



Facilities Conditions Review
September 15, 2025

Our History

2000-2014

The campus and existing buildings including the administrative building, barn, classrooms, pump house, garages, and tool shed are extensively renovated.



2008

Smith-Gardiner-Norman Farm (Paradise Farm) is placed on the National Register of Historic Places.



2005

NBS purchases 23 acres of Third Beach, completing the original package owned by the Norman family. The acreage links NBS to the Sachuest Point National Wildlife Refuge and ensures public road and beach access.



2015

Paradise Farmhouse, Mabel Norman Cerio's summer home, is extensively renovated and becomes available to the public as a rental.



Norman bird sanctuary

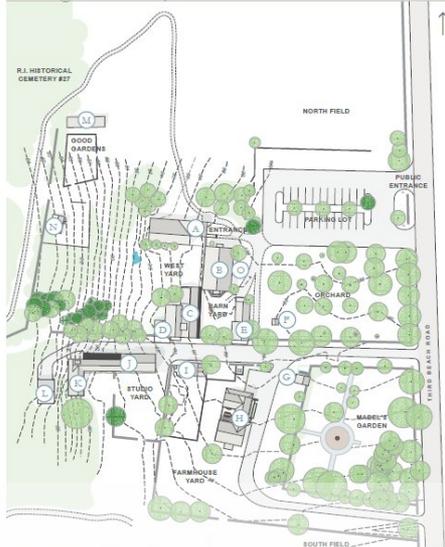
The Norman Bird Sanctuary is a non-profit nature center in Middletown, RI with over 300 acres of wildlife refuge, seven miles of walking trails and an extensive education program. Bequeathed a collection of 18th and 19th farm structures, they asked Foster Associates to develop a phased master plan. A former animal shed is now the administration offices, horse and carriage barns provide space for new classrooms and a library. The partially renovated farmhouse will provide space for expanded educational programs. The color red is applied to steel and glass curtain walls which signify the new entrances. The large barn will eventually provide meeting and museum space. The master plan connects these buildings with a covered walkway.

Location | Middletown, RI
Architect of Record | M. Barreto, Urban Design Group
Interiors | Foster Associates
Contractor | JG Edwards Construction +
Advanced Building Concepts

Funding for the depreciation of campus buildings is the process by which institutions allocate money to account for the gradual decline in value of their facilities due to wear and tear. It is a critical component of institutional financial health, as it ensures there is a cash reserve for future capital renewal projects and major maintenance needs.

Unlike standard businesses, many institutions have historically underfunded or completely ignored building depreciation, leading to a massive backlog of deferred maintenance. However, this trend is changing as institutions adopt more proactive asset management strategies

*Hanging Rock
Richard J. Gosselin - 1981*



PAGE 89 | NORMAN BIRD SANCTUARY

- LEGEND
- A. Welcome Center/Administration
 - B. Barn
 - C. Ed Shed, Classroom and Studio
 - D. Garage 1
 - E. Garage 2
 - F. Pump House
 - G. Tool Shed
 - H. Paradise Farmhouse
 - I. Laundry Cottage
 - J. Studio/Classrooms
 - K. Workshop and Animal Room
 - L. Artary
 - M. Hoop House
 - N. Third Beach Cabana
 - O. Water Tower
 - P. Peabody House
 - Q. Third Beach Education Center



Building Improvements

INTRO

The buildings at the Norman Bird Sanctuary were constructed and restored over a range of years, from the 1700s through the early 2000s. To ensure that the buildings will be properly maintained and useful to NBS over time, an inventory that rated the condition of the systems and architectural elements was conducted. This information details the amount of upkeep required in the years to come and will help to prioritize the work to be done and reveal the potential of programming updates to the various facilities.

This document is focused on the condition of the buildings at NBS. Each building was inspected based on the following systems or elements:

- Roofing
- Siding and trim
- Foundation
- Landscaping
- Windows
- Doors
- Interior Finish
- H.V.A.C. (Heating, Ventilation, & Air Conditioning)
- Electric
- Plumbing
- O.W.T.S. (On-site Wastewater Treatment System)
- Drinking Water Treatment System
- Appliances

Overall the buildings at the Norman Bird Sanctuary are in good condition. Specific items were identified during the assessment that should be completed in the next five years and are considered high priority. For a break-down of those improvements, see the Implementation Chapter. Urgent items include issues with the following: HVAC at the Welcome Center, Doors on Garage 2, Roofing of the Tool Shed, and Roofing and Foundation of the Third Beach Cabana.

In general, the buildings should have annual upkeep and cleaning measures performed. This will help them to last for years to come.

Goals and Strategies

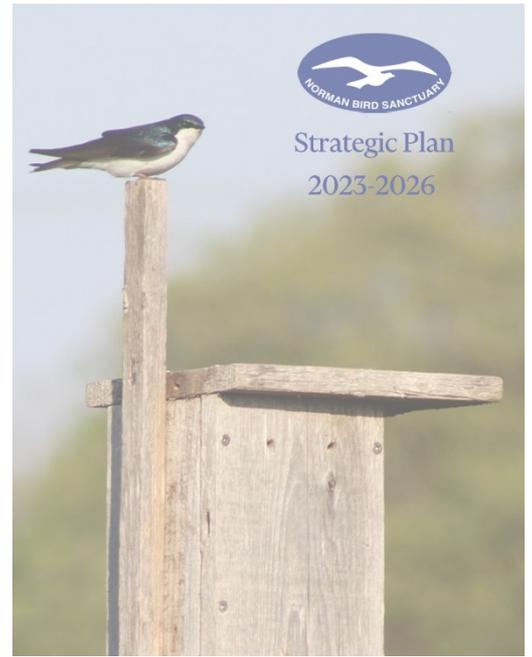
Goal 1. Norman Bird Sanctuary's campus demonstrates comprehensive and effective conservation stewardship and showcases adaptive use of historic structures and spaces.

