

FACILITY CONDITION ASSESSMENT



**BUREAU
VERITAS**

prepared for

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



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BV PROJECT #:

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DATE OF REPORT:

May 22, 2023

ON SITE DATE:

January 4, 2023

**DOVER ELEMENTARY SCHOOL - Main Building
9 SCHOOLHOUSE ROAD
EAST DOVER , VT 05351**

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1. Executive Summary

Property Overview and Assessment Details

General Information	
Property Type	School
School ID Number	PS086-SU034
Main Address	9 School House Road, East Dover , VT 05351
E911 Address Verification	Zip 05351, Standardized, Fixed abbreviations, Matched Street and city and state, Confirmed entire address
GPS Location (Verified E911)	Main Building 42.94282, -72.80323
Site Developed	1970 Renovated: 1995
Site Area	17 acres (estimated)
Parking Spaces	30 total spaces all in open lots; 1 of which are accessible.
Building Square Footage	33,200 SF
Number of Stories	1 above grade
Supervisory Union/ District	Windham Central SU
Date(s) of Visit	May 4, 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 town of Dover consists of East and West Dover villages and sits in a rural area. The town's population was declining until Mt Snow arrived in the mid-1950s. The population reversed with permanent and part time work. A new Elementary School was built on Dover Hill in 1970 and teaches pre-K thru sixth grade. An addition was built in 1995 on the east side of the school.

Architectural

The exterior walls are CMU with white brick veneer. The roof is constructed with bar joist and metal decking. The original school roof is TPO/PVC membrane, and the 1995 addition roof is EPDM membrane. Both roofs are showing signs of roof leakage. No evidence of cracking or settlement was observed. A small number of windows were replaced in 1995 but the majority are original metal framed double glazed units. Main entry doors are fully glazed aluminum framed doors and secondary entrance with steel doors at service entrances. Most exterior and interior finishes are in fair condition as would be expected for their ages. Typical lifecycle based interior and exterior finish replacements are budgeted and anticipated.

Mechanical, Electrical, Plumbing and Fire (MEPF)

Majority of the systems are original equipment and in fair condition. Well-practiced maintenance has resulted in maximum life expectancy from these units. Two oil fired boilers provide for necessary heated water to unit ventilators and cabinet heaters throughout the school. The boilers were installed in 1995 and are dated. Interior air handlers are close to end of life and are also budgeted for replacement. In general, the plumbing systems are adequate to serve the school, with equipment and fixtures to be updated as needed. The domestic water service is drawn from an on sit well and sanitized with non-chlorine system. There were no leaks observed at the domestic piping. The domestic hot water service at the school consists of an updated oil hot water tank, and supply appears to be adequate. Lifecycle replacement of the piping and sanitary sewer systems is anticipated. No major issues were observed or reported. Most of the electrical service equipment and systems should be replaced during normal life expectancy. Electrical systems are original equipment and are of adequate size to provide necessary power to all systems. Interior lighting consists mainly of florescent T8 linear troffers. LED retrofits are suggested. Fire protection system consist of a hard-wired fire alarm system and minimal wet fire sprinkler systems. The alarm system consists of strobes, pull stations, illuminated exit signs.

Site

The site has mixed features. There are expansive grass areas for sporting events and a newer playground area with wood chip base and play structures. The dugouts in the lower baseball diamond could use updating. The parking lot asphalt is in good condition and striping has not faded. There is a small basketball court in the Southeast corner where the asphalt is cracking and worn. New topping is budgeted. Site lighting could benefit from retrofitting HID lighting to LED technology. Flatwork surrounds the school and consists of concrete sidewalks at pedestrian walkways. Small areas have lifted and could use replacement. Planter boxes and picnic tables are located in the front right side of the school and are in fair condition and provide a nice down to earth feel.

Recommended Additional Studies

The Gymnasium floor is in poor condition. Asbestos containing building materials were reportedly found under the parquet floor of the gymnasium and around piping elbows in the commercial kitchen. A professional engineer must be retained to analyze the existing condition, provide recommendations and, if necessary, estimate the scope and cost of any required repairs. The cost of this study is included in the cost tables. A budgetary cost allowance to replace the floor is also included.

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		
<i>Replacement Value</i>	<i>Total SF</i>	<i>Cost/SF</i>
\$8,300,000	33,200	\$250
Current FCI	\$672,000	6.9%
3-Year	\$1,814,800	18.8%
5-Year	\$2,562,100	26.5%
10-Year	\$3,800,000	39.3%

Campus 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.

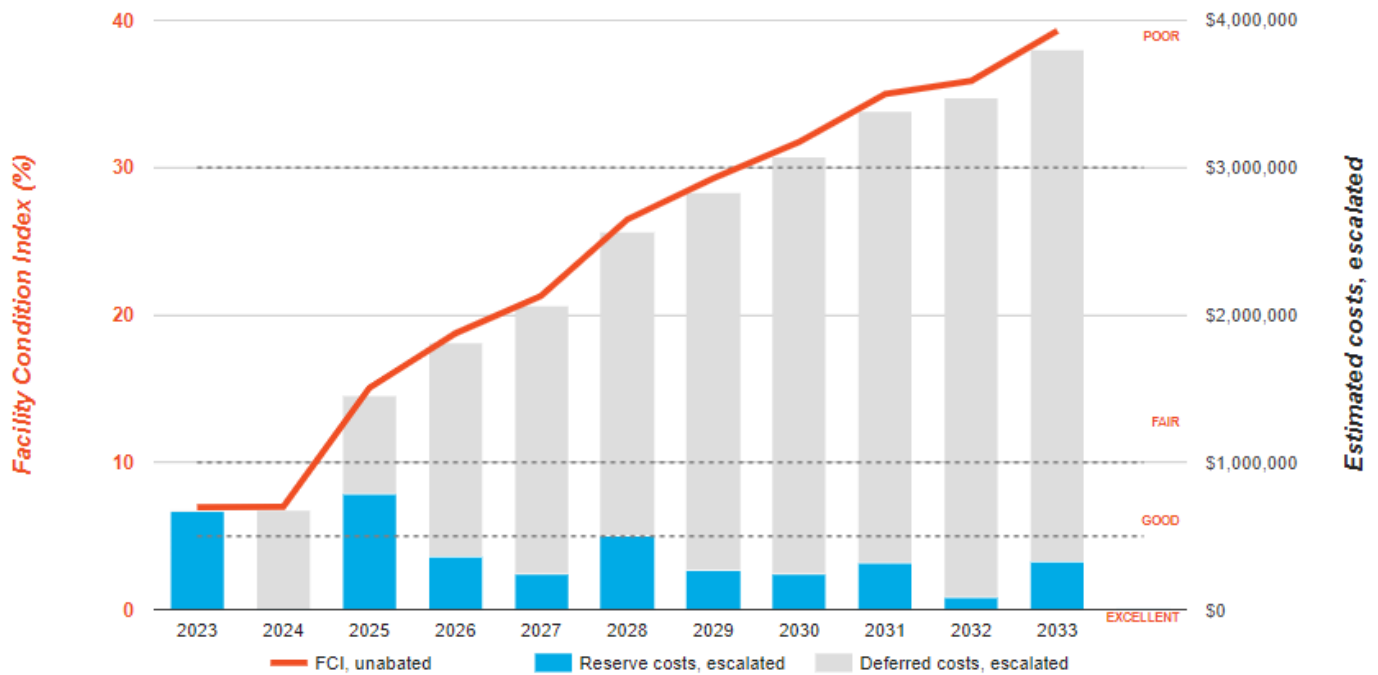
Needs by Year with Unaddressed FCI Over Time

