



**Spaulding High School
Central Vermont Career Center
Barre City Elementary and Middle School
Barre Town Middle and Elementary School**

Chris Hennessey, M.Ed.
Superintendent of Schools

A rock solid education for a lifetime of discovery

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MEMORANDUM

TO: **Barre Unified Union School District Special Facilities and Transportation Committee**
Giuliano Cecchinelli II - Chair, Terry Reil, Sarah Pregent, Andy McMichael, Mary Jane Ainsworth

DATE: November 30, 2023

RE: Barre Unified Union School District Facilities and Transportation Committee Meeting
December 4, 2023 @ 6:00 p.m.
In-Person: Spaulding High School Library, 155 Ayers St., Barre
Remote: Meeting ID: meet.google.com/yva-xiqt-dmj
Phone Number: (US)+1 240-292-8164 PIN: 644 880 341#

Please Note: If you attend the meeting remotely you must state your name for the record to satisfy the Open Meeting Law

AGENDA

1. Call to Order
2. Organize (appoint vice chair)
3. Additions/Changes to Agenda
4. Public Comment
5. Review/Approval of Meeting Minutes
 - 5.1. Approval of Minutes Regular Meeting November 6, 2023
6. New Business
 - 6.1. Facilities Director Report
 - 6.2. 5-year Capital Plan Draft
 - 6.3. Building Assessment Reports
7. Old Business
 - 7.1. EEI Update
 - 7.2. Update on Storm Water Mitigation Projects
8. Items for Future Agenda
9. Next Meeting Date: January 8, 2024 at 6:00 pm, SHS Library and via Google Meet.
10. Adjournment

Parking Lot of Future Items

- A. Presentations by Building Maintenance Leads [Added: Mr. Riel - July 2023]
- B. Athletic Facilities Consultant - Information Gathering [Added: Mr. Reil - April 2023]
- C. Transportation to SHS from Out of District/Sending Schools Discussion [Added: Feb 2023]
- D. Transportation SEA Building [Added: Feb 2023]
- E. Transportation SHS Student [Added: Feb 2023 (Luke)]
- F. General Transportation Discussion (SHS, SEA, Out of District, etc.) [Added: Feb 2023]
- G. Storm Water Run-Off Mitigation Update (ongoing) [Added: Feb 2023]
- H. Building Visionary Lists - known needs or "to do's" at each building - From Maintenance Leads
Next 6 Month Schedule of anticipated/planned work in each building.(ongoing) [Reil 11/14/22]
- I. Crisis Response Plan [Added by Committee Aug. 2023]

BOARD/COMMITTEE MEETING NORMS

- Keep the best interest of the school and children in mind, while balancing the needs of the taxpayers
- Make decisions based on clear information
- Honor the board's decisions
- Keep meetings short and on time
- Stick to the agenda
- Keep remarks short and to the point
- Everyone gets a chance to talk before people take a second turn
- Respect others and their ideas

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BARRE UNIFIED UNION SCHOOL DISTRICT FACILITIES AND TRANSPORTATION COMMITTEE MEETING Spaulding High School Library and Via Video Conference – Google Meet November 6, 2023 - 6:00 p.m.

MINUTES

COMMITTEE MEMBERS PRESENT:

Giuliano Cecchinelli, II, Chair – (BC)
Mary Jane Ainsworth (BT Community Member)
Andrew McMichael (BC Community Member)
Terry Reil, - (BT)

COMMITTEE MEMBERS ABSENT:

Vacant Position - (BC)

OTHER BOARD MEMBERS PRESENT:

Nancy Leclerc
Paul Malone

ADMINISTRATORS PRESENT:

Chris Hennessey, Superintendent
Jamie Evans, Facilities Director

GUESTS PRESENT:

Sarah Helman

1. Call to Order

The Chair, Mr. Cecchinelli, called the Monday, November 6, 2023 BUUSD Facilities and Transportation Committee meeting to order at 6:00 p.m., which was held in the Spaulding High School Library and via video conference.

2. Additions and/or Deletions to the Agenda

Add 6.1 Update on Storm Water Cost Estimate
Add 6.2 Update on 5-Year Capital Plan
Add 5.3 Update on AOE Building Assessment Reports

On a motion by Mr. Reil, seconded by Ms. Ainsworth, the Committee unanimously voted to approve the Agenda as amended.

3. Public Comment

None.

4. Approval of Minutes

4.1 Approval of Minutes – October 2, 2023 BUUSD Facilities and Transportation Committee Meeting

On a motion by Mr. Reil, seconded by Ms. Ainsworth, the Committee unanimously voted to approve the Minutes of the October 2, 2023 BUUSD Facilities and Transportation Committee meeting.

5. New Business

5.1 Transportation Discussion

Mr. Hennessey advised that he and administrators will be meeting with Stacy Emerson (STA) and will be putting together an audit of transportation needs (including; ridership, Suburban use, use of personal vehicles and use of outside services for outplacement). The purpose is to get a handle on the transportation needs of the District and identify efficiencies. Discussion will also include the current structure of using one Transportation Coordinator for both BCEMS and BTMES, which is showing to be much more work than anticipated. Ms. Emerson and principals will present at the January 24, 2024 meeting. Additional discussion included; current use of Suburbans, transportation for SEA students (transportation requirements vs transportation the District would like to provide), the impact transportation has on attendance for SEA students, transportation regulations (legal and insurance related), confirmation that routing efficiencies will be studied, budgeting for FY25 (transportation has been over budget the past 2 years), a query regarding a written plan for planned research, and confirmation that there are no documents for presentation this evening (relating to transportation and air conditioning). Discussion this evening is informational only; to provide an update on planned work.

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5.2 BCEMS and BTMES Air Conditioning

Mr. Evans advised this agenda item is in response to queries regarding air conditioning for BCEMS and BTMES, as the District is currently installing AC in a portion of SHS. It was clarified that AC at SHS is actually installation of dehumidification units (smaller scale than traditional AC). Addition of air conditioning for BCEMS and BTMES is a 'big ask', and is something to be discussed further down the road. There are no current plans (at least for the current fiscal year), to seriously discuss and research AC at the elementary/middle schools. Mr. Evans noted that healthy discussion will need to be held prior to considering budgetary considerations (nothing will be done in the FY25 budget). It was confirmed that the majority of BTMES is currently air conditioned (exceptions being; cafeteria, gymnasium, and multi-purpose rooms). BCEMS has never had air conditioning. It was reiterated that this is a very early point of discussion and this item should be added to the Parking Lot for future discussion. AC for BCEMS and BTMES is not currently in the 5-Year Plan and most likely won't be until healthy discussion has been held. Ms. Ainsworth suggested that a plan be created to map out what needs to be done to perform an analysis of this item. Mr. Evans recommends finishing the project at SHS and then 'see' what was learned from that project. Work being performed at SHS is classified as dehumidification, which is the same as air conditioning, but on a smaller scale. BCEMS does have a centralized duct work system, which might be conducive to installation of air conditioning. Mr. Malone noted that the work at SHS was ESSER funded, and if AC work is performed at other schools, it might have to be performed over multiple years (for budgetary considerations). Mr. Reil believes it's important to note that though someone from BTMES attended a meeting and expressed concerns over AC, BTMES does have air conditioning and it was in the process of being upgraded and improved (it didn't fail). It was suggested that a feasibility study be performed (over the entire District). Additional discussion included maintenance and replacement of rooftop units at BTMES, and acknowledgement that monies are usually budgeted for routine maintenance and replacement of AC units at BTMES.

5.3 Update on AOE Building Assessment Reports

Mr. Evans advised that the District received four Building Assessment Reports (one for each school and Central Office). Those performing the audit spent approximately one week at each building and everything was reviewed. The reports are quite extensive. Mr. Evans attended a webinar that assists with explaining/understanding the reports. Individuals from AOE were also present at the webinar. Mr. Evans advised that a cursory review of the reports does not raise any red flags or identify any immediate needs. Mr. Evans advised that most areas were ranked as good or fair. Fair is defined as operating at today's standards and in good shape. Life expectancy is also part of the report. The SEA building was not audited due to its relatively new age. Mr. Malone requested a copy of the reports (for his examination). It is not known if construction costs are included in the report. Administrators will be taking a more in-depth look at the reports and they will be shared with the entire Board.

6. Old Business

6.1 Update on Storm Water Cost Estimate

Mr. Evans reported that the report was shared by the vendor shortly after the last meeting, and Mr. Evans forwarded the information on to Committee Members. Mr. Evans will resend the documentation. Mr. Evans advised that permits are in hand for BCEMS and BTMES, and the SHS permit application is currently under review. Given the status of the permits, the District is allowed to apply for Phase 2 construction funding. All funding applications have been submitted and results are expected in mid-December. It is currently believed that funding will be provided at 90%, with the District responsible for 10% of costs. If additional information becomes available, it will be shared at the next meeting. Mr. Cecchinelli advised that while driving through Boynton Street, he noticed that it appears that one of the daylight pipes (for water), has been knocked out. Mr. Cecchinelli advised Mr. Evans of the pipe location so that he may investigate.

6.2 Update on 5-Year Capital Plan

Mr. Evans reported that he and the Business Office have been updating the Plan and it is now much more robust. Prior year expenses have been added to the Plan. Mr. Evans would like to incorporate the Assessment Reports into the Plan (after reports have been thoroughly reviewed). Mr. Evans would prefer to enter additional information prior to posting the Plan on-line. Mr. Hennessey noted that it has been helpful for Mr. Malone and Mrs. Spaulding to provide input as part of the budget process. Mr. Evans advised that the 5-Year Plan is always a work in progress and items change based on various circumstances and variables.

Mr. Evans will share with Committee Members (via email), the Facilities Directors Report and the Opinion of Probable Costs for the SHS Storm Water Remediation Project.

7. Items for Future Agendas

- Facilities Director Report
- 5-Year Capital Plan Draft
- AOE Building Assessments (TBD)
- EEI Update
- Updates on Storm Water Mitigation Projects (Including Funding)

8. Next Meeting Date

The next meeting is Monday, December 4, 2023 at 6:00 p.m., at the Spaulding High School Library and via video conference.

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The January 1, 2024 meeting is cancelled.

The January meeting will be held on Monday, January 8, 2024 at 6:00 p.m., at the Spaulding High School Library and via video conference.

9. Adjournment

On a motion by Mr. Reil, seconded by Ms. Ainsworth, the Committee unanimously voted to adjourn at 6:57 p.m.

Respectfully submitted,

Andrea Poulin

Barre Unified Union School District
Five-year Capital Improvement Budget - DRAFT
FY 2022-2023 through FY 2028 - 2029

Project Description	Building	Actual	Budget	Actual	Budget	Budget	Budget	Budget	Budget
		FY 2022-2023	FY 2023-2024	FY 2023-2024	FY 2024-2025	FY 2025-2026	FY 2026-2027	FY 2027-2028	FY 2028-2029
Classroom Floor Tiles	BCEMS	\$ 18,700		\$ 13,706	\$ 15,000	\$ 15,000	\$ 15,000		
Victaulic Fitting Replacement	BCEMS	\$ 29,569		\$ 27,116	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Bus Loop Paving	BCEMS	\$ 14,908							
Student Restroom Renovation	BCEMS	\$ 9,773			\$ 10,000	\$ 10,000	\$ 10,000		
Exterior Door Replacement	BCEMS			\$ 36,368	\$ 20,000	\$ 20,000			
Gym Floor Complete Refinishing	BCEMS			\$ 13,560					
Continuation of Roof Replacement	BCEMS				TBD	TBD			
Paving Project	BCEMS						\$400,000 est.		
Classroom Floor Tiles Project	BTMES	\$ 56,245	\$ 15,000	\$ 16,856	\$ 15,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
Basketball Backboard Upgrade	BTMES	\$ 23,850							
Rooftop AC Unit Replacement	BTMES	\$ 25,000		\$ 11,952	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
Student Restroom Renovation	BTMES	\$ 19,502							
Interior Classroom Doors	BTMES		\$ 15,000	\$ -	\$ 15,000	\$ 15,000			
Exterior Door Replacement	BTMES				\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000
New Air Conditioning Installation	CENTRAL OFFICE	\$ 13,755							
Roof Replacement	CENTRAL OFFICE				TBD	TBD			
Electrical Service SEA Barn	SEA	\$ 21,733							
Asphalt Paving Barn/Parking Lot	SEA	\$ 17,910							
SEA Barn Project	SEA				TBD	TBD			
Addition-Phase 2, 10,000 sq./ft	SEA				TBD				
Classroom Floor Tiles	SHS	\$ 37,312	\$ 20,000	\$ 21,844	\$ 45,000	\$ 20,000	\$ 20,000		
Victaulic Fitting Replacement	SHS	\$ 19,663			\$ 25,000	\$ 20,000	\$ 20,000		
New Front Entry Doors	SHS	\$ 16,755							
Exterior Gym Door Replacement	SHS			\$ 20,625					
Girls Locker Room Storage	SHS			\$ 21,315					
Interior Entry Gym Doors	SHS				\$ 13,400				
Interior Band Hallway Doors	SHS				\$ 20,000				
Asbestos Ceiling Tiles	SHS			\$ 119,350					
**Ballfield Renovation	SHS								
**Auditorium Renovation	SHS								
Storm Water (Majority paid for by Grant Funds - timing is TBD next 5 yrs)	SHS					\$215,000 est			
Storm Water (Majority paid for by Grant Funds - timing is TBD next 5 yrs)	BCEMS					\$471,000 est.			
Storm Water (Majority paid for by Grant Funds - timing is TBD next 5 yrs)	BTMES					\$215,000 est.			
Wrestling Room Ventilation	SHS				TBD				
Wireless clocks throughout building	SHS				TBD	TBD	TBD		
Classroom Doors Card Access	SHS/BTMES/BCEMS				TBD	TBD	TBD	TBD	TBD
Chalkboard removal (Asbestos)	SHS				TBD	TBD	TBD	TBD	TBD
Auditorium Lobby Entry Doors	SHS				TBD	TBD	TBD	TBD	TBD
Window Blinds	SHS				TBD	TBD	TBD	TBD	TBD

Communal Bathrooms	SHS				TBD	TBD	TBD	TBD	TBD
Playground Equipment Replacement	BCEMS				\$ 100,000	\$ 100,000			
Playground Equipment Replacement	BTMES				\$ 100,000	\$ 100,000			
Chalkboard Removal (Asbestos)	BTMES				TBD	TBD	TBD	TBD	TBD
ECO Outdoor Space - Fenced In Area	BCEMS				TBD	TBD			
Playground Storage	BCEMS				TBD	TBD			
Stage Sound System	BTMES				\$ 75,000				
Fencing Around Playground Area	BTMES				TBD	TBD	TBD	TBD	TBD
Science Lab Room 200 Renovation	BTMES				TBD	TBD			
Bus Loop Paving	BTMES					TBD	TBD		
Roof Penthouse Encapsulation	BTMES				\$ 30,000				
Rain Gutters on Woodchip Building	BTMES				TBD				
Central AC Equipment (40 Ton Units)	BTMES				TBD	TBD	TBD	TBD	TBD
Locker Room Renovations (Boys & Girls)	BTMES				TBD	TBD	TBD	TBD	TBD
Parking Lot Expansion	SEA				TBD	TBD	TBD	TBD	TBD
Building Expansion	SEA				TBD	TBD	TBD	TBD	TBD
Gym Roof Replacement	SHS				TBD	TBD	TBD	TBD	TBD
Woodchip Building Roof Replacement	SHS				TBD	TBD	TBD	TBD	TBD
CAPITAL RESERVE									
BT Roofing	BTMES	\$ 192,314							
SHS Lighting	SHS	\$ 289,756		\$ 212,574					
BC Roofing	BCEMS			\$ 387,389	\$386,200 + skylights				
Asbestos Ceiling Tiles	SHS			\$ 375,780					
Truck w/Plow-Buy out lease	BCEMS			\$ 15,117					
ARP ESSER FUNDING									
HVAC/Sprinkler	SHS	\$ 1,936,322							
Total Capital Improvement Project Budgets				\$ 1,293,552	\$ 558,400	\$ 405,000	\$ 170,000	\$ 105,000	\$ 105,000

FACILITY CONDITION ASSESSMENT



prepared for
Vermont Agency of Education_FCA Phase Two
1 National Life Drive, Davis 5
Montpelier, VT 05620-2501



PREPARED BY:
Bureau Veritas
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BV PROJECT #:
158982.22R000-023.379

DATE OF REPORT:
August 23, 2023

ON SITE DATE:
July 17, 2023

BARRE UNIFIED UNION SD - Main Building (U097-SU061)
120 Ayers Street
Barre VT,05641

Bureau Veritas

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1. Executive Summary

Property Overview and Assessment Details

General Information	
Property Type	Administration Building
School ID Number	U097-SU061
Main Address	120 Ayers Street, Barre VT,05641
E911 Address Verification	05641-4304, Standardized, Fixed abbreviations, Matched Street and city and state, Confirmed entire address
GPS Location (Verified E911)	Main Building 44.19062, -72.4936
Site Developed	1900
Site Area	.55 acres (estimated)
Parking Spaces	19 total spaces all in open lots; 1 of which are accessible
Building Square Footage	6,200 (Verified)
Number of Stories	2 above grade
Supervisory Union/ District	Barre Unified Union SD
Date(s) of Visit	July 17, 2023

Note: (Verified) in Square Foot signifies that the square footage of the facility has been verified to be accurate.



Significant/Systemic Findings and Deficiencies

Historical Summary

The Barre Unified Union SD building was constructed in 1900. It has been renovated since its construction to turn it into office space.

Architectural

The building is a brick construction. The roof is constructed out of asphalt shingles. The windows are aluminum and vinyl in construction. The interior finishes have been regularly replaced over the years as budgeting allowed and needs required. Typical lifecycle interior finish, exterior finish, and roof replacements are budgeted and anticipated.

Mechanical, Electrical, Plumbing and Fire (MEPF)

Heating for the building is provided by two boilers located in the boiler room. Baseboard radiators are located throughout the building and are fed by 2 heating water pumps. These pumps did not have VFDs. The electrical service feeds a panel located in the boiler room that was installed in 1995. The rest of the electrical system was renovated at the same time. There are smaller distribution panels throughout the building. The interior lighting consists of mainly linear fluorescent bulbs but there are a very limited number of LED replacements installed. Most of the electrical service equipment and systems are well maintained and should be replaced during normal life expectancy. In general, the plumbing systems are adequate to serve the facilities, with equipment and fixtures to be updated as needed. The domestic water service within the facility is well maintained, with no evidence of leaks observed at the domestic piping. The domestic hot water service at the facilities consists of an electric heater. Lifecycle replacement of the domestic water and sanitary sewer systems is not anticipated. No major issues were observed or reported. Fire protection system consists of a hard-wired fire alarm system and a wet-type fire sprinkler system. The sprinkler system is throughout the building. The alarm system consists of strobes, pull stations, illuminated exit signs, emergency lighting and other modern life safety devices.

Site

The property has a parking lot to the left side of the building. The current main entrance is also on the left side of the building,

Recommended Additional Studies

No additional studies recommended at this time.



Facility Condition Index (FCI)

One of the major goals of the FCA is to calculate each building's Facility Condition Index (FCI), which provides a theoretical objective indication of a building's overall condition. By definition, the FCI is defined as the ratio of the cost of current needs divided by current replacement value (CRV) of the facility. The chart below presents the industry standard ranges and cut-off points.

FCI Ranges and Descriptions	
0 – 5%	In new or well-maintained condition, with little or no visual evidence of wear or deficiencies.
5 – 10%	Subjected to wear but is still in a serviceable and functioning condition.
10 – 30%	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.
30% and above	Has reached the end of its useful or serviceable life. Renewal is now necessary.

The deficiencies and lifecycle need identified in this assessment provide the basis for a portfolio-wide capital improvement funding strategy. In addition to the current FCI, extended FCI's have been developed to provide owners the intelligence needed to plan and budget for the "keep-up costs" for their facilities. As such the 3-year, 5-year, and 10-year FCI's are calculated by dividing the anticipated needs of those respective time periods by current replacement value. As a final point, the FCI's ultimately provide more value when used to relatively compare facilities across a portfolio instead of being over-analyzed and scrutinized as stand-alone values. The table below summarizes the individual findings for this FCA:

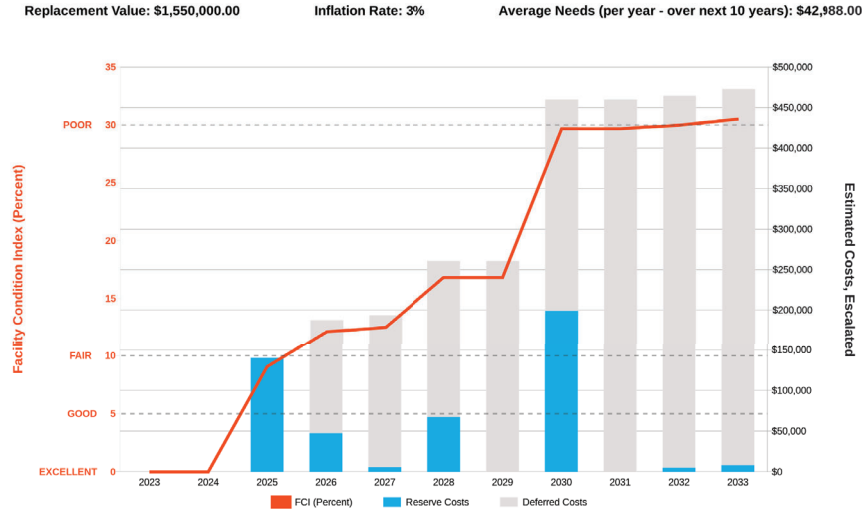
FCI Analysis			
Replacement Value	Total SF	Cost/SF	
\$1,550,000	6,200	\$250	
Current FCI	\$0		0.0%
3-Year	\$187,900		12.1%
5-Year	\$261,000		16.8%
10-Year	\$472,900		30.5%



Facility Level FCI:

The orange line in the graph below forecasts what would happen to the FCI (left Y axis) over time, assuming zero capital expenditures. The capital expenditures allocated for each year (blue bars) are associated with the dollar amounts along the right Y axis. If the school expends the average amount per year to maintain and replace systems, they will not incur the capital debt represented by the gray bars.

Needs by Year with Unaddressed FCI Over Time



Needs by Year with Unaddressed FCI Over Time (Table)

The above graph is a visual representation of the information contained in the table below.

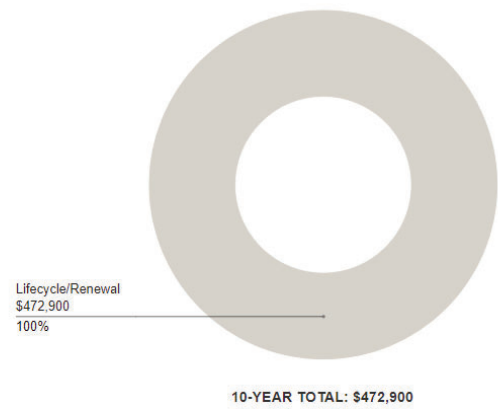
Year	Reserve	Reserve Escalation	Recurrence	Recurrence Escalation	Total Escalation	Deferred	FCI
2023	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0
2025	132,162	8,049	0	0	8,049	140,211	0.09
2026	43,584	4,041	0	0	4,041	187,836	0.12
2027	5,200	653	0	0	653	193,689	0.12
2028	58,000	9,238	0	0	9,238	260,927	0.17
2029	0	0	0	0	0	260,927	0.17
2030	156,600	35,998	5,175	1,190	37,188	453,525	0.29
2031	0	0	0	0	0	453,525	0.29
2032	3,680	1,122	0	0	1,122	458,327	0.3
2033	6,100	2,098	0	0	2,098	466,525	0.3
2034	6,650	2,555	0	0	2,555	475,730	0.31
2035	157,450	67,036	34,625	14,742	81,778	700,216	0.45
2036	0	0	15,000	7,028	7,028	700,216	0.45
2037	4,800	2,460	0	0	2,460	707,476	0.46
2038	0	0	0	0	0	707,476	0.46
2039	0	0	0	0	0	707,476	0.46
2040	76,810	50,145	52,962	34,576	84,721	834,431	0.54
2041	0	0	12,600	8,851	8,851	834,431	0.54
2042	0	0	1,500	1,130	1,130	834,431	0.54

Plan Types

Each line item in the cost database is assigned a Plan Type, which is the primary reason or rationale for the recommended replacement, repair, or other corrective action. This is the "why" part of the equation. A cost or line item may commonly have more than one applicable Plan Type; however, only one Plan Type will be assigned based on the "best" fit, typically the one with the greatest significance. Each of the Key Findings identified below are assigned a Plan Type.

Plan Type Descriptions		
Safety	■	An observed or reported unsafe condition that if left unaddressed could result in injury; a system or component that presents potential liability risk.
Performance/Integrity	■	Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses risk to overall system stability.
Accessibility	■	Does not meet ADA, UFAS, Safety and/or other handicap accessibility requirements.
Environmental	■	Improvements to air or water quality, including removal of hazardous materials from the building or site.
Retrofit/Adaptation	■	Components, systems, or spaces recommended for upgrades in in order to meet current standards, facility usage, or client/occupant needs.
Lifecycle/Renewal	■	Any component or system that is not currently deficient or problematic but for which future replacement or repair is anticipated and budgeted.

Plan Type Distribution (by Cost)



Immediate Needs

ID	Location Description	UF Code	Description	Condition	Plan Type	Cost
Total (0 items)	N/A	N/A	N/A	N/A	N/A	\$0
Total						\$0



Key Findings

No key findings for this location.



2. Building and Site Information



System Summary

System	Description	Condition
Structure	Masonry bearing walls with wood roof deck supported by wood joists and concrete strip/wall footing foundation system.	Fair
Facade	Wall Finish: Brick Windows: Aluminum and Vinyl	Fair
Roof	Hip construction with asphalt shingles.	Fair
Interiors	Walls: Painted gypsum board and lath & plaster Floors: Carpet, VCT, ceramic tile, wood strip, coated concrete Ceilings: Painted gypsum board and ACT	Fair
Elevators	None	N/A
Plumbing	Distribution: Copper supply and cast-iron waste & venting Hot Water: Electric water heaters with integral tanks Fixtures: Toilets, urinals, and sinks in all restrooms	Fair
HVAC	Central System: Boilers, air handlers, feeding hydronic baseboard radiators and cabinet terminal units. Supplemental components: Split-system heat pumps.	Fair
Safety and Security	Cameras, card readers, perimeter intrusion detection, security windows and doors, fencing, lighting, traffic gates. Multiple points of auto locking doors, main entry monitored, auto locking doors, internal locking on classroom doors, complete intercom system	Fair
Fire Suppression	Wet-pipe sprinkler system and fire extinguishers	Fair
Electrical	Source & Distribution: Main panel with copper wiring Interior Lighting: LED and linear fluorescent Emergency Power: None	Fair



Fire Alarm	Alarm panel with smoke detectors, heat detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs.	Fair
Equipment/Special	None	N/A
Site Pavement	Asphalt lots with limited areas of concrete aprons and pavement and adjacent concrete sidewalks, curbs, ramps, and stairs	Good
Site Development	Building-mounted signage; chain link fencing. Limited Park benches, picnic tables, trash receptacles	Fair
Landscaping & Topography	Limited landscaping features including lawns, trees, bushes, and planters. Irrigation not present. CMU retaining walls. Low to moderate site slopes throughout	Good
Utilities	Municipal water and sewer Local utility-provided electric and fuel oil tanks	Good
Site Lighting	Pole-mounted: LED Building-mounted: LED	Good
Ancillary Structures	None	N/A
Accessibility	Presently it does not appear an accessibility study is needed for this property.	
Key Issues and Findings	None observed at time of assessment	



3. Supplemental Evaluations

Square Foot Verification

We have reviewed the square footage of 6,200 square feet and it is in the range of square foot calculations as reported by the school district. This confirmation of the square footage of the facility is based on the exterior wall dimensions and number of stories measured from Google Earth and other publicly available internet searches. This measurement may not reflect the actual heated square footage but provides a general size of the heated square feet of the overall building.

PCB Air Indoor Testing

At the time of the onsite evaluation of this facility PCB air testing has not been conducted. Further ongoing information can be found on the Agency of Natural Resources PCB in Schools website [Agency of Natural Resources PCB in Schools](#).

School Educational Capacity and Programming Space

As part of the FCA report, school administrative staff were asked to conduct a self-assessment of whether their school building meets their space, operational needs and if they have sufficient building capacity and appropriate spaces to deliver educational programming. The school responses to the survey are reported in Appendix D. The respondents indicated that the following areas were inadequate to meet current needs:

A space needs self-assessment was conducted by the school administrative staff which identified space constraints in the following areas:

- Adequate number of classrooms.
- Adequate overall building space.
- Confidential space to maintain FERPA, HIPPA or IEP requirements.
- Administrative offices and/or office space for staff.
- Cafeteria, kitchen and/or gymnasium space.



The Depleted Value Facility Condition Index (FCI) is an estimate of a building's overall amount of consumed system life. The Depleted Value FCI ratings scale indicates the estimated condition of the system. Generally, the higher the Depleted Value FCI, the greater the need to repair or replace a system. Note that the FCI can also be calculated for system groups, building types and other aggregations. The estimated percentage of collective system life left in a building, also referred to as Remaining Useful Life (RUL). The higher the RUL, the newer the system. The sum of Depleted Value FCI and RUL will equal 100%.

Depleted Value Index	
Index Value	57.1%

System Expenditure Forecast						
System	Immediate	Short Term (1-2 yr)	Near Term (3-5 yr)	Med Term (6-10 yr)	Long Term (11-20 yr)	TOTAL
Structure	-	-	-	-	-	-
Facade	-	\$42,276	\$4,589	-	\$434,178	\$481,043
Roofing	-	-	-	-	\$20,098	\$20,098
Interiors	-	\$41,851	\$37,256	-	\$130,008	\$209,115
Plumbing	-	\$6,258	\$5,627	\$17,585	\$109,796	\$139,266
HVAC	-	\$24,173	\$65,989	\$69,213	\$110,569	\$269,944
Fire Protection	-	-	\$7,249	\$1,957	\$12,610	\$21,816
Electrical	-	\$4,243	-	\$38,126	\$35,358	\$77,727
Fire Alarm & Electronic Systems	-	\$15,913	-	\$38,125	\$24,792	\$78,830
Equipment & Furnishings	-	-	-	\$36,896	-	\$36,896
Site Pavement	-	\$5,490	-	\$6,364	\$82,458	\$94,312
Site Utilities	-	-	-	\$3,689	-	\$3,689
Site Development	-	-	-	-	\$21,795	\$21,795
TOTALS	\$0	\$140,204	\$120,710	\$211,955	\$981,662	\$1,454,531



4. Property Space Use and Observed Areas

Areas Observed

The interior spaces were observed to gain a clear understanding of the property's overall condition. Other areas accessed included the site within the property boundaries, the exterior of the property and the roofs.

Key Spaces Not Observed

All key areas of the property were accessible and observed.



5. ADA Accessibility

Generally, Title II of the Americans with Disabilities Act (ADA) prohibits discrimination by entities to access and use of "areas of public accommodations" and "public facilities" on the basis of disability. Regardless of their age, these areas and facilities must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

A public entity (i.e., city governments) shall operate each service, program, or activity so that the service, program, or activity, when viewed in its entirety, is readily accessible to and usable by individuals with disabilities.

However, this does not:

1. Necessarily requires a public entity to make each of its existing facilities accessible to and usable by individuals with disabilities.
2. Require a public entity to take any action that would threaten or destroy the historic significance of an historic property; or
3. Require a public entity to take any action that it can demonstrate would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. In those circumstances where personnel of the public entity believe that the proposed action would fundamentally alter the service, program, or activity or would result in undue financial and administrative burdens, a public entity has the burden of proving that compliance with 35.150(a) of this part would result in such alteration or burdens. The decision that compliance would result in such alteration or burdens must be made by the head of a public entity or his or her designee after considering all resources available for use in the funding and operation of the service, program, or activity, and must be accompanied by a written statement of the reasons for reaching that conclusion. If an action would result in such an alteration or such burdens, a public entity shall take any other action that would not result in such an alteration or such burdens but would nevertheless ensure that individuals with disabilities receive the benefits or services provided by the public entity.

Removal of barriers to accessibility should be addressed from a liability standpoint in order to comply with federal law, but the barriers may or may not be building code violations. The Americans with Disabilities Act Accessibility Guidelines are part of the ADA federal civil rights law pertaining to the disabled and are not a construction code. State and local jurisdictions have adopted the ADA Guidelines or have adopted other standards for accessibility as part of their construction codes.

During the FCA, Bureau Veritas performed a limited high-level accessibility review of the facility non-specific to any local regulations or codes. The scope of the visual observation was limited to the same areas observed while performing the FCA and the categories set forth in the appendix. It is understood by the Client that the limited observations described herein do not comprise a full ADA Compliance Survey, and that such a survey is beyond the scope of this particular assessment. A full measured ADA survey would be required to identify any and all specific potential accessibility issues. Additional clarifications of this limited survey:

- This survey was visual in nature and actual measurements were not taken to verify compliance.
- Only a representative sample of areas was observed.
- Two overview photos were taken for each subsection regardless of perceived compliance or non-compliance.
- Itemized costs for individual non-compliant items are not included in the dataset.
- For any "none" boxes checked or reference to "no issues" identified, that alone does not guarantee full compliance.

The facility was originally constructed in 1956. The facility was renovated in 1994 and has widespread accessibility. No information about complaints or pending litigation associated with potential accessibility issues was provided during the interview process.

A detailed follow-up accessibility study is included as a recommendation based on the potential that specific ADA violations, not in this scope of services, may exist. Reference the appendix for specific data, photos, and tables or checklists associated with this limited accessibility survey.



6. Purpose and Scope

Purpose

Bureau Veritas was retained by the client to render an opinion as to the Property's current general physical condition on the day of the site visit.

Based on the observations, interviews and document review outlined below, this report identifies significant deferred maintenance issues, existing deficiencies, and material code violations of record, which affect the Property's use. Opinions are rendered as to its structural integrity, building system condition and the Property's overall condition. The report also notes building systems or components that have realized or exceeded their typical expected useful lives. The physical condition of building systems and related components are typically defined as being in one of five condition ratings. For the purposes of this report, the following definitions are used:

Condition Ratings	
Excellent	New or very close to new; component or system typically has been installed within the past year, sound and performing its function. Eventual repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Good	Satisfactory as-is. Component or system is sound and performing its function, typically within the first third of its lifecycle. However, it may show minor signs of normal wear and tear. Repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Fair	Showing signs of wear and use but still satisfactory as-is, typically near the median of its estimated useful life. Component or system is performing adequately at this time but may exhibit some signs of wear, deferred maintenance, or evidence of previous repairs. Repair or replacement will be required due to the component or system's condition and/or its estimated remaining useful life.
Poor	Component or system is significantly aged, flawed, functioning intermittently or unreliably; displays obvious signs of deferred maintenance; shows evidence of previous repair or workmanship not in compliance with commonly accepted standards; has become obsolete; or exhibits an inherent deficiency. The present condition could contribute to or cause the deterioration of contiguous elements or systems. Either full component replacement is needed, or repairs are required to restore to good condition, prevent premature failure, and/or prolong useful life.
Failed	Component or system has ceased functioning or performing as intended. Replacement, repair, or other significant corrective action is recommended or required.
Not Applicable	Assigning a condition does not apply or make logical sense, most commonly due to the item in question not being present.



Scope

The standard scope of the Facility Condition Assessment includes the following:

- Visit the Property to evaluate the general condition of the building and site improvements, review available construction documents to familiarize ourselves with, and be able to comment on, the in-place construction systems, life safety, mechanical, electrical, and plumbing systems, and the general-built environment.
- Identify those components that are exhibiting deferred maintenance issues and provide cost estimates for Immediate Costs and Replacement Reserves based on observed conditions, maintenance history and industry standard useful life estimates. This will include the review of documented capital improvements completed within the last five-year period and work currently contracted for, if applicable.
- Provide a full description of the Property with descriptions of in-place systems and commentary on observed conditions.
- Provide a high-level categorical general statement regarding the subject Property's compliance to Title III of the Americans with Disabilities Act. This will not constitute a full ADA survey but will help identify exposure to issues and the need for further review.
- Obtain background and historical information about the facility from a building engineer, property manager, maintenance staff, or other knowledgeable source. The preferred methodology is to have the client representative or building occupant complete a Pre-Survey Questionnaire (PSQ) in advance of the site visit. Common alternatives include a verbal interview just prior to or during the walk-through portion of the assessment.
- Review maintenance records and procedures with the in-place maintenance personnel.
- Observe a representative sample of the interior spaces/units, including vacant spaces/units, to gain a clear understanding of the property's overall condition. Other areas to be observed include the exterior of the property, the roofs, interior common areas, and the significant mechanical, electrical and elevator equipment rooms.
- Provide recommendations for additional studies, if required, with related budgetary information.
- Provide an Executive Summary at the beginning of this report, which highlights key findings and includes a Facility Condition Index as a basis for comparing the relative conditions of the buildings within the portfolio.



7. Opinions of Probable Costs

Cost estimates are attached throughout this report, with the Replacement Reserves in the appendix. These estimates are based on Invoice or Bid Document/s provided either by the Owner/facility and construction costs developed by construction resources such as *R.S. Means*, *CBRE Whitestone*, and *Marshall & Swift*, Bureau Veritas's experience with past costs for similar properties, city cost indexes, and assumptions regarding future economic conditions.

Opinions of probable costs should only be construed as preliminary, order of magnitude budgets. Actual costs most probably will vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing or bundling of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, use of subcontractors, and whether competitive pricing is solicited, etc. Certain opinions of probable costs cannot be developed within the scope of this guide without further study. Opinions of probable cost for further study should be included in the FCA.

Methodology

Based upon site observations, research, and judgment, along with referencing Expected Useful Life (EUL) tables from various industry sources, Bureau Veritas opines as to when a system or component will most probably necessitate replacement. Accurate historical replacement records, if provided, are typically the best source of information. Exposure to the elements, initial quality and installation, extent of use, the quality and amount of preventive maintenance exercised, etc., are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual chronological age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its *effective age*, whether explicitly or implicitly stated. Projections of Remaining Useful Life (RUL) are based primarily on age and condition with the presumption of continued use and maintenance of the Property similar to the observed and reported past use and maintenance practices, in conjunction with the professional judgment of Bureau Veritas's assessors. Significant changes in occupants and/or usage may affect the service life of some systems or components.

Where quantities could not be or were not derived from an actual construction document take-off or facility walk-through, and/or where systemic costs are more applicable or provide more intrinsic value, budgetary square foot and gross square foot costs are used. Estimated costs are based on professional judgment and the probable or actual extent of the observed defect, inclusive of the cost to design, procure, construct and manage the corrections.

Definitions

Immediate Needs

Immediate Needs are line items that require immediate action as a result of: (1) material existing or potential unsafe conditions, (2) failed or imminent failure of mission critical building systems or components, or (3) conditions that, if not addressed, have the potential to result in, or contribute to, critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost.

For database and reporting purposes the line items with RUL=0, and commonly associated with **Safety** or **Performance/Integrity** Plan Types, are considered Immediate Needs.



Replacement Reserves

Cost line items traditionally called Replacement Reserves (equivalently referred to as Lifecycle/Renewals) are for recurring probable renewals or expenditures, which are not classified as operation or maintenance expenses. The replacement reserves should be budgeted for in advance on an annual basis. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, Replacement Reserves may also include components or systems that have an indeterminable life but, nonetheless, have a potential for failure within an estimated time period.

Replacement Reserves generally exclude systems or components that are estimated to expire after the reserve term and are not considered material to the structural and mechanical integrity of the subject property. Furthermore, systems and components that are not deemed to have a material effect on the use of the Property are also excluded. Costs that are caused by acts of God, accidents, or other occurrences that are typically covered by insurance, rather than reserved for, are also excluded.

Replacement costs are solicited from ownership/property management, Bureau Veritas's discussions with service companies, manufacturers' representatives, and previous experience in preparing such schedules for other similar facilities. Costs for work performed by the ownership's or property management's maintenance staff are also considered.

Bureau Veritas's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the assessment period. The assessment period is defined as the effective age plus the reserve term. Additional information concerning systems or component's respective replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Replacement Reserves Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined as Immediate Needs.

For the purposes of 'bucketizing' the System Expenditure Forecasts in this report, the Replacement Reserves have been subdivided and grouped as follows: Short Term (years 1-3), Near Term (years 4-5), Medium Term (years 6-10), and Long Term (years 11-20).

Key Findings

In an effort to highlight the most significant cost items and not be overwhelmed by the Replacement Reserves report in its totality, a subsection of Key Findings is included within the Executive Summary section of this report. Key Findings typically include repairs or replacements of deficient items within the first five-year window, as well as the most significant high-dollar line items that fall anywhere within the ten-year term. Note that while there is some subjectivity associated with identifying the Key Findings, the Immediate Needs are always included as a subset.

Exceedingly Aged

A common scenario encountered during the assessment process, and a frequent source of debate, occurs when classifying and describing "very old" systems or components that are still functioning adequately and do not appear nor were reported to be in any way deficient. To help provide some additional intelligence on these items, such components will be tagged in the database as Exceedingly Aged. This designation will be reserved for mechanical or electrical systems or components that have aged well beyond their industry standard lifecycles, typically at least 15 years beyond and/or twice their Estimated Useful Life (EUL). In tandem with this designation, these items will be assigned a Remaining Useful Life (RUL) not less than two years but not greater than 1/3 of their standard EUL. As such the recommended replacement time for these components will reside outside the typical Short-Term window but will not be pushed 'irresponsibly' (too far) into the future.



8. STEM/STEAM Assessment

This location is not an educational facility and does not fall under the guidelines of STEM/STEAM requirements.



