	TRB	06/15/23	Gypsum on wood studs.	
C1020 Interior Doors	2005	2005	2	TRB	06/15/23	Wood doors and frames with ADA-compliant lever-style hardware.	
C1030 Fittings	2005	2005	2	TRB	06/15/23	Stainless ADA grab bar in restroom (met prior ADA code). Consider installing vertical bar to meet current ADA code.	
C30 Interior Finishes							
C3010 Wall Finishes	2005	2005	2	TRB	06/15/23	Paint, stained wood accent trim, ceramic tile wainscot in restroom.	
C3020 Floor Finishes	2005	2005	2	TRB	06/15/23	Stained wood flooring, ceramic tile in restroom.	
C3030 Ceiling Finishes	2005	2005	2	TRB	06/15/23	Painted gypsum.	
D Services				2.9			
D20 Plumbing							
D2010 Plumbing Fixtures	2005	2005	2	DCS	06/15/23	Two restrooms, each with one tank-type gravity flush water closet and one lavatory. The second restroom is used as a makeshift kitchen. Kitchenette counter in the main program area with bar sink and bottled-water dispenser in lieu of drinking fountain.	

Facility Summary

City of Snohomish
 Visitor Information Center
 Visitor Information Center

1301 First Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services				2.9			
D20 Plumbing							
D2020 Domestic Water Distribution	2005	2005	2	DCS	06/15/23	City water to copper distribution; one American-brand electric tank-type domestic hot water heater with expansion tank, but no recirculation pump.	
D2030 Sanitary Waste	2005	2005	2	DCS	06/15/23	Drain, waste, and vent piping serving plumbing fixtures; tested fixtures flush and drain well with no issues reported. No grease interceptor - minor maintenance to install a point-of-use grease interceptor in conjunction with new kitchenette - see opportunity for D2010 Plumbing Fixtures.	
D2040 Rain Water Drainage	2005	2005	3	DCS	06/15/23	Roof slopes to metal gutters and downspouts to storm - requiring significant maintenance to keep free and clear running.	
D30 HVAC							
D3030 Cooling Generating Systems	2005	2005	4	DCS	06/15/23	Portable air conditioning system in combination office and dry goods storage room.	
D3040 HVAC Distribution Systems	2005	2005	3	DCS	06/15/23	Uninsulated duct. Marginal outside air intake partially blocked - minor ongoing maintenance to keep clear of stored materials, organic debris, trash, and pests. One portable air purifier was observed, but not in active use. Operable windows for natural ventilation and passive cooling. Minimal attic venting, but no issues reported. Attic is at the ceiling, with ductwork in cold attic, but difficult to access. Confirm duct is insulated per code - if not minor maintenance to insulate.	
D3050 Terminal and Package Units	2005	2005	3	DCS	06/15/23	Original electric resistance heat furnace.	
D3060 Controls and Instrumentation	2005	2005	3	DCS	06/15/23	Programmable thermostat - minor maintenance to replace in conjunction with new furnace opportunity (see D3050 Terminal and Package Units).	

Facility Summary

City of Snohomish
 Visitor Information Center
 Visitor Information Center

1301 First Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
D Services			2.9			
D40 Fire Protection						
D4030 Fire Protection Specialties	2005	2005	4	DCS	06/15/23	Fire extinguishers out of service and being replaced as minor maintenance.
D50 Electrical						
D5010 Electrical Service and Distribution	2005	2005	2	DCS	06/15/23	120/240V, single-phase, 200A capacity - no issues reported.
D5020 Lighting and Branch Wiring	2005	2005	3	DCS	06/15/23	Mix of recessed can and pendant-mounted fixtures with apparent LED lamps on manual control. Exterior party lights along entire roof line with some strings failed - minor maintenance to relamp or replace.
D5032 Low Voltage Communication	2005	2005	2	DCS	06/15/23	Telephone; no issues reported.
D5037 Low Voltage Fire Alarm	2005	2005	4	DCS	06/15/23	Battery-operated smoke detector; no fire alarm system - minor maintenance to install in this relatively small building.
D5038 Low Voltage Security	2005	2005	3	DCS	06/15/23	Includes light-duty CCTV and intrusion detection.
D5039 Low Voltage Data	2005	2005	3	DCS	06/15/23	High-speed fiber-optic, but with minimal features otherwise.
D5090 Other Electrical Systems	2005	2005	3	DCS	06/15/23	Combination egress and exit signs with on-board battery back-up.
E Equipment and Furnishings			2.0			
E10 Equipment						
E1010 Commercial Equipment	2005	2005	2	DCS	06/15/23	Kitchen and office appliances and equipment.
E1020 Institutional Equipment	2005	2005	2	DCS	06/15/23	Certain retail service equipment, specific to tenant services.

Facility Summary

City of Snohomish
Visitor Information Center
Visitor Information Center

1301 First Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
E Equipment and Furnishings			2.0			
E20 Furnishings						
E2010 Fixed Furnishings	2005	2005	2	TRB	06/15/23	Plastic laminate and solid surface counters. Stained wood base cabinetry.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Visitor Information Center

Facility: Visitor Information Center

Escalation 5%

Discount Rate 1.5%

D3030	Cooling Generating Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	1	\$30,000.00	LS	\$30,000	\$59,000

Deficient Material: Air conditioning

Portable air conditioning system for back office and storage room only; hot elsewhere during summer months.

Remedial Action:

Install permanent air conditioning system.

Action Type:

Significant Operational Impact



Facility Summary

City of Snohomish

Visitor Information Center

Visitor Information Center Infrastructure

1301 First Street
Snohomish, WA 98290

Facility Condition Summary

The site was formerly a Burlington Northern railway station and now houses a building constructed in 2005 that is leased to a commercial retail gift shop. Other site amenities include an asphalt parking lot, concrete pathways, and ornamental shrub landscaping with blackberries and other invasive plant materials encroaching on the riverbank side. Hidden in the weeds, the site also still contains an artifact of the bygone era, a section of the old railway lines (truncated and preserved when the new structure was built).

City water and sewer, but no fire service. On-site storm water detection vault. SnoPUD power, but no natural gas. High-speed fiber-optic data.

Facility Summary

City of Snohomish
 Visitor Information Center
 Visitor Information Center Infrastructure

1301 First Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
G Sitework						
G20 Site Improvements						
G2020 Parking Lots	2005	2005	2	TRB	06/15/23	Asphalt parking lot, single ADA stall marked, but no signage per code; minor maintenance to install for compliance.
G2030 Pedestrian Paving	2005	2005	2	TRB	06/15/23	Concrete sidewalk to front entry and back deck.
G2040 Site Development	2005	2005	2	TRB	06/15/23	Concrete block retaining wall on river side, section of original railroad tracks retained from old Burlington Northern line.
G2050 Landscaping	2005	2005	3	TRB	06/15/23	Mature landscaping of shrubs and trees, but overgrown against building, and significant invasive species encroaching deck on riverbank side.
G30 Site Civil / Mechanical Utilities						
G3010 Water Supply	2005	2005	2	DCS	06/15/23	City water to building and irrigation system with no issues reported.
G3020 Sanitary Sewer	2005	2005	2	DCS	06/15/23	City sewer with no issues reported.
G3030 Storm Sewer	2005	2005	2	DCS	06/15/23	Roof drains to storm water detection vault at NE corner of site - no issues reported. However, there is some concern that landscape erosion and debris may be directing some surface run-off into the crawlspace - minor maintenance to more fully maintain.
G40 Site Electrical utilities						
G4010 Electrical Distribution	2005	2005	2	DCS	06/15/23	Residential-grade 120/240V, single-phase power underground from nearby SnoPUD overhead power pole with pot-transformer; meter No. 467578.