FCI Analysis: DOVER ELEMENTARY SCHOOL - Main Building

Replacement Value: \$9,675,000

Inflation Rate: 3.0%

Average Needs per Year: \$345,500



Needs by Year with Unaddressed FCI Over Time (Table)

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

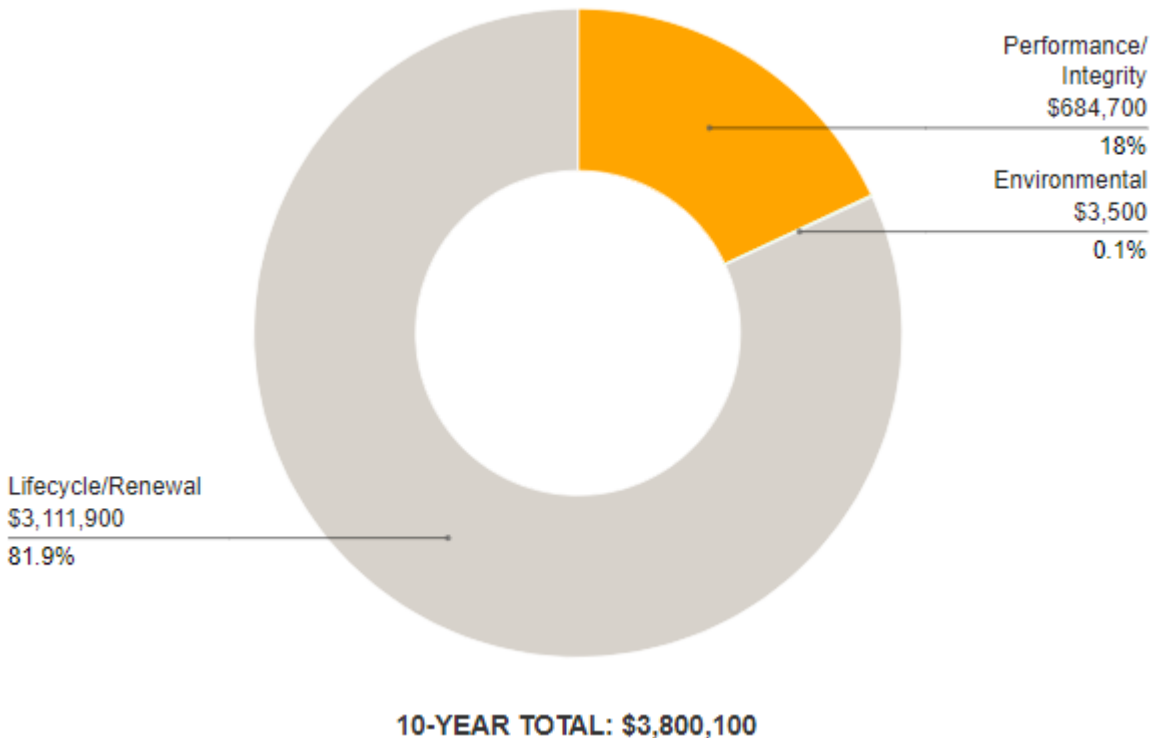
Year	Reserve	Reserve Escalation	Recurrence	Recurrence Escalation	Total Escalation	Deferred	FCI
2023	672,000	0	0	0	0	672,000	0.07
2024	3,300	99	0	0	99	675,399	0.07
2025	736,927	44,879	0	0	44,879	1,457,205	0.15
2026	327,214	30,342	0	0	30,342	1,814,761	0.19
2027	217,200	27,261	0	0	27,261	2,059,222	0.21
2028	422,176	67,242	11,562	1,842	69,084	2,548,640	0.26
2029	226,750	44,001	0	0	44,001	2,819,391	0.29
2030	191,671	44,060	2,115	486	44,546	3,055,122	0.32
2031	220,800	58,903	27,212	7,259	66,162	3,334,825	0.34
2032	66,300	20,206	0	0	20,206	3,421,331	0.35
2033	232,200	79,857	12,000	4,127	83,984	3,733,388	0.39
2034	201,000	77,231	11,562	4,443	81,674	4,011,619	0.41
2035	526,450	224,142	2,115	900	225,042	4,762,211	0.49
2036	107,387	50,314	37,614	17,623	67,937	4,919,912	0.51
2037	4,320	2,214	11,562	5,927	8,141	4,926,446	0.51
2038	58,050	32,390	458,826	256,010	288,400	5,016,886	0.52
2039	17,604	10,645	0	0	10,645	5,045,135	0.52
2040	72,000	47,005	13,677	8,929	55,934	5,164,140	0.53
2041	121,723	85,502	37,750	26,517	112,019	5,371,365	0.56
2042	5,000	3,768	15,000	11,303	15,071	5,380,133	0.56

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
6123828	Classrooms	C2030	Flooring, Carpet, Commercial Standard, Replace	Poor	Performance/Integrity	\$69,800
6123866	Throughout building	C2030	Flooring, Vinyl Tile (VCT), Replace	Poor	Performance/Integrity	\$247,800
6123942	Meeting room	C2030	Flooring, any surface, w/ Paint or Sealant, Prep & Paint	Poor	Performance/Integrity	\$200
6124028	Utility closet	D2010	Sink/Lavatory, Service Sink, Wall-Hung, Replace	Poor	Performance/Integrity	\$2,800
6123997	Theater	E1070	Theater & Stage Equipment, Flameproof Curtain, Medium Weight Velour, Replace	Poor	Performance/Integrity	\$90,000
6123956	Theater	E2010	Fixed Seating, Auditorium/Theater, Metal Cushioned Standard, Replace	Poor	Performance/Integrity	\$253,800
6123874	Library	E2010	Casework, Countertop, Plastic Laminate, Replace	Poor	Performance/Integrity	\$10,000
6123971	Library	E2010	Casework, Cabinetry, Hardwood Standard, Replace	Poor	Performance/Integrity	\$70,500
6128106	Throughout	Y1090	ADA Miscellaneous, Level III Study, Includes Measurements, Evaluate/Report	NA	Accessibility	\$7,500
Total						\$752,400

Key Findings



Exterior Walls in Poor condition.

any painted surface

DOVER ELEMENTARY SCHOOL - Main Building Building Exterior

Uniformat Code: B2010

Recommendation: **Prep & Paint in 2023**

Priority Score: **89.8**

Plan Type: Performance/Integrity

Cost Estimate: \$12,000

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Paint, soffit front of building down right side overhang - AssetCALC ID: 6125459



Roofing in Poor condition.

Single-Ply Membrane, TPO/PVC

DOVER ELEMENTARY SCHOOL - Main Building Roof

Uniformat Code: B3010

Recommendation: **Replace in 2023**

Priority Score: **88.9**

Plan Type: Performance/Integrity

Cost Estimate: \$408,000

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The roof has passed its estimated useful life - AssetCALC ID: 6125507



Roofing in Poor condition.

Single-Ply Membrane, EPDM
DOVER ELEMENTARY SCHOOL - Main Building Roof

Uniformat Code: B3010
Recommendation: **Replace in 2023**
Priority Score: **88.9**
Plan Type: Performance/Integrity
Cost Estimate: \$137,500

\$\$\$\$

The roof is past it's estimated useful life, maintenance reports, numerous leaks - AssetCALC ID: 6125535



Storage Tank in Poor condition.

Domestic Water
DOVER ELEMENTARY SCHOOL - Main Building Maintenance room 24

Uniformat Code: D2010
Recommendation: **Replace in 2023**
Priority Score: **84.9**
Plan Type: Performance/Integrity
Cost Estimate: \$11,000

\$\$\$\$

Tank has exceeded recommended useful life - AssetCALC ID: 6125551



Flooring in Poor condition.