9. Energy Audit

The purpose of this Energy Audit is to provide the Barre Unified Union SD with a baseline of energy usage, the relative energy efficiency of the facility, and specific recommendations for Energy Conservation Measures. Information obtained from these analyses may be used to support a future application to an Energy Conservation Program, Federal and Utility grants towards energy conservation, as well as support performance contracting, justify a municipal bond-funded improvement program, or as a basis for replacement of equipment or systems.

The energy audit consisted of an on-site visual assessment to determine current conditions, itemize the energy consuming equipment (i.e. Boilers, Make-Up Air Units, DWH equipment); review lighting systems both exterior and interior; and review efficiency of all such equipment. The study also included interviews and consultation with operational and maintenance personnel. The following is a summary of the tasks and reporting that make up the Energy Audit portion of the report.

The following is a summary of the tasks and reporting that make up the Energy Audit portion of the report.

Energy and Water Using Equipment

- Bureau Veritas has surveyed the common areas, offices, maintenance facilities and mechanical rooms to document utility-related equipment, including heating systems, cooling systems, air handling systems and lighting systems.

Building Envelope

- Bureau Veritas has reviewed the characteristics and conditions of the building envelope, checking insulation values and conditions. This review also includes an inspection of the condition of walls, windows, doors, roof areas, insulation and special use areas.

Recommendations for Energy Savings Opportunities

- Based on the information gathered during the on-site assessment, the utility rates, as well as recent consumption data and engineering analysis, Bureau Veritas has identified opportunities to save energy and provide probable construction costs, projected energy/utility savings and provide a simple payback analysis.

Analysis of Energy Consumption

- Based on the information gathered during the on-site assessment, Bureau Veritas has conducted an analysis of the energy usage of all equipment, and identified which equipment is using the most energy and what equipment upgrades may be necessary. As a result, equipment upgrades, or replacements are identified that may provide a reasonable return on the investment and improve maintenance reliability.

Energy Audit Process

- Interviewing staff and review plans and past upgrades
- Performing an energy audit for each use type
- Performing a preliminary evaluation of the utility system
- Analyzing findings, utilizing ECM cost-benefit worksheets
- Making preliminary recommendations for system energy improvements and measures
- Estimating initial cost and changes in operating and maintenance costs based on implementation of energy efficiency measures
- Ranking recommended cost measures, based on the criticality of the project and the largest payback



10. Historical Energy and Water Performance Metrics

Utility Data Tabulation Methodology

Establishing the energy baseline begins with an analysis of the utility cost and consumption of the facility. Utilizing the historical energy data and local weather information, we evaluate the existing utility consumption and assign it to the various end-uses throughout the buildings. The Historical Data Analysis breaks down utilities by consumption, cost and annual profile.

This data is analyzed using standard engineering assumptions and practices. The analysis serves the following functions:

- Allows our engineers to benchmark the energy and water consumption of the facilities against consumption of efficient buildings of similar construction, use and occupancy.
- Generates the historical and current unit costs for energy and water
- Provides an indication of how well changes in energy consumption correlate to changes in weather.
- Reveals potential opportunities for energy consumption and/or cost reduction. For example, the analysis may indicate that there is excessive, simultaneous heating and cooling, which may mean that there is an opportunity to improve the control of the heating and cooling systems.

By performing this analysis and leveraging our experience, our engineers prioritize buildings and pinpoint systems for additional investigation during the site visit, thereby maximizing the benefit of their time spent on-site and minimizing time and effort by the customer’s personnel.

No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used average utility costs from other VT Agency of Education properties to approximate the utility costs for this property. Bureau Veritas will update the report on receipt of the actual data from the client.

Utilities Metering at a Glance	
Number of electric meters observed	One
Number of gas meters observed	None
Number of central steam meters observed	None
Number of domestic water meters observed	One

Average Utility Rates		
Electricity	No. 2 Oil	Water & Sewer
Average Rate	Average Rate	Blended Rate
\$0.18 / kWh (est.)	\$2.78 / Gal (est.)	\$16.11 / kGal (est.)



Electricity

Green Mountain Power provides electrical service to the facility.

The consumption pattern likely remains relatively constant. Any seasonal variation in consumption is primarily attributed to cooling loads, while the static base load primarily consists of lighting and appliances.

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the electric rate from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.



Propane or Fuel Oil

The fuel oil supplier to the facility was not provided. The deliveries are made on an as-needed basis. The primary use of fuel oil is for space heating. Any seasonal variation in consumption is primarily attributed to the heating loads.

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the utility rates from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.



Water and Sewer

The Town of Barre satisfies the water and sewer requirements of the facility. The water consumption pattern most likely remains more or less flat over the 10-month period that school is in session.

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the utility rate from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.



11. Energy Conservation Measures

Bureau Veritas has conducted an Energy Audit on the Barre Unified Union SD. The study included a review of the building's construction features, historical energy and water consumption and costs, review of the building envelope, HVAC equipment, heat distribution systems, lighting, and the building's operational and maintenance practices.

Bureau Veritas has evaluated six Energy Conservation Measures (ECMs) for this property. The savings for each measure are calculated using standard engineering methods followed in the industry, and detailed calculations for ECM are provided in Appendix H for reference. A 10% discount in energy savings was applied to account for the interactive effects amongst the ECMs. In addition to the consideration of the interactive effects, Bureau Veritas has applied a 15% contingency to the implementation costs to account for potential cost overruns during the implementation of the ECMs.

The following table summarizes the recommended ECMs in terms of description, investment cost, energy consumption reduction, and cost savings.

Recommended Non- Renewable Energy Conservation Measures: Financial Impact	
Total Projected Initial ECM Investment	\$59,088
Estimated Annual Cost Savings Related to ECMs	\$5,796
Net Effective ECM Payback	10.2 Years

Key Metrics to Benchmark the Subject Property's Energy Usage Profile

- **Building Site Energy Use Intensity** - The sum of the total site energy use in thousands of Btu per unit of gross building area. Site energy accounts for all energy consumed at the building location only not the energy consumed during generation and transmission of the energy to the site.
- **Building Source Energy Use Intensity** - The sum of the total source energy use in thousands of Btu per unit of gross building area. Source energy is the energy consumed during generation and transmission in supplying the energy to your site.
- **Building Cost Intensity** - This metric is the sum of all energy use costs in dollars per unit of gross building area.
- **Greenhouse Gas Emissions** - Although there are numerous gases that are classified as contributors to the total for Greenhouse Emissions, the scope of this energy audit focuses on carbon dioxide (CO₂). Carbon dioxide enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and also as a result of other chemical reactions (e.g., manufacture of cement).



Energy Conservation Measures Screening:

Bureau Veritas screens ECMs using the financial methodology below. ECMs which are considered financially viable must meet the criteria.

Simple Payback Period - The number of years required for the cumulative value of energy or water cost savings less future non-fuel or non-water costs to equal the investment costs of the building energy or water system, without consideration of discount rates. ECMs with a payback period greater than the Expected Useful Life (EUL) of the project are not typically recommended, as the cost of the project will not be recovered during the lifespan of the equipment. These ECMs are recommended for implementation during future system replacement. At that time, replacement may be evaluated based on the premium cost of installing energy efficient equipment.



Energy Conservation Measures

Description of ECM	Location	Net Projected Initial Investment (\$)	Estimated Annual Savings (\$/yr)	Estimated Annual Savings Electricity (kWh)	Estimated Annual Savings Water (KGal)	Total Energy Savings (MMBtu)	Total Green House Gas Savings (MCO ₂ e/yr)	Estimated Utility Cost Savings (\$)	Estimated Annual O&M Savings (\$)	Total Estimated Annual Cost Savings (\$)	Simple Payback (yrs)	Life-cycle Savings (\$)	Expected Useful Life (yrs)
1	Location: Restrooms, lounge Install Low Flow Faucet Aerators, Replace 6x 2GPM rated bathroom aerators with 0.5GPM WaterSense certified aerators	\$91	0.0	265.2	1.7	0.9	0.1	\$48	\$0	\$76	1.2	\$554	10
2	Location: Restrooms Retrofit 2x 1.6 GPF toilets with dual-flush flush valves	\$374	0.0	0.0	9.0	0.0	0.0	\$0	\$0	\$144	2.6	\$1,350	15
3	Location: Throughout building Replace Existing Linear Fluorescent Lamps, Replace 40x F44T8 with F44LED, Replace 17x F42T8 with F42LED, Replace 13x F44T8 with F44LED	\$4,717	0.0	7,000.9	0.0	23.9	1.7	\$1,260	\$153	\$1,413	3.3	\$12,151	15
4	Location: Restrooms Retrofit 2x 1.6GPF toilets to dual-flush, Retrofit 2x 1.6GPF toilets to dual-flush	\$262	0.0	0.0	2.6	0.0	0.0	\$0	\$0	\$41	6.3	\$352	20
6	Location: Boiler room Replace inefficient Heating Plant, Replace (2x) Cast Iron boiler(s) with (2x) 95% efficient Condensing Boiler	\$27,837	1,105.3	0.0	0.0	153.1	11.2	\$3,073	\$154	\$3,226	8.6	\$28,342	25
7	Location: Building exterior Replace Existing Air Conditioners with Energy Star Air Conditioners, Replace 2x 48000Btu/h Cooling Unit with 2x Split System-48000 Unit; 1x 36000Btu/h Cooling Unit with 1x Split System-36000 Unit; 1x 24000Btu/h Cooling Unit with 1x Split System-24000 Unit	\$18,100	0.0	8,448.6	0.0	27.8	1.9	\$1,467	\$73	\$1,540	11.8	\$285	15
Totals for no/low cost items		\$726	0.0	265.2	13.2	0.9	0.1	\$48	\$0	\$261	2.8		
Total for capital cost		\$50,654	1,105.3	15,149.5	0.0	204.8	14.8	\$5,800	\$380	\$6,179	8.2		
Interactive Savings Discount @10%			-110.5	-1,541.5	-1.3	-20.6	-1.5	-\$585	-\$58	-\$644			
Total Contingency Expenses @ 15%		\$7,707											
Totals for improvements		\$59,088	994.7	13,873.2	11.9	185.1	13.4	\$5,263	\$342	\$5,796	10.2		

12. Certification

Vermont Agency of Education, Phase Two (the Client) retained Bureau Veritas to perform this Facility Condition Assessment in connection with its continued operation of Barre Unified Union SD - Main Building, 120 Ayers Street, Barre VT, 05641, the "Property". It is our understanding that the primary interest of the Client is to locate and evaluate materials and building system defects that might significantly affect the value of the property and to determine if the present Property has conditions that will have a significant impact on its continued operations.

The conclusions and recommendations presented in this report are based on the brief review of the plans and records made available to our Project Manager during the site visit, interviews of available property management personnel and maintenance contractors familiar with the Property, appropriate inquiry of municipal authorities, our Project Manager's walk-through observations during the site visit, and our experience with similar properties.

No testing, exploratory probing, dismantling, or operating of equipment or in-depth studies were performed unless specifically required under the *Purpose and Scope* section of this report. This assessment did not include engineering calculations to determine the adequacy of the Property's original design or existing systems. Although walk-through observations were performed, not all areas may have been observed (see Section 1 for specific details). There may be defects in the Property, which were in areas not observed or readily accessible, may not have been visible, or were not disclosed by management personnel when questioned. The report describes property conditions at the time that the observations and research were conducted.

This report has been prepared on behalf of and exclusively for the use of the Client for the purpose stated within the *Purpose and Scope* section of this report. The report, or any excerpt thereof, shall not be used by any party other than the Client or for any other purpose than that specifically stated in our agreement or within the *Purpose and Scope* section of this report without the express written consent of Bureau Veritas.

Any reuse or distribution of this report without such consent shall be at the Client and the recipient's sole risk, without liability to Bureau Veritas.

Prepared by: Bureau Veritas Technical Assessments

13. Appendices

- Appendix A: Photographic Record
- Appendix B: Site Plans
- Appendix C: School Educational Capacity and Programming Space
- Appendix D: Accessibility Review & Photos
- Appendix E: Component Condition Report
- Appendix F: Replacement Reserves
- Appendix G: Depleted Value Report



Appendix A: Photographic Record



Photographic Overview



1 - OVERVIEW OF FRONT ELEVATION



2 - OVERVIEW OF LEFT ELEVATION



3 - OVERVIEW OF REAR ELEVATION



4 - OVERVIEW OF RIGHT ELEVATION



5 - OVERVIEW OF OFFICE SPACE



6 - OVERVIEW OF OFFICE SPACE

Photographic Overview



7 - PHOTO OF SHARED OFFICE SPACE



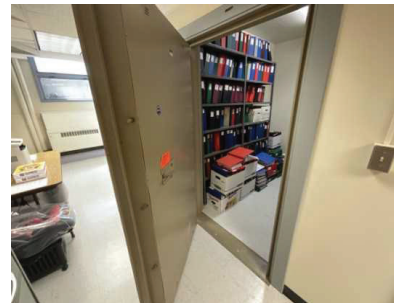
8 - OVERVIEW OF CONFERENCE ROOM



9 - OVERVIEW OF FILE STORAGE



10 - OVERVIEW OF RECEPTION AREA



11 - PHOTO OF FILE SAFE



12 - OVERVIEW OF BREAKROOM SPACE

Appendix B:

Site Plans



Project Name	Project Number
Vermont Agency of Education	158982.22R000-023.379 Barre Unified Union SD
Source	On-Site Date
Google MyMaps	July 20, 2023

Appendix C:

School Educational Capacity and Programming Space



School Educational Capacity and Programming Space

As part of Act 72, AOE has contracted with Bureau Veritas (BVNA) to complete a Facility Condition Assessment (FCA) of very public school building in Vermont. One component of the FCA report will be to identify whether the size and configuration of your current facility is meeting your school's educational and operational needs. In order for us to accurately capture your facility space needs, it is necessary for the AOE and BVNA to receive your input. To complete this brief survey, we recommend that you consult with school building leadership and facilities/custodial staff.

School Name

Barre Unified Union SD - Main Building

At the time of this assessment there was no information available for this location.

Appendix D:

Accessibility Review & Photos



Visual Survey - ADA Standards for Accessible Design

Property Name: Barre Unified Union SD

BV Project Number: 158982.22R000-023.379

Facility History & Interview				
Question	Yes	No	Unk	Comments
1. ADA: Has an accessibility study been performed at the site? If so, when?			X	
2. ADA: If a study has occurred, have the associated recommendations been addressed? In full or in part?			X	
3. ADA: Have there been regular complaints about accessibility issues, or previous or pending litigation?			X	

Building: Accessibility Issues				
Category	Major Issues (ADA study recommended)	Moderate Issues (ADA study recommended)	Minor Issues	None
Parking				None
Exterior Route				None
Building Entrances				None
Interior Route			Blocked hallway access	
Public Restrooms				None

*Be cognizant that if the "None" box is marked that does not guarantee full compliance; this study is limited in nature



1 - OVERVIEW OF ACCESSIBLE PARKING AREA



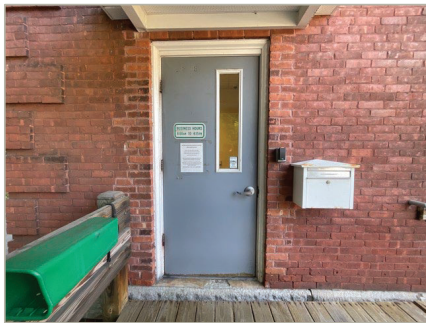
2 - CLOSE-UP OF STALL or 2ND PARK AREA



3 - EXT RAMP or PRIMARY PATH OF TRAVEL



4 - CURB CUT or 2ND PATH OF TRAVEL



5 - MAIN ACCESSIBLE ENTRANCE



6 - 2ND ENTRANCE or SIGNAGE/HARDWARE



7 - ACCESSIBLE INTERIOR PATH (RAMP/LIFT)



8 - HARDWARE, STAIR RAILS or SELF-SERVICE AREA



9 - TOILET STALL OVERVIEW



10 - SINK, FAUCET HANDLES or ACCESSORIES

The table below is intended to be used as a general reference guide to help differentiate the orders of magnitude between some of the more commonly observed accessibility issues. The table is not intended to be all-inclusive, and boxes checked in the tables above do not necessarily mean those specific problems or shortcomings cited as examples below exist at the subject buildings and sites. Reference the data and photos above and/or the *Key Findings* section in the body of the report for visuals and/or more specifics about the particular subject site conditions.

Reference Guide			
	Major Issues <i>(ADA study recommended)</i>	Moderate Issues <i>(ADA study recommended)</i>	Minor Issues
Parking	<ul style="list-style-type: none">- Needs full reconstruction- Excessive slopes over 3% require major re-grading- No level locations to add required spaces	<ul style="list-style-type: none">- No or non-compliant curb cuts- Moderate difficulty to add required accessible spaces- Slopes close to compliant	<ul style="list-style-type: none">- Painting of markings needed- Signage height non-compliant- Signage missing
Exterior Route	<ul style="list-style-type: none">- Large areas of sidewalks with excessive slopes- No ramp when needed- Ramps with excessive slopes	<ul style="list-style-type: none">- Ramps need rails- Ramps need rail extensions- All or most entrance door exterior maneuvering clearance areas with excessive slopes	<ul style="list-style-type: none">- One entrance door exterior maneuvering clearance area with excessive slope- Non-compliant signage
Building Entrances	<ul style="list-style-type: none">- No compliant entrance exists- Exterior entry door/s not wide enough- Entrance vestibule requires complete reconstruction / reconfiguration due to clearance	<ul style="list-style-type: none">- Need significant # of lever handles- Need to add or modify automatic door opener- Entrance vestibule requires limited reconfigurations	<ul style="list-style-type: none">- A few door knobs instead of lever handles- Non-compliant door threshold
Interior Route	<ul style="list-style-type: none">- All or most interior doors appear less than 32" wide- Corridors less than 36" wide- No ramp when needed- Ramps with excessive slopes- Non-compliant treads/risers at means of egress stairways	<ul style="list-style-type: none">- Single height drinking fountains- Drinking fountain too high or protrudes into accessible route- Ramps need rails- Ramps need rail extensions- Need significant # of lever handles- Non-compliant rail extensions at egress stairways- All/most door thresholds high	<ul style="list-style-type: none">- One door threshold too high- A few door knobs instead of lever handles- Non-compliant door pressures- Non-compliant signage- Switches not within reach range
Elevators	<ul style="list-style-type: none">- No elevator present when required- Elevator cab too small	<ul style="list-style-type: none">- Panel control buttons not at compliant height- No hands-free emergency communication system- Elevator only has mechanical stops	<ul style="list-style-type: none">- Audible/visual signals at every floor may be lacking- Minor signage / Braille issues
Public Restrooms	<ul style="list-style-type: none">- No ADA RR on each accessible floor- Restroom(s) too small- Entire restroom(s) requires renovation- Water closet clearance requires moving walls	<ul style="list-style-type: none">- Interior doors appear less than 32" wide- Missing or non-compliant grab bars- Easily fixable clearance issues	<ul style="list-style-type: none">- Minor height adjustments required- Non-compliant door pressures- Missing a visual strobe (only required if audible fire alarm already present)- Missing lavatory pipe wraps- Signage not compliant

	Major Issues <i>(ADA study recommended)</i>	Moderate Issues <i>(ADA study recommended)</i>	Minor Issues
Kitchens/Kitchenettes	<ul style="list-style-type: none">- Clear space for each appliance not present- Clearance between opposing counters too narrow	<ul style="list-style-type: none">- Sink and counter too high- Sink knee and toe clearance not provided where required (built-in)- Less than 50% of cabinetry within reach range	<ul style="list-style-type: none">- Dispensers not within reach range- Switches not within reach range- Missing sink pipe wraps if knee and toe clearance required
Playgrounds & Pools	<ul style="list-style-type: none">- Large areas of surfacing non-compliant- Install compliant play structures- No pool lift provided	<ul style="list-style-type: none">- Small area/s of surfacing or equipment non-compliant- Moderate issues with path of travel to playground/pool	<ul style="list-style-type: none">- Minor issues with path of travel to playground/pool

Appendix E:
Component Condition Report



Component Condition Report | BARRE UNIFIED UNION SD - Main Building

UF13 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
Structure								
B1080	Stairwells	Structure	Fair	Stairs, Metal or Pan-Filled, Interior	250	SF	21	6881050
Facade								
B2010	Building Exterior	Facade	Fair	Exterior Walls, Brick	4,500	SF	20	6881023
B2020	Building Exterior	Facade	Fair	Window, Aluminum Double-Glazed, 16-25 SF	5		2	6881039
B2020	Building Exterior	Facade	Fair	Window, Vinyl-Clad Double-Glazed, 16-25 SF	39		2	6881065
B2050	Building Exterior	Facade	Fair	Exterior Door, Wood, Solid-Core Decorative High-End w/ Glazing	2		3	6881057
B2050	Building Exterior	Facade	Fair	Exterior Door, Steel, Standard	4		12	6881013
Roofing								
B3010	Roof	Roofing	Good	Roofing, Asphalt Shingle, 20-Year Standard	3,200	SF	17	6881067
Interiors								
C1030	Throughout building	Interiors	Fair	Interior Door, Wood, Solid-Core Decorative High-End	3		17	6881022
C1030	Throughout building	Interiors	Fair	Interior Door, Wood, Solid-Core	15		17	6881071
C1030	Throughout building	Interiors	Fair	Interior Door, Wood, Solid-Core Decorative High-End	2		5	6881036
C1070	Throughout building	Interiors	Fair	Interior Door, Steel, w/ Extensive Glazing	7		11	6881028
C2010	Throughout building	Interiors	Fair	Suspended Ceilings, Acoustical Tile (ACT)	3,100	SF	12	6881063
C2030	Throughout building	Interiors	Fair	Wall Finishes, any surface, Prep & Paint	10,000	SF	3	6881016
C2030	Throughout building	Interiors	Fair	Flooring, Wood, Strip	1,000	SF	5	6881046
C2030	Throughout building	Interiors	Fair	Flooring, Carpet, Commercial Standard	3,000	SF	2	6881059
C2030	Restrooms	Interiors	Good	Flooring, Ceramic Tile	250	SF	27	6881051
C2030	Boiler room	Interiors	Fair	Flooring, any surface, w/ Paint or Sealant, Prep & Paint	500	SF	2	6881054
C2030	Throughout building	Interiors	Fair	Flooring, Vinyl Tile (VCT)	2,000	SF	2	6881029
C2050	Throughout building	Interiors	Fair	Ceiling Finishes, any flat surface, Prep & Paint	3,100	SF	2	6881058
Plumbing								
D2010	Throughout building	Plumbing	Fair	Plumbing System, Supply & Sanitary, Medium Density (excludes fixtures)	6,200	SF	12	6881048
D2010	Restrooms	Plumbing	Good	Toilet, Residential Water Closet	2		22	6881041
D2010	Boiler room	Plumbing	Fair	Water Heater, Electric, Residential, 30 to 52 GAL	1		7	6881047
D2010	Lounge	Plumbing	Fair	Sink/Lavatory, Drop-In Style, Stainless Steel	1		17	6881042
D2010	Restrooms	Plumbing	Fair	Toilet, Commercial Water Closet	2		2	6881009
D2010	Restrooms	Plumbing	Fair	Urinal, Standard	3		2	6881049
D2010	Restrooms	Plumbing	Fair	Sink/Lavatory, Service Sink, Laundry	1		17	6881047
D2010	Boiler room	Plumbing	Fair	Pump, Circulation, Domestic Water, 1 HP	2		7	6881035
D2010	Hallway	Plumbing	Fair	Drinking Fountain, Wall-Mounted, Single-Level	1		7	6881012
D2010	Restrooms	Plumbing	Fair	Sink/Lavatory, Vanity Top, Solid Surface or Vitreous China	5		17	6881038
D2060	Basement	Plumbing	Fair	Supplemental Components, Compressed Air Dryer, Process Support	1		7	6881024
D2060	Basement	Plumbing	Fair	Air Compressor, Tank-Style	1		3	6881019
HVAC								
D3010	Boiler room	HVAC	Fair	Storage Tank, Fuel, Interior	2		4	6881021
D3020	Boiler room	HVAC	Fair	Boiler Supplemental Components, Expansion Tank	1		9	6881053
D3020	Boiler room	HVAC	Fair	Boiler, Oil, HVAC	2		5	6881055

UFL3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
D3020	Throughout building	HVAC	Fair	Radiator, Hydronic, Baseboard (per LF)	150	LF	7	6881018
D3020	Attic	HVAC	Fair	Air Ventilator, Energy Recovery Unit, up to 6500 CFM	1		2	6881026
D3030	Building exterior	HVAC	Fair	Split System, Condensing Unit/Heat Pump	1		3	6881020
D3030	Building exterior	HVAC	Good	Split System Ductless, Single Zone, 1.5 to 2 TON	1		14	6881032
D3030	Building exterior	HVAC	Fair	Split System, Condensing Unit/Heat Pump	1		3	6881060
D3030	Boiler room	HVAC	Fair	Split System, Fan Coil Unit, DX, 3.5 to 5 TON	1		2	6881037
D3030	Building exterior	HVAC	Fair	Split System, Condensing Unit/Heat Pump	1		3	6881064
D3030	Building exterior	HVAC	Fair	Split System Ductless, Single Zone, 2.5 to 3 TON	1		10	6881025
D3030	Building exterior	HVAC	Fair	Split System, Condensing Unit/Heat Pump	1		2	6881045
D3050	Throughout building	HVAC	Fair	HVAC System, Hydronic Piping, 2 Pipe	6,200	SF	12	6881044
D3050	Throughout building	HVAC	Fair	HVAC System, Ductwork, Medium Density	6,200	SF	7	6881033
Fire Protection								
D4010	Throughout building	Fire Protection	Fair	Fire Suppression System, Existing Sprinkler Heads, by SF	6,200	SF	3	6881052
D4010	Boiler room	Fire Protection	Fair	Fire Riser, Dry Standpipe, 4 IN	1		12	6881070
D4030	Throughout building	Fire Protection	Good	Fire Extinguisher, Type ABC, up to 20 LB	10		9	6881040
Electrical								
D5020	Boiler room	Electrical	Fair	Distribution Panel, 120/208 V	2		2	6881017
D5030	Throughout building	Electrical	Fair	Electrical System, Wiring & Switches, High Density/Complexity	6,200	SF	12	6881030
D5040	Throughout building	Electrical	Fair	Interior Lighting System, Full Upgrade, High Density & Standard Fixtures	6,200	SF	7	6881034
Fire Alarm & Electronic Systems								
D7030	Throughout building	Fire Alarm & Electronic Systems	Fair	Security/Surveillance System, Full System Upgrade, Average Density	6,200	SF	7	6881031
D7050	Throughout building	Fire Alarm & Electronic Systems	Fair	Fire Alarm System, Full System Upgrade, Standard Addressable, Upgrade/Install	6,200	SF	7	6881014
Equipment & Furnishings								
D7050	Main entrance	Fire Alarm & Electronic Systems	Fair	Fire Alarm Panel, Fully Addressable	1		2	6881061
E2010	Throughout building	Equipment & Furnishings	Fair	Casework, Cabinetry, Hardwood Standard	50	LF	7	6881066
E2010	Lounge	Equipment & Furnishings	Fair	Casework, Cabinetry Hardwood High-End	30	LF	7	6881011
Pedestrian Plazas & Walkways								
G2020	Site	Pedestrian Plazas & Walkways	Good	Parking Lots, Pavement, Asphalt, Mill & Overlay	11,500	SF	17	6891293
G2020	Site	Pedestrian Plazas & Walkways	Fair	Parking Lots, Pavement, Asphalt, Seal & Stripe	11,500	SF	2	6881015
Sitework								
G2060	Site	Sitework	Good	Picnic Table, Wood/Composite/Fiberglass	3		17	6881043
G2060	Site	Sitework	Fair	Retaining Wall, Concrete Masonry Unit (CMU)	220	SF	12	6881062
G4050	Building exterior	Sitework	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	5		7	6881056

Appendix F: Replacement Reserves

Year	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	Total estimate
20	\$1,420.11	\$2,729.25	\$3,505.85	\$5,729.28	29	\$1,000.00	29	\$1,000.00	29	\$2,400	\$5,100	\$5,200	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500
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Appendix G:

Depleted Value Report



BARRE UNIFIED UNION SD - Main Building

Depleted Value Index

57.1%

System	System Contribution	System Value
Air Compressor	\$ 3,605	\$ 5,150
Air Ventilator	\$ 8,442	\$ 12,987
Boiler	\$ 24,000	\$ 40,000
Boiler Supplemental Components	\$ 1,889	\$ 2,180
Casework	\$ 9,750	\$ 15,000
Casework	\$ 1,500	\$ 15,000
Ceiling Finishes	\$ 4,340	\$ 6,200
Distribution Panel	\$ 3,520	\$ 4,000
Drinking Fountain	\$ 1,000	\$ 1,200
Electrical System	\$ 19,840	\$ 24,800
Exterior Door	\$ 1,365	\$ 4,200
Exterior Door	\$ 1,920	\$ 2,400
Exterior Fixture w/ Lamp	\$ 2,600	\$ 3,000
Exterior Walls	\$ 166,950	\$ 238,500
Fire Alarm Panel	\$ 11,500	\$ 15,000
Fire Alarm System	\$ 10,695	\$ 18,600
Fire Extinguisher	\$ 863	\$ 1,500
Fire Riser	\$ 6,125	\$ 7,000
Fire Suppression System	\$ 4,810	\$ 6,634
Flooring	\$ 9,750	\$ 15,000
Flooring	\$ 7,200	\$ 22,500
Flooring	\$ 2,700	\$ 4,500
Flooring	\$ 113	\$ 750
Flooring	\$ 7,000	\$ 10,000
HVAC System	\$ 16,533	\$ 31,000
HVAC System	\$ 19,013	\$ 24,800
Interior Door	\$ 3,150	\$ 4,500
Interior Door	\$ 1,575	\$ 10,500
Interior Door	\$ 1,600	\$ 3,000
Interior Door	\$ 2,882	\$ 6,650
Interior Lighting System	\$ 13,433	\$ 31,000
Parking Lots	\$ 17,442	\$ 40,250
Parking Lots	\$ 4,140	\$ 5,175
Picnic Table	\$ 1,440	\$ 1,800
Plumbing System	\$ 59,107	\$ 68,200
Pump	\$ 5,280	\$ 6,600
Radiator	\$ 19,500	\$ 22,500

System	System Contribution	System Value
Retaining Wall	\$ 880	\$ 13,200
Roofing	\$ 4,053	\$ 12,160
Security/Surveillance System	\$ 7,192	\$ 12,400
Sink/Lavatory	\$ 1,008	\$ 1,200
Sink/Lavatory	\$ 585	\$ 900
Sink/Lavatory	\$ 2,860	\$ 5,500
Split System	\$ 1,387	\$ 5,200
Split System	\$ 3,733	\$ 4,000
Split System	\$ 4,293	\$ 4,600
Split System	\$ 2,380	\$ 3,400
Split System	\$ 2,773	\$ 5,200
Split System Ductless	\$ 4,480	\$ 4,800
Split System Ductless	\$ 5,693	\$ 6,100
Stairs	\$ -	\$ 12,000
Storage Tank	\$ -	\$ 5,200
Supplemental Components	\$ -	\$ 5,600
Suspended Ceilings	\$ -	\$ 10,850
Toilet	\$ -	\$ 1,400
Toilet	\$ -	\$ 2,600
Urinal	\$ -	\$ 3,300
Wall Finishes	\$ -	\$ 15,000
Water Heater	\$ -	\$ 900
Window	\$ -	\$ 4,750
Window	\$ -	\$ 35,100
Totals	\$ 517,889	\$ 907,436

FACILITY CONDITION ASSESSMENT



prepared for

Vermont Agency of Education_FCA Phase Two
1 National Life Drive, Davis 5
Montpelier, VT 05620-2501



SPAULDING UHS - Main Building (PS276-SU019)
155 Ayers Street
Barre, VT 05641

PREPARED BY:

Bureau Veritas
6021 University Blvd., Suite 200
Ellicott City, MD 21043
800.733.0660
www.us.bureauveritas.com

BV PROJECT #:

158982.22R000-305.379

DATE OF REPORT:

September 12, 2023

ON SITE DATE:

August 1, 2023

Bureau Veritas

6021 University Blvd., Suite 200 | Ellicott City, MD 21043 | www.us.bureauveritas.com | p 800.733.0660

SPAULDING UHS - MAIN BUILDING

BUREAU VERITAS PROJECT: 158982.22R000-305.379

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1. Executive Summary

Property Overview and Assessment Details

General Information	
Property Type	School
School ID Number	PS276-SU019
Main Address	155 Ayers Street, Barre, VT 05641
E911 Address Verification	Zip 05641-4349, Standardized, Fixed abbreviations, Matched street and city and state, Confirmed entire address
GPS Location (Verified E911)	Main Building 44.18986, -72.493
Site Developed	1964 Renovated: 2002
Site Area	20.7 acres (estimated)
Parking Spaces	225 total spaces all in open lots; 8 of which are accessible
Building Square Footage	210,000 (Verified)
Number of Stories	3 above grade
Supervisory Union/ District	Barre Unified Union SD
Date(s) of Visit	August 1, 2023

Note: (Verified) in Square Foot signifies that the square footage of the facility has been verified to be accurate.



Significant/Systemic Findings and Deficiencies

Historical Summary

The building was originally constructed in 1964 and has had several additions since then. The latest addition occurred in 2002 and added classroom and gymnasium spaces. Th building houses both the high school and the technical center.

Architectural

The building is steel framed. There is a brick façade and metal panels on the exterior of the building. The windows are aluminum and were installed in 2002 or earlier. The roof of the main building is TPO/PVC material while the gymnasium roof is EPDM material. The interior finishes consist of wood floors and VCT in the gymnasium addition, and terrazzo, VCT and carpet in the main building and classrooms. The walls are painted CMU and gypsum board with ceramic tile accents. There are wood and steel doors throughout the building. All interior finishes have been maintained and updated as needed.

Mechanical, Electrical, Plumbing and Fire (MEPF)

Heating for the main building is mainly provided by two oil-fired boilers, as well as a wood chip boiler. The oil boilers are located in a boiler room in the main building. The wood chip boiler is located in a standalone boiler room. There is a smaller oil-fired boiler in the gymnasium addition that provides the heat for the area. Baseboard radiators are located throughout the building and are fed by heating water pumps. There are unit ventilators in some rooms. These pumps did not have VFDs. There are packaged units on the roof providing heating and air circulation to the building. There are also fans on the roof providing air extraction for the building. The electrical service feeds a 1200-amp switchboard located in the electrical room. The switchboard is original to the building. There are smaller distribution panels throughout the building. The interior lighting consists of mainly linear fluorescent bulbs, but sections of the building are being replaced with LED fixtures as of summer 2023. Most of the electrical service equipment and systems are well maintained and should be replaced during normal life expectancy. In general, the plumbing systems are adequate to serve the facilities, with equipment and fixtures to be updated as needed. The domestic water service within each facility is well maintained, with no evidence of leaks observed at the domestic piping. The domestic hot water service at the facilities consists of 2 electric heaters and a large indirect water heater. Lifecycle replacement of original domestic water and sanitary sewer systems is not anticipated. No major issues were observed or reported. Fire protection system consists of a hard-wired fire alarm system and a wet-type fire sprinkler system. The sprinkler system is throughout the building. The alarm system consists of strobes, pull stations, illuminated exit signs, emergency lighting and other modern life safety devices. The building also has a commercial kitchen with a exhaust hood extinguishing system.

Site

The site has a large parking lot to the front, left, and rear sides of the building. There are large sports fields behind the building including a football field and a baseball field.

Recommended Additional Studies

No additional studies recommended at this time.



Facility Condition Index (FCI)

One of the major goals of the FCA is to calculate each building's Facility Condition Index (FCI), which provides a theoretical objective indication of a building's overall condition. By definition, the FCI is defined as the ratio of the cost of current needs divided by current replacement value (CRV) of the facility. The chart below presents the industry standard ranges and cut-off points.

FCI Ranges and Descriptions	
0 – 5%	In new or well-maintained condition, with little or no visual evidence of wear or deficiencies.
5 – 10%	Subjected to wear but is still in a serviceable and functioning condition.
10 – 30%	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.
30% and above	Has reached the end of its useful or serviceable life. Renewal is now necessary.

The deficiencies and lifecycle needs identified in this assessment provide the basis for a portfolio-wide capital improvement funding strategy. In addition to the current FCI, extended FCI's have been developed to provide owners the intelligence needed to plan and budget for the "keep-up costs" for their facilities. As such the 3-year, 5-year, and 10-year FCI's are calculated by dividing the anticipated needs of those respective time periods by current replacement value. As a final point, the FCI's ultimately provide more value when used to relatively compare facilities across a portfolio instead of being over-analyzed and scrutinized as stand-alone values. The table below summarizes the individual findings for this FCA:

FCI Analysis			
Replacement Value	Total SF	Cost/SF	
\$52,500,000	210,000	\$250	
Current FCI	\$0		0.0%
3-Year	\$4,045,800		7.7%
5-Year	\$6,614,000		12.6%
10-Year	\$11,661,700		22.2%



Facility Level FCI:

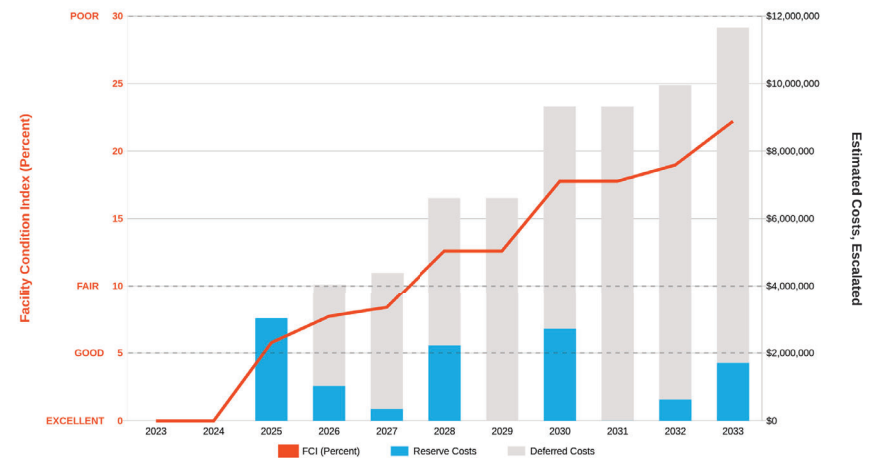
The orange line in the graph below forecasts what would happen to the FCI (left Y axis) over time, assuming zero capital expenditures. The capital expenditures allocated for each year (blue bars) are associated with the dollar amounts along the right Y axis. If the school expends the average amount per year to maintain and replace systems, they will not incur the capital debt represented by the gray bars.

Needs by Year with Unaddressed FCI Over Time

Replacement Value: \$52,500,000.00

Inflation Rate: 3%

Average Needs (per year - over next 10 years): \$1,060,148.00



Needs by Year with Unaddressed FCI Over Time (Table)

The above graph is a visual representation of the information contained in the table below.

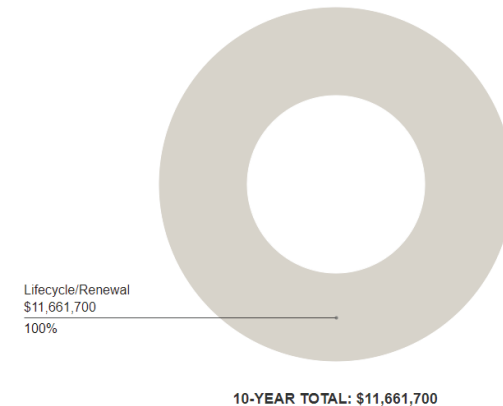
Year	Reserve	Reserve Escalation	Recurrence	Recurrence Escalation	Total Escalation	Deferred	FCI
2023	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0
2025	2,849,450	173,532	0	0	173,532	3,022,982	0.06
2026	935,988	86,791	0	0	86,791	4,045,761	0.08
2027	307,600	38,607	0	0	38,607	4,391,968	0.08
2028	1,916,700	305,281	0	0	305,281	6,613,949	0.13
2029	0	0	0	0	0	6,613,949	0.13
2030	2,082,250	478,655	125,000	28,734	507,389	9,174,854	0.17
2031	2,100	560	0	0	560	9,177,514	0.17
2032	481,100	146,626	0	0	146,626	9,805,240	0.19
2033	1,267,000	435,742	0	0	435,742	11,507,982	0.22
2034	92,400	35,503	0	0	35,503	11,635,885	0.22
2035	217,700	92,688	717,450	305,462	398,150	11,946,273	0.23
2036	223,835	104,874	0	0	104,874	12,274,982	0.23
2037	264,500	135,580	0	0	135,580	12,675,062	0.24
2038	1,400	781	0	0	781	12,677,243	0.24
2039	9,200	5,563	0	0	5,563	12,692,006	0.24
2040	2,009,600	1,311,963	1,509,500	985,474	2,297,437	16,013,569	0.31
2041	0	0	114,501	80,429	80,429	16,013,569	0.31
2042	4,285,200	3,228,924	22,950	17,293	3,246,217	23,527,693	0.45

**Plan Types**

Each line item in the cost database is assigned a Plan Type, which is the primary reason or rationale for the recommended replacement, repair, or other corrective action. This is the "why" part of the equation. A cost or line item may commonly have more than one applicable Plan Type; however, only one Plan Type will be assigned based on the "best" fit, typically the one with the greatest significance. Each of the Key Findings identified below are assigned a Plan Type.

Plan Type Descriptions

Safety	■	An observed or reported unsafe condition that if left unaddressed could result in injury; a system or component that presents potential liability risk.
Performance/Integrity	■	Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses risk to overall system stability.
Accessibility	■	Does not meet ADA, UFAS, Safety and/or other handicap accessibility requirements.
Environmental	■	Improvements to air or water quality, including removal of hazardous materials from the building or site.
Retrofit/Adaptation	■	Components, systems, or spaces recommended for upgrades in in order to meet current standards, facility usage, or client/occupant needs.
Lifecycle/Renewal	■	Any component or system that is not currently deficient or problematic but for which future replacement or repair is anticipated and budgeted.