Facility Summary

City of Snohomish

Visitor Information Center

Visitor Information Center Infrastructure

1301 First Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
G Sitework							
G40 Site Electrical utilities							
G4020 Site Lighting	2005	2005	2	DCS	06/15/23	Most site lighting from adjacent City street lighting, plus several building exterior light fixtures.	
G4030 Site Communications and Security	2005	2005	2	DCS	06/15/23	High-speed fiber-optic data service, plus other legacy services. Site electronic security limited to one or two building exterior CCTV cameras.	

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Visitor Information Center

Facility: Visitor Information Center Infrastructure

Escalation 5%

Discount Rate 1.5%

G2050	Landscaping	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	1	\$5,000.00	LS	\$5,000	\$10,000

Deficient Material: Landscaping

Landscaping is overgrown against building and significant invasive species encroaching deck on riverbank side.

Remedial Action:

Prune and trim away all plantings at least two feet away from structure and prevent hiding spaces. Eliminate weeds and invasive species along Avenue D and riverbank sides.

Action Type:

Other



Deficiency Repair Cost Markups By System

2023 - 2028

City of Snohomish

Site: Visitor Information Center

Escalation 5%
Discount Rate 1.5%

Facility	System	Direct Construction Cost	Contingency 20%	Contractor's OH & P 20%	Project Soft Cost 36%	Total Project Cost	Total Project Cost (Present Value)
Visitor Information Center	D30 HVAC	\$30,000	\$6,000	\$7,200	\$15,552	\$59,000	\$63,000
	Facility Total	\$30,000	\$6,000	\$7,200	\$15,552	\$59,000	\$63,000
Visitor Information Center Infrastructure	G20 Site Improvements	\$5,000	\$1,000	\$1,200	\$2,592	\$10,000	\$10,000
	Facility Total	\$5,000	\$1,000	\$1,200	\$2,592	\$10,000	\$10,000
	Site Total	\$35,000	\$7,000	\$8,400	\$18,144	\$69,000	\$73,000

Opportunity Summary By Subsystem

City of Snohomish

Site: Visitor Information Center

Total Site Opportunity Cost: **\$151,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: Visitor Information Center System: Plumbing							\$117,000
D2010	Plumbing Fixtures						
	Second bathroom used as a makeshift kitchen.	Create a proper kitchen meeting Department of Health requirements.	1.00	\$40,000.00	LS	\$40,000	\$78,000
D2040	Rain Water Drainage						
	Difficult to maintain roof rain water draining gutter and downspout system.	Replace with water feature type rain chain with catch basin incorporating more readily accessible clean-out feature at grade, one at each for the four building corners.	4.00	\$5,000.00	EA	\$20,000	\$39,000
Facility: Visitor Information Center System: HVAC							\$34,000
D3050	Terminal and Package Units						
	Inefficient electric resistance furnace with no air conditioning.	Upgrade to heat pump furnace with economizer for free cooling during favorable conditions.	1.00	\$17,500.00	LS	\$17,500	\$34,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Facility Summary

City of Snohomish
Wastewater Treatment Plant
Blower Building

2115 Second Street
Snohomish, WA 98290

Facility Size - Gross S.F. 1,200
Year Of Original Construction 2012
Facility Use Type Utility Support
Construction Type Medium
of Floors 1
Energy Source Electric
Year Of Last Renovation 2012
Historic Register No



		Total Project Cost	Total Project Cost Present Value
Weighted Avg Condition Score	2.1		
Facility Condition Index (FCI)	0.05	Observed Deficiencies 2023 - 2028	
Current Replacement Value (CRV)	\$322,000	Predicted Renewal Budget 2029 - 2042	
Beginning Budget Year	2023	\$102,000	\$157,000
Escalation	5%	Opportunities	
Discount Rate	1.5%		N/A

Facility Condition Summary

The 2012 blower building houses three lagoon aeration blowers and associated electrical room with blower motor variable frequency drives. The building has concrete slab on grade, CMU walls, and metal joist roof structure. HVAC is natural ventilation via gable-end louvers for the compressor room, and ductless split-Dx for the electrical room. No observed plumbing, no fire sprinkler, and lighting is T-8 fluorescent on manual control with SCADA process control.

Facility Summary

City of Snohomish
Wastewater Treatment Plant
Blower Building

2115 Second Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
A Substructure			2.0			
A10 Foundations						
A1010 Standard Foundations	2012	2012	2	LS	06/20/23	Cast-in-place concrete wainscot, some paint chipping on exterior.
A1030 Slab On Grade	2012	2012	2	LS	06/20/23	Concrete slab on grade.
B Shell			2.0			
B10 Superstructure						
B1020 Roof Construction	2012	2012	2	LS	06/20/23	Metal joists with insulated metal panel roof deck.
B20 Exterior Closure						
B2010 Exterior Walls	2012	2012	2	LS	06/20/23	CMU bearing walls with no insulation.
B2020 Exterior Windows	2012	2012	2	LS	06/20/23	Double-glazed, fixed, mill finish aluminum windows.
B2030 Exterior Doors	2012	2012	2	LS	06/20/23	Hollow metal man door with vision lite. Overhead coiling steel garage door.
B30 Roofing						
B3010 Roof Coverings	2012	2012	2	LS	06/20/23	Standing seam metal panel roof.
C Interiors			2.0			
C10 Interior Construction						
C1010 Partitions	2012	2012	2	LS	06/20/23	Metal stud with gypsum board separating the blower room from the electrical room.