Why this matters: We manage an extraordinary property with rich and diverse habitat types, eleven buildings, and seven miles of trail. This campus is the platform from which we and our partner organizations provide programming. It is also our organization's home base. Our program and operational needs have outgrown the way we currently use our buildings. Investments in our land, our buildings, and the team that cares for them are necessary.

Over the next three years, we will:

1. Use our property to demonstrate comprehensive land management and restoration practices. Use climate data and updated management plans to guide our conservation assessment and investments, and an awareness of the site's human use impacts to guide our programmatic uses and investments.
2. Use our existing buildings to their full potential in meeting organizational needs for program and office spaces, by analyzing their best and highest use and planning for efficiencies, adaptive reuse, and renovation.
3. Use our primary campus as an exemplary and educational showcase for "green best practices."
4. Enhance the visitor experience on our campus through improved multilingual signage, trail connections, and application of "universal design" measures that increase accessibility.
5. Broaden the narrative history of land use and ownership of the property the Sanctuary conserves.

*Hanging Rock
Richard Grosvenor - 1981*



Facility Condition Assessment

A systematic evaluation of a real estate portfolio's current state to identify deficiencies, estimate future costs, and inform capital planning decisions for maintenance, repair, and replacement

Deferred Maintenance

The practice of delaying needed repairs and upkeep on a property or asset, often to save money in the short term. It is often compared to a maintenance debt.

Why it Happens:

- **Budget Limitations** - There is simply not enough money or staff to do all the necessary work.
- **Competing Priorities** - Responding to emergencies or failures take priority over routine maintenance.
- **Lack of Awareness** - Sometimes, owners do not realize that a small problem is actually a sign of a larger issue.

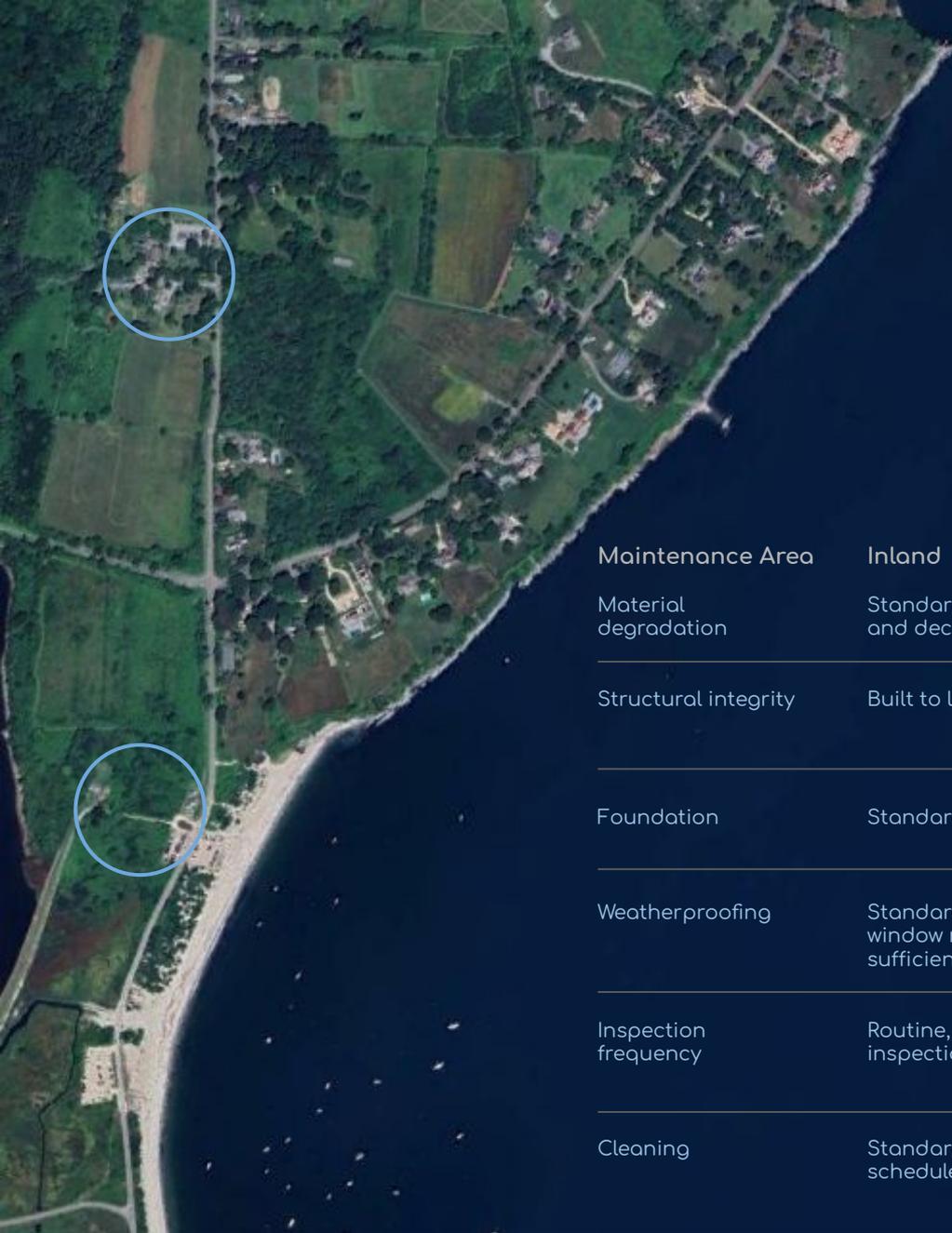
Risk of Delay:

- **Higher Costs Later** - Minor issues can easily escalate into major issues - expensive problems over time.
- **Reduced Efficiency** - Poorly maintained equipment or property can lead to higher operating costs.
- **Safety Hazards** - Neglected issues can pose a danger to a property's occupants.
- **Shorter Lifespan** - Assets that are not properly cared for will fail sooner than expected.

Prioritization Criteria

When faced with limited resources, facility managers/owners, can use a framework to systematically evaluate and rank work orders.

- **Safety and compliance:** Tasks that address safety hazards or regulatory requirements receive the highest priority and must be completed immediately.
- **Operational criticality:** vital to production and business continuity. Maintenance for this equipment is prioritized, as a breakdown would cause major disruption and financial loss.
- **Risk assessment:** This involves weighing the probability of equipment failure against the consequence of that failure. This approach, called Risk-Based Maintenance (RBM), helps allocate resources away from low-risk assets to those with the highest potential for impact.
- **Cost implications:** The potential financial impact of delaying a task is a major factor..
- **Preventive vs. reactive maintenance:** Rather than waiting for a failure to occur, which is the most expensive type of maintenance, businesses prioritize proactive strategies like regular inspections and preventive maintenance.



Maintenance Area

Inland

Coastal

Material degradation

Standard Rate of Rust and decay

Accelerated corrosion of metal, faster decay of wood, and weakening of concrete due to salt - 10x

Structural integrity

Built to local codes

Reinforced connections and stronger materials required to resist higher wind speeds and flood risks

Foundation

Standard foundation

Risk of erosion and scour undermining the foundation, especially during storms

Weatherproofing

Standard siding and window ratings sufficient

Need for impact-resistant glass, higher rated windows, and more durable coatings to resist wind, rain and debris

Inspection frequency

Routine, less frequent inspections.

Frequent, specialized inspections to catch signs of salt corrosion, wood rot, and water infiltration early - 2x

Cleaning

Standard cleaning schedule

Regular washing of exterior surfaces to remove corrosive salt deposits - 2x

Accelerated corrosion

The most significant factor impacting coastal properties is the high concentration of salt in the air and water spray, which greatly accelerates the corrosion of metal components.

- **Faster rust:** Saltwater corrodes metal up to 10 times faster than freshwater environments with normal humidity.
- **Affected materials:** This includes not just visible metal railings and light fixtures, but also hidden structural components like rebar in concrete, which can weaken over time and cause serious damage.
- **Maintenance:** Near the coast, standard maintenance recommendations for products should be doubled.

Weather and erosion

Coastal buildings are subjected to more extreme weather events and natural forces than inland properties.

- **Higher wind loads:** The structure must withstand higher wind speeds and gusts, requiring more robust materials and fastening systems.
- **Wind-driven rain:** Coastal areas experience more wind-driven rain, which can force water into openings and cracks that might otherwise be water-tight.
- **Erosion:** Over time, coastal erosion can destabilize a building's foundation and even cause its complete failure.

Moisture and humidity

High humidity, frequent storms, and moisture infiltration create problems that are less common inland.

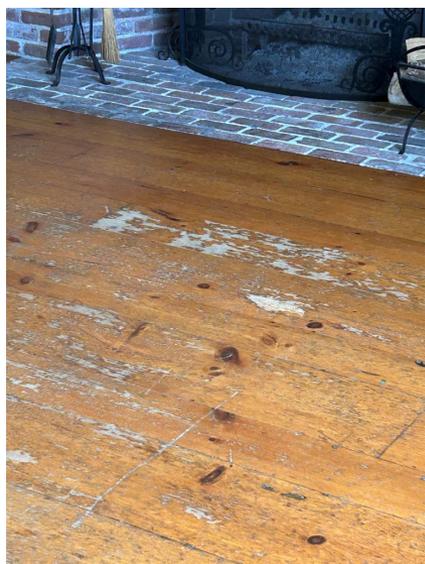
- **Mold and decay:** The constant moisture in the air can lead to mold and mildew growth and accelerate the decay of wood.
- **Interior damage:** Water damage is a persistent threat from flooding, moisture infiltration, and wind-driven rain. For example, windows with insufficient ratings are prone to leaking, leading to interior damage.

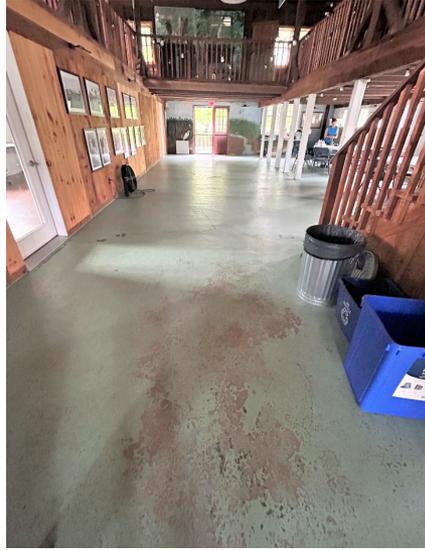
Wear from sand and debris

Wind drives sand and other debris against the building, causing physical wear and tear.