Plan Type Distribution (by Cost)

Immediate Needs

ID	Location Description	UF Code	Description	Condition	Plan Type	Cost
Total (0 items)	0	0	0	0	0	\$0
Total						\$0



Key Findings

No Key Findings Exist For This Facility



2. Building and Site Information



System Summary

System	Description	Condition
Structure	Steel frame with concrete-topped metal decks over concrete pad column footings	Good
Facade	Primary Wall Finish: Brick Secondary Wall Finish: Metal siding Windows: Aluminum	Fair
Roof	Primary: Flat construction with single-ply TPO/PVC membrane Secondary: Flat construction with single-ply EPDM membrane	Fair
Interiors	Walls: Painted gypsum board, painted CMU, wood paneling, ceramic tile, stone Floors: Carpet, VCT, ceramic tile, quarry tile, wood strip, terrazzo, coated concrete Ceilings: Painted gypsum board and ACT, Unfinished/exposed	Fair
Elevators	Passenger: 1 hydraulic car serving all 3 floors	Fair
Plumbing	Distribution: Copper supply and cast-iron waste & venting Hot Water: Electric and indirect water heaters with integral tanks Fixtures: Toilets, urinals, and sinks in all restrooms	Fair
HVAC	Central System: Boilers, air handlers, feeding fan coil and hydronic baseboard radiators and cabinet terminal units Non-Central System: Packaged units, Split-system heat pumps Supplemental components: Suspended unit heaters	Fair
Safety and Security	Cameras, card readers, perimeter intrusion detection, security windows and doors, fencing, lighting, traffic gates. Multiple points of auto locking doors, main entry monitored, auto locking doors, internal locking on classroom doors, complete intercom system	Fair
Fire Suppression	Wet-pipe sprinkler system and fire extinguishers, and kitchen hood system	Fair
Electrical	Source & Distribution: Main switchboard with copper wiring Interior Lighting: LED and linear fluorescent Emergency Power: None	Fair



Fire Alarm	Alarm panel with smoke detectors, heat detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Fair
Equipment/Special	Commercial kitchen equipment	Fair
Site Pavement	Asphalt lots with limited areas of concrete aprons and pavement and adjacent concrete sidewalks, curbs, ramps, and stairs	Fair
Site Development	Property entrance signage; chain link fencing Playgrounds and sports fields and courts with bleachers, dugouts, press box, fencing, and site lights Heavily furnished with park benches, picnic tables, trash receptacles	Fair
Landscaping & Topography	Significant landscaping features including lawns, trees, bushes, and planters Irrigation present Low to moderate site slopes throughout	Good
Utilities	Municipal water and sewer Local utility-provided electric and natural gas and fuel oil tanks	Fair
Site Lighting	Pole-mounted: LED Building-mounted: LED	Good
Ancillary Structures	Garages, Storage sheds, and greenhouse	Fair
Accessibility	Presently it does not appear an accessibility study is needed for this property.	
Key Issues and Findings	None observed at time of assessment.	



3. Supplemental Evaluations

Square Foot Verification

We have reviewed the square footage of 210,000 square feet and it is in the range of square foot calculations as reported by the school district. This confirmation of the square footage of the facility is based on the exterior wall dimensions and number of stories measured from Google Earth and other publicly available internet searches. This measurement may not reflect the actual heated square footage but provides a general size of the heated square feet of the overall building.

PCB Air Indoor Testing

At the time of the onsite evaluation of this facility PCB air testing has not been conducted. Further ongoing information can be found on the Agency of Natural Resources PCB in Schools website [Agency of Natural Resources PCB in Schools](#).

School Educational Capacity and Programming Space

As part of the FCA report, school administrative staff were asked to conduct a self-assessment of whether their school building meets their space, operational needs and if they have sufficient building capacity and appropriate spaces to deliver educational programming. The school responses to the survey are reported in Appendix D. The respondents indicated that the following areas were inadequate to meet current needs:

A space needs self-assessment was conducted by the school administrative staff which identified space constraints in the following areas:

- Adequate number of classrooms.
- Adequate overall building space.
- Confidential space to maintain FERPA, HIPPA or IEP requirements.
- Administrative offices and/or office space for staff.
- Cafeteria, kitchen and/or gymnasium space.



The Depleted Value Facility Condition Index (FCI) is an estimate of a building's overall amount of consumed system life. The Depleted Value FCI ratings scale indicates the estimated condition of the system. Generally, the higher the Depleted Value FCI, the greater the need to repair or replace a system. Note that the FCI can also be calculated for system groups, building types and other aggregations. The estimated percentage of collective system life left in a building, also referred to as Remaining Useful Life (RUL). The higher the RUL, the newer the system. The sum of Depleted Value FCI and RUL will equal 100%.

Depleted Value Index

Index Value	55.2%
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System Expenditure Forecast

System	Immediate	Short Term (1-2 yr)	Near Term (3-5 yr)	Med Term (6-10 yr)	Long Term (11-20 yr)	TOTAL
Structure	-	-	-	-	\$260,100	\$260,100
Facade	-	-	\$20,700	\$398,000	\$3,037,800	\$3,456,500
Roofing	-	-	-	\$1,478,300	\$36,100	\$1,514,400
Interiors	-	\$2,149,600	\$627,200	\$111,300	\$2,486,700	\$5,374,800
Conveying	-	\$9,500	\$5,800	\$91,300	\$14,900	\$121,600
Plumbing	-	-	\$44,400	\$142,600	\$4,298,500	\$4,485,500
HVAC	-	\$76,700	\$1,930,800	\$659,300	\$2,425,000	\$5,091,900
Fire Protection	-	-	\$252,900	\$15,100	\$7,100	\$275,100
Electrical	-	-	\$112,700	\$25,700	\$3,208,400	\$3,346,800
Fire Alarm & Electronic Systems	-	\$557,000	\$18,100	\$1,717,500	\$896,000	\$3,188,600
Equipment & Furnishings	-	\$144,200	\$480,000	\$234,200	\$509,200	\$1,367,500
Special Construction & Demo	-	-	-	\$41,500	\$347,900	\$389,400
Site Development	-	-	\$52,400	\$33,200	\$199,500	\$285,200
Site Pavement	-	\$85,900	-	\$99,600	\$1,303,200	\$1,488,800
Site Utilities	-	-	\$45,900	-	\$17,100	\$63,000
TOTALS	\$0	\$3,022,900	\$3,590,900	\$5,047,600	\$19,047,500	\$30,709,200



4. Property Space Use and Observed Areas

Areas Observed

The interior spaces were observed to gain a clear understanding of the property's overall condition. Other areas accessed included the site within the property boundaries, the exterior of the property and the roofs.

Key Spaces Not Observed

All key areas of the property were accessible and observed.



5. ADA Accessibility

Generally, Title II of the Americans with Disabilities Act (ADA) prohibits discrimination by entities to access and use of "areas of public accommodations" and "public facilities" on the basis of disability. Regardless of their age, these areas and facilities must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

A public entity (i.e., city governments) shall operate each service, program, or activity so that the service, program, or activity, when viewed in its entirety, is readily accessible to and usable by individuals with disabilities.

However, this does not:

1. Necessarily requires a public entity to make each of its existing facilities accessible to and usable by individuals with disabilities.
2. Require a public entity to take any action that would threaten or destroy the historic significance of an historic property; or
3. Require a public entity to take any action that it can demonstrate would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. In those circumstances where personnel of the public entity believe that the proposed action would fundamentally alter the service, program, or activity or would result in undue financial and administrative burdens, a public entity has the burden of proving that compliance with 35.150(a) of this part would result in such alteration or burdens. The decision that compliance would result in such alteration or burdens must be made by the head of a public entity or his or her designee after considering all resources available for use in the funding and operation of the service, program, or activity, and must be accompanied by a written statement of the reasons for reaching that conclusion. If an action would result in such an alteration or such burdens, a public entity shall take any other action that would not result in such an alteration or such burdens but would nevertheless ensure that individuals with disabilities receive the benefits or services provided by the public entity.

Removal of barriers to accessibility should be addressed from a liability standpoint in order to comply with federal law, but the barriers may or may not be building code violations. The Americans with Disabilities Act Accessibility Guidelines are part of the ADA federal civil rights law pertaining to the disabled and are not a construction code. State and local jurisdictions have adopted the ADA Guidelines or have adopted other standards for accessibility as part of their construction codes.

During the FCA, Bureau Veritas performed a limited high-level accessibility review of the facility non-specific to any local regulations or codes. The scope of the visual observation was limited to the same areas observed while performing the FCA and the categories set forth in the appendix. It is understood by the Client that the limited observations described herein do not comprise a full ADA Compliance Survey, and that such a survey is beyond the scope of this particular assessment. A full measured ADA survey would be required to identify any and all specific potential accessibility issues. Additional clarifications of this limited survey:

- This survey was visual in nature and actual measurements were not taken to verify compliance.
- Only a representative sample of areas was observed.
- Two overview photos were taken for each subsection regardless of perceived compliance or non-compliance.
- Itemized costs for individual non-compliant items are not included in the dataset.
- For any "none" boxes checked or reference to "no issues" identified, that alone does not guarantee full compliance.

The facility was originally constructed in 1956. The facility was renovated in 1994 and has widespread accessibility. No information about complaints or pending litigation associated with potential accessibility issues was provided during the interview process.

A detailed follow-up accessibility study is included as a recommendation based on the potential that specific ADA violations, not in this scope of services, may exist. Reference the appendix for specific data, photos, and tables or checklists associated with this limited accessibility survey.



6. Purpose and Scope

Purpose

Bureau Veritas was retained by the client to render an opinion as to the Property's current general physical condition on the day of the site visit.

Based on the observations, interviews and document review outlined below, this report identifies significant deferred maintenance issues, existing deficiencies, and material code violations of record, which affect the Property's use. Opinions are rendered as to its structural integrity, building system condition and the Property's overall condition. The report also notes building systems or components that have realized or exceeded their typical expected useful lives. The physical condition of building systems and related components are typically defined as being in one of five condition ratings. For the purposes of this report, the following definitions are used:

Condition Ratings	
Excellent	New or very close to new; component or system typically has been installed within the past year, sound and performing its function. Eventual repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Good	Satisfactory as-is. Component or system is sound and performing its function, typically within the first third of its lifecycle. However, it may show minor signs of normal wear and tear. Repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Fair	Showing signs of wear and use but still satisfactory as-is, typically near the median of its estimated useful life. Component or system is performing adequately at this time but may exhibit some signs of wear, deferred maintenance, or evidence of previous repairs. Repair or replacement will be required due to the component or system's condition and/or its estimated remaining useful life.
Poor	Component or system is significantly aged, flawed, functioning intermittently or unreliably; displays obvious signs of deferred maintenance; shows evidence of previous repair or workmanship not in compliance with commonly accepted standards; has become obsolete; or exhibits an inherent deficiency. The present condition could contribute to or cause the deterioration of contiguous elements or systems. Either full component replacement is needed, or repairs are required to restore to good condition, prevent premature failure, and/or prolong useful life.
Failed	Component or system has ceased functioning or performing as intended. Replacement, repair, or other significant corrective action is recommended or required.
Not Applicable	Assigning a condition does not apply or make logical sense, most commonly due to the item in question not being present.



Scope

The standard scope of the Facility Condition Assessment includes the following:

- Visit the Property to evaluate the general condition of the building and site improvements, review available construction documents to familiarize ourselves with, and be able to comment on, the in-place construction systems, life safety, mechanical, electrical, and plumbing systems, and the general-built environment.
- Identify those components that are exhibiting deferred maintenance issues and provide cost estimates for Immediate Costs and Replacement Reserves based on observed conditions, maintenance history and industry standard useful life estimates. This will include the review of documented capital improvements completed within the last five-year period and work currently contracted for, if applicable.
- Provide a full description of the Property with descriptions of in-place systems and commentary on observed conditions.
- Provide a high-level categorical general statement regarding the subject Property's compliance to Title III of the Americans with Disabilities Act. This will not constitute a full ADA survey but will help identify exposure to issues and the need for further review.
- Obtain background and historical information about the facility from a building engineer, property manager, maintenance staff, or other knowledgeable source. The preferred methodology is to have the client representative or building occupant complete a Pre-Survey Questionnaire (PSQ) in advance of the site visit. Common alternatives include a verbal interview just prior to or during the walk-through portion of the assessment.
- Review maintenance records and procedures with the in-place maintenance personnel.
- Observe a representative sample of the interior spaces/units, including vacant spaces/units, to gain a clear understanding of the property's overall condition. Other areas to be observed include the exterior of the property, the roofs, interior common areas, and the significant mechanical, electrical and elevator equipment rooms.
- Provide recommendations for additional studies, if required, with related budgetary information.
- Provide an Executive Summary at the beginning of this report, which highlights key findings and includes a Facility Condition Index as a basis for comparing the relative conditions of the buildings within the portfolio.



7. Opinions of Probable Costs

Cost estimates are attached throughout this report, with the Replacement Reserves in the appendix. These estimates are based on Invoice or Bid Document/s provided either by the Owner/facility and construction costs developed by construction resources such as *R.S. Means*, *CBRE Whitestone*, and *Marshall & Swift*, Bureau Veritas's experience with past costs for similar properties, city cost indexes, and assumptions regarding future economic conditions.

Opinions of probable costs should only be construed as preliminary, order of magnitude budgets. Actual costs most probably will vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing or bundling of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, use of subcontractors, and whether competitive pricing is solicited, etc. Certain opinions of probable costs cannot be developed within the scope of this guide without further study. Opinions of probable cost for further study should be included in the FCA.

Methodology

Based upon site observations, research, and judgment, along with referencing Expected Useful Life (EUL) tables from various industry sources, Bureau Veritas opines as to when a system or component will most probably necessitate replacement. Accurate historical replacement records, if provided, are typically the best source of information. Exposure to the elements, initial quality and installation, extent of use, the quality and amount of preventive maintenance exercised, etc., are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual chronological age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its *effective age*, whether explicitly or implicitly stated. Projections of Remaining Useful Life (RUL) are based primarily on age and condition with the presumption of continued use and maintenance of the Property similar to the observed and reported past use and maintenance practices, in conjunction with the professional judgment of Bureau Veritas's assessors. Significant changes in occupants and/or usage may affect the service life of some systems or components.

Where quantities could not be or were not derived from an actual construction document take-off or facility walk-through, and/or where systemic costs are more applicable or provide more intrinsic value, budgetary square foot and gross square foot costs are used. Estimated costs are based on professional judgment and the probable or actual extent of the observed defect, inclusive of the cost to design, procure, construct and manage the corrections.

Definitions

Immediate Needs

Immediate Needs are line items that require immediate action as a result of: (1) material existing or potential unsafe conditions, (2) failed or imminent failure of mission critical building systems or components, or (3) conditions that, if not addressed, have the potential to result in, or contribute to, critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost.

For database and reporting purposes the line items with RUL=0, and commonly associated with **Safety** or **Performance/Integrity** Plan Types, are considered Immediate Needs.



Replacement Reserves

Cost line items traditionally called Replacement Reserves (equivalently referred to as Lifecycle/Renewals) are for recurring probable renewals or expenditures, which are not classified as operation or maintenance expenses. The replacement reserves should be budgeted for in advance on an annual basis. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, Replacement Reserves may also include components or systems that have an indeterminable life but, nonetheless, have a potential for failure within an estimated time period.

Replacement Reserves generally exclude systems or components that are estimated to expire after the reserve term and are not considered material to the structural and mechanical integrity of the subject property. Furthermore, systems and components that are not deemed to have a material effect on the use of the Property are also excluded. Costs that are caused by acts of God, accidents, or other occurrences that are typically covered by insurance, rather than reserved for, are also excluded.

Replacement costs are solicited from ownership/property management, Bureau Veritas's discussions with service companies, manufacturers' representatives, and previous experience in preparing such schedules for other similar facilities. Costs for work performed by the ownership's or property management's maintenance staff are also considered.

Bureau Veritas's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the assessment period. The assessment period is defined as the effective age plus the reserve term. Additional information concerning systems or component's respective replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Replacement Reserves Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined as Immediate Needs.

For the purposes of 'bucketizing' the System Expenditure Forecasts in this report, the Replacement Reserves have been subdivided and grouped as follows: Short Term (years 1-3), Near Term (years 4-5), Medium Term (years 6-10), and Long Term (years 11-20).

Key Findings

In an effort to highlight the most significant cost items and not be overwhelmed by the Replacement Reserves report in its totality, a subsection of Key Findings is included within the Executive Summary section of this report. Key Findings typically include repairs or replacements of deficient items within the first five-year window, as well as the most significant high-dollar line items that fall anywhere within the ten-year term. Note that while there is some subjectivity associated with identifying the Key Findings, the Immediate Needs are always included as a subset.

Exceedingly Aged

A common scenario encountered during the assessment process, and a frequent source of debate, occurs when classifying and describing "very old" systems or components that are still functioning adequately and do not appear nor were reported to be in any way deficient. To help provide some additional intelligence on these items, such components will be tagged in the database as Exceedingly Aged. This designation will be reserved for mechanical or electrical systems or components that have aged well beyond their industry standard lifecycles, typically at least 15 years beyond and/or twice their Estimated Useful Life (EUL). In tandem with this designation, these items will be assigned a Remaining Useful Life (RUL) not less than two years but not greater than 1/3 of their standard EUL. As such the recommended replacement time for these components will reside outside the typical Short-Term window but will not be pushed 'irresponsibly' (too far) into the future.



8. STEM/STEAM Assessment

STEM and STEAM education is an integrated curriculum that is driven by exploratory project-based learning and student-centered development of ideas and solutions. BV has evaluated the facility for the existence of spaces and systems to provide STEM/STEAM education based on input from the point of contact for the school. The below table identifies the required standards and to what degree the requirements have been met for the facility.

STEM/STEAM Evaluations				
Property Name	STEM/STEAM Suitability Score	Project Number	School Type	Square Footage
Spaulding UHS - Main Building	79%	158982.22R000-305.379	High	210,000

Suitability Classification	Scale
Compares Poorly	Score 0 - 25
Compares Marginally	Score 25-50
Compares Fairly	Score 50-75
Compares Well	Score 75 - 100

Score Value	Score Impact
1- Meets	100%
2- Partial	50%
3- Missing	0%

Details of the STEM/STEAM evaluation are included in the appendix of this report. Reference this appendix for specific data associated with this limited survey.



9. Energy Audit

The purpose of this Energy Audit is to provide Spaulding UHS with a baseline of energy usage, the relative energy efficiency of the facility, and specific recommendations for Energy Conservation Measures. Information obtained from these analyses may be used to support a future application to an Energy Conservation Program, Federal and Utility grants towards energy conservation, as well as support performance contracting, justify a municipal bond-funded improvement program, or as a basis for replacement of equipment or systems.

The energy audit consisted of an on-site visual assessment to determine current conditions, itemize the energy consuming equipment (i.e. Boilers, Make-Up Air Units, DWH equipment); review lighting systems both exterior and interior; and review efficiency of all such equipment. The study also included interviews and consultation with operational and maintenance personnel. The following is a summary of the tasks and reporting that make up the Energy Audit portion of the report.

The following is a summary of the tasks and reporting that make up the Energy Audit portion of the report.

Energy and Water Using Equipment

- Bureau Veritas has surveyed the common areas, offices, maintenance facilities and mechanical rooms to document utility-related equipment, including heating systems, cooling systems, air handling systems and lighting systems.

Building Envelope

- Bureau Veritas has reviewed the characteristics and conditions of the building envelope, checking insulation values and conditions. This review also includes an inspection of the condition of walls, windows, doors, roof areas, insulation and special use areas.

Recommendations for Energy Savings Opportunities

- Based on the information gathered during the on-site assessment, the utility rates, as well as recent consumption data and engineering analysis, Bureau Veritas has identified opportunities to save energy and provide probable construction costs, projected energy/utility savings and provide a simple payback analysis.

Analysis of Energy Consumption

- Based on the information gathered during the on-site assessment, Bureau Veritas has conducted an analysis of the energy usage of all equipment, and identified which equipment is using the most energy and what equipment upgrades may be necessary. As a result, equipment upgrades, or replacements are identified that may provide a reasonable return on the investment and improve maintenance reliability.

Energy Audit Process

- Interviewing staff and review plans and past upgrades
- Performing an energy audit for each use type
- Performing a preliminary evaluation of the utility system
- Analyzing findings, utilizing ECM cost-benefit worksheets
- Making preliminary recommendations for system energy improvements and measures
- Estimating initial cost and changes in operating and maintenance costs based on implementation of energy efficiency measures
- Ranking recommended cost measures, based on the criticality of the project and the largest payback



10. Historical Energy and Water Performance Metrics

Utility Data Tabulation Methodology

Establishing the energy baseline begins with an analysis of the utility cost and consumption of the facility. Utilizing the historical energy data and local weather information, we evaluate the existing utility consumption and assign it to the various end-uses throughout the buildings. The Historical Data Analysis breaks down utilities by consumption, cost and annual profile.

This data is analyzed using standard engineering assumptions and practices. The analysis serves the following functions:

- Allows our engineers to benchmark the energy and water consumption of the facilities against consumption of efficient buildings of similar construction, use and occupancy.
- Generates the historical and current unit costs for energy and water
- Provides an indication of how well changes in energy consumption correlate to changes in weather.
- Reveals potential opportunities for energy consumption and/or cost reduction. For example, the analysis may indicate that there is excessive, simultaneous heating and cooling, which may mean that there is an opportunity to improve the control of the heating and cooling systems.

By performing this analysis and leveraging our experience, our engineers prioritize buildings and pinpoint systems for additional investigation during the site visit, thereby maximizing the benefit of their time spent on-site and minimizing time and effort by the customer’s personnel.

No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used average utility costs from other VT Agency of Education properties to approximate the utility costs for this property. Bureau Veritas will update the report on receipt of the actual data from the client.

Utilities Metering at a Glance	
Number of electric meters observed	One
Number of gas meters observed	One
Number of central steam meters observed	None
Number of domestic water meters observed	One

Average Utility Rates				
Electricity	Wood Chips	Natural Gas	No. 2 Oil	Water & Sewer
Average Rate	Average Rate	Average Rate	Average Rate	Blended Rate
\$0.18 / kWh (est.)	\$0.10 / Lb. (est.)	\$1.20 / therm (est.)	\$2.78 / Gal (est.)	\$16.11 / kGal (est.)



Electricity

Green Mountain Power provides electrical service to the facility.

The consumption pattern likely remains relatively constant. Any seasonal variation in consumption is primarily attributed to periods when school is out of session, while the static base load primarily consists of domestic water heating, lighting, and appliances.

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the electric rate from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.



Wood Chips/Pellets

The wood chip fuel supplier to the facility was not provided. The deliveries are made on an as-needed basis. The primary use of wood chips is for space heating. Any seasonal variation in consumption is primarily attributed to the heating loads.

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the utility rates from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.



Natural Gas

Vermont Gas provides natural gas to the facility.

The primary use of natural gas is for cooking. Any seasonal variation in consumption is primarily attributed to varying levels of cooking requirements based on weather and school being in session.

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the utility rates from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.



Propane or Fuel Oil

The fuel oil supplier to the facility was not provided. The deliveries are made on an as-needed basis. The primary use of fuel oil is for space heating and domestic water heating. Any seasonal variation in consumption is primarily attributed to the heating loads, while the static base load primarily consists of domestic water heating.

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the utility rates from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.



Water and Sewer

The Town of Barre satisfies the water and sewer requirements of the facility. The water consumption pattern most likely remains more or less flat over the 10-month period that school is in session.

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the utility rate from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.



11. Energy Conservation Measures

Bureau Veritas has conducted an Energy Audit on Spaulding UHS. The study included a review of the building's construction features, historical energy and water consumption and costs, review of the building envelope, HVAC equipment, heat distribution systems, lighting, and the building's operational and maintenance practices.

Bureau Veritas has evaluated five Energy Conservation Measures (ECMs) for this property. The savings for each measure are calculated using standard engineering methods followed in the industry, and detailed calculations for ECM are provided in Appendix H for reference. A 10% discount in energy savings was applied to account for the interactive effects amongst the ECMs. In addition to the consideration of the interactive effects, Bureau Veritas has applied a 15% contingency to the implementation costs to account for potential cost overruns during the implementation of the ECMs.

The following table summarizes the recommended ECMs in terms of description, investment cost, energy consumption reduction, and cost savings.

Recommended Non- Renewable Energy Conservation Measures: Financial Impact	
Total Projected Initial ECM Investment	\$130,859
Estimated Annual Cost Savings Related to ECMs	\$18,974
Net Effective ECM Payback	6.9 Years

Key Metrics to Benchmark the Subject Property's Energy Usage Profile

- Building Site Energy Use Intensity - The sum of the total site energy use in thousands of Btu per unit of gross building area. Site energy accounts for all energy consumed at the building location only not the energy consumed during generation and transmission of the energy to the site.
- Building Source Energy Use Intensity – The sum of the total source energy use in thousands of Btu per unit of gross building area. Source energy is the energy consumed during generation and transmission in supplying the energy to your site.
- Building Cost Intensity - This metric is the sum of all energy use costs in dollars per unit of gross building area.
- Greenhouse Gas Emissions - Although there are numerous gases that are classified as contributors to the total for Greenhouse Emissions, the scope of this energy audit focuses on carbon dioxide (CO₂). Carbon dioxide enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and also as a result of other chemical reactions (e.g., manufacture of cement).



Energy Conservation Measures Screening:

Bureau Veritas screens ECMs using the financial methodology below. ECMs which are considered financially viable must meet the criteria.

Simple Payback Period –The number of years required for the cumulative value of energy or water cost savings less future non-fuel or non-water costs to equal the investment costs of the building energy or water system, without consideration of discount rates. ECMs with a payback period greater than the Expected Useful Life (EUL) of the project are not typically recommended, as the cost of the project will not be recovered during the lifespan of the equipment. These ECMs are recommended for implementation during future system replacement. At that time, replacement may be evaluated based on the premium cost of installing energy efficient equipment.



Spaulding UHS

Energy Conservation Measures															
	Description of ECM	Location	Net Projected Investment (\$)	Estimated Annual Savings: Nat. Gas (therms)	Estimated Annual Savings: #2 Oil (gal)	Estimated Annual Savings: Electricity (kWh)	Estimated Annual Savings: Water (KGal)	Total Energy Savings (MMBTU)	Total Green House Gas Savings (MTCO2/Yr)	Estimated Utility Cost Savings (\$)	Estimated Annual O&M Savings (\$)	Total Estimated Annual Savings (\$)	Simple Payback (Yrs)	Life Cycle Savings (\$)	Expected Useful Life (EUL) (Yrs)
1	Replace Existing Linear Fluorescent Lamps; Replace 12x F42T8 with F42LED; Replace 22x F43T8 with F43LED; Replace 66x F42T8 with F42LED; Replace 96x F42T8 with F42LED; Replace 7x F42T8 with F42LED	Location: Throughout building interiors	\$6,414	0.0	0.0	14,850.5	0.0	50.7	3.5	\$2,673	\$234	\$2,907	2.2	\$28,294	15
2	Install Low Flow Faucet Aerators; Replace 59x 1.5GPM rated bathroom aerators with 0.5GPM WaterSense certified aerators	Location: Restrooms, throughout building	\$895	0.0	59.6	0.0	13.4	8.3	0.6	\$166	\$0	\$382	2.3	\$2,366	10
3	Replace Incandescent/CFL /Halogen Lamps With LED Lamps; Replace 60 Screw In- CFL20 with 11W LED A19	Location: Auditorium	\$827	0.0	0.0	702.0	0.0	2.4	0.2	\$126	\$52	\$178	4.6	\$1,301	15
4	Re-Commission The Building & Its Control Systems; Improve building efficiency by 7% through re-commissioning	Location: Throughout building	\$93,133	0.0	5,600.0	0.0	0.0	775.6	56.7	\$15,568	\$0	\$15,568	6.0	\$92,716	15
5	Install Variable Frequency Drives (VFD); Install (2x) VFDs on 20HP motors	Location: Boiler room	\$12,521	0.0	0.0	11,370.8	0.0	38.8	2.7	\$2,047	\$0	\$2,047	6.1	\$11,913	15
Totals for no/low cost items			\$1,722	0.0	59.6	702.0	13.4	10.7	0.8	\$292	\$52	\$561	3.1		
Total for capital cost			\$112,069	0.0	5,600.0	26,211.3	0.0	865.1	62.9	\$20,288	\$234	\$20,522	5.5		
Interactive Savings Discount @10%				0.0	-566.0	-2,692.3	-1.3	-87.6	-6.4	-\$2,058	-\$29	-\$2,108			
Total Contingency Expense @ 15%			\$17,069												
Totals for improvements			\$130,859	0.0	5,093.7	24,231.0	12.1	788.1	57.3	\$18,522	\$258	\$18,974	6.9		

SPAULDING UHS - MAIN BUILDING

BUREAU VERITAS PROJECT: 158982.22R000-305.379

12. Certification

Vermont Agency of Education, Phase Two (the Client) retained Bureau Veritas to perform this Facility Condition Assessment in connection with its continued operation of Spaulding UHS - Main Building, 155 Ayers Street, Barre, VT 05641, the "Property". It is our understanding that the primary interest of the Client is to locate and evaluate materials and building system defects that might significantly affect the value of the property and to determine if the present Property has conditions that will have a significant impact on its continued operations.

The conclusions and recommendations presented in this report are based on the brief review of the plans and records made available to our Project Manager during the site visit, interviews of available property management personnel and maintenance contractors familiar with the Property, appropriate inquiry of municipal authorities, our Project Manager's walk-through observations during the site visit, and our experience with similar properties.

No testing, exploratory probing, dismantling, or operating of equipment or in-depth studies were performed unless specifically required under the *Purpose and Scope* section of this report. This assessment did not include engineering calculations to determine the adequacy of the Property's original design or existing systems. Although walk-through observations were performed, not all areas may have been observed (see Section 1 for specific details). There may be defects in the Property, which were in areas not observed or readily accessible, may not have been visible, or were not disclosed by management personnel when questioned. The report describes property conditions at the time that the observations and research were conducted.

This report has been prepared on behalf of and exclusively for the use of the Client for the purpose stated within the *Purpose and Scope* section of this report. The report, or any excerpt thereof, shall not be used by any party other than the Client or for any other purpose than that specifically stated in our agreement or within the *Purpose and Scope* section of this report without the express written consent of Bureau Veritas.

Any reuse or distribution of this report without such consent shall be at the Client and the recipient's sole risk, without liability to Bureau Veritas.

Prepared by: Bureau Veritas Technical Assessments

13. Appendices

- Appendix A: Photographic Record
- Appendix B: Site Plans
- Appendix C: Stem/Steam Assessment
- Appendix D: School Educational Capacity and Programming Space
- Appendix E: Accessibility Review & Photos
- Appendix F: Component Condition Report
- Appendix G: Replacement Reserves
- Appendix H: Depleted Value Report



Appendix A:

Photographic Record



Photographic Overview



1 - FRONT ELEVATION



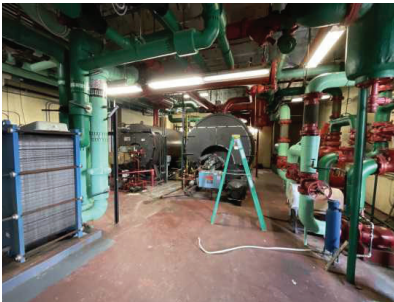
2 - LEFT ELEVATION



3 - REAR ELEVATION



4 - RIGHT ELEVATION



5 - BOILER ROOM OVERVIEW PHOTO



6 - WOOD CHIP BOILER ROOM

Photographic Overview



7 - GYMNAISUM OVERVIEW PHOTO



8 - OVERVIEW OF TECHNICAL CLASSROOM



9 - PHOTO OF AUDITORIUM FROM STAGE



10 - WOOD SHOP OVERVIEW PHOTO



11 - CAFETERIA OVERVIEW PHOTO



12 - WORKOUT ROOM OVERVIEW

Photographic Overview



13 - HOME ECONOMICS CLASSROOM



14 - LABORATORY CLASSROOM OVERVIEW



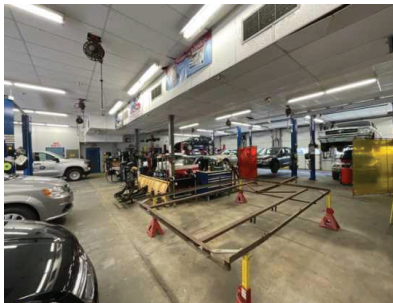
15 - STANDARD TEACHING CLASSROOM OVERVIEW



16 - OVERVIEW OF AVERAGE HALLWAY

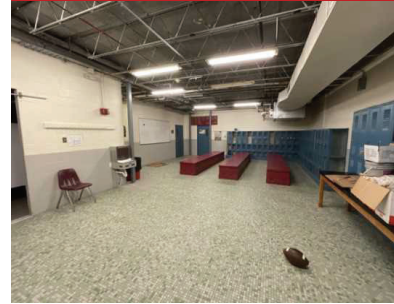


17 - PHOTO OF COSMETOLOGY CLASSROOM

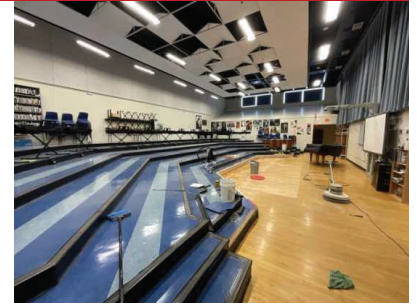


18 - OVERVIEW OF AUTOMOTIVE SHOP

Photographic Overview



19 - OVERVIEW OF LOCKER ROOM



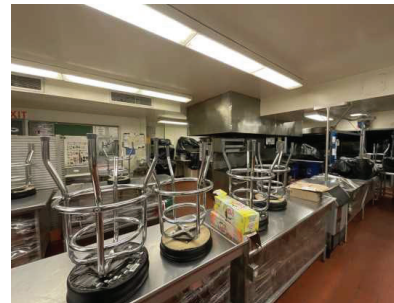
20 - OVERVIEW OF CHORUS ROOM



21 - OVERVIEW OF LIBRARY



22 - OVERVIEW OF SHOP SPACE



23 - TEACHING KITCHEN OVERVIEW PHOTO



24 - OFFICE

Appendix B:

Site Plans



Project Name	Project Number
Vermont Agency of Education	158982.22R000-305.379 Spaulding High School Main Building
Source	On-Site Date
Google MyMaps	August 1-4, 2023

Appendix C:

Stem/Steam Assessment



STEM/STEAM Evaluation					
Property Name	STEM/STEAM Suitability Score	Project Number	School Type	Square Footage	
Spaulding UHS - Main Building	79%	158982.22R000-305.379	High	210,000	
Suitability Classification		Scale	Score Value	Score Impact	
Compares Poorly		Score 0 - 25	1- Meets	100%	
Compares Marginally		Score 25-50	2- Partial	50%	
Compares Fairly		Score 50-75	3- Missing	0%	
Compares Well		Score 75 - 100			
Rooms to support STEM/STEAM Curriculum - X= Required by School Type					
Room Types	Room Present (Yes/No)	Elementary School	Middle School	High School	
Does the facility have an Art Room?	Yes	X	X	X	
Does the facility have a Science Lab?	Yes		X	X	
Does the facility have a Shop (Machine, Wood, Metal, etc.)?	Yes		X	X	
Does the facility have a Computer Lab?	Yes	X	X	X	
Does the facility have a dedicated STEM/STEAM Room?	Yes	X	X	X	
	Overall Compliance				
Questions	Art Room	Science Labs	Shops	Computer Lab	STEM/STEAM
Does the room have chemical resilient perimeter counters with a minimum of two sinks, one being ADA accessible?	1- Meets	1- Meets	2- Partial		1- Meets
Does the room have electrical outlet distribution along perimeter walls and from the ceiling?	2- Partial	2- Partial	1- Meets	2- Partial	2- Partial
Does the room have open shelving and lockable storage cabinets?	1- Meets	1- Meets	1- Meets		1- Meets
Does the room have technology connectivity and an interactive display?	1- Meets	1- Meets	2- Partial	1- Meets	1- Meets
Does the room have appropriate wet floor finishes?	1- Meets	1- Meets	1- Meets		1- Meets
Does the room have visual display boards?	1- Meets	1- Meets	1- Meets	1- Meets	1- Meets
Does the room have Prep/Storage Room?	1- Meets	1- Meets	1- Meets	1- Meets	1- Meets
Does the room have direct access to the exterior?	3- Missing	2- Partial	1- Meets		3- Missing
Does the room the ability to structurally suspend items from the ceiling?	3- Missing	3- Missing	1- Meets		3- Missing
Does the have goggle cabinets, fire extinguisher, eye wash and deluge shower?	2- Partial	2- Partial	1- Meets		2- Partial
Room Type Score	70%	75%	90%	88%	70%

Appendix D:

School Educational Capacity and Programming Space



School Educational Capacity and Programming Space

As part of Act 72, AOE has contracted with Bureau Veritas (BVNA) to complete a Facility Condition Assessment (FCA) of very public school building in Vermont. One component of the FCA report will be to identify whether the size and configuration of your current facility is meeting your school's educational and operational needs. In order for us to accurately capture your facility space needs, it is necessary for the AOE and BVNA to receive your input. To complete this brief survey, we recommend that you consult with school building leadership and facilities/custodial staff.

School Name

Spaulding Union High School

SU/SD

Barre Supervisory Union

Does the school have an adequate number of classrooms to meet student enrollment needs?

Yes

Please provide some explanation and/or context (known needs, barriers, other constraints outside of space, etc.):

Yes we have adequate space.

Does the school have adequate space to accommodate all the current educational programs being offered?

Yes

Please describe capacity of your school building(s) to deliver educational programming:

We have had declining enrollment.

Would the school provide additional programming if available space was provided?

Yes

More students staying in the school setting if there were more space.

Does the school have adequate confidential space to provide 1:1 services to students as required to maintain FERPA, HIPPA or IEP requirements?

Yes

Please describe:

No

Do the school have adequate administrative offices and/or office space for staff?

No

Please describe:

Yes

Based on the size of enrollment does the size of the cafeteria, kitchen and gymnasium meet the current and future enrollment needs?

No

Please describe:

Yes

Appendix E:

Accessibility Review & Photos



Visual Survey - ADA Standards for Accessible Design

Property Name: Spaulding High School

BV Project Number: 158982.22R000-305.379

Facility History & Interview				
Question	Yes	No	Unk	Comments
1. ADA: Has an accessibility study been performed at the site? If so, when?			X	
2. ADA: If a study has occurred, have the associated recommendations been addressed? In full or in part?			X	
3. ADA: Have there been regular complaints about accessibility issues, or previous or pending litigation?			X	

Building : Accessibility Issues				
Category	Major Issues (ADA study recommended)	Moderate Issues (ADA study recommended)	Minor Issues	None*
Parking				None
Exterior Route				None
Building Entrances				None
Interior Route				None
Elevators				None
Public Restrooms				None

*Be cognizant that if the "None" box is marked that does not guarantee full compliance; this study is limited in nature



1 - OVERVIEW OF ACCESSIBLE PARKING AREA



2 - 2ND ACCESSIBLE PARKING AREA



3 - PRIMARY PATH OF TRAVEL



4 - CURB CUT



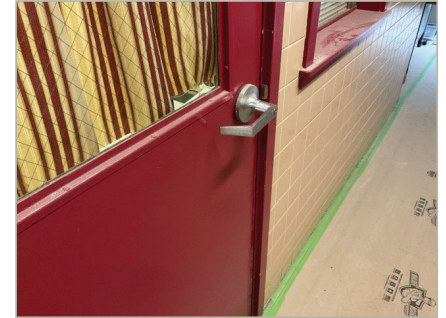
5 - MAIN ACCESSIBLE ENTRANCE



6 - SIGNAGE/HARDWARE



7 - ACCESSIBLE INTERIOR PATH



8 - INTERIOR PATH DOOR HARDWARE



9 - TOILET STALL OVERVIEW



10 - SINK, FAUCET HANDLES or ACCESSORIES



13 - LOBBY VIEW OF CABS, WITH DOORS OPEN



14 - IN-CAB CONTROLS/EMERGENCY CALL PANEL

The table below is intended to be used as a general reference guide to help differentiate the orders of magnitude between some of the more commonly observed accessibility issues. The table is not intended to be all-inclusive, and boxes checked in the tables above do not necessarily mean those specific problems or shortcomings cited as examples below exist at the subject buildings and sites. Reference the data and photos above and/or the *Key Findings* section in the body of the report for visuals and/or more specifics about the particular subject site conditions.