Facility Summary

City of Snohomish
Wastewater Treatment Plant
Blower Building

2115 Second Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
C Interiors				2.0			
C10 Interior Construction							
C1030 Fittings	2012	2012	2	LS	06/20/23	Bridge crane.	
C30 Interior Finishes							
C3010 Wall Finishes	2012	2012	2	LS	06/20/23	Inside of CMU in blower room. Painted gypsum board in electrical room.	
C3020 Floor Finishes	2012	2012	2	LS	06/20/23	Concrete slab non-slip paint.	
C3030 Ceiling Finishes	2012	2012	2	LS	06/20/23	Suspended perforated metal acoustical panels in blower room. Painted gypsum board in electrical room.	
D Services				2.2			
D20 Plumbing							
D2040 Rain Water Drainage	2012	2012	2	DCS	06/20/23	Metal gutter and downspouts to grade.	
D30 HVAC							
D3030 Cooling Generating Systems	2012	2012	2	DCS	06/20/23	Condensing unit outside at grade with metal shield to prevent swinging door damage to unit; this hampers air flow, but no performance issues are reported.	
D3040 HVAC Distribution Systems	2012	2012	2	DCS	06/20/23	Outside air duct to inside split-Dx heat pump unit at electrical room. Natural ventilation via gable-end louvers at blower room.	
D3050 Terminal and Package Units	2012	2012	2	DCS	06/20/23	Inside ductless split fan coil unit in electrical room.	
D3060 Controls and Instrumentation	2012	2012	2	DCS	06/20/23	Programmable thermostat for electrical room HVAC system.	

Facility Summary

City of Snohomish
Wastewater Treatment Plant
Blower Building

2115 Second Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services				2.2			
D40 Fire Protection							
D4030 Fire Protection Specialties	2012	2012	2	DCS	06/20/23	Fire extinguishers on hooks.	
D50 Electrical							
D5010 Electrical Service and Distribution	2012	2012	2	DCS	06/20/23	Main distribution panel is 480V, three-phase with 300A capacity. Three distribution panels powering 72 individual circuits for each of the aeration control valves in the three south lagoons; one 15-kVA 480/208V transformer; one 208V distribution panel for house loads. Three automatic frequency drives, one for each of the aeration blower motors.	
D5020 Lighting and Branch Wiring	2012	2012	3	DCS	06/20/23	T-8 fluorescent fixtures on manual control - minor maintenance to upgrade to drop-in LED replacement lamps upon failure.	
D5090 Other Electrical Systems	2012	2012	2	DCS	06/20/23	Lighted exit signs; battery-backed bug-eye egress pathway emergency light fixtures.	
E Equipment and Furnishings				2.0			
E10 Equipment							
E1020 Institutional Equipment	2012	2012	2	DCS	06/20/23	Three Aerzen lagoon aeration blowers in blower room.	
E1030 Vehicular Equipment	2012	2012	2	DCS	06/20/23	Raynor motor-operated roll-up door.	
E20 Furnishings							
E2010 Fixed Furnishings	2012	2012	2	LS	06/20/23	Plastic laminate upper cabinets with stainless steel countertop.	

Facility Summary

City of Snohomish
 Wastewater Treatment Plant
 Blower Building

2115 Second Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
F Special Construction			2.0			
F10 Special Construction						
F1050	Special Controls and Instrumentation	2012	2012	2	DCS	06/20/23 SCADA controls.

Facility Summary

City of Snohomish
 Wastewater Treatment Plant
 Chlorine Room

2115 Second Street
 Snohomish, WA 98290

Facility Size - Gross S.F. 1,000
 Year Of Original Construction 1995
 Facility Use Type Utility Support
 Construction Type Medium
 # of Floors 1
 Energy Source Electric
 Year Of Last Renovation 1995
 Historic Register No



Weighted Avg Condition Score	2.5		Total Project Cost	Total Project Cost Present Value
Facility Condition Index (FCI)	0.08	Observed Deficiencies 2023 - 2028		
Current Replacement Value (CRV)	\$268,000	Predicted Renewal Budget 2029 - 2042	\$60,000	\$78,000
Beginning Budget Year	2023	Opportunities		N/A
Escalation	5%			
Discount Rate	1.5%			

Facility Condition Summary

In 2012, chlorine was eliminated, so this building is now referred to as the "South Building." It is a long, skinny, four-room building with concrete slab on grade, uninsulated CMU walls, and apparent uninsulated wood-framed roof with standing seam metal roof covering. Each space includes an electric unit heater; several spaces include ventilation louvers and/or exhaust fans. Utility power to this building with south plant switchboard and motor control centers. T-8 fluorescent lighting with manual control. SCADA system for process control. The south plant generator feeds the ATS outside the electrical room.

Facility Summary

City of Snohomish
 Wastewater Treatment Plant
 Chlorine Room

2115 Second Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
A Substructure			2.0			
A10 Foundations						
A1030 Slab On Grade	1995	1995	2	LS	06/20/23	Concrete slab on grade.
B Shell			2.1			
B10 Superstructure						
B1020 Roof Construction						
	1995	1995	2	LS	06/20/23	Wood joists bearing on CMU walls, plywood decking, no insulation.
B20 Exterior Closure						
B2010 Exterior Walls						
	1995	1995	2	LS	06/20/23	CMU load-bearing walls with no insulation.
B2030 Exterior Doors						
	1995	1995	2	LS	06/20/23	Painted hollow metal doors and frames.
B30 Roofing						
B3010 Roof Coverings						
	1995	1995	3	LS	06/20/23	Standing seam metal panel roof.
C Interiors			2.5			
C10 Interior Construction						
C1010 Partitions						
	1995	1995	2	LS	06/20/23	Painted CMU.
C30 Interior Finishes						
C3010 Wall Finishes						
	1995	1995	3	LS	06/20/23	Painted CMU. Some chlorine on the walls leftover from the chlorine operation.
C3020 Floor Finishes						
	1995	1995	3	LS	06/20/23	Painted concrete. Painted finish on the floor in the chlorine room is mostly worn off.

Facility Summary

City of Snohomish
Wastewater Treatment Plant
Chlorine Room

2115 Second Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services				3.0			
D20 Plumbing							
D2010	Plumbing Fixtures	1995	1995	3	DCS	06/20/23	Safety shower and eyewash with unclear water tempering.
D2020	Domestic Water Distribution	1995	1995	3	DCS	06/20/23	Potable water to safety shower and eyewash, non-potable to process, most observed piping is dark grey CPVC.
D2030	Sanitary Waste	1995	1995	3	DCS	06/20/23	Minimal with no issues reported.
D2040	Rain Water Drainage	1995	1995	3	DCS	06/20/23	Metal gutter and downspouts to storm.
D30 HVAC							
D3030	Cooling Generating Systems	1995	1995	3	DCS	06/20/23	Electrical room cooling is outside air through roof rafter block vent screens, through room, through transfer opening screen to adjacent compressor room, in turn out through compressor room exhaust fan, with no mechanical cooling, but no issues reported.
D3040	HVAC Distribution Systems	1995	1995	3	DCS	06/20/23	Several exhaust fans, most notably side wall propeller exhaust fan for the compressor room, and low spun-aluminum type exhaust fan for the former chlorine room at east end. This fan appears abandoned in place as there is no longer any chlorine; the related louvers also appear largely abandoned in place.
D3050	Terminal and Package Units	1995	1995	3	DCS	06/20/23	Approximately four electric resistance unit heaters; all about 5-kW capacity.
D3060	Controls and Instrumentation	1995	1995	3	DCS	06/20/23	Thermostats for unit heaters.
D40 Fire Protection							
D4030	Fire Protection Specialties	1995	1995	3	DCS	06/20/23	First aid kit in electrical room; minor maintenance to replace any missing fire extinguishers.