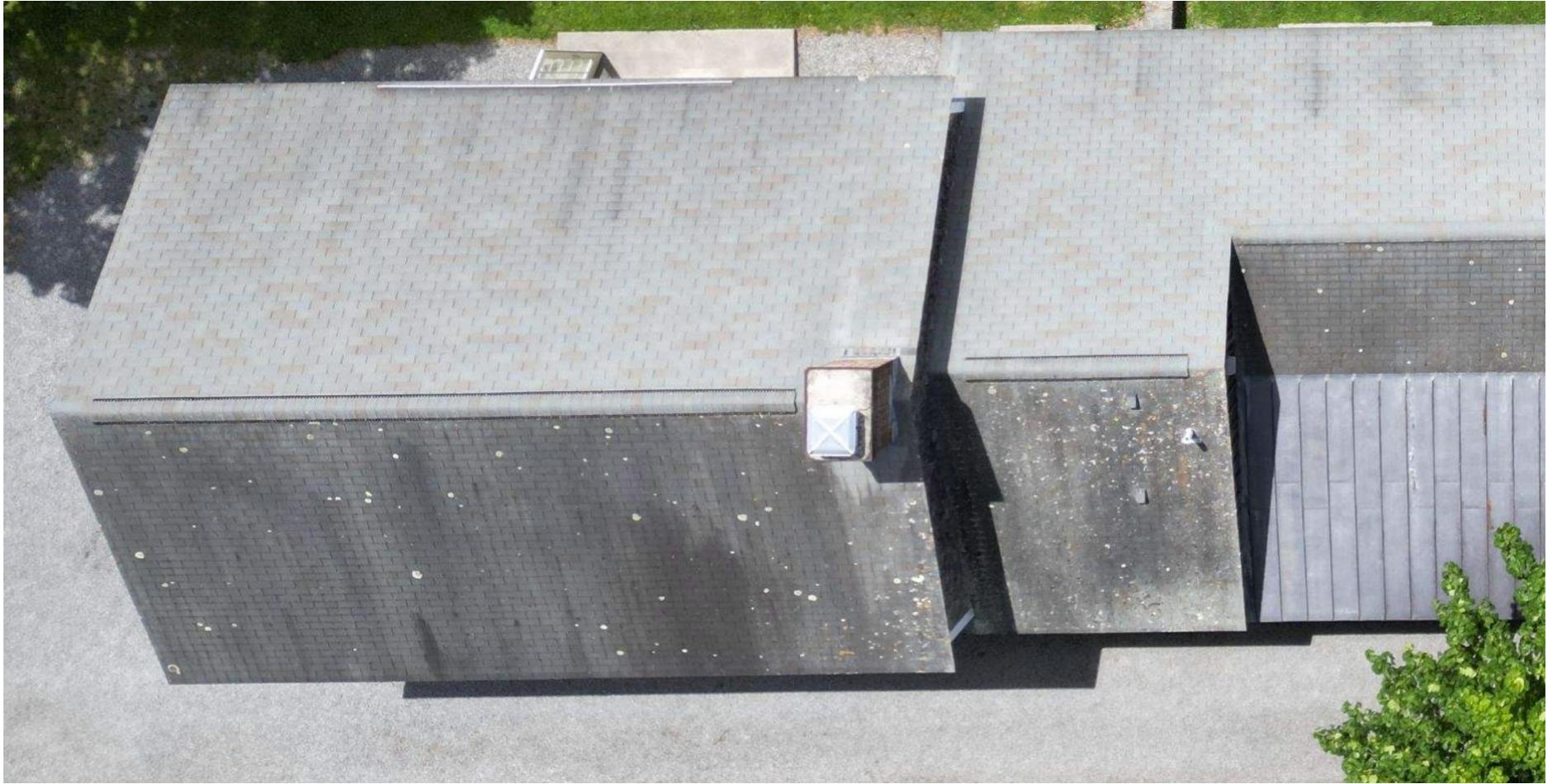
- **Abrasive damage:** The abrasive nature of sand can wear down exterior paint, coatings, and equipment.
- **Frequent cleaning:** Sand and saltwater can be tracked inside, requiring more frequent cleaning of floors, carpets, and furniture.











Introduction

Facility Condition Assessments (FCA), also known as Property Condition Assessment (PCA) and Building Condition Assessment (BCA) are reliable methods of identifying risk, generating strategy and communicating needs to make the most intelligent use of capital. These custom reports created from detailed, on-site assessments are essential for the longevity of physical assets.

Facilities Condition Assessment Guideline

Objective: The main objective is to measure the condition and functionality of buildings, substructures and sub systems from a baseline previously completed in 2016 (NBS Comprehensive Management Plan). My suggestion would be to use a UniFormat Level Two, which is typically group elements that provide approximately twelve to twenty pieces of asset information. Level Two of the UniFormat system is typically used for master planning projects.