Reference Guide			
	Major Issues <i>(ADA study recommended)</i>	Moderate Issues <i>(ADA study recommended)</i>	Minor Issues
Parking	<ul style="list-style-type: none">- Needs full reconstruction- Excessive slopes over 3% require major re-grading- No level locations to add required spaces	<ul style="list-style-type: none">- No or non-compliant curb cuts- Moderate difficulty to add required accessible spaces- Slopes close to compliant	<ul style="list-style-type: none">- Painting of markings needed- Signage height non-compliant- Signage missing
Exterior Route	<ul style="list-style-type: none">- Large areas of sidewalks with excessive slopes- No ramp when needed- Ramps with excessive slopes	<ul style="list-style-type: none">- Ramps need rails- Ramps need rail extensions- All or most entrance door exterior maneuvering clearance areas with excessive slopes	<ul style="list-style-type: none">- One entrance door exterior maneuvering clearance area with excessive slope- Non-compliant signage
Building Entrances	<ul style="list-style-type: none">- No compliant entrance exists- Exterior entry door/s not wide enough- Entrance vestibule requires complete reconstruction / reconfiguration due to clearance	<ul style="list-style-type: none">- Need significant # of lever handles- Need to add or modify automatic door opener- Entrance vestibule requires limited reconfigurations	<ul style="list-style-type: none">- A few doorknobs instead of lever handles- Non-compliant door threshold
Interior Route	<ul style="list-style-type: none">- All or most interior doors appear less than 32" wide- Corridors less than 36" wide- No ramp when needed- Ramps with excessive slopes- Non-compliant treads/risers at means of egress stairways	<ul style="list-style-type: none">- Single height drinking fountains- Drinking fountain too high or protrudes into accessible route- Ramps need rails- Ramps need rail extensions- Need significant # of lever handles- Non-compliant rail extensions at egress stairways- All/most door thresholds high	<ul style="list-style-type: none">- One door threshold too high- A few doorknobs instead of lever handles- Non-compliant Door pressures- Non-compliant signage- Switches not within reach range
Elevators	<ul style="list-style-type: none">- No elevator present when required- Elevator cab too small	<ul style="list-style-type: none">- Panel control buttons not at compliant height- No hands-free emergency communication system- Elevator only has mechanical stops	<ul style="list-style-type: none">- Audible/visual signals at every floor may be lacking- Minor signage / Braille issues

	Major Issues <i>(ADA study recommended)</i>	Moderate Issues <i>(ADA study recommended)</i>	Minor Issues
Public Restrooms	<ul style="list-style-type: none">- No ADA RR on each accessible floor- Restroom(s) too small- Entire restroom(s) requires renovation- Water closet clearance requires moving walls	<ul style="list-style-type: none">- Interior doors appear less than 32" wide- Missing or non-compliant grab bars- Easily fixable clearance issues	<ul style="list-style-type: none">- Minor height adjustments required- Non-compliant door pressures- Missing a visual strobe (only required if audible fire alarm already present)- Missing lavatory pipe wraps- Signage not compliant
Kitchens/Kitchenettes	<ul style="list-style-type: none">- Clear space for each appliance not present- Clearance between opposing counters too narrow	<ul style="list-style-type: none">- Sink and counter too high- Sink knee and toe clearance not provided where required (built-in)- Less than 50% of cabinetry within reach range	<ul style="list-style-type: none">- Dispensers not within reach range- Switches not within reach range- Missing sink pipe wraps if knee and toe clearance required
Playgrounds & Pools	<ul style="list-style-type: none">- Large areas of surfacing non-compliant- Install compliant play structures- No pool lift provided	<ul style="list-style-type: none">- Small area/s of surfacing or equipment non-compliant- Moderate issues with path of travel to playground/pool	<ul style="list-style-type: none">- Minor issues with path of travel to playground/pool

Appendix F:

Component Condition Report



Component Condition Report | SPAULDING UHS - Main Building

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
Structure								
B1080	Stairwells	Structure	Fair	Stairs, Metal or Pan-Filled, Interior	3,000	SF	20	6895262
Facade								
B2010	Building Exterior	Facade	Fair	Exterior Walls, Brick Veneer	61,820	SF	20	6895206
B2010	Building Exterior	Facade	Fair	Exterior Walls, Metal/Insulated Sandwich Panels	23,740	SF	24	6895293
B2010	Building Exterior	Facade	Fair	Exterior Walls, Metal/Insulated Sandwich Panels	6,300	SF	24	6895196
B2020	Building Exterior	Facade	Fair	Window, Aluminum Double-Glazed, 16-25 SF	263		9	6895330
B2050	Building Exterior	Facade	Fair	Overhead/Dock Door, Steel, 20'x14' (280 SF)	2		5	6895370
B2050	Building Exterior	Facade	Fair	Exterior Door, Aluminum-Framed & Glazed, Standard Swing	12		9	6895283
B2050	Building Exterior	Facade	Fair	Exterior Door, Steel, Standard	22		19	6895168
B2050	Building Exterior	Facade	Fair	Exterior Door, Wood, Solid-Core	8		3	6895337
B2050	Building Exterior	Facade	Fair	Overhead/Dock Door, Aluminum, 12'x12' (144 SF)	9		9	6895245
Roofing								
B3010	Roof	Roofing	Fair	Roofing, Single-Ply Membrane, EPDM	2,300	SF	12	6895228
B3010	Roof	Roofing	Fair	Roofing, Single-Ply Membrane, EPDM	15,000	SF	10	6895236
B3010	Roof	Roofing	Fair	Roofing, Single-Ply Membrane, TPO/PVC	55,000	SF	10	6895268
Interiors								
C1030	Throughout building	Interiors	Fair	Interior Door, Steel, Standard	105		17	6895350
C1030	Throughout building	Interiors	Fair	Interior Door, Steel, w/ Extensive Glazing	50		17	6895274
C1070	Throughout building	Interiors	Fair	Suspended Ceilings, Acoustical Tile (ACT)	210,000	SF	2	6895349
C1090	Hallways	Interiors	Fair	Lockers, Steel-Baked Enamel, 12" W x 15" D x 72" H	400		5	6895316
C2010	Hallways	Interiors	Fair	Wall Finishes, Ceramic Tile	2,000	SF	17	6895222
C2010	Locker room	Interiors	Fair	Wall Finishes, Ceramic Tile	1,000	SF	19	6895248
C2010	Auditorium	Interiors	Fair	Wall Finishes, Wood Paneling, Raised Architectural Wainscot	2,500	SF	10	6895242
C2010	Throughout building	Interiors	Fair	Wall Finishes, any surface, Prep & Paint	325,000	SF	2	6895218
C2010	Hallway	Interiors	Fair	Wall Finishes, Granite Veneer	750	SF	29	6895352
C2030	Cosmetology	Interiors	Fair	Flooring, Laminate Faux Wood	2,000	SF	7	6895345
C2030	Auditorium	Interiors	Fair	Flooring, Wood, Strip	5,000	SF	11	6895179
C2030	Restrooms	Interiors	Fair	Flooring, Ceramic Tile	500	SF	5	6895320
C2030	Boiler room	Interiors	Fair	Flooring, any surface, w/ Paint or Sealant, Prep & Paint	1,500	SF	2	6895197
C2030	Throughout building	Interiors	Fair	Flooring, Terrazzo	20,000	SF	5	6895281
C2030	Cafeteria	Interiors	Fair	Flooring, Ceramic Tile	3,000	SF	19	6895240
C2030	Kitchen	Interiors	Fair	Flooring, Quarry Tile	2,000	SF	5	6895307
C2030	Storage	Interiors	Fair	Flooring, Vinyl Tile (VCT), w/ Asbestos Abatement	500	SF	2	6895217
C2030	Throughout building	Interiors	Fair	Flooring, Vinyl Tile (VCT)	152,000	SF	2	6895339
C2030	Throughout building	Interiors	Fair	Flooring, Carpet, Commercial Standard	5,000	SF	2	6895176
Conveying								
D1010	Elevator	Conveying	Fair	Elevator Controls, Automatic, 1 Car	1		5	6895161
D1010	Elevator	Conveying	Fair	Passenger Elevator, Hydraulic, 3 Floors, Renovate	1		9	6895275
D1010	Elevator	Conveying	Fair	Elevator Cab Finishes, Standard	1		2	6895361
Plumbing								

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
D2010	Restroom	Plumbing	Fair	Toilet, Commercial Water Closet	52		7	6895336
D2010	Hallways	Plumbing	Fair	Drinking Fountain, Wall-Mounted, Single-Level	1		7	6895276
D2010	Boiler room	Plumbing	Fair	Pump, Circulation, Domestic Water	2		7	6895288
D2010	Teaching Kitchen	Plumbing	Fair	Sink/Lavatory, Commercial Kitchen, 3-Bowl	2		9	6895356
D2010	Boiler room	Plumbing	Good	Water Heater, Electric, Commercial (36 kW)	1		14	6895169
D2010	Throughout building	Plumbing	Fair	Sink/Lavatory, Service Sink, Laundry	2		17	6895253
D2010	Kitchen	Plumbing	Fair	Sink/Lavatory, Commercial Kitchen, 2-Bowl	1		9	6895327
D2010	Locker room	Plumbing	Fair	Shower, Valve & Showerhead	13		9	6895213
D2010	Labs	Plumbing	Fair	Urinal, Standard	21		17	6895378
D2010	Kitchen	Plumbing	Fair	Sink/Lavatory, Trough Style, Solid Surface	14		22	6895366
D2010	Utility closet	Plumbing	Fair	Sink/Lavatory, Commercial Kitchen, 1-Bowl	3		17	6895328
D2010	Kitchen	Plumbing	Fair	Sink/Lavatory, Service Sink, Wall-Hung	1		22	6895368
D2010	Kitchen	Plumbing	Fair	Emergency Plumbing Fixtures, Eye Wash	1		7	6895189
D2010	Restrooms	Plumbing	Fair	Sink/Lavatory, Commercial Kitchen, 1-Bowl	1		9	6895259
D2010	Boiler room	Plumbing	Fair	Water Heater, Indirect	3		3	6895237
D2010	Cosmetology	Plumbing	Fair	Water Heater, Electric, Residential, 53 to 120 GAL	1		4	6895375
D2010	Boiler room	Plumbing	Fair	Pump, Circulation, Domestic Water, 1 HP	4		7	6895250
D2010	Restroom	Plumbing	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	53		17	6895365
D2010	Gymnasium	Plumbing	Fair	Water Heater, Oil	1		5	6895202
D2010	Throughout building	Plumbing	Fair	Plumbing System, Supply & Sanitary, Medium Density (excludes fixtures)	210,000	SF	19	6895162
D2010	Utility closet	Plumbing	Fair	Sink/Lavatory, Service Sink, Floor	1		14	6895286
D2010	Restrooms	Plumbing	Fair	Sink/Lavatory, Vanity Top, Solid Surface or Vitreous China	6		17	6895329
D2060	Boiler room	Plumbing	Fair	Supplemental Components, Compressed Air Dryer, Process Support	1		7	6895249
D2060	Boiler room	Plumbing	Fair	Air Compressor, Tank-Style	1		4	6895277
D2060	Boiler room	Plumbing	Fair	Air Compressor, Tank-Style	1		3	6895182
HVAC								
D3010	Boiler room	HVAC	Fair	Supplemental Components, Tank Monitoring System, Fuel Oil	1		7	6895319
D3010	Boiler room	HVAC	Fair	Pump, Fuel Oil	3		2	6895201
D3010	Boiler room	HVAC	Fair	Storage Tank, Fuel, Interior	1		12	6895167
D3020	Boiler room	HVAC	Fair	Unit Heater, Electric	1		7	6895227
D3020	Throughout building	HVAC	Fair	Radiator, Hydronic, Baseboard (per LF)	800	LF	5	6895303
D3020	Gymnasium	HVAC	Fair	Boiler, Oil, HVAC	1		7	6895165
D3020	Roof	HVAC	Fair	Replace Energy Recovery Ventilator 180 to 315 CFM, Energy Recovery	1		3	6895221
D3020	Roof	HVAC	Good	Air Ventilator, Energy Recovery Unit, up to 6500 CFM	3		13	6895338
D3020	Boiler room	HVAC	Fair	Wood Pellet Boiler, Hopper and Chute Feeder	1		3	6895164
D3020	Roof	HVAC	Good	Air Ventilator, Energy Recovery Unit, up to 6500 CFM	2		13	6895355
D3020	Roof	HVAC	Fair	Air Ventilator, Energy Recovery Unit, up to 6500 CFM	1		3	6895304
D3020	Boiler room	HVAC	Fair	Boiler, Gas, HVAC, 2001 to 2500 MBH	1		9	6895296
D3020	Boiler room	HVAC	Fair	Boiler Supplemental Components, Expansion Tank	1		25	6895260
D3020	Boiler room	HVAC	Fair	Boiler, Oil, HVAC	1		5	6895216
D3020	Boiler room	HVAC	Fair	Boiler, Oil, HVAC	1		3	6895203

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
D3020	Boiler room	HVAC	Fair	Unit Heater, Hydronic	1		3	6895156
D3020	Gymnasium	HVAC	Fair	Unit Heater, Hydronic	1		3	6895264
D3020	Boiler room	HVAC	Fair	Heat Exchanger, Plate & Frame, HVAC	1		14	6895220
D3020	Gymnasium	HVAC	Fair	Heat Exchanger, Plate & Frame, HVAC	1		12	6895377
D3020	Shops	HVAC	Fair	Unit Heater, Hydronic	1		2	6895188
D3030	Classrooms	HVAC	Fair	Unit Ventilator, approx/nominal 2 Ton	20		13	6895308
D3030	Roof	HVAC	Fair	Split System Ductless, Single Zone, 0.75 to 1 TON	4		7	6895219
D3030	Roof	HVAC	Fair	Split System Ductless, Single Zone, 2.5 to 3 TON	1		7	6895132
D3050	Roof	HVAC	Fair	Split System Ductless, Single Zone, 2.5 to 3 TON	1		10	6895335
D3050	Roof	HVAC	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1		10	6895170
D3050	Boiler room	HVAC	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1		2	6895297
D3050	Boiler room	HVAC	Good	Air Handler, Interior AHU, Easy/Moderate Access	1		24	6895254
D3050	Boiler room	HVAC	Fair	Pump, Distribution, HVAC Heating Water	2		24	6895254
D3050	Throughout building	HVAC	Fair	HVAC System, Hydronic Piping, 2-Pipe	210,000	SF	19	6895190
D3050	Gymnasium	HVAC	Fair	Pump, Distribution, HVAC Heating Water	2		2	6895200
D3050	Gymnasium	HVAC	Fair	Air Handler, Interior AHU, Easy/Moderate Access	4		7	6895266
D3050	Shops	HVAC	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1		12	6895332
D3050	Roof	HVAC	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1		10	6895181
D3050	Boiler room	HVAC	Fair	Pump, Distribution, HVAC Heating Water	2		4	6895376
D3050	Locker room	HVAC	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1		16	6895243
D3050	Boiler room	HVAC	Good	Pump, Distribution, HVAC Heating Water	2		23	6895158
D3050	Throughout building	HVAC	Fair	HVAC System, Ductwork, Medium Density	210,000	SF	5	6895364
D3050	Auditorium	HVAC	Fair	Air Handler, Interior AHU, Easy/Moderate Access	2		3	6895267
D3050	Attic	HVAC	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1		5	6895205
D3050	Roof	HVAC	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	2		11	6895314
D3050	Roof	HVAC	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1		10	6895224
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 10" Damper	5		10	6895210
D3060	Roof	HVAC	Fair	Exhaust Fan, Centrifugal, 12" Damper	1		15	6895334
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 12" Damper	10		10	6895175
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	2		10	6895324
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1		11	6895325
D3060	Kitchen	HVAC	Fair	Exhaust Fan, Propeller, less than 0.25 HP Motor	1		3	6895347
D3060	Shops	HVAC	Fair	Supplemental Components, Air Purifier, Electrostatic	5		2	6895246
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 12" Damper	6		10	6895363
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	4		10	6895215
D3060	Boiler room	HVAC	Fair	Exhaust Fan, Centrifugal, 16" Damper	2		10	6895177
D3060	Roof	HVAC	Fair	Axial Flow Fan, In-Line, up to 1 HP Motor	1		4	6895284
D3060	Roof	HVAC	Fair	Exhaust Fan, Centrifugal, 24" Damper	1		8	6895342
D3060	Boiler room	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 10" Damper	10		10	6895223
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1		10	6895258
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 12" Damper	2		9	6895344
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 28" Damper	1		10	6895172
Fire Protection								
D4010	Kitchen	Fire Protection	Fair	Fire Suppression System, Commercial Kitchen, per LF of Hood	20	LF	7	6895357

UF LF Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
D4010	Throughout building	Fire Protection	Fair	Fire Suppression System, Existing Sprinkler Heads, by SF	210,000	SF	4	6895346
D4030	Kitchen	Fire Protection	Good	Fire Extinguisher, Wet Chemical/CO2	1		9	6895301
D4030	Throughout building	Fire Protection	Good	Fire Extinguisher, Type ABC, up to 20 LB	25		9	6895298
Electrical	Boiler room	Electrical	Fair	Distribution Panel, 120/208 V	1		3	6895247
	Shops	Electrical	Fair	Distribution Panel, 120/208 V	1		9	6895295
	Electrical room	Electrical	Fair	Secondary Transformer, Dry, Stepdown	1		9	6895287
	Electrical room	Electrical	Fair	Switchboard, 120/208 V	1		5	6895174
	Boiler room	Electrical	Fair	Distribution Panel, 120/208 V	1		9	6895194
				Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	1			
	Boiler room	Electrical	Fair	Electrical System, Wiring & Switches, High Density/Complexity	1		3	6895289
	Throughout building	Electrical	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	210,000	SF	19	6895372
	Boiler room	Electrical	Fair	Interior Lighting System, Full Upgrade, High Density & Standard Fixtures	1		3	6895373
	Throughout building	Electrical	Good		210,000	SF	17	6895159
Fire Alarm & Electronic Systems								
D6060	Throughout building	Fire Alarm & Electronic Systems	Fair	Intercom/PA System, Public Address Upgrade, Facility-Wide	210,000	SF	7	6895278
D7030	Throughout building	Fire Alarm & Electronic Systems	Fair	Security/Surveillance System, Full System Upgrade, Average Density	210,000	SF	7	6895192
D7050	Front entrance	Fire Alarm & Electronic Systems	Fair	Fire Alarm Panel, Annunciator	1		3	6895348
D7050	Throughout building	Fire Alarm & Electronic Systems	Fair	Fire Alarm System, Full System Upgrade, Standard Addressable, Upgrade/Install	210,000	SF	7	6895252
D7050	Front entrance	Fire Alarm & Electronic Systems	Fair	Fire Alarm Panel, Fully Addressable	1		3	6942094
D8010	Throughout building	Fire Alarm & Electronic Systems	Fair	BAS/HVAC Controls, Basic System or Legacy Upgrades, Upgrade/Install	210,000	SF	2	6895290
Equipment & Furnishings								
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Refrigerator	1		3	6895359
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Dairy Cooler/Wells	4		12	6895270
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Exhaust Hood, 8 to 10 LF	1		3	6895223
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Dishwasher Commercial	1		2	6895331
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Evaporator for Refrigerator/Freezer	1		2	6895272
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Exhaust Hood, 8 to 10 LF	1		7	6895279
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Refrigerator, 2-Door Reach-In	1		7	6895353
E1030	Teaching Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Refrigerator, 1-Door Reach-In	1		12	6895265
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Steam Kettle	1		17	6895154
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Convection Oven, Double	1		2	6895277
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Dishwasher Commercial	1		2	6895238
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Range/Oven, 8-Burner	1		7	6895163
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Convection Oven, Single	2		7	6895204

UF LF Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Condenser for Refrigerator/Freezer	1		2	6895299
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Griddle	2		2	6895317
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	2		12	6895233
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Prep Table Refrigerated, Salad/Sandwich	3		3	6895271
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Broiler	1		7	6895371
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Evaporator for Refrigerator/Freezer	1		2	6895234
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Freezer, 3-Door Reach-In	1		3	6895185
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Slicer	1		2	6895209
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Garbage Disposal, 1 to 3 HP	1		14	6895263
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Steam Kettle	1		17	6895157
E1030	Teaching Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Refrigerator, 2-Door Reach-In	2		3	6895302
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Refrigerator	1		3	6895322
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Griddle	1		2	6895232
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Icemaker, Freestanding	1		12	6895374
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Evaporator for Refrigerator/Freezer	1		3	6895160
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Walk-In, Evaporator for Refrigerator/Freezer	1		13	6895369
E1030	Kitchen	Equipment & Furnishings	Fair	Freezer/Refrigerator	1		3	6895311
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Food Warmer, Tabletop Drawers (Set of 4)	1		4	6895178
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Refrigerator, 3-Door Reach-In	2		2	6895208
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Convection Oven, Double	1		2	6895229
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Convection Oven, Single	1		7	6895340
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Range/Oven, 6-Burner	1		7	6895273
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Refrigerator, Undercounter 1-Door	1		7	6895291
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Freezer	1		7	6895166
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Range/Oven, 6-Burner	1		7	6895171
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Deep Fryer	1		2	6895212
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Walk-In, Condenser for Refrigerator/Freezer	1		13	6895309
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Convection Oven, Single	1		7	6895187
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Evaporator for Refrigerator/Freezer	1		3	6895326
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Evaporator for Refrigerator/Freezer	1		3	6895313
E1040	Laabs	Equipment & Furnishings	Fair	Laboratory Equipment, Exhaust Hood, Constant Volume 6 LF	5		3	6895362

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
E2010	Classrooms	Equipment & Furnishings	Fair	Casework, Cabinetry Economy	600	LF	7	6895300
E2010	Gymnasium	Equipment & Furnishings	Fair	Bleachers, Telescoping Power-Operated, up to 15 Tier (per Seat)	200		3	6895214
E2010	Site	Equipment & Furnishings	Fair	Bleachers, Fixed Steel Frame, Aluminum Benches (per Seat)	120		2	6895269
E2010	Auditorium	Equipment & Furnishings	Fair	Fixed Seating, Auditorium/Theater, Metal Cushioned Standard	600		3	6942095
Special Construction & Demo								
F1020	Site	Special Construction & Demo	Fair	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Basic/Minimal	200	SF	7	6895321
F1020	Site	Special Construction & Demo	Fair	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Basic/Minimal	300	SF	7	6895335
F1020	Site	Special Construction & Demo	Fair	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Standard	300	SF	7	6895191
F1020	Site	Special Construction & Demo	Fair	Ancillary Building, Wood-Framed or CMU, Standard	2,300	SF	14	6895315
F1020	Site	Special Construction & Demo	Fair	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Basic/Minimal	100	SF	7	6895251
F1020	Site	Special Construction & Demo	Fair	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Basic/Minimal	150	SF	7	6895294
F1020	Site	Special Construction & Demo	Good	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Standard	1,200	SF	22	6895211
F1020	Site	Special Construction & Demo	Good	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Basic/Minimal	700	SF	22	6895256
F1020	Site	Special Construction & Demo	Good	Ancillary Building, Greenhouse, Truss Frame w/ Plastic Walls & Roof	125	SF	22	6895244
Pedestrian Plazas & Walkways								
G2020	Site	Pedestrian Plazas & Walkways	Fair	Parking Lots, Pavement, Asphalt, Seal & Stripe	180,000	SF	2	6941883
G2020	Site	Pedestrian Plazas & Walkways	Good	Parking Lots, Pavement, Asphalt, Mill & Overlay	180,000	SF	17	6895292
G2030	Site	Pedestrian Plazas & Walkways	Fair	Sidewalk, Asphalt	1,600	SF	12	6895282
G2030	Site	Pedestrian Plazas & Walkways	Fair	Sidewalk, Concrete, Large Areas	1,000	SF	29	6895186
Athletic, Recreational & Playfield Areas								
G2050	Gymnasium	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Basketball, Backboard/Rim/Pole	2		12	6895155
G2050	Gymnasium	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Climbing Wall, by vertical surface area	200	SF	7	6895239
G2050	Gymnasium	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Basketball, Backboard/Rim/Pole	6		12	6895199
G2050	Gymnasium	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Scoreboard, Electronic Basic	3		7	6895226
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Baseball, Backstop Chain-Link	2		7	6895360
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Field and Court Lighting, Light Fixture w/ Lamps	7		4	6895184
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Scoreboard, Electronic Standard	3		12	6895343
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Baseball, Dugout	4		4	6895367
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Football, Goal Post	2		12	6895310
Sitework								
G2060	Site	Sitework	Good	Park Bench, Precast Concrete	1		17	6895231
G2060	Site	Sitework	Fair	Fences & Gates, Fence, Chain Link 6'	300	LF	17	6895193
G2060	Site	Sitework	Fair	Picnic Table, Wood/Composite/Fiberglass	12		12	6895341

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
G4050	Site	Sitework	Fair	Pole Light Fixture w/ Lamps, any type 20' High, w/ LED Replacement, Replace/Install	10		3	6895333
G4050	Building exterior	Sitework	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	20		12	6895241

Uniquident Code	ID	Cost Description	Material	Flag	Rel	Quantity	Unit	Unit Cost *	Subtotal	2020	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	Depletion Report Total					
02000	6892101	Sports Assemblies Football, Goal Posts	25	12	2	2	EA	\$10,000.00	\$10,000														\$10,000								\$10,000					
	6892129	Play Structure, Climbing Wall, by vertical surface area, Repairs	15	8	7	200	SF	90.00	\$4,000								9,000														\$4,000					
	6892141	Fence, Chain, by linear ft, Repairs	20	8	12	12	EA	600.00	\$7,200														\$7,200								\$7,200					
02000	6892111	Play Structure, Climbing Wall, by vertical surface area, Repairs	25	8	12	3	EA	\$1,000.00	\$1,000																							\$1,000				
02000	6892131	Play Structure, Climbing Wall, by vertical surface area, Repairs	40	23	17	300	LF	\$21.00	\$6,300																							\$6,300				
04000	6892111	Play Structure, Climbing Wall, by vertical surface area, Repairs	20	17	3	10	EA	\$4,000.00	\$4,000																							\$4,000				
04000	6892141	Play Structure, Climbing Wall, by vertical surface area, Repairs	20	8	12	20	EA	600.00	\$12,000																							\$12,000				
										Total, Rounded (10% inflation compounded forward)												\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
										Total, Rounded (10% inflation compounded forward)												\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000

SPAULDING UHS - MAIN BUILDING

BUREAU VERITAS PROJECT: 158982.22R000-305.379

Appendix H: Depleted Value Report



SPAULDING UHS - Main Building

Depleted Value Index

55.2%

System	System Contribution	System Value
Air Compressor	\$ 6,360	\$ 10,600
Air Compressor	\$ 2,827	\$ 10,600
Air Handler	\$ 3,720	\$ 6,200
Air Handler	\$ 107,467	\$ 124,000
Air Handler	\$ 7,820	\$ 9,200
Air Handler	\$ 8,464	\$ 9,200
Air Handler	\$ 23,000	\$ 30,000
Air Handler	\$ 6,440	\$ 9,200
Air Ventilator	\$ 32,468	\$ 38,961
Air Ventilator	\$ 23,377	\$ 25,974
Air Ventilator	\$ 4,870	\$ 12,987
Ancillary Building	\$ 149,500	\$ 230,000
Ancillary Building	\$ 3,938	\$ 4,375
Axial Flow Fan	\$ 1,470	\$ 2,100
BAS/HVAC Controls	\$ 367,500	\$ 525,000
Bleachers	\$ 48,000	\$ 90,000
Bleachers	\$ 7,560	\$ 14,400
Boiler	\$ 138,667	\$ 160,000
Boiler	\$ 45,300	\$ 60,400
Boiler	\$ 208,000	\$ 320,000
Boiler	\$ 160,000	\$ 320,000
Boiler Supplemental Components	\$ 1,416	\$ 3,540
Casework	\$ 52,500	\$ 105,000
Distribution Panel	\$ 3,000	\$ 6,000
Distribution Panel	\$ 2,700	\$ 6,000
Distribution Panel	\$ 5,950	\$ 7,000
Drinking Fountain	\$ 600	\$ 1,200
Electrical System	\$ 420,000	\$ 840,000
Elevator Cab Finishes	\$ 4,500	\$ 9,000
Elevator Controls	\$ 4,200	\$ 5,000
Emergency Plumbing Fixtures	\$ 1,260	\$ 1,500
Exhaust Fan	\$ 3,000	\$ 6,000
Exhaust Fan	\$ 700	\$ 1,400
Exhaust Fan	\$ 7,700	\$ 14,000
Exhaust Fan	\$ 2,400	\$ 4,800
Exhaust Fan	\$ 1,680	\$ 2,400
Exhaust Fan	\$ 263	\$ 500

System	System Contribution	System Value
Exhaust Fan	\$ 7,392	\$ 8,400
Exhaust Fan	\$ 3,840	\$ 9,600
Exhaust Fan	\$ 1,680	\$ 2,800
Exhaust Fan	\$ 1,120	\$ 2,400
Exhaust Fan	\$ 1,400	\$ 3,000
Exhaust Fan	\$ 6,900	\$ 12,000
Exhaust Fan	\$ 1,920	\$ 2,400
Exhaust Fan	\$ 2,240	\$ 2,800
Exhaust Fan	\$ 2,600	\$ 4,000
Exterior Door	\$ 1,560	\$ 15,600
Exterior Door	\$ 1,320	\$ 13,200
Exterior Door	\$ 3,640	\$ 5,600
Exterior Fixture w/ Lamp	\$ 10,080	\$ 12,000
Exterior Walls	\$ 1,418,769	\$ 1,669,140
Exterior Walls	\$ 278,549	\$ 522,280
Exterior Walls	\$ 87,780	\$ 138,600
Fences & Gates	\$ 5,513	\$ 6,300
Fire Alarm Panel	\$ 1,264	\$ 1,580
Fire Alarm Panel	\$ 13,500	\$ 15,000
Fire Alarm System	\$ 330,750	\$ 630,000
Fire Extinguisher	\$ 270	\$ 300
Fire Extinguisher	\$ 3,250	\$ 3,750
Fire Suppression System	\$ 6,933	\$ 8,000
Fire Suppression System	\$ 179,760	\$ 224,700
Fixed Seating	\$ 178,500	\$ 210,000
Flooring	\$ 2,800	\$ 14,000
Flooring	\$ 60,000	\$ 75,000
Flooring	\$ 7,200	\$ 9,000
Flooring	\$ 1,950	\$ 2,250
Flooring	\$ 149,333	\$ 280,000
Flooring	\$ 28,800	\$ 54,000
Flooring	\$ 10,400	\$ 52,000
Flooring	\$ 600	\$ 4,000
Flooring	\$ 608,000	\$ 760,000
Flooring	\$ 30,000	\$ 37,500
Foodservice Equipment	\$ 8,000	\$ 15,000
Foodservice Equipment	\$ 4,320	\$ 14,400
Foodservice Equipment	\$ 3,900	\$ 4,500
Foodservice Equipment	\$ 18,633	\$ 21,500
Foodservice Equipment	\$ 920	\$ 4,600
Foodservice Equipment	\$ 3,600	\$ 4,500
Foodservice Equipment	\$ 2,453	\$ 4,600
Foodservice Equipment	\$ 2,340	\$ 2,700

System	System Contribution	System Value
Foodservice Equipment	\$ 24,000	\$ 30,000
Foodservice Equipment	\$ 7,600	\$ 9,500
Foodservice Equipment	\$ 1,433	\$ 21,500
Foodservice Equipment	\$ 1,110	\$ 7,400
Foodservice Equipment	\$ 8,960	\$ 11,200
Foodservice Equipment	\$ 5,355	\$ 6,300
Foodservice Equipment	\$ 12,133	\$ 14,000
Foodservice Equipment	\$ 680	\$ 3,400
Foodservice Equipment	\$ 11,280	\$ 14,100
Foodservice Equipment	\$ 1,120	\$ 8,400
Foodservice Equipment	\$ 3,910	\$ 4,600
Foodservice Equipment	\$ 4,987	\$ 6,800
Foodservice Equipment	\$ 2,773	\$ 3,200
Foodservice Equipment	\$ 3,040	\$ 3,800
Foodservice Equipment	\$ 9,000	\$ 30,000
Foodservice Equipment	\$ 4,907	\$ 9,200
Foodservice Equipment	\$ 8,000	\$ 15,000
Foodservice Equipment	\$ 4,550	\$ 7,000
Foodservice Equipment	\$ 3,573	\$ 6,700
Foodservice Equipment	\$ 3,987	\$ 4,600
Foodservice Equipment	\$ 613	\$ 4,600
Foodservice Equipment	\$ 10,500	\$ 35,000
Foodservice Equipment	\$ 4,560	\$ 5,700
Foodservice Equipment	\$ 10,240	\$ 12,800
Foodservice Equipment	\$ 5,700	\$ 9,500
Foodservice Equipment	\$ 3,680	\$ 5,600
Foodservice Equipment	\$ 3,150	\$ 6,000
Foodservice Equipment	\$ 917	\$ 1,100
Foodservice Equipment	\$ 16,250	\$ 25,000
Foodservice Equipment	\$ 3,450	\$ 6,000
Foodservice Equipment	\$ 4,025	\$ 7,000
Foodservice Equipment	\$ 945	\$ 6,300
Foodservice Equipment	\$ 4,480	\$ 5,600
Foodservice Equipment	\$ 3,450	\$ 4,600
Foodservice Equipment	\$ 3,833	\$ 4,600
Heat Exchanger	\$ 7,980	\$ 11,400
Heat Exchanger	\$ 5,700	\$ 11,400
HVAC System	\$ 525,000	\$ 1,050,000
HVAC System	\$ 420,000	\$ 840,000
Intercom/PA System	\$ 155,925	\$ 346,500
Interior Door	\$ 31,500	\$ 63,000
Interior Door	\$ 15,200	\$ 47,500
Interior Lighting System	\$ 630,000	\$ 1,050,000

System	System Contribution	System Value
Laboratory Equipment	\$ 6,400	\$ 20,000
Lockers	\$ 140,000	\$ 200,000
Overhead/Dock Door	\$ 5,040	\$ 12,600
Overhead/Dock Door	\$ 21,120	\$ 39,600
Packaged Unit	\$ 3,938	\$ 7,500
Packaged Unit	\$ 4,250	\$ 5,000
Packaged Unit	\$ 220	\$ 5,500
Packaged Unit	\$ 8,000	\$ 15,000
Packaged Unit	\$ 13,800	\$ 15,000
Park Bench	\$ 840	\$ 1,000
Parking Lots	\$ 70,200	\$ 81,000
Parking Lots	\$ 50,400	\$ 630,000
Passenger Elevator	\$ 37,333	\$ 70,000
Picnic Table	\$ 6,000	\$ 7,200
Play Structure	\$ 6,400	\$ 8,000
Plumbing System	\$ 924,000	\$ 2,310,000
Pole Light Fixture w/ Lamps	\$ 21,000	\$ 42,000
Pump	\$ 13,600	\$ 27,200
Pump	\$ 4,620	\$ 6,600
Pump	\$ 6,507	\$ 12,200
Pump	\$ 9,967	\$ 13,000
Pump	\$ 5,980	\$ 7,800
Pump	\$ 10,427	\$ 13,600
Pump	\$ 10,120	\$ 13,200
Radiator	\$ 92,000	\$ 120,000
Replace Energy Recovery Ventilator 180 to 315 CFM	\$ 569	\$ 2,134
Roofing	\$ 6,747	\$ 25,300
Roofing	\$ 115,500	\$ 165,000
Roofing	\$ 486,200	\$ 935,000
Secondary Transformer	\$ 2,814	\$ 6,700
Security/Surveillance System	\$ 294,000	\$ 420,000
Shed/Gazebo/Shade Structure	\$ 2,167	\$ 5,000
Shed/Gazebo/Shade Structure	\$ 5,250	\$ 7,500
Shed/Gazebo/Shade Structure	\$ 4,000	\$ 15,000
Shed/Gazebo/Shade Structure	\$ 1,083	\$ 2,500
Shed/Gazebo/Shade Structure	\$ 1,393	\$ 3,750
Shed/Gazebo/Shade Structure	\$ 42,000	\$ 60,000
Shed/Gazebo/Shade Structure	\$ 7,583	\$ 17,500
Shower	\$ 6,240	\$ 10,400
Sidewalk	\$ 3,813	\$ 8,800
Sidewalk	\$ 4,800	\$ 9,000
Sink/Lavatory	\$ 2,667	\$ 5,000
Sink/Lavatory	\$ 936	\$ 1,800

System	System Contribution	System Value
Sink/Lavatory	\$ 1,092	\$ 2,100
Sink/Lavatory	\$ 25,200	\$ 35,000
Sink/Lavatory	\$ 3,120	\$ 4,800
Sink/Lavatory	\$ 728	\$ 1,400
Sink/Lavatory	\$ 1,173	\$ 1,600
Sink/Lavatory	\$ 41,340	\$ 79,500
Sink/Lavatory	\$ 672	\$ 800
Sink/Lavatory	\$ 3,960	\$ 6,600
Split System Ductless	\$ 7,280	\$ 14,000
Split System Ductless	\$ 3,660	\$ 6,100
Sports Apparatus	\$ 12,350	\$ 19,000
Sports Apparatus	\$ 37,050	\$ 57,000
Sports Apparatus	\$ 8,280	\$ 9,000
Sports Apparatus	\$ 8,750	\$ 10,000
Sports Apparatus	\$ 18,400	\$ 24,000
Sports Apparatus	\$ 7,540	\$ 11,600
Sports Apparatus	\$ 8,500	\$ 10,000
Sports Field and Court Lighting	\$ 29,750	\$ 35,000
Stairs	\$ 129,600	\$ 144,000
Storage Tank	\$ 2,310	\$ 6,600
Supplemental Components	\$ 19,067	\$ 44,000
Supplemental Components	\$ 4,760	\$ 5,600
Supplemental Components	\$ 9,350	\$ 11,000
Suspended Ceilings	\$ 422,625	\$ 735,000
Switchboard	\$ 34,650	\$ 66,000
Toilet	\$ 45,067	\$ 67,600
Unit Heater	\$ 1,440	\$ 1,800
Unit Heater	\$ 714	\$ 1,700
Unit Heater	\$ 510	\$ 1,700
Unit Heater	\$ 1,680	\$ 2,100
Unit Ventilator	\$ 108,533	\$ 148,000
Urinal	\$ 16,683	\$ 23,100
Variable Frequency Drive	\$ 8,680	\$ 12,400
Variable Frequency Drive	\$ 12,495	\$ 14,700
Wall Finishes	\$ -	\$ 36,000
Wall Finishes	\$ -	\$ 18,000
Wall Finishes	\$ -	\$ 70,000
Wall Finishes	\$ -	\$ 487,500
Wall Finishes	\$ -	\$ 82,500
Water Heater	\$ -	\$ 18,500
Water Heater	\$ -	\$ 14,400
Water Heater	\$ -	\$ 1,600
Water Heater	\$ -	\$ 2,900

System	System Contribution	System Value
Window	\$ -	\$ 249,850
Totals	\$ 10,848,823	\$ 19,662,871

FACILITY CONDITION ASSESSMENT

prepared for

Vermont Agency of Education_FCA Phase Two
1 National Life Drive, Davis 5
Montpelier, VT 05620-2501



PREPARED BY:

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BV PROJECT #:

158982.22R000-021.379

DATE OF REPORT:

August 14, 2023

ON SITE DATE:

July 17, 2023

BARRE CITY ELEMENTARY/MIDDLE SCHOOL - Main Building (PS381-SU024)
50 Parkside Terrace
Barre VT, 05641

Bureau Veritas

6021 University Blvd., Suite 200 | Ellicott City, MD 21043 | www.us.bureauveritas.com | p 800.733.0660

BARRE CITY ELEMENTARY/MIDDLE SCHOOL - MAIN BUILDING

BUREAU VERITAS PROJECT: 158982.22R000-021.379

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1. Executive Summary

Property Overview and Assessment Details

General Information	
Property Type	School
School ID Number	PS381-SU024
Main Address	50 Parkside Terrace, Barre VT, 05641
E911 Address Verification	Zip 05641-4846, Standardized, Fixed abbreviations, Matched Street and city and state, Confirmed entire address
GPS Location (Verified E911)	Main Building 44.18527, -72.50304
Site Developed	1995
Site Area	24 acres (estimated)
Parking Spaces	155 total spaces all in open lots; 9 of which are accessible.
Building Square Footage	125,000 (Verified)
Number of Stories	3 above grades
Supervisory Union/ District	Barre Unified Union SD
Date(s) of Visit	July 17, 2023

Note: (Verified) in Square Foot signifies that the square footage of the facility has been verified to be accurate.

Significant/Systemic Findings and Deficiencies

Historical Summary

The building was constructed in 1995 as an Elementary/Middle School. The use case for the building has not changed. No outside tenants are present on the property.

Architectural

The roof of the building is built of three types of materials. The primary roof is finished with single ply TPO membrane, the secondary roof is an EPDM material. The smallest area of roofing is asphalt shingle. The asphalt shingle roofing is currently being replaced. Exterior walls are built of CMU and metal sandwich panels. Aluminum and steel doors are present at the entrances and exits of the main building. There are overhead aluminum doors present to allow access to shop classrooms. The interior flooring for office spaces is mainly VCT and carpet floors. Since the interior finishes in major areas of the building have recently been renovated, only typical lifecycle interior finish, exterior finish, and roof membrane replacements are budgeted and anticipated.

Mechanical, Electrical, Plumbing and Fire (MEPF)

All the electromechanical components installed in both the buildings have been well maintained and replaced on as-needed basis. The seasonal heating needs of the building are served by a wood chip boiler, an oil-fired boiler, baseboard radiators, AHUs, and unit heaters. Most of the roof-top units are original to the building. All the plumbing pipelines and fittings for the heating loops are properly insulated. Anticipatory cost for life cycle-based replacement of all the MEPF infrastructure at the end of its useful life have been estimated. The essential electrical equipment consists of diesel-fired generator, a switchboard, main distribution panels, VFD's, and dry-type transformers. The electrical service in the facility is properly sized to match its current overall electrical requirements. The overall lighting system of the facility have been modernized to energy efficient LED fixtures during the recent rehabilitation projects and serves the optimal lighting needs of the facility. The plumbing fixtures are replaced as required and are properly maintained. An indirect hot water heater is used to provide hot water for the domestic use. The water closets are recommended to be retrofitted with dual flush tanks to save water consumption during the domestic use. No major issues were observed or reported. A fully addressable fire alarm system is present in both the buildings and is inspected annually to ensure its proper operation. The alarm system consists of strobes, pull stations, illuminated exit signs, emergency lighting and other modern life safety devices. Lifecycle-replacement at the end of its useful life has been budgeted. There is a wet pipe fire sprinkler system throughout the building.

Site

The property has a large parking lot to the left side of the building and a smaller lot in front of the building. There is a playground to the left of the building and sports fields on both sides. The site is well maintained.