Facility Summary

City of Snohomish
Wastewater Treatment Plant
Chlorine Room

2115 Second Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services				3.0			
D50 Electrical							
D5010	Electrical Service and Distribution	1995	1995	3	DCS	06/20/23	Mix of 1995 and 2012 electrical panels and motor control centers; see G4010 Electrical Distribution for plan to replace 1995 electrical distribution, including the older motor control center at this building.
D5020	Lighting and Branch Wiring	1995	1995	3	DCS	06/20/23	T-8 fluorescent lighting; minor maintenance to replace lamps with drop-in LED replacements upon failure.
D5090	Other Electrical Systems	1995	2012	2	DCS	06/20/23	2012 ATS which controls the south generator.
E Equipment and Furnishings				3.0			
E10 Equipment							
E1020	Institutional Equipment	1995	2012	3	DCS	06/20/23	Process equipment and support tools and equipment.
E1030	Vehicular Equipment	1995	1995	3	DCS	06/20/23	Motorized roll-up door to west.
F Special Construction				2.0			
F10 Special Construction							
F1010	Special Structures	1995	1995	2	LS	06/20/23	Covered storage at the north end of the building.
F1050	Special Controls and Instrumentation	1995	2012	2	DCS	06/20/23	Plant SCADA system panel and workstation in electrical room.

Facility Summary

City of Snohomish
Wastewater Treatment Plant
Mixture Building

2115 Second Street
Snohomish, WA 98290

Facility Size - Gross S.F. 400
Year Of Original Construction 2012
Facility Use Type Utility Support
Construction Type Medium
of Floors 1
Energy Source Electric
Year Of Last Renovation 2012
Historic Register No



Weighted Avg Condition Score	2.1		Total Project Cost	Total Project Cost Present Value
Facility Condition Index (FCI)	0.04	Observed Deficiencies 2023 - 2028		
Current Replacement Value (CRV)	\$107,000	Predicted Renewal Budget 2029 - 2042	\$29,000	\$42,000
Beginning Budget Year	2023	Opportunities		N/A
Escalation	5%			
Discount Rate	1.5%			

Facility Condition Summary

The mixture building is now known as the "Mag" building, which is short for magnesium hydroxide. That is the chemical injected into the treatment process at this building, which includes the immediately adjacent outside chemical storage tank. The building was all new in 2012 including concrete slab-on-grade, CMU walls, and metal roof structure with apparent insulated metal roof panels, covered with standing seam metal roof covering. HVAC includes and electric unit heater and exhaust fan; plumbing includes non-potable process water, plus tempered water safety shower and eyewash outside and inside. No fire sprinkler, power includes 480V & 208V panels, lighting is T8 fluorescent, and SCADA process controls.

Facility Summary

City of Snohomish
 Wastewater Treatment Plant
 Mixture Building

2115 Second Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
A Substructure			2.0			
A10 Foundations						
A1010 Standard Foundations	2012	2012	2	LS	06/20/23	Cast-in-place concrete wainscot, some paint chipping.
A1030 Slab On Grade	2012	2012	2	LS	06/20/23	Concrete slab on grade.
B Shell			2.0			
B10 Superstructure						
B1020 Roof Construction	2012	2012	2	LS	06/20/23	Metal joists with insulated metal panel roof deck.
B20 Exterior Closure						
B2010 Exterior Walls	2012	2012	2	LS	06/20/23	CMU bearing walls with no insulation.
B2020 Exterior Windows	2012	2012	2	LS	06/20/23	Double-glazed, fixed windows with clad aluminum inside and aluminum on outside.
B2030 Exterior Doors	2012	2012	2	LS	06/20/23	Painted hollow metal door and frame with some chips and scratches in the paint.
B30 Roofing						
B3010 Roof Coverings	2012	2012	2	LS	06/20/23	Standing seam metal panel.
B3020 Roof Openings	2012	2012	2	LS	06/20/23	One vent through roof.

Facility Summary

City of Snohomish
Wastewater Treatment Plant
Mixture Building

2115 Second Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
C Interiors				2.0			
C30 Interior Finishes							
C3010 Wall Finishes	2012	2012	2	LS	06/20/23	Interior of CMU with no paint.	
C3020 Floor Finishes	2012	2012	2	LS	06/20/23	Some paint chips and scratches.	
D Services				2.2			
D10 Vertical Transportation							
D1090 Other Conveying Systems	2012	2012	2	DCS	06/20/23	One-ton manual chain fall on traveling rail trolley.	
D20 Plumbing							
D2010 Plumbing Fixtures	2012	2012	2	DCS	06/20/23	Two safety shower and eyewash stations, both with tempered water. One is outside, heat-traced, and insulated, the other is inside. Reduced-pressure backflow preventer for non-potable water.	
D2020 Domestic Water Distribution	2012	2012	2	DCS	06/20/23	Copper piping. Rudd electric domestic hot water heater with seismic straps, expansion tank, and floor insulation pad. Hot water piping is uninsulated - minor maintenance to insulate.	
D2030 Sanitary Waste	2012	2012	2	DCS	06/20/23	Three floor drains, sharing one timer-based electric solenoid trap primer.	
D2040 Rain Water Drainage	2012	2012	2	DCS	06/20/23	Metal gutter and downspouts to grade.	
D2090 Other Plumbing Systems	2012	2012	2	DCS	06/20/23	Process equipment including outside chemical storage tank and two inside dosing pumps and related controls.	
D30 HVAC							
D3040 HVAC Distribution Systems	2012	2012	2	DCS	06/20/23	One side-wall exhaust fan.	

Facility Summary

City of Snohomish
Wastewater Treatment Plant
Mixture Building

2115 Second Street
Snohomish, WA 98290

Facility Components

Systems		Original System Date	Renewal Date	Last Score	Surveyor	Survey Date	Comments
D Services				2.2			
D30	HVAC						
D3050	Terminal and Package Units	2012	2012	2	DCS	06/20/23	One Indeeco electric unit heater with estimated 3-kW capacity.
D3060	Controls and Instrumentation	2012	2012	2	DCS	06/20/23	Wall-mounted thermostat for unit heater.
D40	Fire Protection						
D4030	Fire Protection Specialties	2012	2012	2	DCS	06/20/23	Fire extinguisher on hook.
D50	Electrical						
D5010	Electrical Service and Distribution	2012	2012	2	DCS	06/20/23	One 480V distribution panel, one 480/208V transformer, and one 208V distribution panel.
D5020	Lighting and Branch Wiring	2012	2012	3	DCS	06/20/23	T-8 fluorescent lighting - minor maintenance to upgrade lamps to LED upon failure.
D5090	Other Electrical Systems	2012	2012	2	DCS	06/20/23	Uninterruptible power supply at SCADA panel.
E Equipment and Furnishings				2.0			
E10	Equipment						
E1020	Institutional Equipment	2012	2012	2	DCS	06/20/23	Miscellaneous process support tools and equipment.
E20	Furnishings						
E2010	Fixed Furnishings	2012	2012	2	LS	06/20/23	Upper plastic laminate cabinets with stainless steel counter.
F Special Construction				2.0			
F10	Special Construction						
F1010	Special Structures	2012	2012	2	LS	06/20/23	Mag tank outside the building.