Assessment Methodology: Identify renewal and replacement needs and guidance for capital project decision options which may include renovation and modernization. Needed remedial actions are identified to restore building or infrastructures to original condition and meet current codes along with the elimination of damaging or hazardous conditions. The following timelines should be considered with regards to the physical assessment:

- Critical Deficiencies: 12 to 24 months
- Capital Renewal Needs: 2 to 5 years
- Capital Renewal Needs: 5 to 10 years

Scope: The scope should include a physical condition assessment, a functionality assessment and a high level review of life-cycle modeling.

Intended Users: Facilities condition assessment users should include senior NBS administrators, governing boards and team specialists (architects, engineers) when appropriate.

There are typically 4 phases required to complete the Facility Conditions Assessment:

Phase 1 - Designing the assessment: 1 week

- Determine assessment scope - choose and develop functional criteria
- Select assessment team
- Create/Prepare inspection format
- Plan inspections

Phase 2 - Collecting Data: 2 weeks

- Hold interviews for functional deficiencies
- Complete physical inspections
- Explore systems performance inspections

Phase 3 - Summarizing the Results: 2 weeks

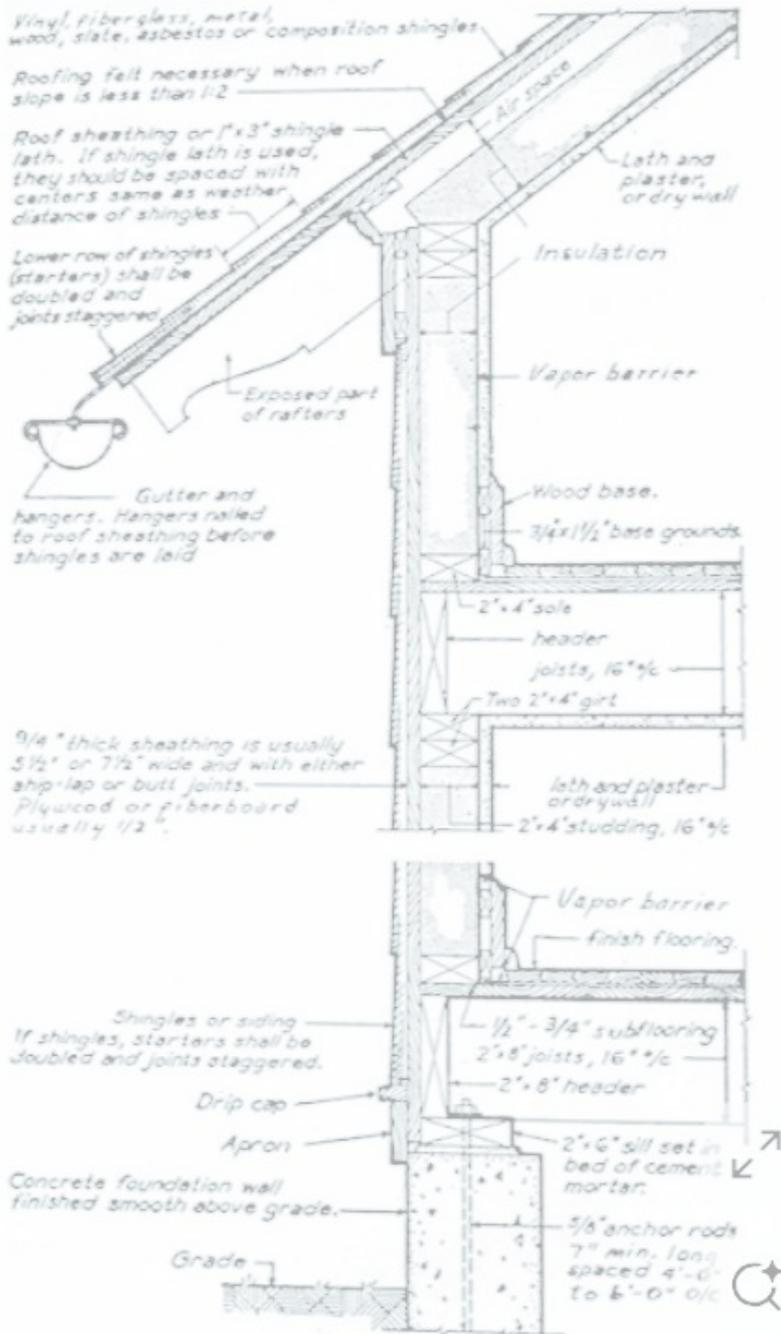
- Evaluate inspections
- Compile data
- Prepare summary reports

Phase 4 - Present the Findings + Apply the Assessment: 1 week

- Design presentation
- Prepare and present final report
- Put assessment to work - Process should be repeated 3 to 5 years.
- Apply the assessment and create a culture that improves facilities management effectiveness by making the condition assessments routine.