Recommended Additional Studies

No additional studies recommended at this time.



Facility Condition Index (FCI)

One of the major goals of the FCA is to calculate each building's Facility Condition Index (FCI), which provides a theoretical objective indication of a building's overall condition. By definition, the FCI is defined as the ratio of the cost of current needs divided by current replacement value (CRV) of the facility. The chart below presents the industry standard ranges and cut-off points.

FCI Ranges and Descriptions	
0 – 5%	In new or well-maintained condition, with little or no visual evidence of wear or deficiencies.
5 – 10%	Subjected to wear but is still in a serviceable and functioning condition.
10 – 30%	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.
30% and above	Has reached the end of its useful or serviceable life. Renewal is now necessary.

The deficiencies and lifecycle needs identified in this assessment provide the basis for a portfolio-wide capital improvement funding strategy. In addition to the current FCI, extended FCI's have been developed to provide owners the intelligence needed to plan and budget for the "keep-up costs" for their facilities. As such the 3-year, 5-year, and 10-year FCI's are calculated by dividing the anticipated needs of those respective time periods by current replacement value. As a final point, the FCI's ultimately provide more value when used to relatively compare facilities across a portfolio instead of being over-analyzed and scrutinized as stand-alone values. The table below summarizes the individual findings for this FCA:

FCI Analysis			
Replacement Value	Total SF	Cost/SF	
\$31,250,000	125,000	\$250	
Current FCI		\$0	0.0%
3-Year		\$3,743,000	12.0%
5-Year		\$4,723,500	15.1%
10-Year		\$6,483,400	20.7%



Facility Level FCI:

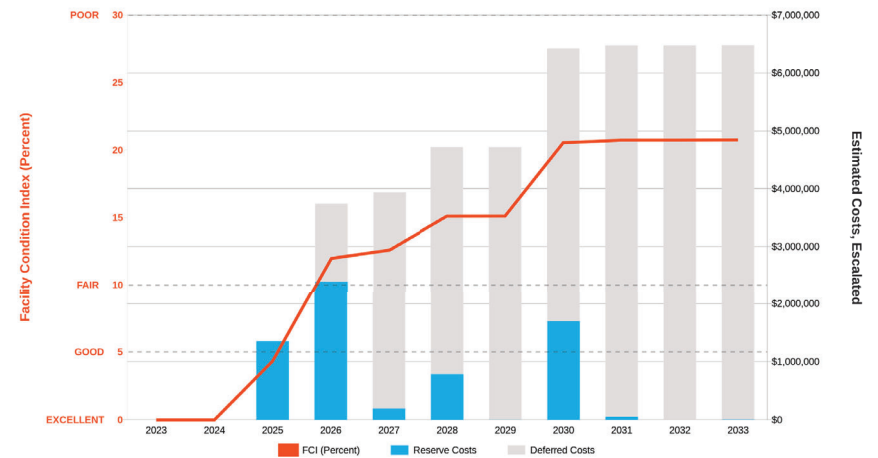
The orange line in the graph below forecasts what would happen to the FCI (left Y axis) over time, assuming zero capital expenditures. The capital expenditures allocated for each year (blue bars) are associated with the dollar amounts along the right Y axis. If the school expends the average amount per year to maintain and replace systems, they will not incur the capital debt represented by the gray bars.

Needs by Year with Unaddressed FCI Over Time

Replacement Value: \$31,250,000.00

Inflation Rate: 3%

Average Needs (per year - over next 10 years): \$589,398.00



Needs by Year with Unaddressed FCI Over Time (Table)

The above graph is a visual representation of the information contained in the table below.

Year	Reserve	Reserve Escalation	Recurrence	Recurrence Escalation	Total Escalation	Deferred	FCI
2023	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0
2025	1,274,100	77,593	0	0	77,593	1,351,693	0.04
2026	2,188,400	202,924	0	0	202,924	3,743,017	0.12
2027	172,770	21,684	0	0	21,684	3,937,471	0.13
2028	655,600	104,420	22,400	3,568	107,988	4,697,491	0.15
2029	1,400	272	0	0	272	4,699,163	0.15
2030	1,381,037	317,464	0	0	317,464	6,397,664	0.2
2031	21,200	5,656	22,400	5,976	11,632	6,424,520	0.21
2032	0	0	0	0	0	6,424,520	0.21
2033	3,400	1,169	0	0	1,169	6,429,089	0.21
2034	0	0	41,720	16,030	16,030	6,429,089	0.21
2035	2,129,870	906,815	384,350	163,641	1,070,456	9,465,774	0.3
2036	111,700	52,335	14,000	6,559	58,894	9,629,809	0.31
2037	0	0	41,400	21,221	21,221	9,629,809	0.31
2038	0	0	0	0	0	9,629,809	0.31
2039	0	0	0	0	0	9,629,809	0.31
2040	404,250	263,914	91,300	59,605	323,519	10,297,973	0.33
2041	76,650	53,841	56,420	39,631	93,472	10,428,464	0.33
2042	0	0	0	0	0	10,428,464	0.33



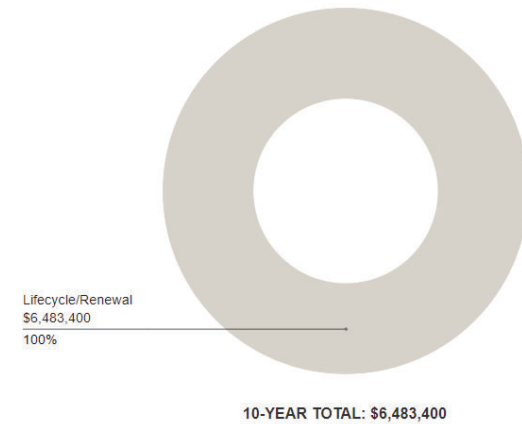
Plan Types

Each line item in the cost database is assigned a Plan Type, which is the primary reason or rationale for the recommended replacement, repair, or other corrective action. This is the "why" part of the equation. A cost or line item may commonly have more than one applicable Plan Type; however, only one Plan Type will be assigned based on the "best" fit, typically the one with the greatest significance. Each of the Key Findings identified below are assigned a Plan Type.

Plan Type Descriptions

Safety	■	An observed or reported unsafe condition that if left unaddressed could result in injury; a system or component that presents potential liability risk.
Performance/Integrity	■	Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses risk to overall system stability.
Accessibility	■	Does not meet ADA, UFAS, Safety and/or other handicap accessibility requirements.
Environmental	■	Improvements to air or water quality, including removal of hazardous materials from the building or site.
Retrofit/Adaptation	■	Components, systems, or spaces recommended for upgrades in in order to meet current standards, facility usage, or client/occupant needs.
Lifecycle/Renewal	■	Any component or system that is not currently deficient or problematic but for which future replacement or repair is anticipated and budgeted.

Plan Type Distribution (by Cost)



Immediate Needs

ID	Location Description	UF Code	Description	Condition	Plan Type	Cost
Total (0 items)	N/A	N/A	N/A	N/A	N/A	\$0
Total						\$0



Key Findings

No key findings exist for this location.



2. Building and Site Information



System Summary

System	Description	Condition
Structure	Steel frame with concrete-topped metal decks over concrete pad column footings.	Fair
Facade	Primary Wall Finish: CMU Secondary Wall Finish: Curtain wall Windows: Aluminum	Fair
Roof	Primary: Flat construction with single-ply TPO/PVC membrane Secondary: Flat and Domed construction with single-ply EPDM membrane Tertiary: Hip construction with asphalt shingles	Fair
Interiors	Walls: Painted gypsum board, painted CMU Floors: Carpet, VCT, faux wood plank LVT[VSJ1], wood strip, coated concrete Ceilings: Painted gypsum board and ACT, Unfinished/exposed	Fair
Elevators	Passenger: 1 hydraulic car serving all 3 floors	Fair
Plumbing	Distribution: Copper supply and PVC waste & venting Hot Water: Indirect water heaters with integral tanks Fixtures: Toilets, urinals, and sinks in all restrooms	Fair
HVAC	Central System: Boilers, air handlers, RTUs feeding fan coil, hydronic baseboard radiators and cabinet terminal units. Supplemental components: Split-system heat pumps, Suspended unit heaters, Make-up air units.	Fair
Safety and Security	Cameras, card readers, perimeter intrusion detection, security windows and doors, fencing, lighting, traffic gates. Multiple points of auto locking doors, main entry monitored, auto locking doors, internal locking on classroom doors, complete intercom system	Fair
Fire Suppression	Wet-pipe sprinkler system and fire extinguishers, and kitchen hood system	Fair



Electrical	Source & Distribution: Main switchgear copper wiring Interior Lighting: LED Emergency Power: Diesel generator with automatic transfer switch	Fair
Fire Alarm	Alarm panel with smoke detectors, heat detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs.	Fair
Equipment/Special	Commercial kitchen equipment	Fair
Site Pavement	Asphalt lots with limited areas of concrete aprons and pavement and adjacent concrete sidewalks, curbs, ramps, and stairs	Fair
Site Development	Building-mounted signage; chain link fencing Playgrounds and sports fields and courts with fencing Heavily furnished with park benches, picnic tables, trash receptacles	Good
Landscaping & Topography	Significant landscaping features including lawns, trees, bushes, and planters. Irrigation present CMU retaining walls. Low to moderate site slopes throughout	Good
Utilities	Municipal water and sewer Local utility-provided electric with propane and fuel oil tanks	Good
Site Lighting	Pole-mounted: LED Building-mounted: LED	Good
Ancillary Structures	Garage, and storage sheds	Fair
Accessibility	Presently it does not appear an accessibility study is needed for this property.	
Key Issues and Findings	None observed at time of assessment.	



3. Supplemental Evaluations

Square Foot Verification

We have reviewed the square footage of 125,000 square feet and it is in the range of square foot calculations as reported by the school district. This confirmation of the square footage of the facility is based on the exterior wall dimensions and number of stories measured from Google Earth and other publicly available internet searches. This measurement may not reflect the actual heated square footage but provides a general size of the heated square feet of the overall building.

PCB Air Indoor Testing

At the time of the onsite evaluation of this facility PCB air testing has not been conducted. Further ongoing information can be found on the Agency of Natural Resources PCB in Schools website [Agency of Natural Resources PCB in Schools](#).

School Educational Capacity and Programming Space

As part of the FCA report, school administrative staff were asked to conduct a self-assessment of whether their school building meets their space, operational needs and if they have sufficient building capacity and appropriate spaces to deliver educational programming. The school responses to the survey are reported in Appendix D. The respondents indicated that the following areas were inadequate to meet current needs:

A space needs self-assessment was conducted by the school administrative staff which identified space constraints in the following areas:

- Adequate number of classrooms.
- Adequate overall building space.
- Confidential space to maintain FERPA, HIPPA or IEP requirements.
- Administrative offices and/or office space for staff.
- Cafeteria, kitchen and/or gymnasium space.



The Depleted Value Facility Condition Index (FCI) is an estimate of a building's overall amount of consumed system life. The Depleted Value FCI ratings scale indicates the estimated condition of the system. Generally, the higher the Depleted Value FCI, the greater the need to repair or replace a system. Note that the FCI can also be calculated for system groups, building types and other aggregations. The estimated percentage of collective system life left in a building, also referred to as Remaining Useful Life (RUL). The higher the RUL, the newer the system. The sum of Depleted Value FCI and RUL will equal 100%.

Depleted Value Index

Index Value	68.4%
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System Expenditure Forecast

System	Immediate	Short Term (1-2 yr)	Near Term (3-5 yr)	Med Term (6-10 yr)	Long Term (11-20 yr)	TOTAL
Facade	-	\$216,581	-	-	\$655,166	\$871,747
Roofing	-	\$11,033	\$295,691	\$412,930	\$163,344	\$882,998
Interiors	-	\$425,685	\$989,627	\$5,534	\$2,082,352	\$3,503,198
Conveying	-	\$74,263	\$15,297	-	\$15,321	\$104,881
Plumbing	-	\$214,088	\$26,333	\$14,442	-	\$254,863
HVAC	-	\$120,515	\$857,768	\$28,269	\$919,644	\$1,926,196
Fire Protection	-	\$4,243	\$150,536	-	-	\$154,779
Electrical	-	\$195,841	\$110,583	\$56,573	\$1,476,128	\$1,839,125
Fire Alarm & Electronic Systems	-	-	\$225,374	\$768,670	-	\$994,044
Equipment & Furnishings	-	\$56,756	\$88,563	\$159,469	\$220,978	\$525,766
Special Construction & Demo	-	-	-	\$184,481	\$31,816	\$216,297
Site Development	-	\$23,764	\$114,071	\$129,590	\$182,123	\$449,548
Site Pavement	-	-	\$497,899	-	\$186,039	\$683,938
Site Utilities	-	\$8,911	-	-	\$117,482	\$126,393
TOTALS	\$0	\$1,351,680	\$3,371,742	\$1,759,958	\$6,050,393	\$12,533,773



4. Property Space Use and Observed Areas

Areas Observed

The interior spaces were observed to gain a clear understanding of the property's overall condition. Other areas accessed included the site within the property boundaries, the exterior of the property and the roofs.

Key Spaces Not Observed

All key areas of the property were accessible and observed.



5. ADA Accessibility

Generally, Title II of the Americans with Disabilities Act (ADA) prohibits discrimination by entities to access and use of "areas of public accommodations" and "public facilities" on the basis of disability. Regardless of their age, these areas and facilities must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

A public entity (i.e., city governments) shall operate each service, program, or activity so that the service, program, or activity, when viewed in its entirety, is readily accessible to and usable by individuals with disabilities.

However, this does not:

1. Necessarily requires a public entity to make each of its existing facilities accessible to and usable by individuals with disabilities.
2. Require a public entity to take any action that would threaten or destroy the historic significance of an historic property; or
3. Require a public entity to take any action that it can demonstrate would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. In those circumstances where personnel of the public entity believe that the proposed action would fundamentally alter the service, program, or activity or would result in undue financial and administrative burdens, a public entity has the burden of proving that compliance with 35.150(a) of this part would result in such alteration or burdens. The decision that compliance would result in such alteration or burdens must be made by the head of a public entity or his or her designee after considering all resources available for use in the funding and operation of the service, program, or activity, and must be accompanied by a written statement of the reasons for reaching that conclusion. If an action would result in such an alteration or such burdens, a public entity shall take any other action that would not result in such an alteration or such burdens but would nevertheless ensure that individuals with disabilities receive the benefits or services provided by the public entity.

Removal of barriers to accessibility should be addressed from a liability standpoint in order to comply with federal law, but the barriers may or may not be building code violations. The Americans with Disabilities Act Accessibility Guidelines are part of the ADA federal civil rights law pertaining to the disabled and are not a construction code. State and local jurisdictions have adopted the ADA Guidelines or have adopted other standards for accessibility as part of their construction codes.

During the FCA, Bureau Veritas performed a limited high-level accessibility review of the facility non-specific to any local regulations or codes. The scope of the visual observation was limited to the same areas observed while performing the FCA and the categories set forth in the appendix. It is understood by the Client that the limited observations described herein do not comprise a full ADA Compliance Survey, and that such a survey is beyond the scope of this particular assessment. A full measured ADA survey would be required to identify any and all specific potential accessibility issues. Additional clarifications of this limited survey:

- This survey was visual in nature and actual measurements were not taken to verify compliance.
- Only a representative sample of areas was observed.
- Two overview photos were taken for each subsection regardless of perceived compliance or non-compliance.
- Itemized costs for individual non-compliant items are not included in the dataset.
- For any "none" boxes checked or reference to "no issues" identified, that alone does not guarantee full compliance.

The facility was originally constructed in 1956. The facility was renovated in 1994 and has widespread accessibility. No information about complaints or pending litigation associated with potential accessibility issues was provided during the interview process.

A detailed follow-up accessibility study is included as a recommendation based on the potential that specific ADA violations, not in this scope of services, may exist. Reference the appendix for specific data, photos, and tables or checklists associated with this limited accessibility survey.



6. Purpose and Scope

Purpose

Bureau Veritas was retained by the client to render an opinion as to the Property's current general physical condition on the day of the site visit.

Based on the observations, interviews and document review outlined below, this report identifies significant deferred maintenance issues, existing deficiencies, and material code violations of record, which affect the Property's use. Opinions are rendered as to its structural integrity, building system condition and the Property's overall condition. The report also notes building systems or components that have realized or exceeded their typical expected useful lives. The physical condition of building systems and related components are typically defined as being in one of five condition ratings. For the purposes of this report, the following definitions are used:

Condition Ratings	
Excellent	New or very close to new; component or system typically has been installed within the past year, sound and performing its function. Eventual repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Good	Satisfactory as-is. Component or system is sound and performing its function, typically within the first third of its lifecycle. However, it may show minor signs of normal wear and tear. Repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Fair	Showing signs of wear and use but still satisfactory as-is, typically near the median of its estimated useful life. Component or system is performing adequately at this time but may exhibit some signs of wear, deferred maintenance, or evidence of previous repairs. Repair or replacement will be required due to the component or system's condition and/or its estimated remaining useful life.
Poor	Component or system is significantly aged, flawed, functioning intermittently or unreliably; displays obvious signs of deferred maintenance; shows evidence of previous repair or workmanship not in compliance with commonly accepted standards; has become obsolete; or exhibits an inherent deficiency. The present condition could contribute to or cause the deterioration of contiguous elements or systems. Either full component replacement is needed, or repairs are required to restore to good condition, prevent premature failure, and/or prolong useful life.
Failed	Component or system has ceased functioning or performing as intended. Replacement, repair, or other significant corrective action is recommended or required.
Not Applicable	Assigning a condition does not apply or make logical sense, most commonly due to the item in question not being present.



Scope

The standard scope of the Facility Condition Assessment includes the following:

- Visit the Property to evaluate the general condition of the building and site improvements, review available construction documents to familiarize ourselves with, and be able to comment on, the in-place construction systems, life safety, mechanical, electrical, and plumbing systems, and the general-built environment.
- Identify those components that are exhibiting deferred maintenance issues and provide cost estimates for Immediate Costs and Replacement Reserves based on observed conditions, maintenance history and industry standard useful life estimates. This will include the review of documented capital improvements completed within the last five-year period and work currently contracted for, if applicable.
- Provide a full description of the Property with descriptions of in-place systems and commentary on observed conditions.
- Provide a high-level categorical general statement regarding the subject Property's compliance to Title III of the Americans with Disabilities Act. This will not constitute a full ADA survey but will help identify exposure to issues and the need for further review.
- Obtain background and historical information about the facility from a building engineer, property manager, maintenance staff, or other knowledgeable source. The preferred methodology is to have the client representative or building occupant complete a Pre-Survey Questionnaire (PSQ) in advance of the site visit. Common alternatives include a verbal interview just prior to or during the walk-through portion of the assessment.
- Review maintenance records and procedures with the in-place maintenance personnel.
- Observe a representative sample of the interior spaces/units, including vacant spaces/units, to gain a clear understanding of the property's overall condition. Other areas to be observed include the exterior of the property, the roofs, interior common areas, and the significant mechanical, electrical and elevator equipment rooms.
- Provide recommendations for additional studies, if required, with related budgetary information.
- Provide an Executive Summary at the beginning of this report, which highlights key findings and includes a Facility Condition Index as a basis for comparing the relative conditions of the buildings within the portfolio.



7. Opinions of Probable Costs

Cost estimates are attached throughout this report, with the Replacement Reserves in the appendix.

These estimates are based on Invoice or Bid Document/s provided either by the Owner/facility and construction costs developed by construction resources such as *R.S. Means*, *CBRE Whitestone*, and *Marshall & Swift*, Bureau Veritas's experience with past costs for similar properties, city cost indexes, and assumptions regarding future economic conditions.

Opinions of probable costs should only be construed as preliminary, order of magnitude budgets. Actual costs most probably will vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing or bundling of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, use of subcontractors, and whether competitive pricing is solicited, etc. Certain opinions of probable costs cannot be developed within the scope of this guide without further study. Opinions of probable cost for further study should be included in the FCA.

Methodology

Based upon site observations, research, and judgment, along with referencing Expected Useful Life (EUL) tables from various industry sources, Bureau Veritas opines as to when a system or component will most probably necessitate replacement. Accurate historical replacement records, if provided, are typically the best source of information. Exposure to the elements, initial quality and installation, extent of use, the quality and amount of preventive maintenance exercised, etc., are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual chronological age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its *effective age*, whether explicitly or implicitly stated. Projections of Remaining Useful Life (RUL) are based primarily on age and condition with the presumption of continued use and maintenance of the Property similar to the observed and reported past use and maintenance practices, in conjunction with the professional judgment of Bureau Veritas's assessors. Significant changes in occupants and/or usage may affect the service life of some systems or components.

Where quantities could not be or were not derived from an actual construction document take-off or facility walk-through, and/or where systemic costs are more applicable or provide more intrinsic value, budgetary square foot and gross square foot costs are used. Estimated costs are based on professional judgment and the probable or actual extent of the observed defect, inclusive of the cost to design, procure, construct and manage the corrections.

Definitions

Immediate Needs

Immediate Needs are line items that require immediate action as a result of: (1) material existing or potential unsafe conditions, (2) failed or imminent failure of mission critical building systems or components, or (3) conditions that, if not addressed, have the potential to result in, or contribute to, critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost.

For database and reporting purposes the line items with RUL=0, and commonly associated with **Safety** or **Performance/Integrity** Plan Types, are considered Immediate Needs.



Replacement Reserves

Cost line items traditionally called Replacement Reserves (equivalently referred to as Lifecycle/Renewals) are for recurring probable renewals or expenditures, which are not classified as operation or maintenance expenses. The replacement reserves should be budgeted for in advance on an annual basis. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, Replacement Reserves may also include components or systems that have an indeterminable life but, nonetheless, have a potential for failure within an estimated time period.

Replacement Reserves generally exclude systems or components that are estimated to expire after the reserve term and are not considered material to the structural and mechanical integrity of the subject property. Furthermore, systems and components that are not deemed to have a material effect on the use of the Property are also excluded. Costs that are caused by acts of God, accidents, or other occurrences that are typically covered by insurance, rather than reserved for, are also excluded.

Replacement costs are solicited from ownership/property management, Bureau Veritas's discussions with service companies, manufacturers' representatives, and previous experience in preparing such schedules for other similar facilities. Costs for work performed by the ownership's or property management's maintenance staff are also considered.

Bureau Veritas's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the assessment period. The assessment period is defined as the effective age plus the reserve term. Additional information concerning systems or component's respective replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Replacement Reserves Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined as Immediate Needs.

For the purposes of 'bucketizing' the System Expenditure Forecasts in this report, the Replacement Reserves have been subdivided and grouped as follows: Short Term (years 1-3), Near Term (years 4-5), Medium Term (years 6-10), and Long Term (years 11-20).

Key Findings

In an effort to highlight the most significant cost items and not be overwhelmed by the Replacement Reserves report in its totality, a subsection of Key Findings is included within the Executive Summary section of this report. Key Findings typically include repairs or replacements of deficient items within the first five-year window, as well as the most significant high-dollar line items that fall anywhere within the ten-year term. Note that while there is some subjectivity associated with identifying the Key Findings, the Immediate Needs are always included as a subset.

Exceedingly Aged

A common scenario encountered during the assessment process, and a frequent source of debate, occurs when classifying and describing "very old" systems or components that are still functioning adequately and do not appear nor were reported to be in any way deficient. To help provide some additional intelligence on these items, such components will be tagged in the database as Exceedingly Aged. This designation will be reserved for mechanical or electrical systems or components that have aged well beyond their industry standard lifecycles, typically at least 15 years beyond and/or twice their Estimated Useful Life (EUL). In tandem with this designation, these items will be assigned a Remaining Useful Life (RUL) not less than two years but not greater than 1/3 of their standard EUL. As such the recommended replacement time for these components will reside outside the typical Short-Term window but will not be pushed 'irresponsibly' (too far) into the future.



8. STEM/STEAM Assessment

STEM and STEAM education is an integrated curriculum that is driven by exploratory project-based learning and student-centered development of ideas and solutions. BV has evaluated the facility for the existence of spaces and systems to provide STEM/STEAM education based on input from the point of contact for the school. The below table identifies the required standards and to what degree the requirements have been met for the facility.

STEM/STEAM Evaluations				
Property Name	STEM/STEAM Suitability Score	Project Number	School Type	Square Footage
Barre City Elem/Middle School - Main Building	50%	158982.22R000-021.379	Middle	125,000

Suitability Classification	Scale
Compares Poorly	Score 0 - 25
Compares Marginally	Score 25-50
Compares Fairly	Score 50-75
Compares Well	Score 75 - 100

Score Value	Score Impact
1- Meets	100%
2- Partial	50%
3- Missing	0%

Details of the STEM/STEAM evaluation are included in the appendix of this report. Reference this appendix for specific data associated with this limited survey.



9. Energy Audit

The purpose of this Energy Audit is to provide Barre City Elementary/Middle School with a baseline of energy usage, the relative energy efficiency of the facility, and specific recommendations for Energy Conservation Measures. Information obtained from these analyses may be used to support a future application to an Energy Conservation Program, Federal and Utility grants towards energy conservation, as well as support performance contracting, justify a municipal bond-funded improvement program, or as a basis for replacement of equipment or systems.

The energy audit consisted of an on-site visual assessment to determine current conditions, itemize the energy consuming equipment (i.e. Boilers, Make-Up Air Units, DWH equipment); review lighting systems both exterior and interior; and review efficiency of all such equipment. The study also included interviews and consultation with operational and maintenance personnel. The following is a summary of the tasks and reporting that make up the Energy Audit portion of the report.

The following is a summary of the tasks and reporting that make up the Energy Audit portion of the report.

Energy and Water Using Equipment

- Bureau Veritas has surveyed the common areas, offices, maintenance facilities and mechanical rooms to document utility-related equipment, including heating systems, cooling systems, air handling systems and lighting systems.

Building Envelope

- Bureau Veritas has reviewed the characteristics and conditions of the building envelope, checking insulation values and conditions. This review also includes an inspection of the condition of walls, windows, doors, roof areas, insulation and special use areas.

Recommendations for Energy Savings Opportunities

- Based on the information gathered during the on-site assessment, the utility rates, as well as recent consumption data and engineering analysis, Bureau Veritas has identified opportunities to save energy and provide probable construction costs, projected energy/utility savings and provide a simple payback analysis.

Analysis of Energy Consumption

- Based on the information gathered during the on-site assessment, Bureau Veritas has conducted an analysis of the energy usage of all equipment, and identified which equipment is using the most energy and what equipment upgrades may be necessary. As a result, equipment upgrades, or replacements are identified that may provide a reasonable return on the investment and improve maintenance reliability.

Energy Audit Process

- Interviewing staff and review plans and past upgrades
- Performing an energy audit for each use type
- Performing a preliminary evaluation of the utility system
- Analyzing findings, utilizing ECM cost-benefit worksheets
- Making preliminary recommendations for system energy improvements and measures
- Estimating initial cost and changes in operating and maintenance costs based on implementation of energy efficiency measures.
- Ranking recommended cost measures, based on the criticality of the project and the largest payback.



10. Historical Energy and Water Performance Metrics

Utility Data Tabulation Methodology

Establishing the energy baseline begins with an analysis of the utility cost and consumption of the facility. Utilizing the historical energy data and local weather information, we evaluate the existing utility consumption and assign it to the various end-uses throughout the buildings. The Historical Data Analysis breaks down utilities by consumption, cost and annual profile.

This data is analyzed using standard engineering assumptions and practices. The analysis serves the following functions:

- Allows our engineers to benchmark the energy and water consumption of the facilities against consumption of efficient buildings of similar construction, use and occupancy.
- Generates the historical and current unit costs for energy and water.
- Provides an indication of how well changes in energy consumption correlate to changes in weather.
- Reveals potential opportunities for energy consumption and/or cost reduction. For example, the analysis may indicate that there is excessive, simultaneous heating and cooling, which may mean that there is an opportunity to improve the control of the heating and cooling systems.

By performing this analysis and leveraging our experience, our engineers prioritize buildings and pinpoint systems for additional investigation during the site visit, thereby maximizing the benefit of their time spent on-site and minimizing time and effort by the customer’s personnel.

No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used average utility costs from other VT Agency of Education properties to approximate the utility costs for this property. Bureau Veritas will update the report on receipt of the actual data from the client.

Utilities Metering at a Glance	
Number of electric meters observed	One
Number of gas meters observed	None
Number of central steam meters observed	None
Number of domestic water meters observed	One

Average Utility Rates				
Electricity	Wood Chips	Propane	No. 2 Oil	Water & Sewer
Average Rate	Average Rate	Average Rate	Average Rate	Blended Rate
\$0.18 / kWh (est.)	\$0.10 / Lb. (est.)	\$1.96 / Gal (est.)	\$2.78 / Gal (est.)	\$16.11 / kGal (est.)



Electricity

Green Mountain Power provides electrical service to the facility.

The consumption pattern likely varies seasonally. Any seasonal variation in consumption is primarily attributed to periods when school is out of session, while the static base load primarily consists of lighting and appliances.

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the electric rate from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.



Wood Chips/Pellets

The wood chip fuel supplier to the facility was not provided. The deliveries are made on an as-needed basis. The primary use of wood chips is for space heating. Any seasonal variation in consumption is primarily attributed to the heating loads, while the static base load primarily consists of domestic water heating.

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the utility rates from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.



Propane and Fuel Oil

The propane and fuel oil suppliers to the facility were not provided. The deliveries are made on an as-needed basis. The primary use of propane is for cooking. The primary use of fuel oil is for space heating and domestic water heating. Any seasonal variation in consumption is primarily attributed to the heating loads, while the static base load primarily consists of domestic water heating and cooking.

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the utility rates from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.



Water and Sewer

The Town of Barre satisfies the water and sewer requirements of the facility.

The water consumption pattern most likely remains more or less flat over the 10-month period that school is in session.

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the utility rate from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.

11. Energy Conservation Measures

Bureau Veritas has conducted an Energy Audit on Barre City Elementary/Middle School. The study included a review of the building's construction features, historical energy and water consumption and costs, review of the building envelope, HVAC equipment, heat distribution systems, lighting, and the building's operational and maintenance practices.

Bureau Veritas has evaluated three Energy Conservation Measures (ECMs) for this property. The savings for each measure are calculated using standard engineering methods followed in the industry, and detailed calculations for ECM are provided in Appendix H for reference. A 10% discount in energy savings was applied to account for the interactive effects amongst the ECMs. In addition to the consideration of the interactive effects, Bureau Veritas has applied a 15% contingency to the implementation costs to account for potential cost overruns during the implementation of the ECMs.

The following table summarizes the recommended ECMs in terms of description, investment cost, energy consumption reduction, and cost savings.

Recommended Non- Renewable Energy Conservation Measures: Financial Impact	
Total Projected Initial ECM Investment	\$11,684
Estimated Annual Cost Savings Related to ECMs	\$3,384
Net Effective ECM Payback	3.5 Years

Key Metrics to Benchmark the Subject Property's Energy Usage Profile

- Building Site Energy Use Intensity - The sum of the total site energy use in thousands of Btu per unit of gross building area. Site energy accounts for all energy consumed at the building location only not the energy consumed during generation and transmission of the energy to the site.
- Building Source Energy Use Intensity – The sum of the total source energy use in thousands of Btu per unit of gross building area. Source energy is the energy consumed during generation and transmission in supplying the energy to your site.
- Building Cost Intensity - This metric is the sum of all energy use costs in dollars per unit of gross building area.
- Greenhouse Gas Emissions - Although there are numerous gases that are classified as contributors to the total for Greenhouse Emissions, the scope of this energy audit focuses on carbon dioxide (CO₂). Carbon dioxide enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and also as a result of other chemical reactions (e.g., manufacture of cement).



Energy Conservation Measures Screening:

Bureau Veritas screens ECMs using the financial methodology below. ECMs which are considered financially viable must meet the criteria.

Simple Payback Period –The number of years required for the cumulative value of energy or water cost savings less future non-fuel or non-water costs to equal the investment costs of the building energy or water system, without consideration of discount rates. ECMs with a payback period greater than the Expected Useful Life (EUL) of the project are not typically recommended, as the cost of the project will not be recovered during the lifespan of the equipment. These ECMs are recommended for implementation during future system replacement. At that time, replacement may be evaluated based on the premium cost of installing energy efficient equipment.

**Energy Conservation Measures**

	Description of ECM	Location	Net Projected Initial Investment (\$)	Estimated Annual Savings Propane (Gal)	Estimated Annual Savings Oil (Gal)	Estimated Annual Savings Electricity (kWh)	Estimated Annual Savings Water (KGal)	Total Energy Savings (MMBTU)	Total Green House Gas Savings (MCO ₂ /Yr.)	Estimated Utility Cost Savings (\$)	Estimated Annual O&M Savings (\$)	Total Estimated Annual Cost Savings (\$)	Simple Payback (Yrs)	Life Cycle Savings (\$)	Expected Useful Life (EUL) (Yrs)
1	Install Outside Air Temperature Reset Controls For Hot Water Boilers, Install OA sensors on (1x) boilers(s)	Location: Boiler room	\$1,131	0.0	720.0	0.0	0.0	99.7	7.3	\$2,002	\$0	\$2,002	0.6	\$15,943	10
2	Install Low Flow Faucet Aerators, Install OA sensors on (1x) boilers(s), Replace 121x 1.5GPM rated bathroom aerators with 0.5GPM WaterSense certified aerators	Location: Restrooms and classrooms	\$1,835	0.0	65.9	0.0	15.8	9.1	0.7	\$183	\$0	\$438	4.2	\$1,904	10
3	Retrofit Flush Tank Toilets to Dual Flush, Replace 121x 1.5GPM rated bathroom aerators with 0.5GPM WaterSense certified aerators	Location: Restrooms	\$7,194	0.0	0.0	0.0	81.9	0.0	0.0	\$0	\$0	\$1,320	5.5	\$12,440	20
Totals for no/low cost items			\$0	0.0	0.0	0.0	0.0	0.0	0.0	\$0	\$0	\$0	0.0		
Total for capital cost			\$10,160	0.0	785.9	0.0	97.8	108.8	8.0	\$2,185	\$0	\$3,760	2.7		
Interactive Savings Discount @10%				0.0	-78.6	0.0	-9.8	-10.9	-0.8	-\$218	\$0	-\$376			
Total Contingency Expenses @ 15%			\$1,524												
Totals for improvements			\$11,684	0.0	707.3	0.0	88.0	98.0	7.2	\$1,966	\$0	\$3,384	3.5		

12. Certification

Vermont Agency of Education, Phase Two (the Client) retained Bureau Veritas to perform this Facility Condition Assessment in connection with its continued operation of Barre City Elementary/Middle School - Main Building, 50 Parkside Terrace, Barre VT, 05641, the "Property". It is our understanding that the primary interest of the Client is to locate and evaluate materials and building system defects that might significantly affect the value of the property and to determine if the present Property has conditions that will have a significant impact on its continued operations.

The conclusions and recommendations presented in this report are based on the brief review of the plans and records made available to our Project Manager during the site visit, interviews of available property management personnel and maintenance contractors familiar with the Property, appropriate inquiry of municipal authorities, our Project Manager's walk-through observations during the site visit, and our experience with similar properties.

No testing, exploratory probing, dismantling, or operating of equipment or in-depth studies were performed unless specifically required under the *Purpose and Scope* section of this report. This assessment did not include engineering calculations to determine the adequacy of the Property's original design or existing systems. Although walk-through observations were performed, not all areas may have been observed (see Section 1 for specific details). There may be defects in the Property, which were in areas not observed or readily accessible, may not have been visible, or were not disclosed by management personnel when questioned. The report describes property conditions at the time that the observations and research were conducted.

This report has been prepared on behalf of and exclusively for the use of the Client for the purpose stated within the *Purpose and Scope* section of this report. The report, or any excerpt thereof, shall not be used by any party other than the Client or for any other purpose than that specifically stated in our agreement or within the *Purpose and Scope* section of this report without the express written consent of Bureau Veritas.

Any reuse or distribution of this report without such consent shall be at the Client and the recipient's sole risk, without liability to Bureau Veritas.

Prepared by: Bureau Veritas Technical Assessments



13. Appendices

- Appendix A: Photographic Record
- Appendix B: Site Plans
- Appendix C: Stem/Steam Assessment
- Appendix D: School Educational Capacity and Programming Space
- Appendix E: Accessibility Review & Photos
- Appendix F: Component Condition Report
- Appendix G: Replacement Reserves
- Appendix H: Depleted Value Report



Appendix A:
Photographic Record



Photographic Overview



1 - OVERVIEW OF FRONT ELEVATION



2 - OVERVIEW OF FRONT ELEVATION



3 - OVERVIEW OF LEFT ELEVATION



4 - OVERVIEW OF RIGHT ELEVATION



5 - OVERVIEW OF REAR ELEVATION



6 - OVERVIEW OF WHOLE BUILDING

Photographic Overview



7 - OVERVIEW OF PLAYGROUND AREA



8 - OVERVIEW OF HALLWAY RAMP



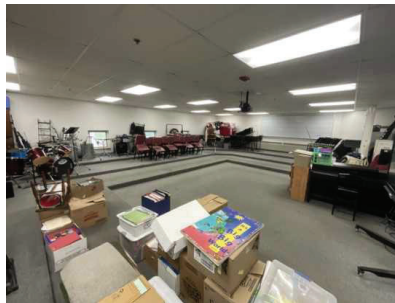
9 - OVERVIEW OF LIBRARY SPACE



10 - OVERVIEW OF SAMPLE CLASSROOM



11 - OVERVIEW OF SAMPLE CLASSROOM



12 - OVERVIEW OF MUSIC ROOM

Photographic Overview



13 - OVERVIEW OF ART ROOM



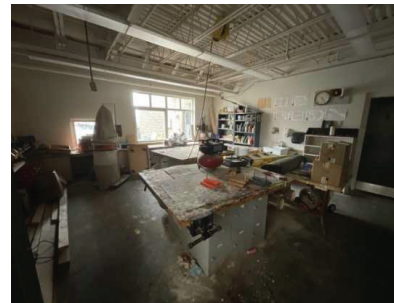
14 - OVERVIEW OF CAFETERIA SPACE



15 - TEACHER SUPPLY SPACE



16 - OVERVIEW OF FITNESS SPACE



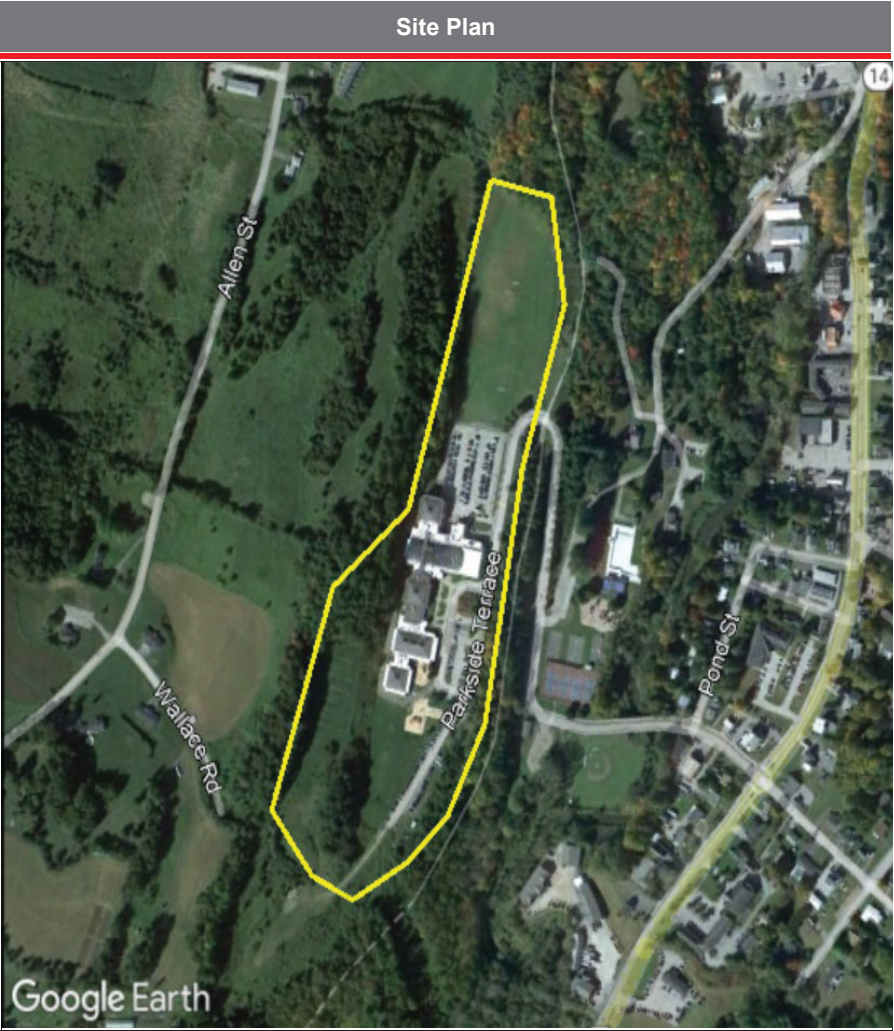
17 - OVERVIEW OF SHOP SPACE



18 - OVERVIEW OF GYMNASIUM SPACE

Appendix B:

Site Plans



Project Name	Project Number
Vermont Agency of Education	158982.22R000-021.379 Barre City Elementary/Middle School
Source	On-Site Date
Google MyMaps	July 17, 2023

Appendix C:

Stem/Steam Assessment



STEM/STEAM Evaluation

Property Name	STEM/STEAM Suitability Score	Project Number	School Type	Square Footage
Barre City Elem/Middle School - Main Building	50%	158982.22R000-021.379	Middle	125,000

Suitability Classification	Scale	Score Value	Score Impact
Compares Poorly	Score 0 - 25	1- Meets	100%
Compares Marginally	Score 25-50	2- Partial	50%
Compares Fairly	Score 50-75	3- Missing	0%
Compares Well	Score 75 - 100		

Rooms to support STEM/STEAM Curriculum - X= Required by School Type

Room Types	Room Present (Yes/No)	Elementary School	Middle School	High School
Does the facility have an Art Room?	Yes	X	X	X
Does the facility have a Science Lab?	Yes		X	X
Does the facility have a Shop (Machine, Wood, Metal, etc.)?	Yes		X	X
Does the facility have a Computer Lab?	Yes	X	X	X
Does the facility have a dedicated STEM/STEAM Room?	No	X	X	X

Questions	Overall Compliance				
	Art Room	Science Labs	Shops	Computer Lab	STEM/STEAM
Does the room have chemical resilient perimeter counters with a minimum of two sinks, one being ADA accessible?	1- Meets	1- Meets	1- Meets		
Does the room have electrical outlet distribution along perimeter walls and from the ceiling?	2- Partial	2- Partial	1- Meets	2- Partial	
Does the room have open shelving and lockable storage cabinets?	1- Meets	1- Meets	1- Meets		
Does the room have technology connectivity and an interactive display?	1- Meets	1- Meets	1- Meets	1- Meets	
Does the room have appropriate wet floor finishes?	1- Meets	1- Meets	1- Meets		
Does the room have visual display boards?	1- Meets	1- Meets	1- Meets	1- Meets	
Does the room have Prep/Storage Room?	1- Meets	1- Meets	1- Meets	2- Partial	
Does the room have direct access to the exterior?	3- Missing	3- Missing	1- Meets		
Does the room the ability to structurally suspend items from the ceiling?	3- Missing	3- Missing	1- Meets		
Does the have goggle cabinets, fire extinguisher, eye wash and deluge shower?	2- Partial	2- Partial	2- Partial		
Room Type Score	70%	70%	95%	75%	0%

Appendix D:

School Educational Capacity and Programming Space



School Educational Capacity and Programming Space

As part of Act 72, AOE has contracted with Bureau Veritas (BVNA) to complete a Facility Condition Assessment (FCA) of very public school building in Vermont. One component of the FCA report will be to identify whether the size and configuration of your current facility is meeting your school's educational and operational needs. In order for us to accurately capture your facility space needs, it is necessary for the AOE and BVNA to receive your input. To complete this brief survey, we recommend that you consult with school building leadership and facilities/custodial staff.