Parquet floor, w/ Asbestos Abatement
DOVER ELEMENTARY SCHOOL - Main Building Gymnasium

Uniformat Code: C2030

Recommendation: **Replace in 2023**

Priority Score: **81.9**

Plan Type: Performance/Integrity

Cost Estimate: \$100,000

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Asbestos abatement- under WOOD parquet floor in gym - AssetCALC ID: 6125526

Recommended Follow-up Study: Environmental, Sample for ACMs

Environmental, Sample for ACMs
DOVER ELEMENTARY SCHOOL - Main Building Gymnasium and piping elbows in kitchen

Uniformat Code: P2030

Recommendation: **Evaluate/Report in 2023**

Priority Score: **72.9**

Plan Type: Environmental

Cost Estimate: \$3,500

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ACBM was reportedly found under Gymnasium floor and around piping elbows in Kitchen. Materials look non-friable. - AssetCALC ID: 6172817

2. Building and Site Information



System Summary

<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Masonry bearing walls with metal roof deck supported by open-web steel joists and concrete strip/wall footing foundation system	Good
Facade	Primary Wall Finish : Brick Secondary Wall Finish: CMU Windows: Aluminum	Fair
Roof	Primary: Flat construction with single-ply EPDM membrane and TPO/PVC membrane	Poor
Interiors	Walls: Painted gypsum board Floors: Carpet, and VCT Ceilings: Painted gypsum board, and stained wood boards.	Fair
Elevators	None	--
Plumbing	Distribution: Copper supply and PVC waste & venting Hot Water: Oil water heaters Fixtures: Toilets, urinals, and sinks in all restrooms	Fair
HVAC	Central System: Boilers, air handlers feeding wall mounted unit ventilators Non-Central System: None Supplemental components: Ductless split-systems	Fair
Safety and Security	Cameras, 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 switchboard with copper wiring Fed from street with copper wiring Interior Lighting: linear fluorescent and CFL Emergency Power: Propane generator with automatic transfer switch	Fair
Fire Alarm	Alarm panel with 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 adjacent concrete sidewalks None	Good
Site Development	Building-mounted and pole mounted signage; wood board, chain link fencing. Playgrounds and sports fields and courts, dugouts, fencing, and site lights Limited Park benches, picnic tables, trash receptacles	Fair
Landscaping & Topography	Limited landscaping features including lawns, trees, bushes, and planters Irrigation not present Low to moderate site slopes throughout	Good
Utilities	On-site wells and septic Local utility-provided electric with propane and fuel oil tanks	Good
Site Lighting	Pole-mounted: HPS Building-mounted: HPS	Fair
Ancillary Structures	Union Arena (ice rink) Union Supervisory Building, Bus Barn	Fair
Accessibility	Presently it does not appear an accessibility study is needed for this property. Security system installed in 2018 consisting of: cameras, card readers, security windows and doors, fencing, lighting, Multiple points of entry, main entry monitored, auto locking doors, intercom system.	Good
Key Issues and Findings	Leaking roof, antiquated HVAC components and infrastructure, building lacks fire suppression, aged electrical infrastructure,	Fair

3. Supplemental Evaluations

Square Foot Verification

We have reviewed the square footage of 38,700 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

50.3%

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	\$12,000	-	\$13,700	\$60,000	\$173,600	\$259,300
Roofing	\$545,500	-	\$2,800	-	\$985,200	\$1,533,600
Interiors	\$100,000	-	\$479,800	\$212,600	\$804,200	\$1,596,700
Plumbing	\$11,000	\$1,700	\$78,800	-	\$606,900	\$698,400
HVAC	-	\$605,200	\$344,000	\$268,300	\$95,900	\$1,313,500
Fire Protection	-	\$5,700	-	-	-	\$5,700
Electrical	-	\$27,900	\$32,200	\$439,100	\$86,300	\$585,500
Fire Alarm & Electronic Systems	-	\$123,200	-	\$104,000	\$90,400	\$317,600
Equipment & Furnishings	-	-	\$47,000	\$26,000	\$92,400	\$165,400
Special Construction & Demo	-	-	-	-	\$58,000	\$58,000
Site Development	-	\$14,500	\$88,400	\$29,700	\$256,600	\$389,200
Site Pavement	-	-	\$17,100	\$19,800	\$285,100	\$322,000
Site Utilities	-	\$7,000	\$900	\$78,300	\$66,100	\$152,300
Follow-up Studies	\$3,500	-	-	-	-	\$3,500
TOTALS	\$672,000	\$785,200	\$1,104,700	\$1,237,800	\$3,600,700	\$7,400,700

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 require 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 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 system's 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
Dover Elementary School - Main Building	5%	158982.22R000-106.379	Elementary	38,700

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 Dover Elementary 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.

Based upon the utility bills provided, the following energy rates have been calculated and utilized in determining existing and proposed energy costs. Only partial 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 utility costs for this property for utilities where data was not received. 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	None

Average Utility Rates

Electricity	Propane	No. 2 Oil	Water & Sewer
Average Rate	Average Rate	Average Rate	Blended Rate
\$0.19 / kWh	\$1.96 / Gal (est.)	\$4.05 / Gal	N/A – on-site only

Electricity

Green Mountain Power provides electrical service to the facility.

The consumption pattern for the period under consideration varies seasonally. The 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.

Based on the 2022 electric usage and costs, not taking into account the electric usage/output related to solar, the average price paid during the year was \$0.19 per kWh. The total annual electricity consumption for the 12-month period analyzed is 179,214 kWh for a total cost of \$34,862.

Electricity Consumption & Cost Data			
Billing Month	Consumption (kWh)	Unit Cost (per kWh)	Total Cost
January,22	19,351	\$0.18	\$3,504
February,22	20,966	\$0.17	\$3,639
March,22	17,582	\$0.19	\$3,278
April,22	17,382	\$0.20	\$3,409
May,22	15,262	\$0.20	\$2,987
June,22	11,174	\$0.21	\$2,361
July,22	9,273	\$0.21	\$1,907
August,22	8,861	\$0.23	\$2,032
September,22	11,890	\$0.21	\$2,444
October,22	14,322	\$0.20	\$2,863
November,22	15,222	\$0.20	\$3,041
December,22	17,929	\$0.19	\$3,397
TOTAL/AVERAGE	179,214	\$0.19	\$34,862

Propane and Fuel Oil

Young Propane provides propane and fuel oil to the facility. The deliveries are made on an as-needed basis.

The primary use of propane is for emergency power (generator) and cooking. The primary use of fuel oil is for space heating and domestic water heating. The consumption pattern for the period under consideration varies seasonally. The seasonal variation in consumption is primarily attributed to the heating loads, and to varying domestic water heating and cooking requirements based on weather and school being in session.

Based on the 2022 fuel oil usage and costs provided, the average price paid during the year was \$4.05 per gallon of fuel oil. The total annual consumption for the 12-month period analyzed is 10,000 gallons for a total cost of \$40,500.

Consumption and cost data was not provided for propane in 2022; as a result, Bureau Veritas has used average utility costs from other VT Agency of Education properties to approximate utility costs for this property.

Fuel Oil Consumption & Cost Data

Delivery Month	Delivery (gallons)	Unit Cost (per gallon)	Total Cost
September,22	10,000	\$4.05	\$40,500
Total	10,000	\$4.05	\$40,500

Water and Sewer

The water and sewer requirements for the facility are satisfied by an on-site well and septic system, respectively.



11. Energy Conservation Measures

Bureau Veritas has conducted an Energy Audit on Dover Elementary 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 seven 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	\$222,931
Estimated Annual Cost Savings Related to ECMs	\$23,981
Net Effective ECM Payback	9.3 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 this criteria.

1. 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.