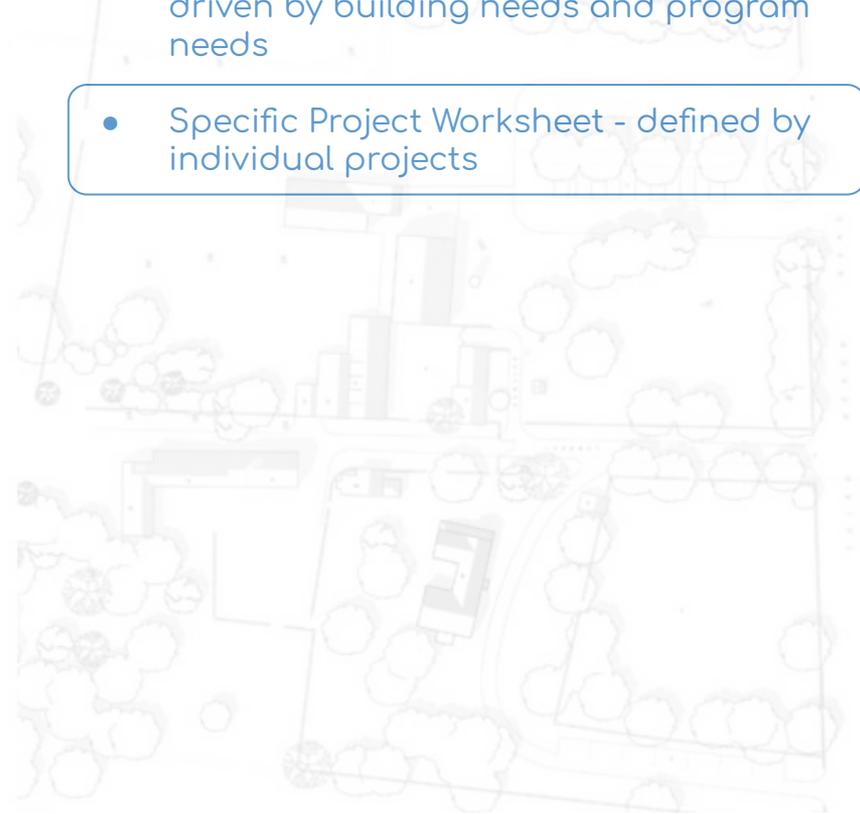
ASTM Uniformat II Classification for Building Elements (E1557-97)

Level 1 Major Group Elements	Level 2 Group Elements	Level 3 Individual Elements
A SUBSTRUCTURE	A10 Foundations	A1010 Standard Foundations A1020 Special Foundations A1030 Slab on Grade
	A20 Basement Construction	A2010 Basement Excavation A2020 Basement Walls
B SHELL	B10 Superstructure	B1010 Floor Construction B1020 Roof Construction
	B20 Exterior Enclosure	B2010 Exterior Walls B2020 Exterior Windows B2030 Exterior Doors
	B30 Roofing	B3010 Roof Coverings B3020 Roof Openings
C INTERIORS	C10 Interior Construction	C1010 Partitions C1020 Interior Doors C1030 Fittings
	C20 Stairs	C2010 Stair Construction C2020 Stair Finishes
	C30 Interior Finishes	C3010 Wall Finishes C3020 Floor Finishes C3030 Ceiling Finishes
D SERVICES	D10 Conveying	D1010 Elevators & Lifts D1020 Escalators & Moving Walks D1090 Other Conveying Systems
	D20 Plumbing	D2010 Plumbing Fixtures D2020 Domestic Water Distribution D2030 Sanitary Waste D2040 Rain Water Drainage D2090 Other Plumbing Systems
	D30 HVAC	D3010 Energy Supply D3020 Heat Generating Systems D3030 Cooling Generating Systems D3040 Distribution Systems D3050 Terminal & Package Units D3060 Controls & Instrumentation D3070 Systems Testing & Balancing D3090 Other HVAC Systems & Equipment
	D40 Fire Protection	D4010 Sprinklers D4020 Standpipes D4030 Fire Protection Specialties D4090 Other Fire Protection Systems
	D50 Electrical	D5010 Electrical Service & Distribution D5020 Lighting and Branch Wiring D5030 Communications & Security D5090 Other Electrical Systems
	E EQUIPMENT & FURNISHINGS	E10 Equipment
E20 Furnishings		E2010 Fixed Furnishings E2020 Movable Furnishings
F SPECIAL CONSTRUCTION & DEMOLITION	F10 Special Construction	F1010 Special Structures F1020 Integrated Construction F1030 Special Construction Systems F1040 Special Facilities F1050 Special Controls and Instrumentation
	F20 Selective Building Demolition	F2010 Building Elements Demolition F2020 Hazardous Components Abatement



The Facility Condition Assessment can be the catalyst to begin to complete the following documents:

- Building | Infrastructure Data Grid - factual data that may already exist
- Deferred Maintenance Grid Including Costs - derived from FCA and estimates
- Potential Projects List for Fiscal Year - driven by building needs and program needs
- Specific Project Worksheet - defined by individual projects



Deferred Maintenance Grid



	A	I	J	K	L	M	N	O	P	Q	R	S	T
1		Building Envelope											
2	Major Group Elements	Building Envelope											
3	UniFormat Level 2	Building Envelope											
4		Roof			Windows			Doors			Exterior Walls		
5	Facilities	12 - 24 mos	2 - 4 yrs	5 - 10 yrs	12 - 24 mos	2 - 4 yrs	5 - 10 yrs	12 - 24 mos	2 - 4 yrs	5 - 10 yrs	12 - 24 mos	2 - 4 yrs	5 - 10 yrs
6	Animal Room + Workshop			\$40,000		\$30,000		\$25,000					\$35,000
7	Barn								\$35,000				
8	Classroom								\$5,000		\$3,000		
9	Ed Shed												\$10,000
10	Farmhouse	\$16,000	\$60,000								\$2,000		\$50,000
11	Laundry Cottage		\$8,000	\$20,000									
12	Peabody House						\$20,000					\$40,000	
13	Studio			\$20,000	\$25,000	\$18,000		\$5,000		\$25,000	\$2,500	\$10,000	
14	Third Beach Education Center									\$15,000	\$1,500		\$20,000
15	Welcome Center				\$3,500			\$1,000				\$15,000	
16													
17	Land Fields												
18													
19													
20	Infrastructure												
21	Parking Lot 1												
22	Road 1												
23													
24	Support												
25	Garage 1	\$3,000							\$30,000				
26	Garage 2								\$20,000			\$2,000	
27	Pump House												
28	Tool Shed	\$10,000											
29	Tower 1												
30		\$29,000	\$68,000	\$80,000	\$28,500	\$48,000	\$20,000	\$31,000	\$90,000	\$40,000	\$9,000	\$67,000	\$115,000