School Name

Barre City Elementary/Middle School

SU/SD

Barre Supervisory Union

Does the school have an adequate number of classrooms to meet student enrollment needs?

No

Please provide some explanation and/or context (known needs, barriers, other constraints outside of space, etc.):

No we need more areas for restorative classrooms, early education and special education.

Does the school have adequate space to accommodate all the current educational programs being offered?

No

Please describe capacity of your school building(s) to deliver educational programming:

No more space is needed.

Would the school provide additional programming if available space was provided?

Yes

Yes, more student would remain in our building and not sent out.

Does the school have adequate confidential space to provide 1:1 services to students as required to maintain FERPA, HIPPA or IEP requirements?

No

Please describe:

No more space for counseling and student cool down space.

Do the school have adequate administrative offices and/or office space for staff?

No

Please describe:

No we need more space for admin.

Based on the size of enrollment does the size of the cafeteria, kitchen and gymnasium meet the current and future enrollment needs?

No

Please describe:

More gym and cafeteria space is needed.

Appendix E:

Accessibility Review & Photos



Visual Survey - ADA Standards for Accessible Design

Property Name: Barre City Elem/Middle School - Main Building

BV Project Number: 158982.22R000-021.379

Facility History & Interview				
Question	Yes	No	Unk	Comments
1. ADA: Has an accessibility study been performed at the site? If so, when?			X	
2. ADA: If a study has occurred, have the associated recommendations been addressed? In full or in part?			X	
3. ADA: Have there been regular complaints about accessibility issues, or previous or pending litigation?			X	

Building : Accessibility Issues				
Category	Major Issues (ADA study recommended)	Moderate Issues (ADA study recommended)	Minor Issues	None*
Parking				None
Exterior Route				None
Building Entrances				None
Interior Route				None
Elevators				None
Public Restrooms				None
Playground				None

**Be cognizant that if the "None" box is marked that does not guarantee full compliance; this study is limited in nature*



1 - OVERVIEW OF ACCESSIBLE PARKING AREA



2 - CLOSE-UP OF STALL or 2ND PARK AREA



3 - EXT RAMP or PRIMARY PATH OF TRAVEL



4 - CURB CUT or 2ND PATH OF TRAVEL



5 - MAIN ACCESSIBLE ENTRANCE



6 - 2ND ENTRANCE or SIGNAGE/HARDWARE



7 - ACCESSIBLE INTERIOR PATH (RAMP/LIFT)



8 - HARDWARE, STAIR RAILS or SELF-SERVICE AREA



9 - TOILET STALL OVERVIEW



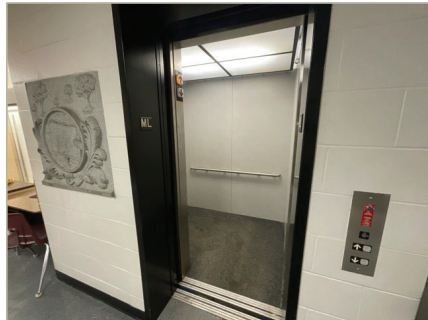
10 - SINK, FAUCET HANDLES or ACCESSORIES



11 - ACCESSIBLE ROUTE TO PLAYGROUND



12 - OVERVIEW OF PLAYGROUND



13 - LOBBY VIEW OF CABS, WITH DOORS OPEN



14 - IN-CAB CONTROLS/EMERGENCY CALL PANEL

The table below is intended to be used as a general reference guide to help differentiate the orders of magnitude between some of the more commonly observed accessibility issues. The table is not intended to be all-inclusive, and boxes checked in the tables above do not necessarily mean those specific problems or shortcomings cited as examples below exist at the subject buildings and sites. Reference the data and photos above and/or the *Key Findings* section in the body of the report for visuals and/or more specifics about the particular subject site conditions.

Reference Guide			
	Major Issues (<i>ADA study recommended</i>)	Moderate Issues (<i>ADA study recommended</i>)	Minor Issues
Parking	<ul style="list-style-type: none"> - Needs full reconstruction - Excessive slopes over 3% require major re-grading - No level locations to add required spaces 	<ul style="list-style-type: none"> - No or non-compliant curb cuts - Moderate difficulty to add required accessible spaces - Slopes close to compliant 	<ul style="list-style-type: none"> - Painting of markings needed - Signage height non-compliant - Signage missing
Exterior Route	<ul style="list-style-type: none"> - Large areas of sidewalks with excessive slopes - No ramp when needed - Ramps with excessive slopes 	<ul style="list-style-type: none"> - Ramps need rails - Ramps need rail extensions - All or most entrance door exterior maneuvering clearance areas with excessive slopes 	<ul style="list-style-type: none"> - One entrance door exterior maneuvering clearance area with excessive slope - Non-compliant signage
Building Entrances	<ul style="list-style-type: none"> - No compliant entrance exists - Exterior entry door/s not wide enough - Entrance vestibule requires complete reconstruction / reconfiguration due to clearance 	<ul style="list-style-type: none"> - Need significant # of lever handles - Need to add or modify automatic door opener - Entrance vestibule requires limited reconfigurations 	<ul style="list-style-type: none"> - A few door knobs instead of lever handles - Non-compliant door threshold
Interior Route	<ul style="list-style-type: none"> - All or most interior doors appear less than 32" wide - Corridors less than 36" wide - No ramp when needed - Ramps with excessive slopes - Non-compliant treads/risers at means of egress stairways 	<ul style="list-style-type: none"> - Single height drinking fountains - Drinking fountain too high or protrudes into accessible route - Ramps need rails - Ramps need rail extensions - Need significant # of lever handles - Non-compliant rail extensions at egress stairways - All/most door thresholds high 	<ul style="list-style-type: none"> - One door threshold too high - A few door knobs instead of lever handles - Non-compliant door pressures - Non-compliant signage - Switches not within reach range
Elevators	<ul style="list-style-type: none"> - No elevator present when required - Elevator cab too small 	<ul style="list-style-type: none"> - Panel control buttons not at compliant height - No hands-free emergency communication system - Elevator only has mechanical stops 	<ul style="list-style-type: none"> - Audible/visual signals at every floor may be lacking - Minor signage / Braille issues
Public Restrooms	<ul style="list-style-type: none"> - No ADA RR on each accessible floor - Restroom(s) too small - Entire restroom(s) requires renovation - Water closet clearance requires moving walls 	<ul style="list-style-type: none"> - Interior doors appear less than 32" wide - Missing or non-compliant grab bars - Easily fixable clearance issues 	<ul style="list-style-type: none"> - Minor height adjustments required - Non-compliant door pressures - Missing a visual strobe (only required if audible fire alarm already present) - Missing lavatory pipe wraps - Signage not compliant

	Major Issues <i>(ADA study recommended)</i>	Moderate Issues <i>(ADA study recommended)</i>	Minor Issues
Kitchens/Kitchenettes	<ul style="list-style-type: none">- Clear space for each appliance not present- Clearance between opposing counters too narrow	<ul style="list-style-type: none">- Sink and counter too high- Sink knee and toe clearance not provided where required (built-in)- Less than 50% of cabinetry within reach range	<ul style="list-style-type: none">- Dispensers not within reach range- Switches not within reach range- Missing sink pipe wraps if knee and toe clearance required
Playgrounds & Pools	<ul style="list-style-type: none">- Large areas of surfacing non-compliant- Install compliant play structures- No pool lift provided	<ul style="list-style-type: none">- Small area/s of surfacing or equipment non-compliant- Moderate issues with path of travel to playground/pool	<ul style="list-style-type: none">- Minor issues with path of travel to playground/pool

Appendix F:
Component Condition Report



Component Condition Report | BARRE CITY ELEM/MIDDLE SCHOOL - Main Building

UFI3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
Facade								
	B2010 Building Exterior	Facade	Fair	Exterior Walls, Metal/Insulated Sandwich Panels	17,500	SF	17	6878194
	B2010 Building Exterior	Facade	Fair	Exterior Walls, Concrete Block (CMU)	52,700	SF	22	6878166
	B2020 Building Exterior	Facade	Fair	Window, Aluminum Double-Glazed, 16-25 SF	201		2	6878142
B2050 Building Exterior	Site	Facade	Fair	Overhead/Dock Door, Aluminum, 12'X12' (144 SF)	3		2	6878241
		Facade	Fair	Exterior Door, Steel, Standard	22		12	6878181
	Roofing	Roofing	Fair	Roofing, Single-Ply Membrane, TPO/PVC	19,750	SF	7	6878254
	B3010 Roof	Roofing	Excellent	Roofing, Asphalt Shingle, 20-Year Standard	23,800	SF	20	6878150
B3010 Roof	Roofing	Roofing	Fair	Roofing, Single-Ply Membrane, EPDM	24,600	SF	3	6878183
B3060 Roof	Roofing	Roofing	Fair	Roof Skylight, per unit, up to 20 SF	8		2	6878263
Interiors								
	C1010 Throughout building	Interiors	Fair	Interior Wall, Movable Partitions, Fabric 8 to 10' Height	500	LF	3	6878224
	C1030 Throughout Building	Interiors	Fair	Interior Door, Wood, Solid-Core Decorative High-End	69		12	6878259
	C1030 Throughout building	Interiors	Fair	Interior Door, Wood, Solid-Core Decorative High-End w/ Glazing	79		12	6878233
C1030 Basement	Interiors	Interiors	Fair	Interior Door, Steel, w/ Extensive Glazing	31		12	6878251
C1030 Basement	Interiors	Interiors	Fair	Interior Door, Steel, Standard	20		12	6878162
C1070 Throughout building	Interiors	Interiors	Fair	Suspended Ceilings, Acoustical Tile (ACT)	100,000	SF	3	6878242
C1090 Hallways	Interiors	Interiors	Fair	Lockers, Steel-Baked Enamel, 12" W x 15" D x 72" H	250		12	6878212
C2010 Throughout building	Interiors	Interiors	Fair	Wall Finishes, any surface, Prep & Paint	220,000	SF	2	6878225
C2030 Throughout building	Interiors	Interiors	Fair	Flooring, Carpet, Commercial Standard	5,000	SF	2	6878147
C2030 Basement	Interiors	Interiors	Fair	Flooring, any surface, w/ Paint or Sealant, Prep & Paint	7,500	SF	2	6878159
C2030 Throughout building	Interiors	Interiors	Fair	Flooring, Laminate Faux Wood	1,500	SF	3	6878169
C2030 Workout room	Interiors	Interiors	Fair	Flooring, Rubber Tile	500	SF	7	6878175
C2030 Throughout building	Interiors	Interiors	Fair	Flooring, Vinyl Tile (VCT)	100,000	SF	5	6878199
C2030 Stage	Interiors	Interiors	Fair	Flooring, Wood, Strip	1,500	SF	2	6878283
Conveying								
	Elevator	Conveying	Fair	Elevator Cab Finishes, Standard	1		3	6878193
	D1010 Elevator	Conveying	Fair	Elevator Controls, Automatic, 1 Car	1		3	6878277
	D1010 Elevator	Conveying	Fair	Passenger Elevator, Hydraulic, 3 Floors, Renovate	1		2	6878275
Plumbing								
	D2010 Utility closet	Plumbing	Fair	Sink/Lavatory, Service Sink, Floor	4		7	6878229
	D2010 Restrooms	Plumbing	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	49		2	6878219
	D2010 Hallways	Plumbing	Fair	Drinking Fountain, Wall-Mounted, Single-Level	3		7	6878156
D2010 Throughout building	Plumbing	Plumbing	Fair	Sink/Lavatory, Vanity Top, Stainless Steel	72		2	6878276
D2010 Kitchen	Plumbing	Plumbing	Good	Sink/Lavatory, Commercial Kitchen, 2-Bowl	1		27	6878236
D2010 Restrooms	Plumbing	Plumbing	Fair	Toilet, Residential Water Closet	55		2	6878153
D2010 Kitchen	Plumbing	Plumbing	Fair	Sink/Lavatory, Wall-Hung, Enameled Steel	2		2	6878154
D2010 Boiler room	Plumbing	Plumbing	Fair	Water Heater, Indirect	1		8	6878139
D2010 Restrooms	Plumbing	Plumbing	Fair	Urinal, Standard	11		3	6878223
D2020 Kitchen	Plumbing	Plumbing	Fair	Supplemental Components, Grease Trap/Interceptor, Underground	1		3	6878186

UFI3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
HVAC								
	D3020 Throughout building	HVAC	Fair	Unit Heater, Hydronic, 13 to 36 MBH	4		3	6878151
	D3020 Boiler room	HVAC	Fair	Heat Exchanger, Plate & Frame, HVAC, 16 to 25 GPM	1		7	6878192
	D3020 Throughout building	HVAC	Fair	Radiator, Hydronic, Baseboard (per LF)	500	LF	5	6878205
	D3020 Boiler room	HVAC	Fair	Boiler, Oil, HVAC	1		2	6878171
	D3020 Boiler room	HVAC	Good	Boiler, Oil, HVAC	1		23	6878245
	D3020 Boiler room	HVAC	Fair	Unit Heater, Electric	2		3	6878287
	D3020 Utility closet	HVAC	Fair	Unit Heater, Hydronic	1		2	6878180
	D3020 Boiler room	HVAC	Fair	Wood Pellet Boiler, Hopper and Chute Feeder	1		7	6878239
	D3020 Boiler room	HVAC	Fair	Boiler Supplemental Components, Expansion Tank	2		33	6878260
	D3020 Boiler room	HVAC	Fair	Boiler Supplemental Components, Expansion Tank	1		12	6878269
	D3020 Roof	HVAC	Fair	Split System, Condensing Unit/Heat Pump	1		2	6878158
	D3030 Roof	HVAC	Fair	Split System, Condensing Unit/Heat Pump	1		2	6878164
	D3030 Roof	HVAC	Fair	Packaged Unit, RTU, Pad or Roof-Mounted, 3 TON	4		3	6878170
	D3050 Boiler room	HVAC	Fair	Pump, Distribution, HVAC Heating Water	4		3	6878246
	D3050 Boiler room	HVAC	Fair	Pump, Distribution, HVAC Heating Water	1		2	6878218
	D3050 Roof	HVAC	Fair	Packaged Unit, RTU, Pad or Roof-Mounted, 4 TON	6		2	6878187
	D3050 Throughout building	HVAC	Fair	HVAC System, Ductwork, Medium Density	125,000	SF	3	6878221
	D3050 Roof	HVAC	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1		2	6878208
	D3050 Roof	HVAC	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1		3	6878240
	D3050 Roof	HVAC	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1		3	6878207
	D3050 Roof	HVAC	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1		3	6878143
	D3050 Roof	HVAC	Fair	Make-Up Air Unit, MUA or MAU	1		3	6878268
	D3050 Throughout building	HVAC	Fair	HVAC System, Hydronic Piping, 2-Pipe	125,000	SF	12	6878140
	D3050 Roof	HVAC	Fair	Make-Up Air Unit, MUA or MAU	1		3	6878155
	D3050 Boiler room	HVAC	Good	Exhaust Fan, Centrifugal, 12" Damper	1		18	6878211
	D3060 Boiler room	HVAC	Fair	Exhaust Fan, Propeller, 0.25 HP Motor	1		4	6878231
	D3060 Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1		2	6878267
	D3060 Greenhouse	HVAC	Fair	Exhaust Fan, Propeller, 0.25 HP Motor	1		7	6878172
	D3060 Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 12" Damper	1		3	6878206
	D3060 Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 12" Damper	1		8	6878220
	D3060 Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 28" Damper	1		3	6878261
	D3060 Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 12" Damper	1		6	6878149
Fire Protection								
	Kitchen	Fire Protection	Fair	Fire Suppression System, Commercial Kitchen, per LF of Hood	10	LF	2	6878176
	Throughout building	Fire Protection	Fair	Fire Suppression System, Existing Sprinkler Heads, by SF	125,000	SF	4	6878258
	Site	Electrical	Fair	Generator, Diesel	1		3	6878215
D5020 Electrical room	Electrical	Electrical	Fair	Secondary Transformer, Dry, Stepdown	1		2	6878168
D5020 Electrical room	Electrical	Electrical	Fair	Switchboard, 277/480 V	1		12	6878201
D5020 Electrical room	Electrical	Electrical	Fair	Secondary Transformer, Dry, Stepdown	1		13	6878238
D5020 Electrical room	Electrical	Electrical	Fair	Distribution Panel, 120/208 V	10		2	6878237
D5020 Electrical room	Electrical	Electrical	Fair	Distribution Panel, 277/480 V	8		2	6878184
D5020 Electrical room	Electrical	Electrical	Fair	Secondary Transformer, Dry, Stepdown	2		2	6878249
D5020 Electrical room	Electrical	Electrical	Fair	Distribution Panel, 120/208 V	1		2	6878209

UFL3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
D5020	Electrical room	Electrical	Fair	Secondary Transformer, Dry, Stepdown	2		3	6878228
D5020	Electrical room	Electrical	Fair	Secondary Transformer, Dry, Stepdown	6		2	6878188
D5030	Electrical room	Electrical	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	4		7	6878247
D5030	Electrical room	Electrical	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	4		7	6878137
D5030	Throughout building	Electrical	Fair	Electrical System, Wiring & Switches, Average or Low Density/Complexity	125,000	SF	12	6878178
D5040	Throughout building	Electrical	Fair	Interior Lighting System, Full Upgrade, High Density & Standard Fixtures	125,000	SF	12	6878243
Fire Alarm & Electronic Systems								
D6060	Throughout building	Fire Alarm & Electronic Systems	Fair	Intercom/PA System, Public Address Upgrade, Facility-Wide	125,000	SF	3	6878191
D7030	Throughout building	Fire Alarm & Electronic Systems	Fair	Security/Surveillance System, Full System Upgrade, Average Density	125,000	SF	7	6878195
D7050	Throughout building	Fire Alarm & Electronic Systems	Fair	Fire Alarm System, Full System Upgrade, Standard Addressable, Upgrade/Install	125,000	SF	7	6878227
Equipment & Furnishings								
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Evaporator for Refrigerator/Freezer	1		3	6878265
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Dairy Cooler/Wells	2		12	6878281
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Steamer, Tabletop	2		3	6878256
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Ice maker, Freestanding	1		3	6878262
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Exhaust Hood, 8 to 10 LF	1		12	6878282
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Exhaust Hood, 8 to 10 LF	1		2	6878250
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Walk-In, Condenser for Refrigerator/Freezer	1		13	6878280
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	2		10	6878284
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Freezer	1		3	6878148
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Range/Oven, 6-Burner	1		2	6878230
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Dishwasher Commercial	1		7	6878179
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Freezer, Chest	1		7	6878189
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Refrigerator, 1-Door Reach-In	2		13	6878266
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Convection Oven, Single	1		2	6878146
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Refrigerator	1		8	6878286
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Mixer, Freestanding	1		2	6878213
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Steam Kettle	1		7	6878285
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Prep Table Refrigerated, Salad/Sandwich	1		7	6878157
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Condenser for Refrigerator/Freezer	1		3	6878216
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Convection Oven, Double	2		4	6878279
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Condenser for Refrigerator/Freezer	1		2	6878161

UFL3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Food Warmer, Tabletop Drawers (Set of 4)	3		2	6878248
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Refrigerator, 2-Door Reach-In	1		5	6878210
E2010	Classrooms and Offices	Equipment & Furnishings	Fair	Casework, Cabinetry Economy	300	LF	7	6878273
Special Construction & Demo								
F1020	Site	Special Construction & Demo	Fair	Ancillary Building, Greenhouse, Truss Frame w/ Plastic Walls & Roof	300	SF	17	6878185
F1020	Site	Special Construction & Demo	Fair	Ancillary Building, Wood-Framed or CMU, Standard	1,500	SF	7	6878234
F1020	Site	Special Construction & Demo	Fair	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Standard	175	SF	17	6878141
F1020	Site	Special Construction & Demo	Good	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Basic/Minimal	75	SF	22	6878278
Pedestrian Plazas & Walkways								
G2020	Site	Pedestrian Plazas & Walkways	Fair	Parking Lots, Aggregate/Stone, Surface Gravel, Replenish	13,800	SF	4	6878274
G2020	Site	Pedestrian Plazas & Walkways	Fair	Parking Lots, Pavement, Asphalt, Mill & Overlay	124,500	SF	3	6878264
G2030	Site	Pedestrian Plazas & Walkways	Good	Sidewalk, Concrete, Large Areas	8,500	SF	22	6878167
G2030	Site	Pedestrian Plazas & Walkways	Good	Sidewalk, Asphalt	13,500	SF	18	6878222
Athletic, Recreational & Playfield Areas								
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Multipurpose, Medium	1		7	6878190
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Soccer, Movable Practice Goal	4		7	6878204
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Swing Set, 4 Seats	2		7	6878217
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Multipurpose, Small	1		7	6878214
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Playfield Surfaces, Chips Wood, 6" Depth	11,200	SF	2	6878202
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Scoreboard, Electronic Basic	1		12	6878244
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Basketball, Backboard/Rim/Pole	8		5	6878253
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Multipurpose, Very Small	1		7	6878160
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Multipurpose, Large	1		7	6878271
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Soccer, Movable Practice Goal	5		7	6878198
Sitework								
G2060	Site	Sitework	Fair	Picnic Table, Wood/Composite/Fiberglass	18		13	6878174
G2060	Site	Sitework	Fair	Bike Rack, Fixed 6-10 Bikes	2		13	6878257
G2060	Site	Sitework	Fair	Fences & Gates, Fence, Chain Link 4'	40	LF	12	6878138
G2060	Site	Sitework	Good	Flagpole, Metal	1		23	6878252
G2060	Site	Sitework	Fair	Fences & Gates, Fence, Chain Link 6'	400	LF	12	6878177
G2060	Site	Sitework	Good	Park Bench, Precast Concrete	1		18	6878152
G2060	Site	Sitework	Fair	Retaining Wall, Concrete Masonry Unit (CMU)	30	SF	12	6878232
G4050	Site	Sitework	Fair	Pole Light Fixture w/ Lamps, any type 20' High, w/ LED Replacement, Replace/Install	2		2	6878272
G4050	Site	Sitework	Fair	Pole Light Fixture w/ Lamps, any type 20' High, w/ LED Replacement, Replace/Install	17		13	6878203
G4050	Building exterior	Sitework	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	20		13	6878255



Unlabeled Code	ID	Card Description	Lifespan (Years)	Edge	Width	Quantity	Unit Cost *	Subtotal	2023												2024												2025												2026												2027												2028												2029												2030												2031												2032												2033												2034												2035												2036												2037												2038												2039												2040												2041												2042												2043												2044												2045												2046												2047												2048												2049												2050												2051												2052												2053												2054												2055												2056												2057												2058												2059												2060												2061												2062												2063												2064												2065												2066												2067												2068												2069												2070												2071												2072												2073												2074												2075												2076												2077												2078												2079												2080												2081												2082												2083												2084												2085												2086												2087												2088												2089												2090												2091												2092												2093												2094												2095												2096												2097												2098												2099												2100												2101												2102												2103												2104												2105												2106												2107												2108												2109												2110												2111												2112												2113												2114												2115												2116												2117												2118												2119												2120												2121												2122												2123												2124												2125												2126												2127												2128												2129												2130												2131												2132												2133												2134												2135												2136												2137												2138												2139												2140												2141												2142												2143												2144												2145												2146												2147												2148												2149												2150												2151												2152												2153												2154												2155												2156												2157												2158												2159												2160												2161												2162												2163												2164												2165												2166												2167												2168												2169												2170												2171												2172												2173												2174												2175												2176												2177												2178												2179												2180												2181												2182												2183												2184												2185												2186												2187												2188												2189												2190												2191												2192												2193												2194												2195												2196												2197												2198												2199												2200												2201												2202												2203												2204												2205												2206												2207												2208												2209												2210												2211												2212												2213												2214												2215												2216												2217												2218												2219												2220												2221												2222												2223												2224												2225												2226												2227												2228												2229												2230												2231												2232												2233												2234												2235												2236												2237												2238												2239												2240												2241												2242												2243												2244												2245												2246												2247												2248												2249												2250												2251												2252												2253												2254												2255												2256												2257												2258												2259												2260												2261												2262												2263												2264												2265												2266												2267												2268												2269												2270												2271												2272												2273												2274												2275												2276												2277												2278												2279												2280												2281												2282												2283												2284												2285												2286												2287												2288												2289												2290												2291												2292												2293												2294												2295												2296												2297												2298												2299												2300												2301												2302												2303												2304												2305												2306												2307												2308												2309												2310												2311												2312												2313												2314												2315												2316												2317												2318												2319												2320												2321												2322												2323												2324												2325												2326												2327												2328												2329												2330												2331												2332												2333												2334									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Unbracketed Item ID	ID	Cost Description	Union (FED)	Tag	Rel.	Quantity	Unit	Unit Cost *	Material	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	Depleted Repair Materials	
F1000	6878130	Archery Building, Concrete, Ties	30	13	17	300	Y	\$55.00	\$10,000																						\$10,000	
F1010	6878141	Steel Reinforcement, 1/2" Dia, 10' Long	30	13	17	175	Y	\$50.00	\$8,750																						\$8,750	
C1000	6878154	Modular Formwork, Standard, Reusable	25	22	3	124,000	Y	\$13.50	\$1,674,000				\$13,750																		\$13,750	
C1010	6878164	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	7	3	4	118,000	Y	\$1.40	\$165,200																						\$165,200	
C1020	6878172	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	25	7	18	110,000	Y	\$5.50	\$727,500																						\$727,500	
C1030	6878181	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	25	20	5	8	1.6	\$9,500.00	\$76,000																						\$76,000	
C1040	6878190	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	15	8	7	4	1.6	\$700.00	\$2,800								\$2,800														\$2,800	
C1050	6878198	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	15	8	7	5	1.6	\$700.00	\$1,600								\$1,600														\$1,600	
C2000	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	25	13	12	1	1.6	\$3,000.00	\$3,000								\$3,000														\$3,000	
C2010	6878205	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	3	1	2	110,000	Y	\$7.00	\$770,000			\$27,400																			\$27,400	\$1,580,000
C2020	6878190	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	13	7	1	1.6	\$10,000.00	\$10,000								\$10,000														\$10,000	
C2030	6878212	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	13	7	2	1.6	\$2,500.00	\$5,000								\$5,000														\$5,000	
C2040	6878214	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	13	7	1	1.6	\$10,000.00	\$10,000								\$10,000														\$10,000	
C2050	6878180	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	13	7	1	1.6	\$6,000.00	\$6,000								\$6,000														\$6,000	
C2060	6878210	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	13	7	1	1.6	\$15,000.00	\$15,000								\$15,000														\$15,000	
C2070	6878198	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	40	28	12	40	1F	\$18.00	\$720								\$720														\$720	
C2080	6878177	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	40	28	12	400	1F	\$21.00	\$8,400								\$8,400														\$8,400	
C2090	6878214	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	13	18	1.6	\$500.00	\$1,800								\$1,800														\$1,800	
C3000	6878212	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	18	2	1.6	\$2,000.00	\$3,200								\$3,200														\$3,200	
C3010	6878212	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	40	28	12	30	Y	\$60.00	\$1,800								\$1,800														\$1,800	
C4000	6878212	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	18	2	2	1.6	\$4,200.00	\$8,400			\$8,400																			\$8,400	
C4010	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4020	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4030	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4040	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4050	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4060	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4070	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4080	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4090	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4100	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4110	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4120	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4130	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4140	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4150	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4160	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4170	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4180	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4190	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4200	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4210	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4220	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4230	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4240	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4250	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4260	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4270	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4280	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4290	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4300	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4310	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4320	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4330	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4340	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4350	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6	\$4,000.00	\$68,000																						\$68,000	
C4360	6878204	Formwork, 1/2" Thick, 10' Long, 1/2" Thick, 10' Long	20	7	12	17	1.6																									

BARRE CITY ELEM/MIDDLE SCHOOL - Main Building

Depleted Value Index

68.4%

System	System Contribution	System Value
Ancillary Building	\$ 5,600	\$ 10,500
Ancillary Building	\$ 105,000	\$ 150,000
Bike Rack	\$ 1,280	\$ 1,600
Boiler	\$ 27,710	\$ 32,600
Boiler	\$ 5,600	\$ 20,000
Boiler Supplemental Components	\$ 5,664	\$ 7,080
Boiler Supplemental Components	\$ 2,430	\$ 2,700
Casework	\$ 34,125	\$ 52,500
Distribution Panel	\$ 51,000	\$ 60,000
Distribution Panel	\$ 25,440	\$ 42,400
Distribution Panel	\$ 5,100	\$ 6,000
Drinking Fountain	\$ 2,520	\$ 3,600
Electrical System	\$ 218,750	\$ 312,500
Elevator Cab Finishes	\$ 3,150	\$ 9,000
Elevator Controls	\$ 3,111	\$ 5,000
Exhaust Fan	\$ 784	\$ 1,400
Exhaust Fan	\$ 490	\$ 700
Exhaust Fan	\$ 1,680	\$ 2,400
Exhaust Fan	\$ 455	\$ 700
Exhaust Fan	\$ 1,260	\$ 1,400
Exhaust Fan	\$ 1,176	\$ 1,400
Exhaust Fan	\$ 933	\$ 4,000
Exhaust Fan	\$ 1,120	\$ 1,400
Exterior Door	\$ 10,560	\$ 13,200
Exterior Fixture w/ Lamp	\$ 9,600	\$ 12,000
Exterior Walls	\$ 205,333	\$ 385,000
Exterior Walls	\$ 702,667	\$ 1,054,000
Fences & Gates	\$ 672	\$ 720
Fences & Gates	\$ 6,720	\$ 8,400
Fire Alarm System	\$ 75,000	\$ 375,000
Fire Suppression System	\$ 2,800	\$ 4,000
Fire Suppression System	\$ 107,000	\$ 133,750
Flagpole	\$ 500	\$ 2,500
Flooring	\$ 32,500	\$ 37,500
Flooring	\$ 1,500	\$ 11,250
Flooring	\$ 3,500	\$ 10,500
Flooring	\$ 3,825	\$ 4,500

System	System Contribution	System Value
Flooring	\$ 433,333	\$ 500,000
Flooring	\$ 6,750	\$ 22,500
Foodservice Equipment	\$ 2,453	\$ 4,600
Foodservice Equipment	\$ 960	\$ 7,200
Foodservice Equipment	\$ 11,200	\$ 14,000
Foodservice Equipment	\$ 4,020	\$ 6,700
Foodservice Equipment	\$ 4,140	\$ 4,500
Foodservice Equipment	\$ 2,925	\$ 4,500
Foodservice Equipment	\$ 3,360	\$ 6,300
Foodservice Equipment	\$ 2,720	\$ 3,400
Foodservice Equipment	\$ 15,000	\$ 25,000
Foodservice Equipment	\$ 5,200	\$ 6,000
Foodservice Equipment	\$ 18,633	\$ 21,500
Foodservice Equipment	\$ 1,200	\$ 1,800
Foodservice Equipment	\$ 4,752	\$ 5,400
Foodservice Equipment	\$ 4,480	\$ 5,600
Foodservice Equipment	\$ 13,500	\$ 15,000
Foodservice Equipment	\$ 9,800	\$ 14,000
Foodservice Equipment	\$ 25,500	\$ 30,000
Foodservice Equipment	\$ 3,290	\$ 4,700
Foodservice Equipment	\$ 4,410	\$ 6,300
Foodservice Equipment	\$ 13,300	\$ 19,000
Foodservice Equipment	\$ 4,410	\$ 6,300
Foodservice Equipment	\$ 6,840	\$ 17,100
Foodservice Equipment	\$ 4,048	\$ 4,600
Generator	\$ 34,400	\$ 86,000
Heat Exchanger	\$ 6,970	\$ 8,200
HVAC System	\$ 425,000	\$ 500,000
HVAC System	\$ 583,333	\$ 625,000
Intercom/PA System	\$ 175,313	\$ 206,250
Interior Door	\$ 93,150	\$ 103,500
Interior Door	\$ 149,310	\$ 165,900
Interior Door	\$ 25,033	\$ 29,450
Interior Door	\$ 10,200	\$ 12,000
Interior Lighting System	\$ 531,250	\$ 625,000
Interior Wall	\$ 4,116	\$ 14,700
Lockers	\$ 53,571	\$ 125,000
Make-Up Air Unit	\$ 30,800	\$ 35,000
Make-Up Air Unit	\$ 44,800	\$ 48,000
Overhead/Dock Door	\$ 4,620	\$ 13,200
Packaged Unit	\$ 19,500	\$ 30,000
Packaged Unit	\$ 35,100	\$ 54,000
Packaged Unit	\$ 5,850	\$ 9,000

System	System Contribution	System Value
Packaged Unit	\$ 3,575	\$ 5,500
Packaged Unit	\$ 13,000	\$ 20,000
Packaged Unit	\$ 6,667	\$ 20,000
Park Bench	\$ 900	\$ 1,000
Parking Lots	\$ 6,762	\$ 19,320
Parking Lots	\$ 383,460	\$ 435,750
Passenger Elevator	\$ 60,667	\$ 70,000
Picnic Table	\$ 9,000	\$ 10,800
Play Structure	\$ 14,000	\$ 20,000
Play Structure	\$ 4,667	\$ 5,000
Play Structure	\$ 6,500	\$ 10,000
Play Structure	\$ -	\$ 6,000
Play Structure	\$ 29,750	\$ 35,000
Playfield Surfaces	\$ 20,907	\$ 22,400
Pole Light Fixture w/ Lamps	\$ 4,760	\$ 8,400
Pole Light Fixture w/ Lamps	\$ 63,467	\$ 68,000
Pump	\$ 27,360	\$ 30,400
Pump	\$ 4,760	\$ 5,100
Radiator	\$ 40,000	\$ 75,000
Retaining Wall	\$ 780	\$ 1,800
Roof Skylight	\$ 2,773	\$ 10,400
Roofing	\$ 188,020	\$ 335,750
Roofing	\$ 25,323	\$ 90,440
Roofing	\$ 216,480	\$ 270,600
Secondary Transformer	\$ 14,933	\$ 16,000
Secondary Transformer	\$ 7,093	\$ 7,600
Secondary Transformer	\$ 2,000	\$ 20,000
Secondary Transformer	\$ 14,187	\$ 15,200
Secondary Transformer	\$ 34,840	\$ 40,200
Security/Surveillance System	\$ 216,667	\$ 250,000
Shed/Gazebo/Shade Structure	\$ 4,667	\$ 8,750
Shed/Gazebo/Shade Structure	\$ 975	\$ 1,875
Sidewalk	\$ 61,200	\$ 76,500
Sidewalk	\$ 39,600	\$ 74,250
Sink/Lavatory	\$ 2,720	\$ 3,200
Sink/Lavatory	\$ 64,680	\$ 73,500
Sink/Lavatory	\$ 60,480	\$ 86,400
Sink/Lavatory	\$ 1,960	\$ 2,100
Sink/Lavatory	\$ 2,890	\$ 3,400
Split System	\$ 3,230	\$ 3,800
Split System	\$ 4,140	\$ 4,600
Sports Apparatus	\$ 2,520	\$ 2,800
Sports Apparatus	\$ 1,950	\$ 3,000

System	System Contribution	System Value
Sports Apparatus	\$ 49,400	\$ 76,000
Sports Apparatus	\$ 2,800	\$ 3,500
Supplemental Components	\$ 5,600	\$ 12,000
Suspended Ceilings	\$ 326,667	\$ 350,000
Switchboard	\$ 58,500	\$ 90,000
Toilet	\$ -	\$ 38,500
Unit Heater	\$ -	\$ 6,800
Unit Heater	\$ -	\$ 3,600
Unit Heater	\$ -	\$ 2,100
Urinal	\$ -	\$ 12,100
Variable Frequency Drive	\$ -	\$ 24,800
Variable Frequency Drive	\$ -	\$ 21,200
Wall Finishes	\$ -	\$ 330,000
Water Heater	\$ -	\$ 4,800
Window	\$ -	\$ 190,950
Wood Pellet Boiler	\$ -	\$ 11,287
Totals	\$ 6,622,371	\$ 9,674,872

FACILITY CONDITION ASSESSMENT

prepared for

Vermont Agency of Education_FCA Phase Two
1 National Life Drive, Davis 5
Montpelier, VT 05620-2501



PREPARED BY:

Bureau Veritas
6021 University Blvd., Suite 200
Ellicott City, MD 21043
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BV PROJECT #:

158982.22R000-022.379

DATE OF REPORT:

September 8, 2023

ON SITE DATE:

August 15, 2023

BARRE TOWN ELEMENTARY (& MIDDLE) SCHOOL - Main Building (PS020-)
70 Websterville Road
Barre VT, 05641

Bureau Veritas

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BARRE TOWN ELEMENTARY (& MIDDLE) SCHOOL - MAIN BUILDING

BUREAU VERITAS PROJECT: 158982.22R000-022.379

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1. Executive Summary

Property Overview and Assessment Details

General Information	
Property Type	School
School ID Number	PS020-
Main Address	70 Websterville Road, Barre VT, 05641
E911 Address Verification	Zip 05641-9029, Standardized, Fixed abbreviations, Matched street and city and state, Confirmed entire address
GPS Location (Verified E911)	Main Building 44.16926, -72.48698
Site Developed	1967 Renovated: 1996
Site Area	20 acres (estimated)
Parking Spaces	211 total spaces all in open lots; 14 of which are accessible. (9 spaces displaying international symbol of access)
Building Square Footage	155,000 (Verified)
Number of Stories	2 above grade
Supervisory Union/ District	Barre Unified Union SD
Date(s) of Visit	August 15, 2023

Note: (Verified) in Square Foot signifies that the square footage of the facility has been verified to be accurate.



Significant/Systemic Findings and Deficiencies

Historical Summary

Barre Town Elementary & Middle school was constructed in 1967 & is one of two PreK-8 schools serving the Barre Unified Union School District. The school was originally constructed as a two-story schoolhouse with an open floor plan. Since its opening the school has undergone one major renovation & two building additions (1971 & 1996) which added individual classrooms, gymnasiums, & a cafeteria/kitchen. Barre Town Elementary & Middle School continues to operate as a Pre-K - 8 school, currently enrolling over 800 students.

Architectural

The building envelope of the school appears to be in an overall good condition. Roofing membranes are replaced periodically & no associated leaks have been reported. Vinyl windows do not appear to be compromised. A significant portion of the school's interior flooring is carpeting, roughly one third of which requires replacement. The ACT ceiling grid also appears to be showing signs of aging in select areas and should be monitored for replacement by facilities management over the next decade. The kitchen interiors need renovation as its tile flooring and ceiling grid have reached the end of their useful lifecycle as indicated by wear and age. Four of the eight restrooms have been recently renovated. All other building interiors appeared to be in good condition and are regularly maintained.

Mechanical, Electrical, Plumbing and Fire (MEPF)

Barre Town Elementary School was originally constructed with an all-electric heating, cooling, and hot water system. Due to rising utility costs in the 1990's, Barre chose to fully replace its electrical system in favor of a wood chip boiler powered hydronic system. At the time this was an innovative technology in the United States. In 1996 one primary wood chip boiler was installed along with two secondary fuel oil boilers which have since been converted to utilize wood chips as well. The two secondary cast iron boilers are used to provide heated domestic water as they hydronically power three water heaters: heating the domestic water using a heat exchange plate. A pairing of rooftop units and air handlers are used as a cooling system which was last updated during 1996. As the efficiency of both heating and cooling systems decreases over time it is recommended that this system be upgraded with new components (boilers, air handlers, RTUs) that take advantage of the technological advances of the past three decades. Most Barre's electrical system dates to the late 60's and early 70's. As such a complete update of the electrical system is recommended for the entire school building. Barre Town Elementary & Middle School has a sprinkler system that covers the entire facility. The fire alarm and suppression system appear to be up to date and is annually inspected.