Facility Summary

City of Snohomish
Wastewater Treatment Plant
Mixture Building

2115 Second Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments	
F Special Construction			2.0				
F10 Special Construction							
F1050	Special Controls and Instrumentation	2012	2012	2	DCS	06/20/23	SCADA control cabinet with Allen-Bradley programmable logic controller.

Facility Summary

City of Snohomish
 Wastewater Treatment Plant
 Office/Lab

2115 Second Street
 Snohomish, WA 98290

Facility Size - Gross S.F. 2,600
 Year Of Original Construction 1995
 Facility Use Type Admin - Low rise
 Construction Type Light
 # of Floors
 Energy Source Electric
 Year Of Last Renovation 1995
 Historic Register No



		Total Project Cost	Total Project Cost Present Value
Weighted Avg Condition Score	2.3		
Facility Condition Index (FCI)	0.08	Observed Deficiencies 2023 - 2028 \$79,000	\$85,000
Current Replacement Value (CRV)	\$1,048,000	Predicted Renewal Budget 2029 - 2042 \$203,000	\$297,000
Beginning Budget Year	2023	Opportunities \$62,000	N/A
Escalation	5%		
Discount Rate	1.5%		

Facility Condition Summary

Lab and office building with locker room, lunch room, electrical room, utility closet, and laundry room with roll-up door. CMU block wall, slab-on-grade, wood-framed roof, double-glazed windows, forced-air HVAC via split-Dx heat pump, lab hood exhaust, conventional plumbing, lab and residential-grade laundry support, 480V power for process loads, 208V power for building loads, lighting upgraded to LED lamps, high-speed fiber-optic data, and SCADA system head-end.

Facility Summary

City of Snohomish
 Wastewater Treatment Plant
 Office/Lab

2115 Second Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
A Substructure			2.0			
A10 Foundations						
A1030 Slab On Grade	1995	1995	2	LS	06/20/23	Concrete slab on grade.
B Shell			2.1			
B10 Superstructure						
B1020 Roof Construction						
	1995	1995	2	LS	06/20/23	Metal panel and wood trusses. No insulation on the interior, but may exist above the plywood roof deck.
B20 Exterior Closure						
B2010 Exterior Walls						
	1995	1995	2	LS	06/20/23	CMU, exterior with 1-1/2" 'Z' furring and rigid insulation. CMU has a couple of vertical cracks in the back, running from the foundation to about 4' high.
B2020 Exterior Windows						
	1995	1995	2	LS	06/20/23	Fiberglass double-glazed windows, fixed over awning.
B2030 Exterior Doors						
	1995	1995	2	LS	06/20/23	Hollow metal doors and frames. Overhead coiling garage door.
B30 Roofing						
B3010 Roof Coverings						
	1995	1995	3	LS	06/20/23	Standing seam metal roof painted (not recommended) to match color at other buildings; some paint is peeling.
B3020 Roof Openings						
	1995	1995	2	LS	06/20/23	Exhaust vent in lab and toilet room vents to roof. Some leaks over the years, but have been repaired promptly.

Facility Summary

City of Snohomish
 Wastewater Treatment Plant
 Office/Lab

2115 Second Street
 Snohomish, WA 98290

Facility Components

Systems		Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
B Shell					2.1			
B30	Roofing							
B3030	Projections	1995	1995	2	LS	06/20/23	Roof overhang, about 36"-48", enclosed wood soffit with attic ventilation along building wall - no issues reported.	
C Interiors					1.5			
C10	Interior Construction							
C1010	Partitions	1995	1995	2	LS	06/20/23	Metal stud with gypsum board on each side.	
C1020	Interior Doors	1995	1995	2	LS	06/20/23	Wood doors in hollow metal frames.	
C30	Interior Finishes							
C3010	Wall Finishes	1995	2017	1	LS	06/20/23	Painted interior.	
C3020	Floor Finishes	1995	2021	1	LS	06/20/23	Carpet and sheet vinyl replaced in 2021.	
C3030	Ceiling Finishes	1995	1995	1	LS	06/20/23	Dropped ceiling; some tiles replaced after leaks were fixed.	
D Services					3.0			
D20	Plumbing							
D2010	Plumbing Fixtures	1995	1995	2	DCS	06/20/23	Locker room with water closet, lavatory, and one-piece fiberglass shower; lunchroom kitchenette; and support for wet-lab, including separate eyewash and safety shower. Electric tank-type domestic hot water heater with recirculation pump.	
D2020	Domestic Water Distribution	1995	1995	2	DCS	06/20/23	City water to copper distribution piping with electric tank-type hot water heater.	

Facility Summary

City of Snohomish
Wastewater Treatment Plant
Office/Lab

2115 Second Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services				3.0			
D20 Plumbing							
D2030 Sanitary Waste	1995	1995	2	DCS	06/20/23	Cast iron drain, waste, and vent piping with no issues reported. Tested fixtures flush and drain well. A former deionized (DI) water unit reportedly discharged reject water to the 5-gallon acid waste neutralization tank outside behind the building, but the DI water unit has been removed and the acid waste tank is reportedly now abandoned in place.	
D2040 Rain Water Drainage	1995	1995	2	DCS	06/20/23	Metal gutter and downspouts to grade.	
D2090 Other Plumbing Systems	1995	1995	2	DCS	06/20/23	Lab gases are installed, including compressed air, vacuum, and gas (provided by a propane tank behind the building). A portable vacuum pump is currently used in the lab.	
D30 HVAC							
D3010 Energy Supply	1995	1995	3	DCS	06/20/23	Portable propane tank on paver behind building piped to lab gas system.	
D3030 Cooling Generating Systems	1995	2007	3	DCS	06/20/23	Two condensing units, one 2007 serving the lab heat pump system, and one 2012 Mitsubishi serving the dedicated electrical room fan coil unit.	
D3040 HVAC Distribution Systems	1995	1995	3	DCS	06/20/23	Forced-air heating and cooling with split-Dx heat pump furnace including economizer (free cooling) and ductwork in attic. It is unclear if the attic is in or out of the conditioned envelope. Uneven air flow suspected in several spaces.	
D3050 Terminal and Package Units	1995	1995	4	DCS	06/20/23	Aging inside split-Dx heat pump furnace. Somewhat newer ductless split-Dx system for the main electrical room.	
D3060 Controls and Instrumentation	1995	2007	3	DCS	06/20/23	Programmable thermostats - minor maintenance to replace when associated HVAC equipment is replaced.	