Dover Elementary School

Energy Conservation Measures

	Description of ECM	Location	Net Projected Initial Investment (\$)	Estimated Annual Savings Propane (Gal)	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 (MtCO 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	Replace Incandescent/CFL /Halogen Lamps With LED Lamps; Replace 18 4 Pin-CFL32 with 4 Pin-LED10	Location: Classrooms	\$62	0.0	0.0	889.6	0.0	3.0	0.2	\$173	\$2	\$175	0.4	\$2,025	15
2	Replace High Intensity Discharge Lamps With LED; Replace 11x Flood Lights:-250W with 50Watt LED	Location: Site	\$3,614	0.0	0.0	8,833.0	0.0	30.1	2.1	\$1,718	\$782	\$2,500	1.4	\$26,231	15
3	Install Low Flow Faucet Aerators; Replace 30x 1.5GPM rated bathroom aerators with 0.5GPM WaterSense certified aerators	Location: Restrooms	\$455	0.0	54.3	0.0	9.1	7.5	0.6	\$220	\$0	\$220	2.1	\$1,421	10
4	Install On-Demand Ventilation on Air Handlers; Install OA controls on (3x) AHU(s)	Location: Gymnasium, mechanical room 2	\$5,299	0.0	540.3	0.0	0.0	74.8	5.5	\$2,188	\$109	\$2,298	2.3	\$14,301	10
5	Replace Existing Linear Fluorescent Lamps; Replace 206x F43T8 with F43LED; Replace 110x F42T8 with F42LED; Replace 42x F44T8 with F44LED	Location: Throughout school	\$12,521	0.0	0.0	19,801.9	0.0	67.6	4.7	\$3,852	\$243	\$4,095	3.1	\$36,368	15
6	Replace External Windows; Replace Metal Frame & Double Glazing windows with new double pane windows rated at U-0.31	Location: Throughout school	\$28,457	0.0	808.3	0.0	0.0	111.9	8.2	\$3,273	\$33	\$3,306	8.6	\$36,345	30
7	Replace Inefficient Heating Plant; Replace (2x) Cast Iron boiler(s) with (3x) 95% efficient Condensing Boilers	Location: Mechanical room	\$143,445	0.0	3,368.4	0.0	0.0	466.5	34.1	\$13,642	\$409	\$14,051	10.2	\$101,233	25
Totals for no/low cost items			\$516	0.0	54.3	889.6	0.0	10.6	0.8	\$393	\$2	\$395	1.3		
Total for capital cost			\$193,337	0.0	4,717.0	28,634.9	1.0	751.0	54.6	\$24,674	\$1,576	\$26,250	7.4		
Interactive Savings Discount @10%				0.0	-477.1	-2,952.5	-0.1	-76.2	-5.5	-\$2,507	-\$158	-\$2,665			
Total Contingency Expenses @ 15%			\$29,078												
Totals for improvements			\$222,931	0.0	4,294.2	26,572.1	0.9	685.4	49.8	\$22,560	\$1,420	\$23,981	9.3		

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 DOVER ELEMENTARY SCHOOL - Main Building, 9 SCHOOLHOUSE ROAD, EAST DOVER, VT 05351, 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 - BUILDING FACADE



6 - MAIN BUILDING ENTRANCE

Photographic Overview



7 - PRIMARY EPDM ROOF OVERVIEW



8 - SECONDARY TPO/PVC ROOF OVERVIEW



9 - EDGE CONDITIONS ALONG PERIMETER



10 - COMMON INTERIOR ACCESS HALLWAY



11 - MULTIPURPOSE GYMNASIUM CAFETERIA



12 - TYPICAL GENERAL CLASSROOM

Photographic Overview



13 - TYPICAL GENERAL CLASSROOM



14 - LIBRARY MEETING AREA



15 - SERVICE DESK RECEPTION AREA



16 - MAIN MECHANICAL EQUIPMENT ROOM



17 - PLUMBING SYSTEM WELL POINT



18 - UNDERGROUND WATER TANK

Photographic Overview



19 - CHLORINE FREE WATER SANITATION SYSTEM



20 - ROOFTOP EXHAUST EQUIPMENT



21 - MAIN ELECTRIC ROOM



22 - FIRE ALARM ENUNCIATOR PANEL



23 - STAFF BREAKROOM OVERVIEW



24 - MAIN STAFF PARKING LOT

Photographic Overview



25 - SECONDARY VISITOR PARKING LOT



26 - PLAYGROUND WEST SIDE



27 - BASEBALL DIAMOND WITH DUGOUTS



28 - PLANTER BOXES AND PICNIC TABLES



29 - EXTERIOR BASKETBALL COURT



30 - BUILDING MOUNTED PROPERTY SIGNAGE

Appendix B:

Site Plans

Site Plan



Project Name	Project Number
Vermont Agency of Education	158892.22R000-106.379 Dover Elementary School
Source	On-Site Date
Google MyMaps	May 4, 2023

Appendix C:

Stem/Steam Assessment

STEM/STEAM Evaluation

Property Name	STEM/STEAM Suitability Score	Project Number	School Type	Square Footage
Dover Elementary School - Main Building	5%	158982.22R000-106.379	Elementary	38,700

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%

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?	No		X	X
Does the facility have a Shop (Machine, Wood, Metal, etc.)?	No		X	X
Does the facility have a Computer Lab?	No	X	X	X
Does the facility have a dedicated STEM/STEAM Room?	No	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?	3- Missing				
Does the room have electrical outlet distribution along perimeter walls and from the ceiling?	2- Partial				
Does the room have open shelving and lockable storage cabinets?	2- Partial				
Does the room have technology connectivity and an interactive display?	2- Partial				
Does the room have appropriate wet floor finishes?	1- Meets				
Does the room have visual display boards?	1- Meets				
Does the room have Prep/Storage Room?	3- Missing				
Does the room have direct access to the exterior?	1- Meets				
Does the room the ability to structurally suspend items from the ceiling?	3- Missing				
Does the have goggle cabinets, fire extinguisher, eye wash and deluge shower?	3- Missing				
Room Type Score	45%	N/A	N/A	0%	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

Dover Elementary School

SU/SD

Windsor Central 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.):

We house Pre-k through 6th grade each grade has a classroom

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

Yes

We offer art, music, Spanish, PE, and academic support services. Each program has a space

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

No

No other programming in the future

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:

We have to use spaces already assigned to another grade or program.

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

Yes

Please describe:

The Admin and Admin assistance share a space, but each has a "room" with a door

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:

The gym and cafeteria share the same space. It would be helpful if we had a separate cafeteria with a larger kitchen.

Appendix E:

Accessibility Review & Photos

Visual Survey - ADA Standards for Accessible Design

Property Name: Dover Elementary School

BV Project Number: 158985.22R000-106.379

Facility History & Interview

Question	Yes	No	Unk	Comments
1. ADA: Has an accessibility study been performed at the site? If so, when?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. ADA: If a study has occurred, have the associated recommendations been addressed? In full or in part?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. ADA: Have there been regular complaints about accessibility issues, or previous or pending litigation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

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
Playground				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 - CLOSE-UP OF STALL



3 - PRIMARY PATH OF TRAVEL



4 - CURB CUT



5 - MAIN ACCESSIBLE ENTRANCE



6 - ENTRY CALL BUTTON



7 - ACCESSIBLE INTERIOR PATH



8 - DOOR HARDWARE



9 - TOILET STALL OVERVIEW



10 - SINK, FAUCET HANDLES



11 - ACCESSIBLE ROUTE TO PLAYGROUND



12 - OVERVIEW OF PLAYGROUND

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 | DOVER ELEMENTARY SCHOOL - Main Building