Site

Barre Town Elementary Schools site is in an overall good condition. The site consists of parking lots, lawns, fields, playgrounds, & asphalt play surfaces. Adjacent to the site are & separated by fencing are residential areas & the Barre Town Recreation Park. All swing-sets on site are due for replacements as many of the chains have become rusted and others have broken.

Recommended Additional Studies

Only minor issues have been identified at this property.



Facility Condition Index (FCI)

One of the major goals of the FCA is to calculate each building's Facility Condition Index (FCI), which provides a theoretical objective indication of a building's overall condition. By definition, the FCI is defined as the ratio of the cost of current needs divided by current replacement value (CRV) of the facility. The chart below presents the industry standard ranges and cut-off points.

FCI Ranges and Descriptions	
0 – 5%	In new or well-maintained condition, with little or no visual evidence of wear or deficiencies.
5 – 10%	Subjected to wear but is still in a serviceable and functioning condition.
10 – 30%	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.
30% and above	Has reached the end of its useful or serviceable life. Renewal is now necessary.

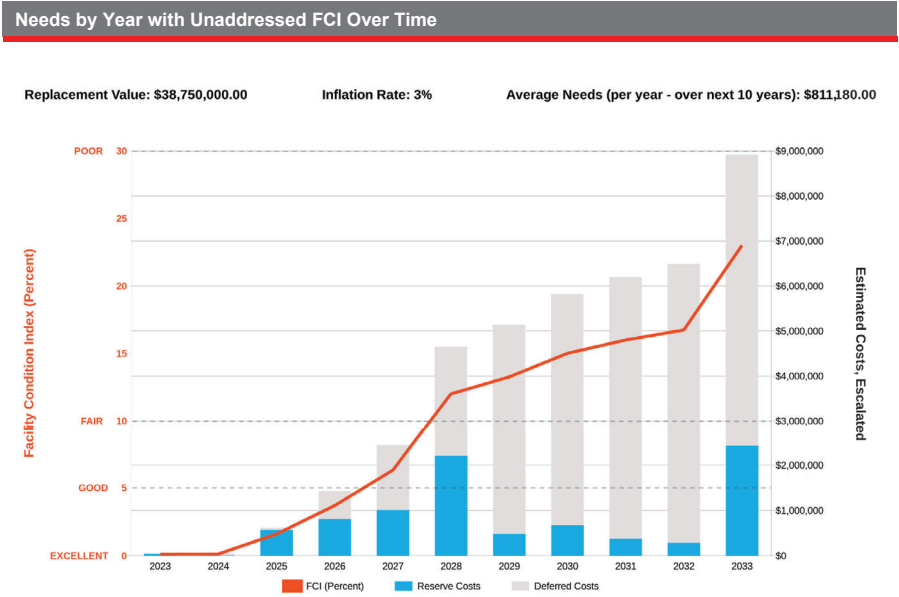
The deficiencies and lifecycle needs identified in this assessment provide the basis for a portfolio-wide capital improvement funding strategy. In addition to the current FCI, extended FCI's have been developed to provide owners the intelligence needed to plan and budget for the "keep-up costs" for their facilities. As such the 3-year, 5-year, and 10-year FCI's are calculated by dividing the anticipated needs of those respective time periods by current replacement value. As a final point, the FCI's ultimately provide more value when used to relatively compare facilities across a portfolio instead of being over-analyzed and scrutinized as stand-alone values. The table below summarizes the individual findings for this FCA:

FCI Analysis			
Replacement Value	Total SF	Cost/SF	
\$38,750,000	155,000	\$250	
Current FCI		\$47,700	0.1%
3-Year		\$1,436,200	3.7%
5-Year		\$4,656,500	12.0%
10-Year		\$8,923,000	23.0%



Facility Level FCI:

The orange line in the graph below forecasts what would happen to the FCI (left Y axis) over time, assuming zero capital expenditures. The capital expenditures allocated for each year (blue bars) are associated with the dollar amounts along the right Y axis. If the school expends the average amount per year to maintain and replace systems, they will not incur the capital debt represented by the gray bars.



Needs by Year with Unaddressed FCI Over Time (Table)

The above graph is a visual representation of the information contained in the table below.

Year	Reserve	Reserve Escalation	Recurrence	Recurrence Escalation	Total Escalation	Deferred	FCI
2023	47,670	0	0	0	0	47,670	0
2024	5,000	150	0	0	150	52,820	0
2025	538,400	32,789	0	0	32,789	624,009	0.02
2026	743,200	68,915	0	0	68,915	1,436,124	0.04
2027	899,322	112,873	0	0	112,873	2,448,319	0.06
2028	1,902,730	303,056	2,070	330	303,386	4,654,105	0.12
2029	388,250	75,341	20,000	3,881	79,222	5,117,696	0.13
2030	551,160	126,697	0	0	126,697	5,795,553	0.15
2031	301,800	80,511	0	0	80,511	6,177,864	0.16
2032	170,900	52,086	50,600	15,422	67,508	6,400,850	0.17
2033	1,796,504	617,847	11,570	3,979	621,826	8,815,201	0.23
2034	32,590	12,522	0	0	12,522	8,860,313	0.23
2035	39,250	16,711	200,000	85,152	101,863	8,916,274	0.23
2036	53,300	24,973	2,200	1,031	26,004	8,994,547	0.23
2037	1,757,600	900,928	40,100	20,555	921,483	11,653,075	0.3
2038	355,200	198,190	199,020	111,047	309,237	12,206,465	0.32
2039	253,000	152,991	348,750	210,891	363,882	12,612,456	0.33
2040	1,334,500	871,225	55,200	36,037	907,262	14,818,181	0.38
2041	84,600	59,426	338,300	237,633	297,059	14,962,207	0.39
2042	0	0	42,100	31,723	31,723	14,962,207	0.39



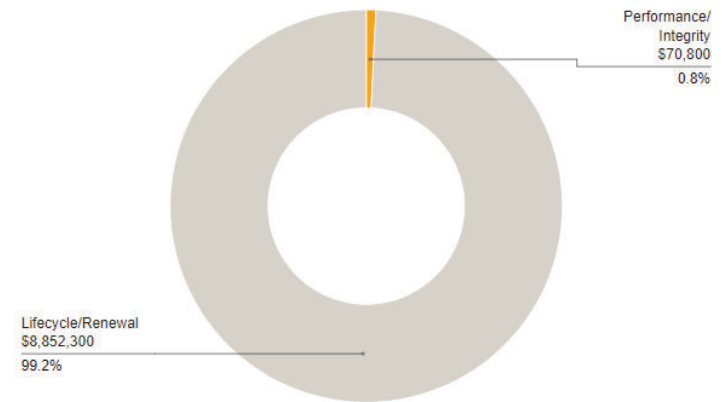
Plan Types

Each line item in the cost database is assigned a Plan Type, which is the primary reason or rationale for the recommended replacement, repair, or other corrective action. This is the "why" part of the equation. A cost or line item may commonly have more than one applicable Plan Type; however, only one Plan Type will be assigned based on the "best" fit, typically the one with the greatest significance. Each of the Key Findings identified below are assigned a Plan Type.

Plan Type Descriptions

Safety	■	An observed or reported unsafe condition that if left unaddressed could result in injury; a system or component that presents potential liability risk.
Performance/Integrity	■	Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses risk to overall system stability.
Accessibility	■	Does not meet ADA, UFAS, Safety and/or other handicap accessibility requirements.
Environmental	■	Improvements to air or water quality, including removal of hazardous materials from the building or site.
Retrofit/Adaptation	■	Components, systems, or spaces recommended for upgrades in in order to meet current standards, facility usage, or client/occupant needs.
Lifecycle/Renewal	■	Any component or system that is not currently deficient or problematic but for which future replacement or repair is anticipated and budgeted.

Plan Type Distribution (by Cost)



10-YEAR TOTAL: \$8,923,100



Immediate Needs

ID	Location Description	UF Code	Description	Condition	Plan Type	Cost
6893346	Stairwells	C2030	Flooring, Vinyl Tile (VCT), w/ Asbestos Abatement, Replace	Poor	Performance/Integrity	\$8,000
6893395	Tech Shop	D3030	Unit Ventilator, approx./nominal 2 Ton, 300 to 750 CFM, Replace	Failed	Performance/Integrity	\$7,400
6893411	Kitchen	E1030	Foodservice Equipment, Refrigerator, Undercounter 2-Door, Replace	Failed	Performance/Integrity	\$1,700
6893337	Kitchen	E1030	Foodservice Equipment, Convection Oven, Double, Replace	Poor	Performance/Integrity	\$9,500
6902024	Site	G2050	Sports Apparatus, Basketball, Backboard/Rim/Pole, Replace	Failed	Performance/Integrity	\$19,000
6902103	Site	G2050	Athletic Surfaces & Courts, Basketball/General, Asphalt Pavement, Seal & Stripe	Failed	Performance/Integrity	\$2,100
Total						\$47,700



Key Findings



Athletic Surfaces & Courts in Failed condition.

Basketball/General, Asphalt Pavement
BARRE TOWN ELEMENTARY & MIDDLE SCHOOL Site

Uniformat Code: G2050
Recommendation: **Seal & Stripe in 2023**
Priority Score: **82.9**
Plan Type: Performance/Integrity
Cost Estimate: \$2,100
\$\$\$\$

Currently no striping on surface - AssetCALC ID: 6902103



Sports Apparatus in Failed condition.

Basketball, Backboard/Rim/Pole
BARRE TOWN ELEMENTARY & MIDDLE SCHOOL Site

Uniformat Code: G2050
Recommendation: **Replace in 2023**
Priority Score: **82.9**
Plan Type: Performance/Integrity
Cost Estimate: \$19,000
\$\$\$\$

Rim & netting missing. Repair/replace - AssetCALC ID: 6902024





Play Structure in Poor condition.

Swing Set, 4 Seats
BARRE TOWN ELEMENTARY & MIDDLE SCHOOL Site

Uniformat Code: G2050
Recommendation: **Replace in 2024**
Priority Score: **82.8**
Plan Type: Performance/Integrity
Cost Estimate: \$5,000

\$\$\$

Rusting chains, missing seats - AssetCALC ID: 6893358



Unit Ventilator in Failed condition.

Approx/Nominal 2 Ton, 300 to 750 CFM
BARRE TOWN ELEMENTARY & MIDDLE SCHOOL Tech Shop

Uniformat Code: D3030
Recommendation: **Replace in 2023**
Priority Score: **81.9**
Plan Type: Performance/Integrity
Cost Estimate: \$7,400

\$\$\$

Item is no longer functioning. Air grilles have been sealed by maintenance. - AssetCALC ID: 6893395



Foodservice Equipment in Failed condition.

Refrigerator, Undercounter 2-Door
BARRE TOWN ELEMENTARY & MIDDLE SCHOOL Kitchen

Uniformat Code: E1030
Recommendation: **Replace in 2023**
Priority Score: **81.9**
Plan Type: Performance/Integrity
Cost Estimate: \$1,700

\$\$\$

No longer works, does not cool, condenser broken. Used as storage. - AssetCALC ID: 6893411



Flooring in Poor condition.

Vinyl Tile (VCT), w/ Asbestos Abatement
BARRE TOWN ELEMENTARY & MIDDLE SCHOOL Stairwells

Uniformat Code: C2030
Recommendation: **Replace in 2023**
Priority Score: **81.9**
Plan Type: Performance/Integrity
Cost Estimate: \$8,000

\$\$\$

9x9 tile Likely original to building. Evaluate for asbestos. - AssetCALC ID: 6893346



Foodservice Equipment in Poor condition.

Convection Oven, Double
BARRE TOWN ELEMENTARY & MIDDLE SCHOOL Kitchen

Uniformat Code: E1030
Recommendation: **Replace in 2023**
Priority Score: **81.9**
Plan Type: Performance/Integrity
Cost Estimate: \$9,500

\$\$\$\$

1 of 2 ovens is out of order, service/repair Zephair - AssetCALC ID: 6893337

2. Building and Site Information



System Summary

System	Description	Condition
Structure	Steel frame with concrete-topped metal decks over concrete pad column footings. Metal roof decking supported by metal joists.	Fair
Facade	Primary Wall Finish: Stone veneer Secondary Wall Finish: Brick Windows: Vinyl	Fair
Roof	Primary: Flat construction with single-ply TPO/PVC membrane Secondary: Flat construction with single-ply EPDM membrane	Good
Interiors	Walls: Painted gypsum board, painted CMU, Ceramic tile Floors: Carpet, VCT, ceramic tile, sealed concrete Ceilings: ACT	Fair
Elevators	Passenger: 1 hydraulic car serving all 2 floors	Fair
Plumbing	Distribution: Copper supply and PCV & cast-iron waste & venting Hot Water: Wood chip domestic boilers with storage tanks Fixtures: Toilets, urinals, and sinks in all restrooms	Good
HVAC	Central System: Boilers, RTUs, air handlers feeding VAV, fan coil, hydronic baseboard radiators, and cabinet terminal units. Non-Central System: Furnaces with split-system condensing units.	Fair
Safety and Security	Cameras, card readers, perimeter intrusion detection, security windows and doors, fencing, lighting, traffic gates. Multiple points of auto locking doors, main entry monitored, auto locking doors, internal locking on classroom doors, complete intercom system	Fair
Fire Suppression	Wet-pipe sprinkler system and fire extinguishers, and kitchen hood system	Fair

Electrical	Source & Distribution: Main panel with copper wiring Fed from on-site Transformer with copper wiring Interior Lighting: LED, linear fluorescent, CFL Emergency Power: Diesel generator with automatic transfer switch and UPS	Fair
Fire Alarm	Alarm panel with smoke detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs.	Good
Equipment/Special	Commercial kitchen equipment	Fair
Site Pavement	Asphalt is lost with adjacent concrete sidewalks, curbs, ramps, and stairs.	Fair
Site Development	Property entrance signage. chain link fencing. Playgrounds and sports fields and courts with fencing Limited park benches, picnic tables, trash receptacles	Fair
Landscaping & Topography	Significant landscaping features including lawns, trees, and planters. Irrigation not present Low to moderate site slopes throughout along southeast boundary	Good
Utilities	Municipal water and sewer Local utility-provided electric & wood chips	Good
Site Lighting	Pole-mounted: LED Building-mounted: None	Fair
Ancillary Structures	Maintenance garage	Good
Accessibility	Only minor issues have been identified at this property	
Key Issues and Findings	Antiquated HVAC components and infrastructure, aged electrical infrastructure.	



3. Supplemental Evaluations

Square Foot Verification

We have reviewed the square footage of 155,000 square feet and it is in the range of square foot calculations as reported by the school district. This confirmation of the square footage of the facility is based on the exterior wall dimensions and number of stories measured from Google Earth and other publicly available internet searches. This measurement may not reflect the actual heated square footage but provides a general size of the heated square feet of the overall building.

PCB Air Indoor Testing

At the time of the onsite evaluation of this facility PCB air testing has not been conducted. Further ongoing information can be found on the Agency of Natural Resources PCB in Schools website [Agency of Natural Resources PCB in Schools](#).

School Educational Capacity and Programming Space

As part of the FCA report, school administrative staff were asked to conduct a self-assessment of whether their school building meets their space, operational needs and if they have sufficient building capacity and appropriate spaces to deliver educational programming. The school responses to the survey are reported in Appendix D. The respondents indicated that the following areas were inadequate to meet current needs:

A space needs self-assessment was conducted by the school administrative staff which identified space constraints in the following areas:

- Adequate number of classrooms.
- Adequate overall building space.
- Confidential space to maintain FERPA, HIPPA or IEP requirements.
- Administrative offices and/or office space for staff.
- Cafeteria, kitchen and/or gymnasium space.



The Depleted Value Facility Condition Index (FCI) is an estimate of a building's overall amount of consumed system life. The Depleted Value FCI ratings scale indicates the estimated condition of the system. Generally, the higher the Depleted Value FCI, the greater the need to repair or replace a system. Note that the FCI can also be calculated for system groups, building types and other aggregations. The estimated percentage of collective system life left in a building, also referred to as Remaining Useful Life (RUL). The higher the RUL, the newer the system. The sum of Depleted Value FCI and RUL will equal 100%.

Depleted Value Index	
Index Value	58.2%

System Expenditure Forecast						
System	Immediate	Short Term (1-2 yr)	Near Term (3-5 yr)	Med Term (6-10 yr)	Long Term (11-20 yr)	TOTAL
Structure	-	-	-	\$29,851	-	\$29,851
Facade	-	-	\$44,618	\$7,164	\$185,703	\$237,485
Roofing	-	-	\$19,475	-	\$2,192,017	\$2,211,492
Interiors	\$8,000	\$190,962	\$255,080	\$2,022,701	\$1,707,996	\$4,184,739
Conveying	-	-	\$69,223	\$12,095	-	\$81,318
Plumbing	-	-	\$39,854	\$19,801	\$2,738,971	\$2,798,626
HVAC	\$7,400	\$350,940	\$1,003,365	\$1,172,736	\$983,373	\$3,517,814
Fire Protection	-	-	\$186,665	-	-	\$186,665
Electrical	-	\$29,280	\$1,777,013	-	-	\$1,806,293
Fire Alarm & Electronic Systems	-	-	\$539,062	\$18,448	-	\$557,510
Equipment & Furnishings	\$11,200	-	\$28,190	\$743,170	\$338,778	\$1,121,338
Site Development	\$21,070	\$5,150	\$35,476	\$134,381	\$153,239	\$349,316
Site Utilities	-	-	-	\$32,253	\$7,048	\$39,301
Site Pavement	-	-	\$34,440	\$73,927	\$481,862	\$590,229
TOTALS	\$47,670	\$576,332	\$4,032,461	\$4,266,527	\$8,788,987	\$17,711,977



4. Property Space Use and Observed Areas

Areas Observed

The interior spaces were observed to gain a clear understanding of the property's overall condition. Other areas accessed included the site within the property boundaries, the exterior of the property and the roofs.

Key Spaces Not Observed

All key areas of the property were accessible and observed.



5. ADA Accessibility

Generally, Title II of the Americans with Disabilities Act (ADA) prohibits discrimination by entities to access and use of "areas of public accommodations" and "public facilities" on the basis of disability. Regardless of their age, these areas and facilities must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

A public entity (i.e., city governments) shall operate each service, program, or activity so that the service, program, or activity, when viewed in its entirety, is readily accessible to and usable by individuals with disabilities.

However, this does not:

1. Necessarily requires a public entity to make each of its existing facilities accessible to and usable by individuals with disabilities.
2. Require a public entity to take any action that would threaten or destroy the historic significance of an historic property; or
3. Require a public entity to take any action that it can demonstrate would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. In those circumstances where personnel of the public entity believe that the proposed action would fundamentally alter the service, program, or activity or would result in undue financial and administrative burdens, a public entity has the burden of proving that compliance with 35.150(a) of this part would result in such alteration or burdens. The decision that compliance would result in such alteration or burdens must be made by the head of a public entity or his or her designee after considering all resources available for use in the funding and operation of the service, program, or activity, and must be accompanied by a written statement of the reasons for reaching that conclusion. If an action would result in such an alteration or such burdens, a public entity shall take any other action that would not result in such an alteration or such burdens but would nevertheless ensure that individuals with disabilities receive the benefits or services provided by the public entity.

Removal of barriers to accessibility should be addressed from a liability standpoint in order to comply with federal law, but the barriers may or may not be building code violations. The Americans with Disabilities Act Accessibility Guidelines are part of the ADA federal civil rights law pertaining to the disabled and are not a construction code. State and local jurisdictions have adopted the ADA Guidelines or have adopted other standards for accessibility as part of their construction codes.

During the FCA, Bureau Veritas performed a limited high-level accessibility review of the facility non-specific to any local regulations or codes. The scope of the visual observation was limited to the same areas observed while performing the FCA and the categories set forth in the appendix. It is understood by the Client that the limited observations described herein do not comprise a full ADA Compliance Survey, and that such a survey is beyond the scope of this particular assessment. A full measured ADA survey would be required to identify any and all specific potential accessibility issues. Additional clarifications of this limited survey:

- This survey was visual in nature and actual measurements were not taken to verify compliance.
- Only a representative sample of areas was observed.
- Two overview photos were taken for each subsection regardless of perceived compliance or non-compliance.
- Itemized costs for individual non-compliant items are not included in the dataset.
- For any "none" boxes checked or reference to "no issues" identified, that alone does not guarantee full compliance.

The facility was originally constructed in 1956. The facility was renovated in 1994 and has widespread accessibility. No information about complaints or pending litigation associated with potential accessibility issues was provided during the interview process.

A detailed follow-up accessibility study is included as a recommendation based on the potential that specific ADA violations, not in this scope of services, may exist. Reference the appendix for specific data, photos, and tables or checklists associated with this limited accessibility survey.



6. Purpose and Scope

Purpose

Bureau Veritas was retained by the client to render an opinion as to the Property's current general physical condition on the day of the site visit.

Based on the observations, interviews and document review outlined below, this report identifies significant deferred maintenance issues, existing deficiencies, and material code violations of record, which affect the Property's use. Opinions are rendered as to its structural integrity, building system condition and the Property's overall condition. The report also notes building systems or components that have realized or exceeded their typical expected useful lives. The physical condition of building systems and related components are typically defined as being in one of five condition ratings. For the purposes of this report, the following definitions are used:

Condition Ratings

Excellent	New or very close to new; component or system typically has been installed within the past year, sound and performing its function. Eventual repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Good	Satisfactory as-is. Component or system is sound and performing its function, typically within the first third of its lifecycle. However, it may show minor signs of normal wear and tear. Repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Fair	Showing signs of wear and use but still satisfactory as-is, typically near the median of its estimated useful life. Component or system is performing adequately at this time but may exhibit some signs of wear, deferred maintenance, or evidence of previous repairs. Repair or replacement will be required due to the component or system's condition and/or its estimated remaining useful life.
Poor	Component or system is significantly aged, flawed, functioning intermittently or unreliably; displays obvious signs of deferred maintenance; shows evidence of previous repair or workmanship not in compliance with commonly accepted standards; has become obsolete; or exhibits an inherent deficiency. The present condition could contribute to or cause the deterioration of contiguous elements or systems. Either full component replacement is needed, or repairs are required to restore to good condition, prevent premature failure, and/or prolong useful life.
Failed	Component or system has ceased functioning or performing as intended. Replacement, repair, or other significant corrective action is recommended or required.
Not Applicable	Assigning a condition does not apply or make logical sense, most commonly due to the item in question not being present.



Scope

The standard scope of the Facility Condition Assessment includes the following:

- Visit the Property to evaluate the general condition of the building and site improvements, review available construction documents to familiarize ourselves with, and be able to comment on, the in-place construction systems, life safety, mechanical, electrical, and plumbing systems, and the general-built environment.
- Identify those components that are exhibiting deferred maintenance issues and provide cost estimates for Immediate Costs and Replacement Reserves based on observed conditions, maintenance history and industry standard useful life estimates. This will include the review of documented capital improvements completed within the last five-year period and work currently contracted for, if applicable.
- Provide a full description of the Property with descriptions of in-place systems and commentary on observed conditions.
- Provide a high-level categorical general statement regarding the subject Property's compliance to Title III of the Americans with Disabilities Act. This will not constitute a full ADA survey but will help identify exposure to issues and the need for further review.
- Obtain background and historical information about the facility from a building engineer, property manager, maintenance staff, or other knowledgeable source. The preferred methodology is to have the client representative or building occupant complete a Pre-Survey Questionnaire (PSQ) in advance of the site visit. Common alternatives include a verbal interview just prior to or during the walk-through portion of the assessment.
- Review maintenance records and procedures with the in-place maintenance personnel.
- Observe a representative sample of the interior spaces/units, including vacant spaces/units, to gain a clear understanding of the property's overall condition. Other areas to be observed include the exterior of the property, the roofs, interior common areas, and the significant mechanical, electrical and elevator equipment rooms.
- Provide recommendations for additional studies, if required, with related budgetary information.
- Provide an Executive Summary at the beginning of this report, which highlights key findings and includes a Facility Condition Index as a basis for comparing the relative conditions of the buildings within the portfolio.



7. Opinions of Probable Costs

Cost estimates are attached throughout this report, with the Replacement Reserves in the appendix.

These estimates are based on Invoice or Bid Document/s provided either by the Owner/facility and construction costs developed by construction resources such as *R.S. Means*, *CBRE Whitestone*, and *Marshall & Swift*, Bureau Veritas's experience with past costs for similar properties, city cost indexes, and assumptions regarding future economic conditions.

Opinions of probable costs should only be construed as preliminary, order of magnitude budgets. Actual costs most probably will vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing or bundling of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, use of subcontractors, and whether competitive pricing is solicited, etc. Certain opinions of probable costs cannot be developed within the scope of this guide without further study. Opinions of probable cost for further study should be included in the FCA.

Methodology

Based upon site observations, research, and judgment, along with referencing Expected Useful Life (EUL) tables from various industry sources, Bureau Veritas opines as to when a system or component will most probably necessitate replacement. Accurate historical replacement records, if provided, are typically the best source of information. Exposure to the elements, initial quality and installation, extent of use, the quality and amount of preventive maintenance exercised, etc., are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual chronological age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its *effective age*, whether explicitly or implicitly stated. Projections of Remaining Useful Life (RUL) are based primarily on age and condition with the presumption of continued use and maintenance of the Property like the observed and reported past use and maintenance practices, in conjunction with the professional judgment of Bureau Veritas's assessors. Significant changes in occupants and/or usage may affect the service life of some systems or components.

Where quantities could not be or were not derived from an actual construction document take-off or facility walk-through, and/or where systemic costs are more applicable or provide more intrinsic value, budgetary square foot and gross square foot costs are used. Estimated costs are based on professional judgment and the probable or actual extent of the observed defect, inclusive of the cost to design, procure, construct, and manage the corrections.

Definitions

Immediate Needs

Immediate Needs are line items that require immediate action as a result of: (1) material existing or potential unsafe conditions, (2) failed or imminent failure of mission critical building systems or components, or (3) conditions that, if not addressed, have the potential to result in, or contribute to, critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost.

For database and reporting purposes the line items with RUL=0, and commonly associated with *Safety* or *Performance/Integrity* Plan Types, are considered Immediate Needs.



Replacement Reserves

Cost line items traditionally called Replacement Reserves (equivalently referred to as Lifecycle/Renewals) are for recurring probable renewals or expenditures, which are not classified as operation or maintenance expenses. The replacement reserves should be budgeted for in advance on an annual basis. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, Replacement Reserves may also include components or systems that have an indeterminable life but, nonetheless, have a potential for failure within an estimated time period.

Replacement Reserves generally exclude systems or components that are estimated to expire after the reserve term and are not considered material to the structural and mechanical integrity of the subject property. Furthermore, systems and components that are not deemed to have a material effect on the use of the Property are also excluded. Costs that are caused by acts of God, accidents, or other occurrences that are typically covered by insurance, rather than reserved for, are also excluded.

Replacement costs are solicited from ownership/property management, Bureau Veritas's discussions with service companies, manufacturers' representatives, and previous experience in preparing such schedules for other similar facilities. Costs for work performed by the ownership's or property management's maintenance staff are also considered.

Bureau Veritas's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the assessment period. The assessment period is defined as the effective age plus the reserve term. Additional information concerning systems or component's respective replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Replacement Reserves Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined as Immediate Needs.

For the purposes of 'bucketizing' the System Expenditure Forecasts in this report, the Replacement Reserves have been subdivided and grouped as follows: Short Term (years 1-3), Near Term (years 4-5), Medium Term (years 6-10), and Long Term (years 11-20).

Key Findings

In an effort to highlight the most significant cost items and not be overwhelmed by the Replacement Reserves report in its totality, a subsection of Key Findings is included within the Executive Summary section of this report. Key Findings typically include repairs or replacements of deficient items within the first five-year window, as well as the most significant high-dollar line items that fall anywhere within the ten-year term. Note that while there is some subjectivity associated with identifying the Key Findings, the Immediate Needs are always included as a subset.

Exceedingly Aged

A common scenario encountered during the assessment process, and a frequent source of debate, occurs when classifying and describing "very old" systems or components that are still functioning adequately and do not appear nor were reported to be in any way deficient. To help provide some additional intelligence on these items, such components will be tagged in the database as Exceedingly Aged. This designation will be reserved for mechanical or electrical systems or components that have aged well beyond their industry standard lifecycles, typically at least 15 years beyond and/or twice their Estimated Useful Life (EUL). In tandem with this designation, these items will be assigned a Remaining Useful Life (RUL) not less than two years but not greater than 1/3 of their standard EUL. As such the recommended replacement time for these components will reside outside the typical Short-Term window but will not be pushed 'irresponsibly' (too far) into the future.



8. STEM/STEAM Assessment

STEM and STEAM education is an integrated curriculum that is driven by exploratory project-based learning and student-centered development of ideas and solutions. BV has evaluated the facility for the existence of spaces and systems to provide STEM/STEAM education based on input from the point of contact for the school. The below table identifies the required standards and to what degree the requirements have been met for the facility.

STEM/STEAM Evaluations

Property Name	STEM/STEAM Suitability Score	Project Number	School Type	Square Footage
Barre Town Elementary & Middle School - Main Building	79%	158982.22R000-022.379	High	155,000

Suitability Classification	Scale
Compares Poorly	Score 0 - 25
Compares Marginally	Score 25-50
Compares Fairly	Score 50-75
Compares Well	Score 75 - 100

Score Value	Score Impact
1- Meets	100%
2- Partial	50%
3- Missing	0%

Details of the STEM/STEAM evaluation are included in the appendix of this report. Reference this appendix for specific data associated with this limited survey.



9. Energy Audit

The purpose of this Energy Audit is to provide Barre Town Elementary & Middle School with a baseline of energy usage, the relative energy efficiency of the facility, and specific recommendations for Energy Conservation Measures. Information obtained from these analyses may be used to support a future application to an Energy Conservation Program, Federal and Utility grants towards energy conservation, as well as support performance contracting, justify a municipal bond-funded improvement program, or as a basis for replacement of equipment or systems.

The energy audit consisted of an on-site visual assessment to determine current conditions, itemize the energy consuming equipment (i.e. Boilers, Make-Up Air Units, DWH equipment); review lighting systems both exterior and interior; and review efficiency of all such equipment. The study also included interviews and consultation with operational and maintenance personnel. The following is a summary of the tasks and reporting that make up the Energy Audit portion of the report.

The following is a summary of the tasks and reporting that make up the Energy Audit portion of the report.

Energy and Water Using Equipment

- Bureau Veritas has surveyed the common areas, offices, maintenance facilities and mechanical rooms to document utility-related equipment, including heating systems, cooling systems, air handling systems and lighting systems.

Building Envelope

- Bureau Veritas has reviewed the characteristics and conditions of the building envelope, checking insulation values and conditions. This review also includes an inspection of the condition of walls, windows, doors, roof areas, insulation and special use areas.

Recommendations for Energy Savings Opportunities

- Based on the information gathered during the on-site assessment, the utility rates, as well as recent consumption data and engineering analysis, Bureau Veritas has identified opportunities to save energy and provide probable construction costs, projected energy/utility savings and provide a simple payback analysis.

Analysis of Energy Consumption

- Based on the information gathered during the on-site assessment, Bureau Veritas has conducted an analysis of the energy usage of all equipment, and identified which equipment is using the most energy and what equipment upgrades may be necessary. As a result, equipment upgrades, or replacements are identified that may provide a reasonable return on the investment and improve maintenance reliability.

Energy Audit Process

- Interviewing staff and review plans and past upgrades
- Performing an energy audit for each use type
- Performing a preliminary evaluation of the utility system
- Analyzing findings, utilizing ECM cost-benefit worksheets
- Making preliminary recommendations for system energy improvements and measures
- Estimating initial cost and changes in operating and maintenance costs based on implementation of energy efficiency measures.
- Ranking recommended cost measures, based on the criticality of the project and the largest payback.



10. Historical Energy and Water Performance Metrics

Utility Data Tabulation Methodology

Establishing the energy baseline begins with an analysis of the utility cost and consumption of the facility. Utilizing the historical energy data and local weather information, we evaluate the existing utility consumption and assign it to the various end-uses throughout the buildings. The Historical Data Analysis breaks down utilities by consumption, cost and annual profile.

This data is analyzed using standard engineering assumptions and practices. The analysis serves the following functions:

- Allows our engineers to benchmark the energy and water consumption of the facilities against consumption of efficient buildings of similar construction, use and occupancy.
- Generates the historical and current unit costs for energy and water.
- Provides an indication of how well changes in energy consumption correlate to changes in weather.
- Reveals potential opportunities for energy consumption and/or cost reduction. For example, the analysis may indicate that there is excessive, simultaneous heating and cooling, which may mean that there is an opportunity to improve the control of the heating and cooling systems.

By performing this analysis and leveraging our experience, our engineers prioritize buildings and pinpoint systems for additional investigation during the site visit, thereby maximizing the benefit of their time spent on-site and minimizing time and effort by the customer's personnel.

No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used average utility costs from other VT Agency of Education properties to approximate the utility costs for this property. Bureau Veritas will update the report on receipt of the actual data from the client.

Utilities Metering at a Glance

Number of electric meters observed	One
Number of gas meters observed	None
Number of central steam meters observed	None
Number of domestic water meters observed	One

Average Utility Rates

Electricity	Wood Chips	Propane	No. 2 Oil	Water & Sewer
Average Rate	Average Rate	Average Rate	Average Rate	Blended Rate
\$0.18 / kWh (est.)	\$0.10 / lb (est.)	\$1.96 / Gal (est.)	\$2.78 / Gal (est.)	\$16.11 / kGal (est.)



Electricity

Green Mountain Power provides electrical service to the facility.

The consumption pattern likely varies seasonally. Any seasonal variation in consumption is primarily attributed to periods when school is out of session.

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the electric rate from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.



Wood Chips/Pellets

The Town of Barre locally provides wood chips to the facility. The deliveries are made on an as-needed basis.

The primary use of wood chips is for space heating. Any seasonal variation in consumption is primarily attributed to the heating loads.

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the utility rates from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.



Propane or Fuel Oil

The propane and fuel oil suppliers to the facility were not provided. The deliveries are made on an as-needed basis. The primary use of propane is for cooking. The primary use of fuel oil is for space heating, domestic water heating, and emergency power (generator). Any seasonal variation in consumption is primarily attributed to the heating loads, while the static base load primarily consists of domestic water heating and cooking.

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the utility rates from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.



Water and Sewer

The municipality satisfies the water and sewer requirements of the facility.
The water consumption pattern most likely remains flat over the 10-month period that school is in session.

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the utility rate from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.



11. Energy Conservation Measures

Bureau Veritas has conducted an Energy Audit on Barre Town Elementary & Middle School. The study included a review of the building’s construction features, historical energy and water consumption and costs, review of the building envelope, HVAC equipment, heat distribution systems, lighting, and the building’s operational and maintenance practices.

Bureau Veritas has evaluated two Energy Conservation Measures (ECMs) for this property. The savings for each measure are calculated using standard engineering methods followed in the industry, and detailed calculations for ECM are provided in Appendix H for reference. A 10% discount in energy savings was applied to account for the interactive effects amongst the ECMs. In addition to the consideration of the interactive effects, Bureau Veritas has applied a 15% contingency to the implementation costs to account for potential cost overruns during the implementation of the ECMs.

The following table summarizes the recommended ECMs in terms of description, investment cost, energy consumption reduction, and cost savings.

Recommended Non- Renewable Energy Conservation Measures: Financial Impact	
Total Projected Initial ECM Investment	\$32,654
Estimated Annual Cost Savings Related to ECMs	\$3,124
Net Effective ECM Payback	10.5 Years

Key Metrics to Benchmark the Subject Property’s Energy Usage Profile

- Building Site Energy Use Intensity - The sum of the total site energy use in thousands of Btu per unit of gross building area. Site energy accounts for all energy consumed at the building location only not the energy consumed during generation and transmission of the energy to the site.
- Building Source Energy Use Intensity – The sum of the total source energy use in thousands of Btu per unit of gross building area. Source energy is the energy consumed during generation and transmission in supplying the energy to your site.
- Building Cost Intensity - This metric is the sum of all energy use costs in dollars per unit of gross building area.
- Greenhouse Gas Emissions - Although there are numerous gases that are classified as contributors to the total for Greenhouse Emissions, the scope of this energy audit focuses on carbon dioxide (CO₂). Carbon dioxide enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and also as a result of other chemical reactions (e.g., manufacture of cement).



Energy Conservation Measures Screening:

Bureau Veritas screens ECMs using the financial methodology below. ECMs which are considered financially viable must meet the criteria.

Simple Payback Period –The number of years required for the cumulative value of energy or water cost savings less future non-fuel or non-water costs to equal the investment costs of the building energy or water system, without consideration of discount rates. ECMs with a payback period greater than the Expected Useful Life (EUL) of the project are not typically recommended, as the cost of the project will not be recovered during the lifespan of the equipment. These ECMs are recommended for implementation during future system replacement. At that time, replacement may be evaluated based on the premium cost of installing energy efficient equipment.



Energy Conservation Measures													
Description of ECM	Location	Net Projected Initial Investment (\$)	Estimated Annual Savings Propane (gal)	Estimated Annual Savings Oil (gal)	Estimated Annual Savings Electricity (kWh)	Estimated Annual Savings Water (gal)	Estimated Total Energy Savings (MMBtu)	Total Greenhouse Gas Savings (MCO ₂ /yr.)	Estimated Utility Costs Savings (\$)	Estimated Annual O&M Savings (\$)	Total Estimated Annual Cost Savings (\$)	Simple Payback (yrs)	Life Cycle Savings (\$)
Expected Useful Life (yrs)													
1	Install Low Flow Faucet Aerators; Replace 28x 1.5GPM rated bathroom aerators with 0.5GPM WaterSense certified aerators	\$425	0.0	68.9	0.0	16.6	9.5	0.7	\$192	\$0	\$459	0.9	\$3,487
2	Replace Rooftop Package Unit; Replace 1x cooling-only rooftop condensing unit with modernized, energy efficient unit	\$27,970	0.0	0.0	15,939.1	0.0	54.4	3.8	\$2,869	\$143	\$3,012	9.3	\$16,848
Totals for no/low cost items													
Total for Capital cost		\$27,970	0.0	68.9	0.0	16.6	9.5	0.7	\$192	\$0	\$459	0.9	
Interactive Savings Discount @10%			0.0	0.0	15,939.1	0.0	54.4	3.8	\$2,869	\$143	\$3,012	9.3	
Total Contingency Expenses @ 15%		\$4,259		-6.9	-1,593.9	-1.7	-6.4	-0.4	-\$306	-\$14	-\$347		
Totals for Improvements		\$32,654	0.0	62.0	14,345.2	14.9	57.5	4.0	\$2,755	\$129	\$3,124	10.5	

12. Certification

Vermont Agency of Education, Phase Two (the Client) retained Bureau Veritas to perform this Facility Condition Assessment in connection with its continued operation of Barre Town Elementary (& Middle) School - Main Building, 70 Websterville Road, Barre VT, 05641, the "Property". It is our understanding that the primary interest of the Client is to locate and evaluate materials and building system defects that might significantly affect the value of the property and to determine if the present Property has conditions that will have a significant impact on its continued operations.

The conclusions and recommendations presented in this report are based on the brief review of the plans and records made available to our Project Manager during the site visit, interviews of available property management personnel and maintenance contractors familiar with the Property, appropriate inquiry of municipal authorities, our Project Manager's walk-through observations during the site visit, and our experience with similar properties.

No testing, exploratory probing, dismantling, or operating of equipment or in-depth studies were performed unless specifically required under the *Purpose and Scope* section of this report. This assessment did not include engineering calculations to determine the adequacy of the Property's original design or existing systems. Although walk-through observations were performed, not all areas may have been observed (see Section 1 for specific details). There may be defects in the Property, which were in areas not observed or readily accessible, may not have been visible, or were not disclosed by management personnel when questioned. The report describes property conditions at the time that the observations and research were conducted.

This report has been prepared on behalf of and exclusively for the use of the Client for the purpose stated within the *Purpose and Scope* section of this report. The report, or any excerpt thereof, shall not be used by any party other than the Client or for any other purpose than that specifically stated in our agreement or within the *Purpose and Scope* section of this report without the express written consent of Bureau Veritas.

Any reuse or distribution of this report without such consent shall be at the Client and the recipient's sole risk, without liability to Bureau Veritas.