Facility Summary

City of Snohomish
Wastewater Treatment Plant
Office/Lab

2115 Second Street
Snohomish, WA 98290

Facility Components

Systems		Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
D Services				3.0			
D30	HVAC						
D3090	Other HVAC Systems and Equipment	1995	1995	4	DCS	06/20/23	Light-duty lab canopy type hood abandoned in place - minor maintenance to recommission if needed. Exhausted lab cabinet with failed fan - minor maintenance to repair or replace.
D40	Fire Protection						
D4030	Fire Protection Specialties	1995	2012	2	DCS	06/20/23	Fire extinguisher, AED, first aid kit.
D50	Electrical						
D5010	Electrical Service and Distribution	1995	1995	3	DCS	06/20/23	GE 480V, three-phase switchboard with 1,600A capacity serving primarily process loads via two motor control centers. Two transformers: 1) 480V to 120/240V, 10-kVA single-phase, and 2) 480V to 208V, 45 kVA three-phase. The lower voltage power systems are for house loads. Reportedly the motor control centers are at end of life - see G4010 Electrical Distribution for overall site electrical system renewal. The 480V service includes a surge suppression device, but this was turned off for unknown reason at time of site visit, and if this has been off for years, may be in part responsible to poor performance and/or damage to downstream electric distribution system components.
D5020	Lighting and Branch Wiring	1995	1995	3	DCS	06/20/23	Original fluorescent light fixtures with manual control, with most fixtures upgraded to LED lamps.
D5032	Low Voltage Communication	1995	2012	2	DCS	06/20/23	VoIP phone system, doorbell, and television antenna.
D5037	Low Voltage Fire Alarm	1995	1995	3	DCS	06/20/23	Aging fire alarm system.
D5038	Low Voltage Security	1995	1995	3	DCS	06/20/23	Perimeter security monitoring system.
D5039	Low Voltage Data	1995	2012	2	DCS	06/20/23	High-speed fiber-optic data service with no issues reported. The server is in the main electrical room which is fully air conditioned.

Facility Summary

City of Snohomish
Wastewater Treatment Plant
Office/Lab

2115 Second Street
Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
D Services				3.0			
D50 Electrical							
D5090 Other Electrical Systems	1995	1995		3	DCS	06/20/23	Standby power via automatic transfer switch from adjacent generator building with no issues reported. Placard exit signs, several battery-backed bug-eye egress pathway lighting wall-packs.
E Equipment and Furnishings				2.1			
E10 Equipment							
E1010 Commercial Equipment	1995	2012		3	DCS	06/20/23	Residential-grade washer and dryer in laundry utility room, residential-grade appliances at lunch room kitchenette, and light-duty office equipment.
E1020 Institutional Equipment	1995	1995		3	DCS	06/20/23	Specialty equipment at lab and in adjacent covered storage shop space.
E1030 Vehicular Equipment	1995	1995		3	DCS	06/20/23	Motor-operated storage room vehicle roll-up door.
E20 Furnishings							
E2010 Fixed Furnishings	1995	1995		2	LS	06/20/23	Lab room has three walls with plastic laminate casework and stainless steel countertops. Testing is done every day.
F Special Construction				2.5			
F10 Special Construction							
F1010 Special Structures	1995	2012		3	DCS	06/20/23	Covered storage building with shop powered from the lab building.

Facility Summary

City of Snohomish
 Wastewater Treatment Plant
 Office/Lab

2115 Second Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
F Special Construction			2.5			
F10 Special Construction						
F1050 Special Controls and Instrumentation	1995	2012	2	DCS	06/20/23	Modern SCADA system with head-end in the lab building; however, there are vestiges of the original analog control system, including main control panel in the hallway, reportedly to be demolished during the forthcoming site-wide electrical system upgrade. No issues reported with the SCADA system. Weather station with sensor array on the antenna mast.

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Wastewater Treatment Plant

Facility: Office/Lab

Escalation 5%

Discount Rate 1.5%

D3030	Cooling Generating Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2026	1	\$10,000.00	EA	\$10,000	\$20,000

Deficient Material: Condensing unit

Aging heat pump condensing unit with increasingly obsolete R22 refrigerant.

Remedial Action:

Budget to replace upon failure.

Action Type:

Energy Efficiency



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Wastewater Treatment Plant

Facility: Office/Lab

Escalation 5%

Discount Rate 1.5%

D3040	HVAC Distribution Systems	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2025	1,700	\$7.00	SF	\$11,900	\$23,000

Deficient Material: Ductwork

Signs of uneven air distribution, with little or no air flow from some supply air diffusers. Unclear if attic is in or out of the thermal envelope, and if the ductwork is insulated accordingly per code.

Remedial Action:

Test, adjust, and balance the ductwork and check thermal envelope integrity regarding the attic and duct insulation; insulate ductwork if needed.

Action Type:

Energy Efficiency



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Wastewater Treatment Plant

Facility: Office/Lab

Escalation 5%

Discount Rate 1.5%

D3050	Terminal and Package Units	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2026	1	\$10,000.00	LS	\$10,000	\$20,000

Deficient Material: Heat pump furnace
Aging inside heat pump furnace.

Remedial Action:
Replace in conjunction with replacement of outside condensing unit.

Action Type:
Energy Efficiency



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Wastewater Treatment Plant

Facility: Office/Lab

Escalation 5%

Discount Rate 1.5%

D5010	Electrical Service and Distribution	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1	\$8,000.00	LS	\$8,000	\$16,000

Deficient Material: Surge Suppression

Electrical service surge protection device turned off and not protecting downstream equipment.

Remedial Action:

Troubleshoot and repair or replace surge protection device.

Action Type:

Significant Operational Impact



Facility Summary

City of Snohomish

Wastewater Treatment Plant

Wastewater Treatment Plant Infrastructure

2115 Second Street
Snohomish, WA 98290

Facility Condition Summary

City of Snohomish municipal waste water treatment plant (WWTP), also known as the local publicly-owned treatment works. The original plant was built in 1960 covering a much larger area, mostly to west with a substantial dyke around the entire site present to current day. In 1995, the plant was upgraded to its current smaller footprint to east, with the west half redeveloped for storm water management. The plant was again upgraded in 2012 to modify the treatment process and construct several new buildings and structures. The site is immediately adjacent to the Snohomish River, with some concern regarding increasingly high flood waters resulting from climate change. More improvements are planned per the WWTP Master Plan including upstream separation of storm from waste water, replacement of the 1995 electrical service and distribution system, replacement of the downstream underground sand filter, and other upgrades.

The WWTP is a four-stage, full-mix, facultative system with fully fixed-film media rated at 2.8 million gallons per day. The process includes headworks, four ponds, the first is the largest and includes mechanical agitation and aeration, the remaining three are remote blower aerated, followed by sand filters and sterilization prior to discharge to the Snohomish River via outfall to bottom middle of river.