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity		RUL	ID
Facade								
B2010	Building Exterior	Facade	Fair	Exterior Walls, Brick Veneer	3,000	SF	12	6125515
B2010	Building Exterior	Facade	Fair	Exterior Walls, any painted surface, Prep & Paint	3,942	SF	6	6125475
B2010	Building Exterior	Facade	Poor	Exterior Walls, any painted surface, Prep & Paint	4,000	SF	0	6125459
B2020	Kitchen	Facade	Fair	Screens & Shutters, Rolling Security Shutter, 55 to 100 SF	1		10	6125479
B2020	Building Exterior	Facade	Fair	Window, Aluminum Double-Glazed, 16-25 SF	35		7	6125547
B2020	Kitchen	Facade	Fair	Screens & Shutters, Rolling Security Shutter, 10 to 50 SF	1		10	6125483
B2050	Building Exterior	Facade	Good	Overhead/Dock Door, Aluminum, 12'x12' (144 SF)	1		23	6125533
B2050	Building Exterior	Facade	Fair	Exterior Door, Steel, Standard	25		13	6125501
Roofing								
B3010	Roof	Roofing	Poor	Roofing, Single-Ply Membrane, EPDM	12,500	SF	0	6125535
B3010	Roof	Roofing	Poor	Roofing, Single-Ply Membrane, TPO/PVC	24,000	SF	0	6125507
B3060	Roof	Roofing	Fair	Roof Skylight, per unit, up to 20 SF	2		4	6125493
Interiors								
C1030	Throughout building	Interiors	Fair	Interior Door, Wood, Solid-Core	70		14	6125500
C1070	Throughout building	Interiors	Fair	Suspended Ceilings, Acoustical Tile (ACT)	16,000	SF	4	6125513
C2010	Throughout	Interiors	Fair	Wall Finishes, any surface, Prep & Paint	60,000	SF	6	6126653
C2030	Restrooms	Interiors	Fair	Flooring, Vinyl Tile (VCT)	3,000	SF	4	6125484
C2030	Restrooms	Interiors	Fair	Flooring, Ceramic Tile	400	SF	13	6125543
C2030	Gymnasium	Interiors	Poor	Flooring, Parquet floor, w/ Asbestos Abatement	200	SF	0	6125526
C2030	Throughout	Interiors	Fair	Flooring, Carpet, Commercial Standard	32,000	SF	6	6125511
C2050	Classroom	Interiors	Fair	Ceiling Finishes, Wood Paneling	12,350	SF	8	6125536
C2050	Gymnasium	Interiors	Fair	Ceiling Finishes, any flat surface, Prep & Paint	8,500	SF	6	6125517
Plumbing								
D2010	Throughout building	Plumbing	Fair	Plumbing System, Supply & Sanitary, Medium Density (excludes fixtures)	38,700	SF	13	6125462
D2010	Maintenance room 24	Plumbing	Poor	Storage Tank, Domestic Water	1		0	6125551
D2010	Restrooms	Plumbing	Fair	Urinal, Standard	2		4	6125476
D2010	Maintenance room 24	Plumbing	Fair	Sink/Lavatory, Service Sink, Floor	1		4	6125549
D2010	Throughout building	Plumbing	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	30		4	6125485
D2010	Kitchen	Plumbing	Fair	Sink/Lavatory, Commercial Kitchen, 1-Bowl	1		3	6125460
D2010	Throughout building	Plumbing	Fair	Toilet, Commercial Water Closet	17		4	6125522
D2010	Boiler room	Plumbing	Fair	Water Heater, Oil	1		6	6125471
HVAC								
D3010	Underground By generator	HVAC	Fair	Storage Tank, Fuel, 2501 to 5000 GAL	1		9	6172815
D3010	Boiler room	HVAC	Good	Pump, Fuel Oil	2		15	6125530
D3020	Entry heaters	HVAC	Fair	Cabinet Heater, Electric, 3 to 4 LF	5		3	6125503
D3020	Mechanical room two	HVAC	Good	Unit Heater, Electric	1		18	6125521
D3020	Boiler room	HVAC	Fair	Boiler, Oil, HVAC	1		3	6125550
D3020	Boiler room	HVAC	Fair	Boiler Supplemental Components, Expansion Tank	1		14	6125456

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity		RUL	ID
D3020	Roof	HVAC	Good	Air Ventilator, Energy Recovery Unit, up to 6500 CFM	1		14	6125531
D3020	Throughout building	HVAC	Fair	Radiator, Hydronic, Baseboard (per LF)	500	LF	4	6125529
D3020	Boiler, Kitchen	HVAC	Fair	Unit Heater, Hydronic	3		2	6125494
D3020	Boiler room	HVAC	Fair	Boiler, Oil, HVAC	1		3	6125478
D3030	Throughout building	HVAC	Fair	Unit Ventilator, approx/nominal 4 Ton	19		5	6125468
D3050	Throughout	HVAC	Fair	HVAC System, Hydronic Piping, 2-Pipe	38700	SF	9	6175742
D3050	Mechanical room two	HVAC	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1		3	6125534
D3050	Gymnasium	HVAC	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1		3	6125482
D3050	Mechanical room two	HVAC	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1		3	6125540
D3050	Throughout	HVAC	Fair	HVAC System, Ductwork, Medium Density	38700	SF	3	6175791
D3060	Roof	HVAC	Fair	Exhaust Fan, Centrifugal, 12" Damper, 100 to 1000 CFM	11		4	6125487
D3060	Roof	HVAC	Good	Exhaust Fan, Centrifugal, 16" Damper	16		24	6125552
D3060	Roof	HVAC	Fair	Exhaust Fan, Centrifugal, 28" Damper	4		6	6125508
Fire Protection								
D4010	Throughout	Fire Protection	Fair	Fire Suppression System, Existing Sprinkler Heads, by SF	5000	SF	3	6126570
Electrical								
D5010	Building exterior	Electrical	Fair	Generator, Gas or Gasoline	1		13	6125556
D5010	Next to generator	Electrical	Fair	Automatic Transfer Switch, ATS	1		13	6125491
D5020	Maintenance room 24	Electrical	Fair	Distribution Panel, 277/480 V, 400 AMP	1		3	6125544
D5020	Maintenance room 24	Electrical	Fair	Distribution Panel, 277/480 V, 600 AMP	1		3	6125538
D5020	Boiler room	Electrical	Fair	Distribution Panel, 120/208 V	1		3	6125542
D5020	Boiler room	Electrical	Fair	Distribution Panel, 120/208 V	1		3	6125465
D5020	Maintenance room 24	Electrical	Fair	Secondary Transformer, Dry, Stepdown	1		4	6125489
D5020	Mechanical room two	Electrical	Fair	Secondary Transformer, Dry, Stepdown	1		4	6125553
D5020	Boiler room	Electrical	Fair	Secondary Transformer, Dry, Stepdown	1		4	6125488
D5020	Mechanical room two	Electrical	Fair	Distribution Panel, 277/480 V, 200 AMP	1		3	6125539
D5020	Maintenance room 24	Electrical	Fair	Distribution Panel, 277/480 V, 600 AMP	1		3	6125545
D5020	Maintenance room 24	Electrical	Fair	Secondary Transformer, Dry, Stepdown	1		4	6125512
D5030	Throughout	Electrical	Fair	Electrical System, Wiring & Switches, High Density/Complexity	38700	SF	11	6126441
D5040	Throughout	Electrical	Fair	Interior Lighting System, Full Upgrade, High Density & Standard Fixtures	38,700	SF	7	6125486
Fire Alarm & Electronic Systems								
D6020	Throughout building	Fire Alarm & Electronic Systems	Good	Low Voltage System, Phone & Data Lines	38,700	SF	16	6125557
D7030	Throughout building	Fire Alarm & Electronic Systems	Good	Security/Surveillance System, Full System Upgrade, Average Density	38700	SF	11	6125463
D7050	Throughout	Fire Alarm & Electronic Systems	Fair	Fire Alarm System, Full System Upgrade, Standard Addressable, Install	38700	SF	3	6126568
Equipment & Furnishings								
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Food Warmer, Tabletop Drawers (Set of 4)	1		5	6125455
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Refrigerator, 2-Door Reach-In	1		4	6125518