Facility Data Sheet

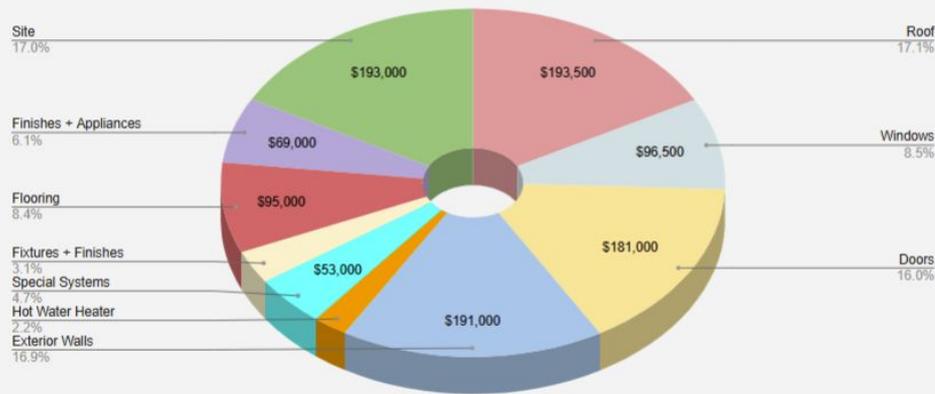
	A	B	C	D	E	
1	Facility Data Sheet					
2						
3	Facility	Studio				
4	Constructed	Early 20th Century				
5	Current Use	Rental (public), Administrative				
6						
7	Previous Facility Renewal Information:	2001 ?				
8						
9	Previous Operational Work:	This is where you would list significant workorders/facility changes. Ex. - replaced roof				
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22			Recommendation	Notes		
23	Substructure					
24	Foundation	Good				
25	Basement	N/A				
26						
27	Building Envelope					
28	Roof	Good/Fair	Replace in 5 - 10 years.	Soft-wash north side in next 24 months	\$25,000	
29	Chimney	Good	Selective painting in 5-10 years.		\$3,000	
30	Flashing	Good	Re-flash, selective painting 5-10 years.		\$8,500	
31	Windows	Fair	Replace large window (north) in 12 -24 months. Replace other windows in 5 - 10 years.		\$38,000	
32	Doors	Good/Fair	Repair trim and Storm Door (slider) in 12 - 24 months. Replace southern door system 5 - 10 years.		\$50,000	
33	Exterior Walls	Good	Clean and repair existing white cedar shingle siding in next 12 - 24 months.		\$2,500	
34	Building Trim	Fair	Paint and repair existing building trim in 12 - 24 months.		\$15,000	
35	Window Trim	Fair	See "Window" note above.			
36						
37	Systems					
38	Conveying	N/A				
39	Electrical	Good	100 amp (Kitchen), 225 amp - multi facilities			
40	Fire Protection	Good				
41	Heat/Boiler	Good	Radiant floor slab. Mechanical room located below Animal Room			
42	Hot Water	Good	Electric water heater (2011)		\$10,000	
43	Plumbing	Good	Copper and PVC			
44						
45	Bothrooms					
46	Fixtures	Good				
47	Flooring	Good				
48	Walls	Good				
49						
50	Interiors					
51	Flooring	Poor	Refinish flooring - lack of finish is degrading wood structure. Next 12 - 24 months.		\$15,000	
52	Finishes	Good/Fair	Replace/Add kitchen fixtures and finishes. 12 -24 months (\$5K) and 2 - 4 years (\$5K)	Age - possibly 2001	\$10,000	
53						
54	Site					
55	Perimeter	Good/Fair	Lower entry concrete patio from existing door system on south elevation. Create landscape buffer from vehicles near building, soften entrance with landscaping.		\$10,000	
56	Structures	N/A				
57						
58	Miscellaneous					
59						
60					Total:	\$187,000
61						

Major Group Elements - UniFormat Level II

Foundation	\$0
Basement	\$0
Roof	\$193,500
Windows	\$96,500
Doors	\$181,000
Exterior Walls	\$191,000
Conveying	\$0
Electrical	\$0
Fire Protection	\$0
Heat/Boiler	\$0
Hot Water Heater	\$25,000
Special Systems	\$53,000
Fixtures + Finishes	\$35,000
Flooring	\$95,000
Finishes + Appliances	\$69,000
Site	\$193,000