The WWTP uses approximately \$13K per month in energy, translating to 130,000 kW-hr per month at \$0.10/kW-hr utility rate, with daily flow averaging 1 million gallons per day. This results in a watergy index of 14.8 btu/gal, or 4,333 kW-hr per million gallons. One national benchmark for aerated lagoon treatment plants is 3,862 kW-hr per million gallons, suggesting the Snohomish WWTP has modest room for improvement; noting there are many variables in calculating watergy and application of benchmarks, but bottom line is this quick analysis, suggests there is opportunity to reduce WWTP energy use over time. Further noting relative to all types of treatment plants nationwide, Energy Star reports the average energy use intensity (EUI) is 10 kbtu per gal/day (gpd) capacity, at just over 5 kbtu per gpd the Snohomish WWTP is half the national average, noting lagoon type plants are inherently more energy efficient than mechanical plant types. Additionally, national benchmarks and EUIs are typically adjusted for BOD, for which we did not get data on this survey, but should be considered if further bench marking is pursued.

Facility Summary

City of Snohomish
 Wastewater Treatment Plant
 Wastewater Treatment Plant Infrastructure

2115 Second Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
G Sitework						
G20 Site Improvements						
G2010 Roadways	1960	2015	2	LS	06/20/23	Asphalt (2015) main dyke only, the rest are gravel. The west dyke road goes over each dyke and dips in center at overflow which is concrete at the dip.
G2020 Parking Lots	1960	2015	2	LS	06/20/23	Asphalt (2015), no ADA parking.
G2030 Pedestrian Paving	1960	1995	2	LS	06/20/23	Concrete pad.
G2040 Site Development	1995	1995	2	LS	06/20/23	Generator building (1995) will be getting a new generator in 2023 with a larger capacity. Existing generator scheduled to be removed as new generator is a standalone package unit. Building is CMU on a concrete base at 3'-4" above grade, with a wood joist roof and metal panel roof. Headworks and Decant (1996) showing cracks in the retaining wall. Added spillway in 2012; brownout will turn off screws.
G2050 Landscaping	1960	1995	1	LS	06/20/23	Flower beds and potted plants that staff maintains. No irrigation, interpretive trail, or signage on either side of the fence.
G30 Site Civil / Mechanical Utilities						
G3010 Water Supply	1960	1995	2	DCS	06/20/23	Two-inch city water service with presumed 1.5-inch meter, with 2-inch reduced pressure backflow preventer in insulated but unheated hot box in front of the lab building - no issues reported. Two fire hydrants and multiple frost-free yard hydrants for maintenance downstream of a reported separate backflow preventer. No fire sprinkler service to any buildings. No irrigation system.

Facility Summary

City of Snohomish
 Wastewater Treatment Plant
 Wastewater Treatment Plant Infrastructure

2115 Second Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
G Sitework						
G30 Site Civil / Mechanical Utilities						
G3020 Sanitary Sewer	1960	1995	2	DCS	06/20/23	Sanitary sewer to on-site WWTP with no issues reported, noting there is no restroom service at the south treatment area.
G3030 Storm Sewer	1960	1995	3	DCS	06/20/23	Storm water sheet flows to lagoons, adjacent storm water pond, adjacent wet lands, or Snohomish River to south with no issues reported. The entire west half of the site is the City's southern storm water detention, treatment, and infiltration system, all with no issues reported. The entire pond is fully enclosed by the substantial original 1960 lagoon dike separating the pond from the river. During heavy storms and high tide, the pond floods from the river, but this is reportedly acceptable as 100-year flood condition. However, there are concerns regarding the 1995 treatment plant if sea level continues to rise.
G3050 Cooling Distribution	1960	2012	3	DCS	06/20/23	Several outside at-grade HVAC condensing units at present, two at the lab building, and one at the blower building. These are subject to debris collection possible blockage by temporary storage materials. Minor ongoing maintenance to keep these areas free and clear of debris and air flow blockages and to keep coils clean of organic material.
G3060 Fuel Distribution	1960	1995	3	DCS	06/20/23	Portable 10-gallon propane tank serving the lab building. Double-contained 10,000-gallon diesel fuel oil storage tank serving the north generator building. Double-contained integral belly tank at the south packaged generator. No natural gas service or vehicle fueling system on-site.

Facility Summary

City of Snohomish
 Wastewater Treatment Plant
 Wastewater Treatment Plant Infrastructure

2115 Second Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Last Renewal Date	Score	Surveyor	Survey Date	Comments
G Sitework						
G40 Site Electrical utilities						
G4010 Electrical Distribution	1960	1995	3	DCS	06/20/23	<p>Two SnoPUD services, one to north and one to south, each with utility-provided pad-mounted 480V, three-phase transformer, with north meter No. 35-8-79-064 and south meter No. 45-762-977 (1000136753). Reportedly, north power cost averages \$10K/month and south \$3K/month, with the largest load north the first lagoon mechanical combined agitator/aerator motors, and south the lagoon aeration blowers. Reportedly, extensive investigation has been conducted into more energy-efficient first lagoon agitation and aeration, but further investigation is suggested.</p> <p>In years past, SnoPUD brown-outs, including relatively short 10- to 15-second voltage droops, have resulted in influent pump (lift screws) tripping offline, requiring manual reset to restart. Additionally, the 1995 process motor control centers at the lab and chlorine buildings are reportedly obsolete with parts increasingly difficult or impossible to find. At first glance, the 1995 equipment does not appear to be in poor condition, and some appear to have many years remaining life - further investigation is suggested to see if some of the 1995 equipment life can be extended 10 to 15 years before replacement, such as through a factory service life extension program. There are two generators, one 1995, 350 kW to north in generator building with adjacent freestanding 1,000-gallon diesel fuel double-contained storage tank, and one 2012 to south in self-contained package with on-board belly tank.</p>
G4020 Site Lighting	1960	2020	2	DCS	06/20/23	<p>Most exterior lighting recently upgraded to LED, both luminaires on poles and building exterior wall-mounted sconces. PUD LED lights are present on several poles along the main access road; these are paid for on a monthly fixed cost basis.</p>
G4030 Site Communications and Security	1960	2012	2	DCS	06/20/23	<p>Main entry key-pad entry with double motor-operated swing gate and no issues reported, other than caution required for swing gates. High-speed fiber-optic data. No site electronic security - consider installing limited CCTV at north and south areas as minor maintenance on a proactive basis.</p>

Facility Summary

City of Snohomish
 Wastewater Treatment Plant
 Wastewater Treatment Plant Infrastructure

2115 Second Street
 Snohomish, WA 98290

Facility Components

Systems	Original System Date	Renewal Date	Last Date	Score	Surveyor	Survey Date	Comments
G Sitework							
G90 Other Site Construction							
G9010 Service and Pedestrian Tunnels	1960	1995	3	DCS	06/20/23	Variety of pits and vaults at both north and south areas - see G2040 Site Development for structural concern at the headworks structure. Reportedly, the south area below grade sand filter is a high-maintenance system, and there are plans to replace this with above-grade technology in the near future, but with unknown cost.	
G9090 Other Site Systems	1960	2012	2	DCS	06/20/23	Site-wide SCADA system for process control and monitoring with Allen-Bradley industrial process logic control and no issues reported, excepting interface with electrical system motor control centers. Besides concerns regarding the electrical distribution system, cracking headworks structure, and hard-to-maintain sand filter, the other major operational concern are compressed air hoses to the south three lagoon aerators.	

Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Wastewater Treatment Plant

Facility: Wastewater Treatment Plant Infrastructure

Escalation 5%

Discount Rate 1.5%

G2040	Site Development	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		5	2023	2023	1,260	\$45.00	SF	\$56,700	\$111,000

Deficient Material: Retaining Wall

Multiple cracks in the 15" concrete retaining wall which seem to be at regular intervals and occur between the guardrail posts. Cracks are completely through the concrete thickness and full height of the open side; some have active water leaks.

Remedial Action:

Structurally strengthen the open side of the retaining wall using 6" gunnite sprayed over mesh and install water drainage system.

Action Type:

Significant Operational Impact



Detailed Assessment - Observed Deficiencies 2023 - 2028

City of Snohomish

Site: Wastewater Treatment Plant

Facility: Wastewater Treatment Plant Infrastructure

Escalation 5%

Discount Rate 1.5%

G4010	Electrical Distribution	Score	Survey Year	Budget Year	Qty	Unit Cost	Unit	Direct Cost	Marked Up Cost
		4	2023	2024	1	\$2,000,000.00	LS	\$2,000,000	\$3,917,000

Deficient Material: Electrical Distribution

Reportedly obsolete and failing 1995 electrical distribution, including motor control centers, north generator, automatic transfer switch, and other system components.

Remedial Action:

Replace 1995 electrical distribution, motor control centers, generator, automatic transfer switch, and related obsolete and failing components.

Action Type:

Significant Operational Impact



Deficiency Repair Cost Markups By System

2023 - 2028

City of Snohomish

Site: Wastewater Treatment Plant

Escalation 5%
Discount Rate 1.5%

Facility	System	Direct Construction Cost	Contingency 20%	Contractor's OH & P 20%	Project Soft Cost 36%	Total Project Cost	Total Project Cost (Present Value)
Office/Lab	D30 HVAC	\$31,900	\$6,380	\$7,656	\$16,537	\$63,000	\$69,000
	D50 Electrical	\$8,000	\$1,600	\$1,920	\$4,147	\$16,000	\$16,000
	Facility Total	\$39,900	\$7,980	\$9,576	\$20,684	\$79,000	\$85,000
Wastewater Treatment Plant Infrastructure	G20 Site Improvements	\$56,700	\$11,340	\$13,608	\$29,393	\$111,000	\$111,000
	G40 Site Electrical utilities	\$2,000,000	\$400,000	\$480,000	\$1,036,800	\$3,917,000	\$4,052,000
	Facility Total	\$2,056,700	\$411,340	\$493,608	\$1,066,193	\$4,028,000	\$4,163,000
	Site Total	\$2,096,600	\$419,320	\$503,184	\$1,086,877	\$4,107,000	\$4,248,000

Opportunity Summary By Subsystem

City of Snohomish

Site: Wastewater Treatment Plant

Total Site Opportunity Cost: **\$5,714,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
Facility: Office/Lab System: Fire Protection							\$33,000
D4010	Fire Protection Sprinkler Systems						
	No fire sprinkler.	Add fire sprinkler.	1,700.00	\$10.00	SF	\$17,000	\$33,000
Facility: Office/Lab System: Special Construction							\$29,000
F1010	Special Structures						
	Makeshift shop with flammable liquid storage cabinet and Romex cable power outside conduit from immediately adjacent lab building. Permanent north generator building reportedly soon to be vacated when electrical distribution system is replaced.	Reconfigure the north generator building as the shop building and move shop tools and equipment from shed to new shop building (former generator building).	1.00	\$15,000.00	LS	\$15,000	\$29,000
Facility: Wastewater Treatment Plant Infrastructure System: Site Improvements							\$26,000
G2040	Site Development						
	ADA compliance.	Complete ADA evaluation and improvements for full compliance.	2,640.00	\$5.00	SF	\$13,200	\$26,000
Facility: Wastewater Treatment Plant Infrastructure System: Site Civil / Mechanical Utilities							\$3,046,000
G3020	Sanitary Sewer						
	No restroom at the south treatment area.	Install restroom at south treatment area.	1.00	\$35,000.00	LS	\$35,000	\$69,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Opportunity Summary By Subsystem

City of Snohomish

Site: Wastewater Treatment Plant

Total Site Opportunity Cost: **\$5,714,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
G3030 Storm Sewer	Sea level rise may flood the treatment plant in future years.	Master plan, if not already, to raise the levy height to protect against say a one-meter sea level rise by mid-21st Century.	1.00	\$1,500,000.00	LS	\$1,500,000	\$2,938,000
G3060 Fuel Distribution	The north generator is planned for replacement with diesel-fired engine; the lab is served by a portable propane tank.	Consider extending natural gas to the site and powering the new generator with natural gas; this service could be extended to the lab building to eliminate the propane tank currently serving the lab.	1.00	\$20,000.00	LS	\$20,000	\$39,000
Facility: Wastewater Treatment Plant Infrastructure System: Site Electrical utilities							\$128,000
G4010 Electrical Distribution	The current plan is to replace all 1995 site electrical infrastructure, motor controls centers, generator, fuel tank, automatic transfer switch, and related components at a cost of \$2M or more.	More closely study what 1995 electrical equipment can be upgraded or service life extended rather than complete replacement; this might save \$1M. This opportunity cost is for an independent third-party review of the current complete replacement plan.	1.00	\$35,000.00	LS	\$35,000	\$69,000

Note: Cost estimates shown include project markups, but exclude escalation.

Print Date: 12/06/23

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Opportunity Summary By Subsystem

City of Snohomish

Site: Wastewater Treatment Plant

Total Site Opportunity Cost: **\$5,714,000**

Subsystem	Opportunity	Action	Qty	Unit Cost	Unit	Direct Cost	Total Project Cost
G4010 Electrical Distribution	One electric utility meter north and one south, with no submetering of individual buildings or major process loads, and plan to replace most of the electrical distribution in the near future.	Install submetering system to proactively manage energy use, and better plan for future energy-efficient repair and upgrades; incorporate into the forthcoming electrical system renewal.	2.00	\$15,000.00	EA	\$30,000	\$59,000
Facility: Wastewater Treatment Plant Infrastructure System: Other Site Construction							\$2,452,000
G9010 Service and Pedestrian Tunnels	Problematic sand filter system.	Upgrade to a less problematic system.	1.00	\$1,000,000.00	LS	\$1,000,000	\$1,958,000
G9090 Other Site Systems	Regular failure of compressed air hoses to south three lagoon aerators.	Upgrade to more robust hoses.	72.00	\$3,500.00	EA	\$252,000	\$494,000

Note: Cost estimates shown include project markups, but exclude escalation.

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