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity		RUL	ID
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Griddle	1		5	6125548
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Freezer, 1-Door Reach-In	1		10	6125467
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Freezer, 2-Door Reach-In	1		8	6125555
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Range/Oven, 6-Burner w/ Griddle	1		8	6125481
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Dishwasher Commercial	1		4	6125527
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Mixer, Freestanding	1		13	6125510
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Icemaker, Tabletop	1		9	6125524
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Dairy Cooler/Wells	1		6	6125505
Special Construction & Demo								
F1020	Site	Special Construction & Demo	Fair	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Standard	200	SF	18	6125506
F1020	Next to generator	Special Construction & Demo	Fair	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Standard	396	SF	18	6125516
F1020	Site	Special Construction & Demo	Good	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Standard	64	SF	27	6125466
F1020	Softball field	Special Construction & Demo	Fair	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Standard	100	SF	20	6133547
Pedestrian Plazas & Walkways								
G2020	Site	Pedestrian Plazas & Walkways	Good	Parking Lots, Pavement, Asphalt, Mill & Overlay	34,778	SF	19	6126572
G2020	Site	Pedestrian Plazas & Walkways	Good	Parking Lots, Pavement, Asphalt, Seal & Stripe	34778	SF	4	6175706
G2030	Site	Pedestrian Plazas & Walkways	Fair	Sidewalk, Concrete, Large Areas	1956	SF	17	6125502
Athletic, Recreational & Playfield Areas								
G2050	Gymnasium	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Basketball, Backboard/Rim/Pole	2		6	6125546
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Athletic Surfaces & Courts, Basketball/General, Asphalt Pavement, Seal & Stripe	4700	SF	3	6125473
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Basketball, Backboard/Rim/Pole	2		4	6125519
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Baseball, Batting Cage	1		9	6125499
G2050	Site	Athletic, Recreational & Playfield Areas	Good	Playfield Surfaces, Chips Wood, 6" Depth	5781	SF	3	6125523
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Multipurpose, Large	1		12	6125477
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Soccer, Movable Practice Goal	2		5	6125490
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Baseball, Backstop Chain-Link	1		9	6125492
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Swing Set, 4 Seats	2		12	6125474
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Multipurpose, Medium	4		12	6125525
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Athletic Surfaces & Courts, Basketball/General, Asphalt Pavement, Mill & Overlay	4700	SF	6	6125498
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Playfield Surfaces, Sand, 6" Depth	1857	SF	8	6125504
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Player/Dugout Benches, 12' Length	2		5	6125496
Sitework								

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity		RUL	ID
G2060	road sign to driveway	Sitework	Fair	Signage, Exterior/Site, Guide & Directional Pole-Mounted	1		8	6125509
G2060	Site	Sitework	Fair	Picnic Table, Wood/Composite/Fiberglass	4		4	6125541
G2060	Site	Sitework	Fair	Fences & Gates, Fence, Chain Link 8'	90	LF	13	6125495
G2060	Site	Sitework	Fair	Fences & Gates, Fence, Chain Link 4'	100	LF	13	6125520
G2060	Site	Sitework	Fair	Fences & Gates, Fence, Wood Board, Refinish	232	SF	4	6125537
G2080	Site	Sitework	Fair	Planter Boxes, Basic or Wood Built-In Place	64	LF	6	6125480
G4050	Parking lot	Sitework	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	11		3	6125458
G4050	Exterior	Sitework	Fair	Site Lighting, Floodlights, 55 W	1		5	6126654
Utilities								
G3010	Rear of building	Utilities	Fair	Storage Tank, Site Water, Underground, 10000 GAL	1		18	6172814
G3060	Southeast underground	Utilities	Fair	Storage Tank, Site Fuel, Underground, 10000 GAL	1		10	6172813
Follow-up Studies								
P2030	Gymnasium and piping elbows	Follow-up Studies	NA	Engineering Study, Environmental, Sample for ACMs, Evaluate/Report	1		0	6172817

Appendix G: Replacement Reserves

Uniformat Code	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	Deficiency Repair Estimate
D3050	6125534	Air Handler, Interior AHU, Easy/Moderate Access, Replace	25	23	2	1	EA	\$22,000.00	\$22,000			\$22,000																			\$22,000
D3050	6125482	Air Handler, Interior AHU, Easy/Moderate Access, Replace	30	28	2	1	EA	\$31,000.00	\$31,000			\$31,000																			\$31,000
D3050	6125540	Air Handler, Interior AHU, Easy/Moderate Access, Replace	25	23	2	1	EA	\$22,000.00	\$22,000			\$22,000																			\$22,000
D3050	6175791	HVAC System, Ductwork, Medium Density, Replace	30	28	2	38700	SF	\$4.00	\$154,800			\$154,800																			\$154,800
D3060	6125487	Exhaust Fan, Centrifugal, 12" Damper, 100 to 1000 CFM, Replace	25	22	3	11	EA	\$1,400.00	\$15,400				\$15,400																		\$15,400
D3060	6125508	Exhaust Fan, Centrifugal, 28" Damper, Replace	25	20	5	4	EA	\$4,000.00	\$16,000						\$16,000																\$16,000
D4010	6126570	Fire Suppression System, Existing Sprinkler Heads, by SF, Replace	25	23	2	5000	SF	\$1.07	\$5,350			\$5,350																			\$5,350
D5010	6125556	Generator, Gas or Gasoline, Replace	25	13	12	1	EA	\$52,000.00	\$52,000													\$52,000									\$52,000
D5010	6125491	Automatic Transfer Switch, ATS, Replace	25	13	12	1	EA	\$8,500.00	\$8,500													\$8,500									\$8,500
D5020	6125489	Secondary Transformer, Dry, Stepdown, Replace	30	27	3	1	EA	\$7,600.00	\$7,600				\$7,600																		\$7,600
D5020	6125553	Secondary Transformer, Dry, Stepdown, Replace	30	27	3	1	EA	\$6,700.00	\$6,700				\$6,700																		\$6,700
D5020	6125488	Secondary Transformer, Dry, Stepdown, Replace	30	27	3	1	EA	\$7,600.00	\$7,600				\$7,600																		\$7,600
D5020	6125512	Secondary Transformer, Dry, Stepdown, Replace	30	27	3	1	EA	\$7,600.00	\$7,600				\$7,600																		\$7,600
D5020	6125544	Distribution Panel, 277/480 V, 400 AMP, Replace	30	28	2	1	EA	\$5,300.00	\$5,300			\$5,300																			\$5,300
D5020	6125538	Distribution Panel, 277/480 V, 600 AMP, Replace	30	28	2	1	EA	\$7,000.00	\$7,000			\$7,000																			\$7,000
D5020	6125542	Distribution Panel, 120/208 V, Replace	30	28	2	1	EA	\$2,000.00	\$2,000			\$2,000																			\$2,000
D5020	6125465	Distribution Panel, 120/208 V, Replace	30	28	2	1	EA	\$2,000.00	\$2,000			\$2,000																			\$2,000
D5020	6125539	Distribution Panel, 277/480 V, 200 AMP, Replace	30	28	2	1	EA	\$3,000.00	\$3,000			\$3,000																			\$3,000
D5020	6125545	Distribution Panel, 277/480 V, 600 AMP, Replace	30	28	2	1	EA	\$7,000.00	\$7,000			\$7,000																			\$7,000
D5030	6126441	Electrical System, Wiring & Switches, High Density/Complexity, Replace	40	30	10	38700	SF	\$4.00	\$154,800											\$154,800											\$154,800
D5040	6125486	Interior Lighting System, Full Upgrade, High Density & Standard Fixtures, Replace	20	14	6	38700	SF	\$5.00	\$193,500						\$193,500																\$193,500
D6020	6125557	Low Voltage System, Phone & Data Lines, Replace	20	5	15	38700	SF	\$1.50	\$58,050															\$58,050							\$58,050
D7030	6125463	Security/Surveillance System, Full System Upgrade, Average Density, Replace	15	5	10	38700	SF	\$2.00	\$77,400											\$77,400											\$77,400
D7050	6126568	Fire Alarm System, Full System Upgrade, Standard Addressable, Install	20	18	2	38700	SF	\$3.00	\$116,100			\$116,100																			\$116,100
E1030	6125518	Foodservice Equipment, Refrigerator, 2-Door Reach-In, Replace	15	12	3	1	EA	\$4,600.00	\$4,600				\$4,600														\$4,600				\$9,200
E1030	6125527	Foodservice Equipment, Dishwasher Commercial, Replace	10	7	3	1	EA	\$21,500.00	\$21,500				\$21,500									\$21,500									\$43,000
E1030	6125455	Foodservice Equipment, Food Warmer, Tabletop Drawers (Set of 4), Replace	15	11	4	1	EA	\$5,700.00	\$5,700					\$5,700														\$5,700			\$11,400
E1030	6125548	Foodservice Equipment, Griddle, Replace	15	11	4	1	EA	\$7,000.00	\$7,000					\$7,000														\$7,000			\$14,000
E1030	6125505	Foodservice Equipment, Dairy Cooler/Wells, Replace	15	10	5	1	EA	\$3,600.00	\$3,600						\$3,600														\$3,600		\$7,200
E1030	6125555	Foodservice Equipment, Freezer, 2-Door Reach-In, Replace	15	8	7	1	EA	\$5,100.00	\$5,100								\$5,100														\$5,100
E1030	6125481	Foodservice Equipment, Range/Oven, 6-Burner w/ Griddle, Replace	15	8	7	1	EA	\$10,200.00	\$10,200								\$10,200														\$10,200
E1030	6125524	Foodservice Equipment, Icemaker, Tabletop, Replace	10	2	8	1	EA	\$2,500.00	\$2,500									\$2,500									\$2,500				\$5,000
E1030	6125467	Foodservice Equipment, Freezer, 1-Door Reach-In, Replace	15	6	9	1	EA	\$3,100.00	\$3,100									\$3,100													\$3,100
E1030	6125510	Foodservice Equipment, Mixer, Freestanding, Replace	25	13	12	1	EA	\$14,000.00	\$14,000												\$14,000										\$14,000
F1020	6125506	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Standard, Replace	30	13	17	200	SF	\$50.00	\$10,000																	\$10,000					\$10,000
F1020	6125516	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Standard, Replace	30	13	17	396	SF	\$50.00	\$19,800																	\$19,800					\$19,800
F1020	6133547	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Standard, Replace	30	11	19	100	SF	\$50.00	\$5,000																		\$5,000				\$5,000