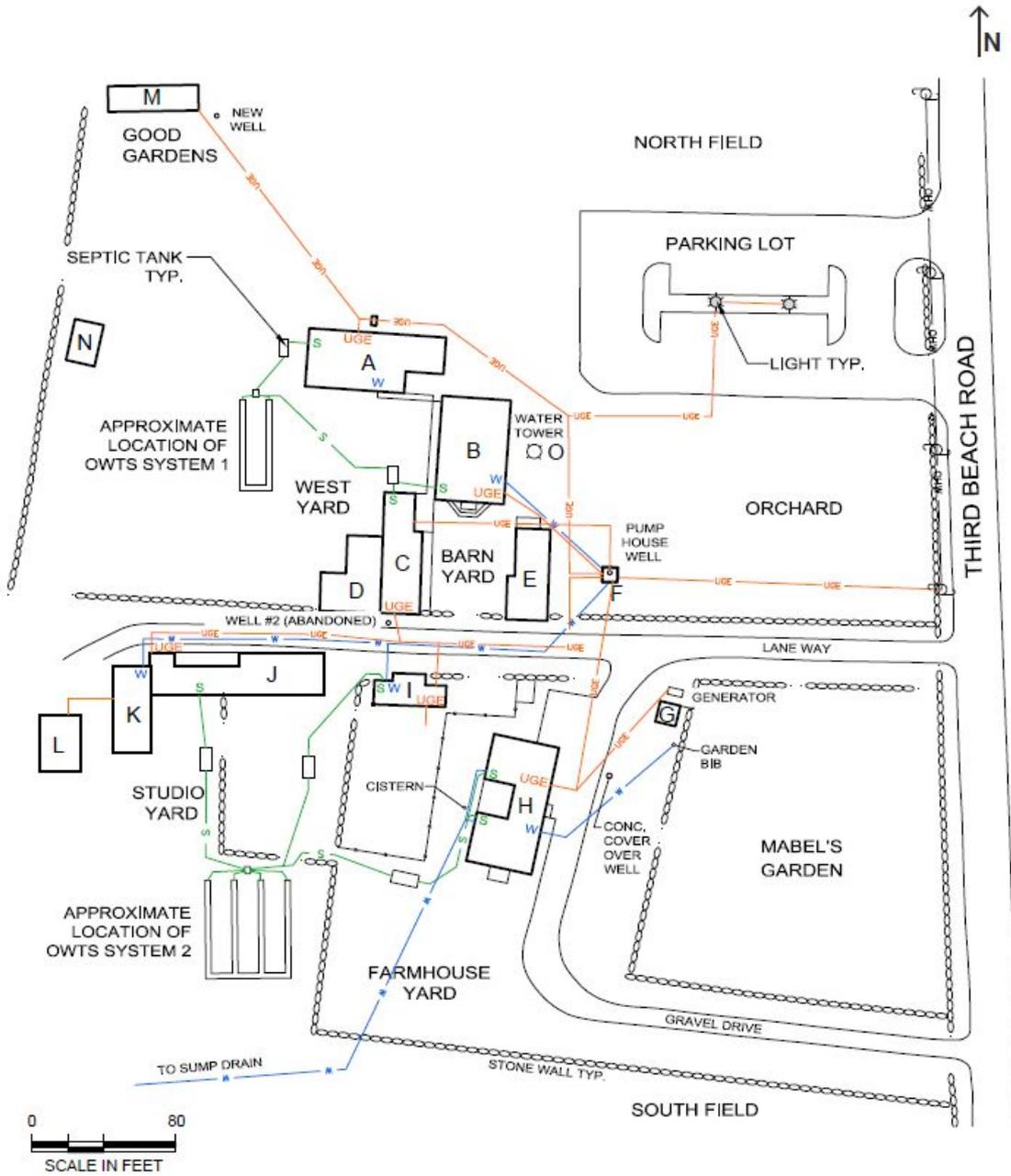
Total \$1,132,000

Major Group Elements - UniFormat Level II



	A	AY	AZ	BA
1				
2	Major Group Elements	Totals		
3	UniFormat Level 2			
4				
5	Facilities			
6	Animal Room + Workshop	\$137,000		
7	Barn	\$208,000		
8	Classroom	\$25,000		
9	Ed Shed	\$33,000		
10	Farmhouse	\$135,500		
11	Laundry Cottage	\$73,500		
12	Peabody House	\$150,000		
13	Studio	\$187,000		
14	Third Beach Education Center	\$38,500		
15	Welcome Center	\$21,500		
16				
17	Land Fields			
18		\$0		
19				
20	Infrastructure			
21	Parking Lot 1	\$0		
22	Road 1	\$0		
23				
24	Support			
25	Garage 1	\$53,000		
26	Garage 2	\$34,000		
27	Pump House	\$0		
28	Tool Shed	\$11,000		
29	Tower 1	\$25,000		
30		\$1,132,000		
31				
32				
33		Totals		
34		\$362,500	12 - 24 months	
35		\$451,000	2 - 4 yrs	
36		\$318,500	5 - 10 yrs	
37		\$1,132,000		
38				
39				
40				

Existing Conditions | UTILITIES



Priority Action Item

- Confirm utilities locations
- Map water/drainage run-off

Buildings + Grounds

- Consider the implementation of some type of work order system.
- Secure vendor relationships for major building systems, on-call agreements, seasonal inspections.
- Update Building data sheets seasonally.
- Verify utility plan (2016), add water drainage.
- Consider securing space for the consolidation of Harvest Fair equipment. Impact is significant to existing facilities and their efficiency.
- Develop/Drill an Emergency Action Plan (EAP)
- Begin the process to develop a landscape master plan and guidelines.

Operations

- Consider a cash reserve for failures - possibly a % of operating budget.
- Alternative revenue streams, possibly tied to enhancing capital renewal as part of agreements. (Strategic Facilities Plan)