Prepared by: Bureau Veritas Technical Assessments

13. Appendices

- Appendix A: Photographic Record
- Appendix B: Site Plans
- Appendix C: Stem/Steam Assessment
- Appendix D: School Educational Capacity and Programming Space
- Appendix E: Accessibility Review & Photos
- Appendix F: Component Condition Report
- Appendix G: Replacement Reserves
- Appendix H: Depleted Value Report



Appendix A:
Photographic Record



Photographic Overview



1 - FRONT ELEVATION



2 - LEFT ELEVATION



3 - REAR ELEVATION



4 - RIGHT ELEVATION



5 - PLAYGROUND 1



6 - PLAYGROUND 2

Photographic Overview



7 - PLAYGROUND 3



8 - SCHOOL GARDEN



9 - ROOF TPO/PVC



10 - SPLIT SYSTEM



11 - AIR HANDLER - AHU



12 - ELECTRICAL ROOM

Photographic Overview



13 - MECHANICAL ROOM



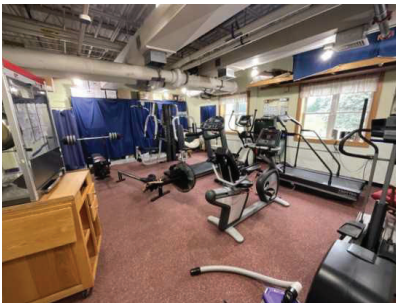
14 - MAINTENANCE GARAGE (1)



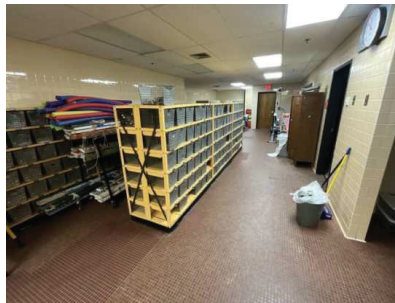
15 - MAINTENANCE GARAGE (2)



16 - STORAGE / MECHANICAL



17 - STAFF WELLNESS



18 - BOYS LOCKER ROOM

Photographic Overview



19 - GIRLS LOCKER ROOM



20 - TYP. HALLWAY



21 - KITCHEN



22 - TYP. BOYS RESTROOM



23 - TYP. GIRLS RESTROOM



24 - TYP. REMODELED RESTROOM

Photographic Overview



25 - STAFF RESTROOM



26 - STAFF BREAKROOM



27 - NURSES OFFICE



28 - TYP. CLASSROOM



29 - SCIENCE CLASSROOM



30 - TYP. OPEN CLASSROOM SPACE

Photographic Overview



31 - FOREIGN LANGUAGES



32 - TYP. OFFICE



33 - BEHAVIORAL SUPPORT



34 - TECH SHOP



35 - MUSIC REHEARSAL



36 - LOBBY

Photographic Overview



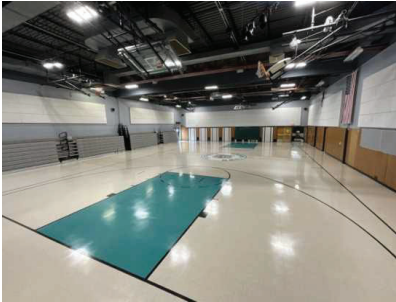
37 - AUXILIARY GYM



38 - LIBRARY



39 - CAFETERIA



40 - GYMNASIUM

Appendix B:
Site Plans



Project Name	Project Number
Vermont Agency of Education	158982.22R000-022.379
	Barre Town Elementary School - Main Building
Source	On-Site Date
Google MyMaps	August 15, 2023

Appendix C:
Stem/Steam Assessment



STEM/STEAM Evaluation

Property Name	STEM/STEAM Suitability Score	Project Number	School Type	Square Footage
Barre Town Elementary School - Main Building	79%	158982.22R000-022.379	High	155,000

Suitability Classification	Scale	Score Value	Score Impact
Compares Poorly	Score 0 - 25	1- Meets	100%
Compares Marginally	Score 25-50	2- Partial	50%
Compares Fairly	Score 50-75	3- Missing	0%
Compares Well	Score 75 - 100		

Rooms to support STEM/STEAM Curriculum - X= Required by School Type

Room Types	Room Present (Yes/No)	Elementary School	Middle School	High School
Does the facility have an Art Room?	Yes	X	X	X
Does the facility have a Science Lab?	Yes		X	X
Does the facility have a Shop (Machine, Wood, Metal, etc.)?	Yes		X	X
Does the facility have a Computer Lab?	Yes	X	X	X
Does the facility have a dedicated STEM/STEAM Room?	Yes	X	X	X

Overall Compliance

Questions	Art Room	Science Labs	Shops	Computer Lab	STEM/STEAM
Does the room have chemical resilient perimeter counters with a minimum of two sinks, one being ADA accessible?	2- Partial	1- Meets	2- Partial		2- Partial
Does the room have electrical outlet distribution along perimeter walls and from the ceiling?	1- Meets	2- Partial	1- Meets	2- Partial	1- Meets
Does the room have open shelving and lockable storage cabinets?	1- Meets	2- Partial	1- Meets		1- Meets
Does the room have technology connectivity and an interactive display?	1- Meets	1- Meets	1- Meets	1- Meets	1- Meets
Does the room have appropriate wet floor finishes?	1- Meets	2- Partial	1- Meets		1- Meets
Does the room have visual display boards?	1- Meets	1- Meets	1- Meets	1- Meets	1- Meets
Does the room have Prep/Storage Room?	1- Meets	2- Partial	1- Meets	3- Missing	1- Meets
Does the room have direct access to the exterior?	1- Meets	3- Missing	1- Meets		1- Meets
Does the room the ability to structurally suspend items from the ceiling?	1- Meets	2- Partial	1- Meets		1- Meets
Does the have goggle cabinets, fire extinguisher, eye wash and deluge shower?	2- Partial	2- Partial	2- Partial		2- Partial
Room Type Score	90%	60%	90%	63%	90%

BARRE TOWN ELEMENTARY (& MIDDLE) SCHOOL - MAIN BUILDING

BUREAU VERITAS PROJECT: 158982.22R000-022.379

Appendix D: School Educational Capacity and Programming Space

School Educational Capacity and Programming Space

As part of Act 72, AOE has contracted with Bureau Veritas (BVNA) to complete a Facility Condition Assessment (FCA) of very public school building in Vermont. One component of the FCA report will be to identify whether the size and configuration of your current facility is meeting your school's educational and operational needs. In order for us to accurately capture your facility space needs, it is necessary for the AOE and BVNA to receive your input. To complete this brief survey, we recommend that you consult with school building leadership and facilities/custodial staff.

School Name

Barre Town Elementary & Middle School

SU/SD

Barre Supervisory Union

Does the school have an adequate number of classrooms to meet student enrollment needs?

No

Please provide some explanation and/or context (known needs, barriers, other constraints outside of space, etc.):

We need more space for restorative classroom and early ed, etc.

Does the school have adequate space to accommodate all the current educational programs being offered?

No

Please describe capacity of your school building(s) to deliver educational programming:

Need more space for early ed and special education.

Would the school provide additional programming if available space was provided?

Yes

Yes, and we would need staffing!

Does the school have adequate confidential space to provide 1:1 services to students as required to maintain FERPA, HIPPA or IEP requirements?

No

Please describe:

No we need more space for meetings with parents and student counseling.

Do the school have adequate administrative offices and/or office space for staff?

No

Please describe:

Office space is spread out throughout the building.

Based on the size of enrollment does the size of the cafeteria, kitchen and gymnasium meet the current and future enrollment needs?

No

Please describe:

More space for dining, and staffing!

Appendix E: Accessibility Review & Photos

Visual Survey - ADA Standards for Accessible Design

Property Name: Barre Town Elementary & Middle School

BV Project Number: 158982.22R000 - 022.379

Facility History & Interview

Question	Yes	No	Unk	Comments
1. ADA: Has an accessibility study been performed at the site? If so, when?	X			1996 (within a year of completing the construction of the addition & before its opening for public use.)
2. ADA: If a study has occurred, have the associated recommendations been addressed? In full or in part?	X			The school appears to be fully ADA compliant.
3. ADA: Have there been regular complaints about accessibility issues, or previous or pending litigation?		X		

Building: Accessibility Issues

Category	Major Issues (ADA study recommended)	Moderate Issues (ADA study recommended)	Minor Issues	None*
Parking				None
Exterior Route				None
Building Entrances				None
Interior Route				None
Elevators				None
Public Restrooms			Install Knee protection at sinks	
Playground				None

**Be cognizant that if the "None" box is marked that does not guarantee full compliance; this study is limited in nature*



1 - OVERVIEW OF ACCESSIBLE PARKING AREA



2 - CLOSE-UP OF 2ND ACCESSIBLE PARKING AREA



3 - PRIMARY PATH OF TRAVEL



4 - CURB CUT/RAMP



5 - MAIN ACCESSIBLE ENTRANCE



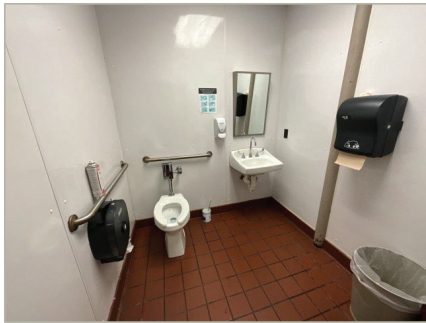
6 - SIGNAGE/HARDWARE



7 - ACCESSIBLE INTERIOR PATH (RAMP)



8 - DOOR HARDWARE



9 - TOILET STALL OVERVIEW



10 - SINK, FAUCET HANDLES



11 - ACCESSIBLE ROUTE TO PLAYGROUND



12 - OVERVIEW OF PLAYGROUND



13 - LOBBY VIEW OF CABS, WITH DOORS OPEN



14 - IN-CAB CONTROLS/EMERGENCY CALL PANEL

The table below is intended to be used as a general reference guide to help differentiate the orders of magnitude between some of the more commonly observed accessibility issues. The table is not intended to be all-inclusive, and boxes checked in the tables above do not necessarily mean those specific problems or shortcomings cited as examples below exist at the subject buildings and sites. Reference the data and photos above and/or the *Key Findings* section in the body of the report for visuals and/or more specifics about the particular subject site conditions.

Reference Guide			
	Major Issues <i>(ADA study recommended)</i>	Moderate Issues <i>(ADA study recommended)</i>	Minor Issues
Parking	<ul style="list-style-type: none">- Needs full reconstruction- Excessive slopes over 3% require major re-grading- No level locations to add required spaces	<ul style="list-style-type: none">- No or non-compliant curb cuts- Moderate difficulty to add required accessible spaces- Slopes close to compliant	<ul style="list-style-type: none">- Painting of markings needed- Signage height non-compliant- Signage missing
Exterior Route	<ul style="list-style-type: none">- Large areas of sidewalks with excessive slopes- No ramp when needed- Ramps with excessive slopes	<ul style="list-style-type: none">- Ramps need rails- Ramps need rail extensions- All or most entrance door exterior maneuvering clearance areas with excessive slopes	<ul style="list-style-type: none">- One entrance door exterior maneuvering clearance area with excessive slope- Non-compliant signage
Building Entrances	<ul style="list-style-type: none">- No compliant entrance exists- Exterior entry door/s not wide enough- Entrance vestibule requires complete reconstruction / reconfiguration due to clearance	<ul style="list-style-type: none">- Need significant # of lever handles- Need to add or modify automatic door opener- Entrance vestibule requires limited reconfigurations	<ul style="list-style-type: none">- A few door knobs instead of lever handles- Non-compliant door threshold
Interior Route	<ul style="list-style-type: none">- All or most interior doors appear less than 32" wide- Corridors less than 36" wide- No ramp when needed- Ramps with excessive slopes- Non-compliant treads/risers at means of egress stairways	<ul style="list-style-type: none">- Single height drinking fountains- Drinking fountain too high or protrudes into accessible route- Ramps need rails- Ramps need rail extensions- Need significant # of lever handles- Non-compliant rail extensions at egress stairways- All/most door thresholds high	<ul style="list-style-type: none">- One door threshold too high- A few door knobs instead of lever handles- Non-compliant door pressures- Non-compliant signage- Switches not within reach range
Elevators	<ul style="list-style-type: none">- No elevator present when required- Elevator cab too small	<ul style="list-style-type: none">- Panel control buttons not at compliant height- No hands-free emergency communication system- Elevator only has mechanical stops	<ul style="list-style-type: none">- Audible/visual signals at every floor may be lacking- Minor signage / Braille issues
Public Restrooms	<ul style="list-style-type: none">- No ADA RR on each accessible floor- Restroom(s) too small- Entire restroom(s) requires renovation- Water closet clearance requires moving walls	<ul style="list-style-type: none">- Interior doors appear less than 32" wide- Missing or non-compliant grab bars- Easily fixable clearance issues	<ul style="list-style-type: none">- Minor height adjustments required- Non-compliant door pressures- Missing a visual strobe (only required if audible fire alarm already present)- Missing lavatory pipe wraps- Signage not compliant

	Major Issues <i>(ADA study recommended)</i>	Moderate Issues <i>(ADA study recommended)</i>	Minor Issues
Kitchens/Kitchenettes	<ul style="list-style-type: none">- Clear space for each appliance not present- Clearance between opposing counters too narrow	<ul style="list-style-type: none">- Sink and counter too high- Sink knee and toe clearance not provided where required (built-in)- Less than 50% of cabinetry within reach range	<ul style="list-style-type: none">- Dispensers not within reach range- Switches not within reach range- Missing sink pipe wraps if knee and toe clearance required
Playgrounds & Pools	<ul style="list-style-type: none">- Large areas of surfacing non-compliant- Install compliant play structures- No pool lift provided	<ul style="list-style-type: none">- Small area/s of surfacing or equipment non-compliant- Moderate issues with path of travel to playground/pool	<ul style="list-style-type: none">- Minor issues with path of travel to playground/pool

Appendix F:

Component Condition Report



Component Condition Report | BARRE TOWN ELEMENTARY & MIDDLE SCHOOL

UF13 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
Structure								
B1080	Stairwells	Structure	Fair	Stair Treads, Raised Rubber Tile	2,500	SF	6	6893335
Facade								
B2010	Building Exterior	Facade	Fair	Exterior Walls, Wood Siding	600	SF	6	6902046
B2020	Building Exterior	Facade	Fair	Window, Wood, 16-25 SF	4		4	6902021
B2020	Building Exterior	Facade	Fair	Window, Aluminum Double-Glazed, 16-25 SF	13		12	6902100
B2020	Building Exterior	Facade	Fair	Window, Vinyl-Clad Double-Glazed, 16-25 SF	94		18	6902072
B2050	Building Exterior	Facade	Fair	Exterior Door, Steel, Standard	8		5	6902054
B2050	Building exterior	Facade	Fair	Overhead/Dock Door, Aluminum, 20'x14' (280 SF)	2		16	6893347
B2050	Building Exterior	Facade	Fair	Exterior Door, Aluminum-Framed & Glazed, Standard Swing	23		4	6902079
Roofing								
B3010	Roof	Roofing	Good	Roofing, Single-Ply Membrane, TPO/PVC	76,000	SF	17	6902075
B3010	Roof	Roofing	Fair	Roofing, Single-Ply Membrane, EPDM	3,500	SF	13	6902023
B3010	Roof	Roofing	Fair	Roofing, Built-Up	1,200	SF	5	6902065
Interiors								
C1030	Throughout building	Interiors	Fair	Door Hardware, School, per Door	140		3	6893415
C1030	Throughout building	Interiors	Fair	Interior Door, Wood, Solid-Core	140		9	6893390
C1070	Cafeteria	Interiors	Good	Suspended Ceilings, Acoustical Tile (ACT)	3,558	SF	20	6893352
C1070	Throughout building	Interiors	Fair	Suspended Ceilings, Acoustical Tile (ACT)	150,000	SF	10	6894413
C1070	Kitchen	Interiors	Fair	Suspended Ceilings, Acoustical Tile (ACT)	1,363	SF	10	6893368
C1090	Restrooms	Interiors	Good	Toilet Partitions, Plastic/Laminate	50		15	6902078
C2010	Kitchen	Interiors	Fair	Wall Finishes, Ceramic Tile	3,830	SF	20	6893378
C2010	Throughout	Interiors	Fair	Wall Finishes, any surface, Prep & Paint	232,500	SF	6	6934653
C2030	Cafeteria	Interiors	Good	Flooring, Vinyl Tile (VCT)	3,558	SF	11	6893417
C2030	Throughout building	Interiors	Fair	Flooring, Carpet, Commercial Standard	24,000	SF	2	6902094
C2030	Stage	Interiors	Fair	Flooring, Wood, Strip	860	SF	10	6893349
C2030	Kitchen	Interiors	Fair	Flooring, Ceramic Tile	1,363	SF	10	6893379
C2030	Tech Shop	Interiors	Excellent	Flooring, any surface, w/ Paint or Sealant, Prep & Paint	4,000	SF	10	6893354
C2030	Restrooms	Interiors	Good	Flooring, Ceramic Tile	640	SF	34	6902025
C2030	Restrooms	Interiors	Fair	Flooring, Ceramic Tile	640	SF	26	6893387
C2030	Stairwells	Interiors	Poor	Flooring, Vinyl Tile (VCT), w/ Asbestos Abatement	1,000	SF	0	6893346
C2030	Locker room	Interiors	Fair	Flooring, Ceramic Tile	3,000	SF	15	6894416
C2030	Throughout building	Interiors	Fair	Flooring, Carpet, Commercial Standard	22,000	SF	5	6893409
C2030	Library	Interiors	Good	Flooring, Carpet, Commercial Standard	23,000	SF	8	6893443
C2030	Throughout building	Interiors	Good	Flooring, Vinyl Tile (VCT)	70,000	SF	10	6893331
C2030	Mechanical Rooms	Interiors	Fair	Flooring, any surface, w/ Paint or Sealant, Prep & Paint	1,500	SF	5	6893348
C2030	Stairwells	Interiors	Fair	Flooring, Quarry Tile	600	SF	7	6902059
Conveying								
D1010	Conveying	Conveying	Fair	Passenger Elevator, Hydraulic, 2 Floors, 1500 to 2500	1		5	6893324
D1010	Conveying	Conveying	Fair	Elevator Cab Finishes, Standard	1		8	6893405
D1010	Conveying	Conveying	Fair	Elevator Controls, Automatic, 1 Car	1		3	6893393

UFL3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
Plumbing								
D2010	Kitchen	Plumbing	Good	Sink/Lavatory, Commercial Kitchen, 3-Bowl	1		21	6893361
D2010	Mechanical room	Plumbing	Fair	Water Heater, Indirect	2		5	6902016
D2010	Mechanical room	Plumbing	Fair	Water Heater, Indirect	1		5	6902052
D2010	Throughout building	Plumbing	Fair	Drinking Fountain, Wall-Mounted, Single-Level	12		9	6893333
D2010	Throughout building	Plumbing	Fair	Sink/Lavatory, Commercial Kitchen, 1-Bowl	11		15	6893399
D2010	Utility closet	Plumbing	Fair	Sink/Lavatory, Service Sink, Floor	1		15	6893392
D2010	Restroom	Plumbing	Good	Toilet, Commercial Water Closet	47		21	6893377
D2010	Maintenance Garage	Plumbing	Fair	Sink/Lavatory, Commercial Kitchen, 2-Bowl	1		15	6902044
D2010	Throughout	Plumbing	Fair	Plumbing System, Supply & Sanitary, Medium Density (excludes fixtures)	155,000	SF	14	6934654
D2010	Kitchen	Plumbing	Fair	Sink/Lavatory, Commercial Kitchen, 1-Bowl	1		15	6893418
D2010	Throughout building	Plumbing	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	28		14	6893340
D2010	Electrical Room 147	Plumbing	Fair	Sink/Lavatory, Service Sink, Floor	1		8	6902028
D2010	Throughout building	Plumbing	Fair	Sink/Lavatory, Vanity Top, Stainless Steel	5		14	6893402
D2010	Throughout building	Plumbing	Good	Urinal, Standard	16		20	6893374
D2010	Throughout building	Plumbing	Fair	Shower, Valve & Showerhead	6		5	6902092
D2010	Restrooms	Plumbing	Fair	Sink/Lavatory, Service Sink, Laundry	1		13	6893372
D2010	Classrooms	Plumbing	Fair	Supplemental Components, Grease Trap/Interceptor, Underground	1		3	6893330
D2020	Kitchen	Plumbing	Fair	Air Compressor, Tank-Style	1		5	6902018
HVAC								
D3020	Maintenance Garage	HVAC	Fair	Unit Heater, Hydronic, 13 to 36 MBH	5		6	6893406
D3020	Throughout building	HVAC	Fair	Boiler, Gas, HVAC	1		3	6902038
D3020	Maintenance Garage	HVAC	Fair	Boiler, Gas, HVAC	1		3	6902020
D3020	Throughout building	HVAC	Fair	Radiator, Hydronic, Baseboard (per LF)	800	LF	15	6893362
D3020	Maintenance Garage	HVAC	Fair	Boiler, Gas, HVAC	1		3	6902056
D3020	Throughout building	HVAC	Fair	Radiator, Hydronic, Column/Cabinet Style (per EA)	8		3	6893370
D3030	Roof	HVAC	Fair	Split System, Condensing Unit/Heat Pump	1		2	6902032
D3030	Roof	HVAC	Fair	Split System, Condensing Unit/Heat Pump, 16 to 20 TON	2		8	6902085
D3030	Roof	HVAC	Fair	Split System, Condensing Unit/Heat Pump	1		3	6902083
D3030	Roof	HVAC	Fair	Split System, Condensing Unit/Heat Pump	3		3	6902040
D3030	Roof	HVAC	Fair	Split System, Condensing Unit/Heat Pump	3		2	6902077
D3030	Roof	HVAC	Fair	Split System, Condensing Unit/Heat Pump	1		3	6902104
D3030	Roof	HVAC	Good	Split System, Condensing Unit/Heat Pump	2		11	6902095
D3030	Roof	HVAC	Excellent	Split System, Condensing Unit/Heat Pump	3		15	6902089
D3030	Roof	HVAC	Good	Split System, Condensing Unit/Heat Pump	2		11	6902099
D3030	Roof	HVAC	Fair	Split System, Condensing Unit/Heat Pump	1		3	6902061
D3030	Roof	HVAC	Fair	Split System, Condensing Unit/Heat Pump	1		7	6902087
D3030	Tech Shop	HVAC	Failed	Unit Ventilator, approx/nominal 2 Ton, 300 to 750 CFM	1		0	6893395
D3030	Roof	HVAC	Fair	Split System, Condensing Unit/Heat Pump	1		5	6902055
D3030	Classrooms	HVAC	Excellent	Split System, Fan Coil Unit, DX	3		15	6893342
D3030	Classrooms	HVAC	Good	Unit Ventilator, approx/nominal 3 Ton	2		17	6902036
D3030	Roof	HVAC	Fair	Split System, Condensing Unit/Heat Pump [UVCA]	1		3	6902037
D3050	Roof	HVAC	Fair	Air Handler, Exterior AHU, 8001 to 10000 CFM	1		2	6902071

UFL3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
D3050	Roof	HVAC	Fair	Air Handler, Exterior AHU, 8001 to 10000 CFM	1		2	6902067
D3050	Roof	HVAC	Fair	Air Handler, Exterior AHU, 6001 to 8000 CFM [C3]	1		2	6902077
D3050	Roof	HVAC	Fair	Air Handler, Exterior AHU	1		5	6902051
D3050	Throughout	HVAC	Fair	HVAC System, Hydronic Piping, 2-Pipe	155,000	SF	10	6934649
D3050	Roof	HVAC	Fair	Air Handler, Exterior AHU, 8001 to 10000 CFM	1		2	6902106
D3050	Gymnasium	HVAC	Fair	Fan Coil Unit, Hydronic Terminal, 1201 to 1800 CFM	4		7	6893367
D3050	Utility closet	HVAC	Fair	Air Handler, Interior AHU, Easy/Moderate Access, 2401 to 4000 CFM [AHU 3]	1		2	6893414
D3050	Throughout building	HVAC	Fair	Fan Coil Unit, Hydronic Terminal, 200 to 400 CFM	3		5	6893403
D3050	Storage / Mechanical	HVAC	Fair	Air Handler, Interior AHU, Easy/Moderate Access, 2401 to 4000 CFM [AHU - 4]	1		2	6893381
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	2		3	6902053
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 10" Damper, 50 to 500 CFM	6		2	6902068
D3060	Roof	HVAC	Fair	Exhaust Fan, Centrifugal, 12" Damper	1		3	6902102
D3060	Roof	HVAC	Fair	Exhaust Fan, Centrifugal, 16" Damper [E F - 2]	1		3	6902066
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 24" Damper [EB-10]	1		3	6902062
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 42" Damper [EB-7]	1		3	6902039
Fire Protection								
D4010	Throughout	Fire Protection	Fair	Fire Suppression System, Existing Sprinkler Heads, by SF	155,000	SF	4	6934652
Electrical								
D5010	Maintenance Garage	Electrical	Fair	Generator, Diesel	1		3	6902090
D5010	Site	Electrical	Good	Generator, Diesel, 405 to 500 KW	1		21	6893350
D5020	Electrical Room 147	Electrical	Fair	Secondary Transformer, Dry, Stepdown	1		4	6902034
D5020	Electrical Room 147	Electrical	Fair	Distribution Panel, 277/480 V	1		5	6902064
D5020	Electrical Room 147	Electrical	Fair	Distribution Panel, 277/480 V	1		2	6902091
D5020	Electrical room	Electrical	Fair	Secondary Transformer, Dry, Stepdown	1		2	6893383
D5020	Electrical room	Electrical	Fair	Secondary Transformer, Dry, Stepdown	1		5	6893326
D5020	Roof	Electrical	Fair	Secondary Transformer, Dry, Stepdown	1		4	6902022
D5020	Mechanical room	Electrical	Fair	Distribution Panel, 277/480 V	1		5	6902014
D5020	Electrical room	Electrical	Fair	Secondary Transformer, Dry, Stepdown	1		5	6893388
D5020	Electrical room	Electrical	Fair	Distribution Panel, 277/480 V [1 B]	1		2	6902030
D5020	Throughout building	Electrical	Fair	Distribution Panel, 120/208 V	16		5	6893382
D5020	Teeth Shop	Electrical	Fair	Distribution Panel, 277/480 V	1		5	6902086
D5020	Throughout building	Electrical	Fair	Distribution Panel, 120/240 V, Residential Style	5		5	6902026
D5020	Mechanical room	Electrical	Fair	Secondary Transformer, Dry, Stepdown	1		5	6902033
D5020	Electrical room	Electrical	Fair	Distribution Panel, 277/480 V [1 B]	1		5	6893363
D5020	Electrical room	Electrical	Fair	Distribution Panel, 277/480 V [Lighting Panel]	1		5	6902048
D5020	Storage / Mechanical	Electrical	Fair	Distribution Panel, 120/208 V	1		5	6893344
D5020	Maintenance Garage	Electrical	Fair	Distribution Panel, 120/240 V, Residential Style	2		3	6902093
D5020	Electrical room	Electrical	Fair	Distribution Panel, 277/480 V [1 A]	1		3	6893420
D5020	Maintenance Garage	Electrical	Fair	Secondary Transformer, Dry, Stepdown	1		3	6902070
D5020	Tech Shop	Electrical	Fair	Distribution Panel, 277/480 V	1		5	6902082
D5020	Electrical Room 147	Electrical	Fair	Distribution Panel, 120/240 V	1		5	6902042

UFL3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
D5030	Maintenance Garage	Electrical	Fair	Variable Frequency Drive, VFD, by HP of Motor, 10 HP	2		5	6902080
D5030	Throughout	Electrical	Fair	Electrical System, Wiring & Switches, High Density/Complexity	155,000	SF	4	6934650
D5040	Throughout	Electrical	Fair	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures	155,000	SF	5	6934656
Fire Alarm & Electronic Systems								
D7050	Office	Fire Alarm & Electronic Systems	Fair	Fire Alarm Panel, Fully Addressable	1		7	6934655
D7050	Throughout	Fire Alarm & Electronic Systems	Fair	Fire Alarm System, Full System Upgrade, Standard Addressable, Install	155,000	SF	5	6934651
Equipment & Furnishings								
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Walk-In, Freezer [Freezer 1]	1		15	6893412
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Ice-maker, Freestanding	1		9	6893398
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Refrigerator, 1-Door Reach-In	1		4	6902067
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Exhaust Hood, 8 to 10 LF	1		13	6893345
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Microwave Commercial	2		3	6893357
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Dishwasher Commercial	1		8	6893338
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Walk-In, Freezer	1		15	6893380
E1030	Kitchen	Equipment & Furnishings	Poor	Foodservice Equipment, Convection Oven, Double	1		0	6893337
E1030	Kitchen	Equipment & Furnishings	Fair	Food Preparation Line, Commercial Kitchen	1	LS	9	6893360
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Convection Oven, Double	1		4	6893386
E1030	Roof	Equipment & Furnishings	Good	Foodservice Equipment, Walk-In, Condenser for Refrigerator/Freezer	2		15	6902041
E1030	Kitchen	Equipment & Furnishings	Failed	Foodservice Equipment, Refrigerator, Undercounter 2-Door	1		0	6893411
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Evaporator for Refrigerator/Freezer [Freezer 1]	1		9	6893359
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Griddle	1		5	6893391
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Walk-In, Evaporator for Refrigerator/Freezer	1		14	6893336
E1030	Kitchen	Equipment & Furnishings	Excellent	Foodservice Equipment, Walk-In, Evaporator for Refrigerator/Freezer	1		15	6893369
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	1		9	6893325
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Prep Table Refrigerated, Salad/Sandwich	2		5	6893404
E1030	Roof	Equipment & Furnishings	Excellent	Foodservice Equipment, Walk-In, Condenser for Refrigerator/Freezer	1		15	6902081
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Tilting Skillet	1		17	6893389
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	1		9	6893394
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Dairy Cooler/Wells	1		12	6893410
E1030	Roof	Equipment & Furnishings	Excellent	Foodservice Equipment, Walk-In, Condenser for Refrigerator/Freezer	1		15	6902035
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Convection Oven, Single	1		9	6893339
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Slicer	1		9	6893366
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Refrigerator	1		9	6893355

UFL3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Dairy Cooler/Wells	2		12	6893407
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Mixer, Freestanding	1		20	6893397
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Refrigerator, 2-Door Reach-In	1		13	6893396
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Range, 2-Burner	1		3	6893334
E1060	Throughout building	Equipment & Furnishings	Fair	Residential Appliances, Refrigerator, 14 to 18 CF	3		5	6893341
E2010	Classrooms	Equipment & Furnishings	Fair	Casework, Countertop, Plastic Laminate	1,000	LF	7	6893356
E2010	Classrooms	Equipment & Furnishings	Fair	Casework, Cabinetry, Hardwood Standard	1,500	LF	7	6893385
Pedestrian Plazas & Walkways								
G2020	Site	Pedestrian Plazas & Walkways	Good	Parking Lots, Pavement, Asphalt, Seal & Stripe	68,000	SF	4	6902101
G2020	Site	Pedestrian Plazas & Walkways	Fair	Parking Lots, Pavement, Asphalt, Mill & Overlay	68,000	SF	16	6893375
G2030	Site	Pedestrian Plazas & Walkways	Fair	Sidewalk, Concrete, Small Areas/Sections	1,265	SF	10	6893373
Athletic, Recreational & Playfield Areas								
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Multipurpose, Small	1		8	6893328
G2050	Site	Athletic, Recreational & Playfield Areas	Failed	Sports Apparatus, Basketball, Backboard/Rim/Pole	2		0	6902024
G2050	Site	Athletic, Recreational & Playfield Areas	Excellent	Playfield Surfaces, Chips Wood, 6' Depth	10,000	SF	3	6894000
G2050	Site	Athletic, Recreational & Playfield Areas	Poor	Play Structure, Swing Set, 4 Seats	2		1	6893358
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Athletic Surfaces & Courts, Basketball/General, Asphalt Pavement, Mill & Overlay	4,600	SF	12	6902096
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Basketball, Backboard/Rim/Pole	2		15	6902050
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Multipurpose, Very Small	2		8	6894119
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Multipurpose, Medium	2		10	6893351
G2050	Site	Athletic, Recreational & Playfield Areas	Failed	Athletic Surfaces & Courts, Basketball/General, Asphalt Pavement, Seal & Stripe	4,600	SF	0	6902103
Sitework								
G2060	Site	Sitework	Fair	Fences & Gates, Fence, Chain Link 4"	554	LF	4	6893376
G4050	Site	Sitework	Fair	Exterior Lighting, Wall Pack, any type w/ LED, 13 to 26 W	12		13	6902058
G4050	Site	Sitework	Fair	Pole Light Fixture w/ Lamps, any type 20' High, w/ LED Replacement, Replace/Install	6		10	6902019

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Replacement Reserves Report
BARRE TOWN ELEMENTARY & MIDDLE SCHOOL[illegible]

Unlinked Code	ID	Call Description	Usage (kWh)	Reg. Rate	Quantity	Unit Cost	Annual	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500
000000	000000	Call Description	Usage (kWh)	Reg. Rate	Quantity	Unit Cost	Annual	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500
000000	000000	Call Description	Usage (kWh)	Reg. Rate	Quantity	Unit Cost	Annual	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381																																																																																																																							

Uncontract Code	ID	Job Description	Lifespan (Yrs)	High Risk	Quantity	Unit	Unit Cost	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500
D0500	6091367	Fire Control System, Alarm, 128110 V, 100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										

Appendix H:

Depleted Value Report



BARRE TOWN ELEMENTARY & MIDDLE SCHOOL

Depleted Value Index

58.2%

System	System Contribution	System Value
Air Compressor	\$ 6,543	\$ 7,270
Air Handler	\$ 52,920	\$ 58,800
Air Handler	\$ 31,360	\$ 58,800
Air Handler	\$ 31,200	\$ 48,000
Air Handler	\$ 70,000	\$ 84,000
Air Handler	\$ 54,880	\$ 58,800
Air Handler	\$ 18,333	\$ 22,000
Air Handler	\$ 20,533	\$ 22,000
Athletic Surfaces & Courts	\$ 13,417	\$ 16,100
Athletic Surfaces & Courts	\$ 1,725	\$ 2,070
Boiler	\$ 28,167	\$ 33,800
Boiler	\$ 112,500	\$ 135,000
Boiler	\$ 225,000	\$ 270,000
Casework	\$ 41,667	\$ 50,000
Casework	\$ 405,000	\$ 450,000
Distribution Panel	\$ 9,000	\$ 10,000
Distribution Panel	\$ 8,333	\$ 10,000
Distribution Panel	\$ 6,125	\$ 7,000
Distribution Panel	\$ 9,000	\$ 10,000
Distribution Panel	\$ 12,800	\$ 32,000
Distribution Panel	\$ 4,770	\$ 5,300
Distribution Panel	\$ 2,567	\$ 5,500
Distribution Panel	\$ 8,500	\$ 10,000
Distribution Panel	\$ 11,900	\$ 14,000
Distribution Panel	\$ 1,800	\$ 2,000
Distribution Panel	\$ 1,936	\$ 2,200
Distribution Panel	\$ 6,160	\$ 7,000
Distribution Panel	\$ 4,505	\$ 5,300
Distribution Panel	\$ 17,850	\$ 21,000
Door Hardware	\$ 49,000	\$ 56,000
Drinking Fountain	\$ 12,480	\$ 14,400
Electrical System	\$ 217,000	\$ 620,000
Elevator Cab Finishes	\$ 7,200	\$ 9,000
Elevator Controls	\$ 3,250	\$ 5,000
Exhaust Fan	\$ 3,600	\$ 4,800
Exhaust Fan	\$ 6,480	\$ 7,200
Exhaust Fan	\$ 747	\$ 1,400

System	System Contribution	System Value
Exhaust Fan	\$ 1,800	\$ 2,400
Exhaust Fan	\$ 2,520	\$ 3,000
Exhaust Fan	\$ 2,933	\$ 11,000
Exterior Door	\$ 3,840	\$ 4,800
Exterior Door	\$ 19,933	\$ 29,900
Exterior Lighting	\$ 3,600	\$ 4,800
Exterior Walls	\$ -	\$ 6,000
Fan Coil Unit	\$ 2,304	\$ 15,360
Fan Coil Unit	\$ 1,754	\$ 5,010
Fences & Gates	\$ 9,972	\$ 9,972
Fire Alarm Panel	\$ 9,375	\$ 15,000
Fire Alarm System	\$ 232,500	\$ 465,000
Fire Suppression System	\$ 33,170	\$ 165,850
Flooring	\$ 5,930	\$ 17,790
Flooring	\$ 90,000	\$ 180,000
Flooring	\$ 11,094	\$ 12,900
Flooring	\$ 9,814	\$ 24,534
Flooring	\$ 1,500	\$ 6,000
Flooring	\$ 4,608	\$ 11,520
Flooring	\$ 8,448	\$ 11,520
Flooring	\$ 1,067	\$ 8,000
Flooring	\$ 37,800	\$ 54,000
Flooring	\$ 33,000	\$ 165,000
Flooring	\$ 43,125	\$ 172,500
Flooring	\$ 350,000	\$ 350,000
Flooring	\$ 1,350	\$ 2,250
Flooring	\$ -	\$ 15,600
Food Preparation Line	\$ 20,000	\$ 20,000
Foodservice Equipment	\$ 10,000	\$ 25,000
Foodservice Equipment	\$ 4,467	\$ 6,700
Foodservice Equipment	\$ 180	\$ 2,700
Foodservice Equipment	\$ -	\$ 4,500
Foodservice Equipment	\$ 880	\$ 2,200
Foodservice Equipment	\$ 14,333	\$ 21,500
Foodservice Equipment	\$ -	\$ 25,000
Foodservice Equipment	\$ 1,425	\$ 9,500
Foodservice Equipment	\$ 3,800	\$ 9,500
Foodservice Equipment	\$ 2,520	\$ 12,600
Foodservice Equipment	\$ -	\$ 1,700
Foodservice Equipment	\$ 460	\$ 4,600
Foodservice Equipment	\$ 700	\$ 7,000
Foodservice Equipment	\$ 2,530	\$ 4,600
Foodservice Equipment	\$ 920	\$ 4,600

System	System Contribution	System Value
Foodservice Equipment	\$ 340	\$ 1,700
Foodservice Equipment	\$ 1,253	\$ 9,400
Foodservice Equipment	\$ 5,040	\$ 6,300
Foodservice Equipment	\$ 21,560	\$ 24,500
Foodservice Equipment	\$ 272	\$ 1,700
Foodservice Equipment	\$ 2,700	\$ 3,600
Foodservice Equipment	\$ 4,883	\$ 6,300
Foodservice Equipment	\$ 4,200	\$ 5,600
Foodservice Equipment	\$ 1,493	\$ 3,200
Foodservice Equipment	\$ 3,000	\$ 15,000
Foodservice Equipment	\$ 2,592	\$ 7,200
Foodservice Equipment	\$ 11,667	\$ 14,000
Foodservice Equipment	\$ 2,760	\$ 4,600
Foodservice Equipment	\$ 1,615	\$ 1,700
Generator	\$ 24,000	\$ 40,000
Generator	\$ 75,000	\$ 150,000
HVAC System	\$ -	\$ 775,000
Interior Door	\$ 63,700	\$ 98,000
Interior Lighting System	\$ 348,750	\$ 697,500
Overhead/Dock Door	\$ 7,500	\$ 15,000
Parking Lots	\$ 27,540	\$ 30,600
Parking Lots	\$ 158,667	\$ 238,000
Passenger Elevator	\$ 8,250	\$ 55,000
Play Structure	\$ 3,500	\$ 10,000
Play Structure	\$ 4,000	\$ 5,000
Play Structure	\$ 10,400	\$ 12,000
Play Structure	\$ 37,333	\$ 40,000
Playfield Surfaces	\$ 16,667	\$ 20,000
Plumbing System	\$ 1,477,667	\$ 1,705,000
Pole Light Fixture w/ Lamps	\$ 20,000	\$ 24,000
Radiator	\$ 100,000	\$ 120,000
Radiator	\$ 5,760	\$ 6,400
Residential Appliances	\$ 1,500	\$ 1,800
Roofing	\$ 1,033,600	\$ 1,292,000
Roofing	\$ 11,550	\$ 38,500
Roofing	\$ 8,400	\$ 16,800
Secondary Transformer	\$ 9,143	\$ 16,000
Secondary Transformer	\$ 3,800	\$ 7,600
Secondary Transformer	\$ 3,350	\$ 6,700
Secondary Transformer	\$ 5,333	\$ 10,000
Secondary Transformer	\$ 5,169	\$ 6,700
Secondary Transformer	\$ 8,533	\$ 16,000
Secondary Transformer	\$ 3,797	\$ 6,700

System	System Contribution	System Value
Shower	\$ 4,160	\$ 4,800
Sidewalk	\$ 11,807	\$ 25,300
Sink/Lavatory	\$ 2,000	\$ 2,500
Sink/Lavatory	\$ 14,080	\$ 17,600
Sink/Lavatory	\$ 693	\$ 800
Sink/Lavatory	\$ 1,680	\$ 2,100
Sink/Lavatory	\$ 427	\$ 1,600
Sink/Lavatory	\$ -	\$ 42,000
Sink/Lavatory	\$ 213	\$ 800
Sink/Lavatory	\$ 4,800	\$ 6,000
Sink/Lavatory	\$ 480	\$ 900
Split System	\$ 30,000	\$ 45,000
Split System	\$ -	\$ 75,600
Split System	\$ 36,000	\$ 45,000
Split System	\$ 10,200	\$ 10,200
Split System	\$ 4,080	\$ 10,200
Split System	\$ 2,267	\$ 3,400
Split System	\$ 6,800	\$ 8,000
Split System	\$ 2,760	\$ 13,800
Split System	\$ 4,080	\$ 6,800
Split System	\$ 36,000	\$ 60,000
Split System	\$ 1,560	\$ 5,200
Split System	\$ 55,000	\$ 220,000
Split System	\$ 6,300	\$ 9,000
Split System	\$ 4,000	\$ 4,000
Sports Apparatus	\$ 2,850	\$ 19,000
Sports Apparatus	\$ 6,333	\$ 19,000
Stair Treads	\$ 18,750	\$ 25,000
Supplemental Components	\$ 6,000	\$ 12,000
Suspended Ceilings	\$ 4,981	\$ 12,453
Suspended Ceilings	\$ 350,000	\$ 525,000
Suspended Ceilings	\$ 3,180	\$ 4,771
Toilet	\$ 52,953	\$ 61,100
Toilet Partitions	\$ 22,500	\$ 37,500
Unit Heater	\$ 3,400	\$ 8,500
Unit Ventilator	\$ -	\$ 7,400
Unit Ventilator	\$ -	\$ 18,000
Urinal	\$ -	\$ 17,600
Variable Frequency Drive	\$ -	\$ 14,000
Wall Finishes	\$ -	\$ 68,940
Wall Finishes	\$ -	\$ 348,750
Water Heater	\$ -	\$ 6,200
Water Heater	\$ -	\$ 4,800

System	System Contribution	System Value
Window	\$ -	\$ 4,800
Window	\$ -	\$ 12,350
Window	\$ -	\$ 84,600
Totals	\$ 6,758,517	\$ 11,604,610