Uniformat Code	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	Deficiency Repair Estimate	
G2020	6175706	Parking Lots, Pavement, Asphalt, Seal & Stripe	5	2	3	34778	SF	\$0.45	\$15,650				\$15,650					\$15,650					\$15,650								\$15,650	\$62,600
G2020	6126572	Parking Lots, Pavement, Asphalt, Mill & Overlay	25	7	18	34778	SF	\$3.50	\$121,723																					\$121,723	\$121,723	
G2030	6125502	Sidewalk, Concrete, Large Areas, Replace Athletic Surfaces & Courts, Basketball/General, Asphalt Pavement, Seal & Stripe	50	34	16	1956	SF	\$9.00	\$17,604																	\$17,604					\$17,604	
G2050	6125473	Sports Apparatus, Basketball, Backboard/Rim/Pole, Replace	5	3	2	4700	SF	\$0.45	\$2,115			\$2,115					\$2,115					\$2,115								\$2,115	\$8,460	
G2050	6125519	Sports Apparatus, Soccer, Movable Practice Goal, Replace	25	22	3	2	EA	\$9,500.00	\$19,000				\$19,000																		\$19,000	
G2050	6125490	Sports Apparatus, Player/Dugout Benches, 12' Length, Replace	15	11	4	2	EA	\$700.00	\$1,400					\$1,400																\$1,400	\$2,800	
G2050	6125496	Sports Apparatus, Basketball, Backboard/Rim/Pole, Replace	15	11	4	2	EA	\$450.00	\$900					\$900																\$900	\$1,800	
G2050	6125546	Sports Apparatus, Basketball, Backboard/Rim/Pole, Replace	25	20	5	2	EA	\$9,500.00	\$19,000						\$19,000																\$19,000	
G2050	6125498	Athletic Surfaces & Courts, Basketball/General, Asphalt Pavement, Mill & Overlay	25	20	5	4700	SF	\$3.50	\$16,450						\$16,450																\$16,450	
G2050	6125499	Sports Apparatus, Baseball, Batting Cage, Replace	15	7	8	1	EA	\$1,500.00	\$1,500									\$1,500													\$1,500	
G2050	6125492	Sports Apparatus, Baseball, Backstop Chain-Link, Replace	20	12	8	1	EA	\$5,000.00	\$5,000									\$5,000													\$5,000	
G2050	6125523	Playfield Surfaces, Chips Wood, 6" Depth, Replace	3	1	2	5781	SF	\$2.00	\$11,562			\$11,562			\$11,562						\$11,562						\$11,562			\$11,562	\$80,934	
G2050	6125504	Playfield Surfaces, Sand, 6" Depth, Replace	20	13	7	1857	SF	\$1.60	\$2,971								\$2,971														\$2,971	
G2050	6125477	Play Structure, Multipurpose, Large, Replace	20	9	11	1	EA	\$35,000.00	\$35,000												\$35,000										\$35,000	
G2050	6125474	Play Structure, Swing Set, 4 Seats, Replace	20	9	11	2	EA	\$2,500.00	\$5,000												\$5,000										\$5,000	
G2050	6125525	Play Structure, Multipurpose, Medium, Replace	20	9	11	4	EA	\$20,000.00	\$80,000												\$80,000										\$80,000	
G2060	6125541	Picnic Table, Wood/Composite/Fiberglass, Replace	20	17	3	4	EA	\$600.00	\$2,400				\$2,400																		\$2,400	
G2060	6125537	Fences & Gates, Fence, Wood Board, Refinish	10	7	3	232	SF	\$2.00	\$464				\$464									\$464									\$464	
G2060	6125495	Fences & Gates, Fence, Chain Link 8', Replace	40	28	12	90	LF	\$25.00	\$2,250												\$2,250										\$2,250	
G2060	6125520	Fences & Gates, Fence, Chain Link 4', Replace	40	28	12	100	LF	\$18.00	\$1,800												\$1,800										\$1,800	
G2060	6125509	Signage, Exterior/Site, Guide & Directional Pole-Mounted, Replace	20	13	7	1	EA	\$500.00	\$500								\$500														\$500	
G2080	6125480	Planter Boxes, Basic or Wood Built-In Place, Replace	25	20	5	64	LF	\$100.00	\$6,400						\$6,400																\$6,400	
G3010	6172814	Storage Tank, Site Water, Underground, 10000 GAL, Replace	30	13	17	1	EA	\$40,000.00	\$40,000																		\$40,000				\$40,000	
G3060	6172813	Storage Tank, Site Fuel, Underground, 10000 GAL, Replace	25	16	9	1	EA	\$60,000.00	\$60,000										\$60,000												\$60,000	
G4050	6126654	Site Lighting, Floodlights, 55 W, Replace Exterior Fixture w/ Lamp, any type, w/ LED Replacement, Replace	20	16	4	1	EA	\$800.00	\$800					\$800																	\$800	
G4050	6125458	Engineering Study, Environmental, Sample for ACMs, Evaluate/Report	0	1	0	1	EA	\$3,500.00	\$3,500	\$3,500																					\$3,500	
Totals, Unescalated										\$672,000	\$3,300	\$736,927	\$327,214	\$217,200	\$433,738	\$226,750	\$193,786	\$248,012	\$66,300	\$244,200	\$212,562	\$528,565	\$145,001	\$15,882	\$516,876	\$17,604	\$85,677	\$159,473	\$20,000	\$572,662	\$5,643,730	
Totals, Escalated (3.0% inflation, compounded annually)										\$672,000	\$3,399	\$781,806	\$357,556	\$244,461	\$502,821	\$270,751	\$238,333	\$314,174	\$86,506	\$328,184	\$294,236	\$753,607	\$212,939	\$24,023	\$805,276	\$28,249	\$141,611	\$271,492	\$35,070	\$1,034,291	\$7,400,786	

Appendix H:

Depleted Value Report

DOVER ELEMENTARY SCHOOL - Main Building

Depleted Value Index

50.3%

System	System Contribution	System Value
Air Handler	\$ 16,133	\$ 22,000
Air Handler	\$ 12,400	\$ 31,000
Air Handler	\$ 19,800	\$ 22,000
Air Ventilator	\$ 11,688	\$ 12,987
Athletic Surfaces & Courts	\$ 1,904	\$ 2,115
Athletic Surfaces & Courts	\$ 14,805	\$ 16,450
Automatic Transfer Switch	\$ 7,650	\$ 8,500
Boiler	\$ 144,000	\$ 160,000
Boiler	\$ 116,000	\$ 160,000
Boiler Supplemental Components	\$ -	\$ 45,400
Cabinet Heater	\$ 14,700	\$ 17,500
Ceiling Finishes	\$ 6,916	\$ 172,900
Ceiling Finishes	\$ 12,920	\$ 17,000
Distribution Panel	\$ 3,578	\$ 5,300
Distribution Panel	\$ 5,950	\$ 7,000
Distribution Panel	\$ 1,520	\$ 2,000
Distribution Panel	\$ 800	\$ 2,000
Distribution Panel	\$ 3,000	\$ 3,000
Distribution Panel	\$ 4,725	\$ 7,000
Electrical System	\$ 104,490	\$ 154,800
Engineering Study	\$ 2,100	\$ 3,500
Exhaust Fan	\$ 13,090	\$ 15,400
Exhaust Fan	\$ 33,792	\$ 38,400
Exhaust Fan	\$ 11,733	\$ 16,000
Exterior Door	\$ 10,125	\$ 15,000
Exterior Fixture w/ Lamp	\$ 6,600	\$ 6,600
Exterior Walls	\$ 32,400	\$ 81,000
Exterior Walls	\$ 7,884	\$ 11,826
Exterior Walls	\$ 8,800	\$ 12,000
Fences & Gates	\$ 1,500	\$ 2,250
Fences & Gates	\$ 600	\$ 1,800
Fences & Gates	\$ 217	\$ 464
Fire Alarm System	\$ 54,180	\$ 116,100
Fire Suppression System	\$ 3,210	\$ 5,350
Flooring	\$ 7,200	\$ 15,000
Flooring	\$ 720	\$ 7,200

System	System Contribution	System Value
Flooring	\$ 60,000	\$ 100,000
Flooring	\$ 115,200	\$ 240,000
Foodservice Equipment	\$ 4,418	\$ 5,700
Foodservice Equipment	\$ 4,140	\$ 4,600
Foodservice Equipment	\$ 4,550	\$ 7,000
Foodservice Equipment	\$ 2,015	\$ 3,100
Foodservice Equipment	\$ 1,020	\$ 5,100
Foodservice Equipment	\$ 2,380	\$ 10,200
Foodservice Equipment	\$ 5,160	\$ 21,500
Foodservice Equipment	\$ 2,800	\$ 14,000
Foodservice Equipment	\$ 2,000	\$ 2,500
Foodservice Equipment	\$ 2,736	\$ 3,600
Generator	\$ 20,800	\$ 52,000
HVAC System	\$ 77,400	\$ 193,500
HVAC System	\$ 61,920	\$ 154,800
Interior Door	\$ -	\$ 49,000
Interior Lighting System	\$ 116,100	\$ 193,500
Low Voltage System	\$ 39,184	\$ 58,050
Overhead/Dock Door	\$ -	\$ 4,400
Parking Lots	\$ 105,493	\$ 121,723
Parking Lots	\$ 13,563	\$ 15,650
Picnic Table	\$ 2,400	\$ 2,400
Planter Boxes	\$ 6,400	\$ 6,400
Play Structure	\$ 17,500	\$ 35,000
Play Structure	\$ 2,500	\$ 5,000
Play Structure	\$ 69,333	\$ 80,000
Playfield Surfaces	\$ 10,020	\$ 11,562
Playfield Surfaces	\$ 2,575	\$ 2,971
Plumbing System	\$ 368,940	\$ 425,700
Pump	\$ 1,152	\$ 4,320
Radiator	\$ 30,000	\$ 75,000
Roof Skylight	\$ 1,040	\$ 2,600
Roofing	\$ 13,750	\$ 137,500
Roofing	\$ 136,000	\$ 408,000
Screens & Shutters	\$ 1,320	\$ 2,000
Screens & Shutters	\$ 720	\$ 1,200
Secondary Transformer	\$ 6,731	\$ 7,600
Secondary Transformer	\$ 5,807	\$ 6,700
Secondary Transformer	\$ 6,840	\$ 7,600
Secondary Transformer	\$ 5,700	\$ 7,600
Security/Surveillance System	\$ 58,824	\$ 77,400
Shed/Gazebo/Shade Structure	\$ 8,400	\$ 10,000

System	System Contribution	System Value
Shed/Gazebo/Shade Structure	\$ 7,920	\$ 19,800
Shed/Gazebo/Shade Structure	\$ 2,133	\$ 3,200
Shed/Gazebo/Shade Structure	\$ 2,750	\$ 5,000
Sidewalk	\$ 11,736	\$ 17,604
Signage	\$ 320	\$ 500
Sink/Lavatory	\$ 480	\$ 800
Sink/Lavatory	\$ 45,000	\$ 45,000
Sink/Lavatory	\$ 640	\$ 1,600
Site Lighting	\$ 672	\$ 800
Sports Apparatus	\$ 16,467	\$ 19,000
Sports Apparatus	\$ 1,900	\$ 19,000
Sports Apparatus	\$ 1,350	\$ 1,500
Sports Apparatus	\$ 1,050	\$ 1,400
Sports Apparatus	\$ 4,333	\$ 5,000
Sports Apparatus	\$ 360	\$ 900
Storage Tank	\$ 12,200	\$ 18,300
Storage Tank	\$ 46,000	\$ 60,000
Storage Tank	\$ -	\$ 11,000
Storage Tank	\$ -	\$ 40,000
Suspended Ceilings	\$ -	\$ 56,000
Toilet	\$ -	\$ 22,100
Unit Heater	\$ -	\$ 2,200
Unit Heater	\$ -	\$ 3,300
Unit Ventilator	\$ -	\$ 201,400
Urinal	\$ -	\$ 2,200
Wall Finishes	\$ -	\$ 90,000
Water Heater	\$ -	\$ 1,900
Window	\$ -	\$ 33,250
Totals	\$ 2,249,273	\$ 4,476,072