4

EVALUATION OF EXISTING CONDITIONS

4.1

SUMMARY EVALUATION OF EXISTING CONDITIONS

DISTRICT TITLE TO PROPERTY
The Martha's Vineyard Regional High School is located on property acquired by the Martha's Vineyard Regional School District for the purpose of erecting a school building. Following this introduction under tab 4.2 is the list of deeds to this property.

PROPERTY AVAILABLE FOR DEVELOPMENT
The existing High school is on a fully developed property including roadways, utilities, fields and parking. The District has no restrictions against the future continued use of this property for educational purposes where the school is located.

HISTORIC REGISTRATIONS
The property is not in a Historic District. In addition, the properties and school is not inventoried by the Massachusetts Historical Commission (MHC). As the project will receive state funding under the MSBA grant program, the project will submit a Project Notification Form (PNF) to the MHC in a later phase of development.

DEVELOPMENT RESTRICTIONS
There are no known restrictions to use of the property for school purposes. There are regulatory restrictions related to wetlands that will be considered in the planning phase. Additionally, there exists and approved Wellhead Protection Areas (Zone II) Area covering about 70% of the site. Restrictions imposed by Zone II well head protection areas will be considered in the planning phase.

NEED FOR SOILS EXPLORATION
Test borings have been completed and were located in areas most likely to accommodate a building expansion project or a building replacement project. The initial data indicates good bearing native soils for conventional spread footings. Testing also does not note any reportable concentrations of contaminants in the soils. These findings would need to be confirmed at a later phase with added borings and testing.

INITIAL EVALUATION OF EXISTING CONDITIONS
Following this introduction are the following documents representing the initial evaluation of the site:

- Code and Accessibility Evaluation
- Existing Building Evaluation
- Structural Evaluation of Existing Building
- Mechanical, Electrical, Plumbing & Technological Evaluations of Existing Building
- Hazardous Materials Report
- Site Analysis
- Infrastructure Evaluation

In addition, attached to the PDP as Appendix are the following documents related to building and site evaluation:

- Geo-environmental Report
- Preliminary Geo-Technical Report
- Existing conditions Traffic Study

4.2

LEGAL TITLE TO PROPERTY

Owner of Record: Martha's Vineyard Regional High School District

Order of Taking for properties in Oak Bluffs @ 229/51 d. August 4, 1955

(other side of the Edgartown/Vineyard Haven Rd)

See OBOF 14.

100 Edgartown/Vineyard Haven Rd is Map 55/Parcel 2 (HS building and behind)

and Map 55/Parcel 4 (Fields and Behind)

111 Edgartown/Vineyard Haven Rd is Map 50/Parcel 29.1 (MVCS)

Map 50/Parcel 29.3 (Skate Park)

and Map 50/Parcel 29.4 (area between MVSC and ILH)

111 R Edgartown/Vineyard Haven Rd is Map 50/Parcel 29 (YMCA)

Sanderson Rd is shown crossing Parcel B and Parcel C on the plan at OBOF 14, both parcels being a portion of the property owned by MVRHS. Its ownership would end at the State Forest boundary.

A US Government Right of Way for the Navy Pole Line, which appears to run along Sanderson Rd., is reserved on the above Order at 229/51.

Leasehold Properties:

1) Martha's Vineyard Community Services @ 481/867 d. 9-16-1986

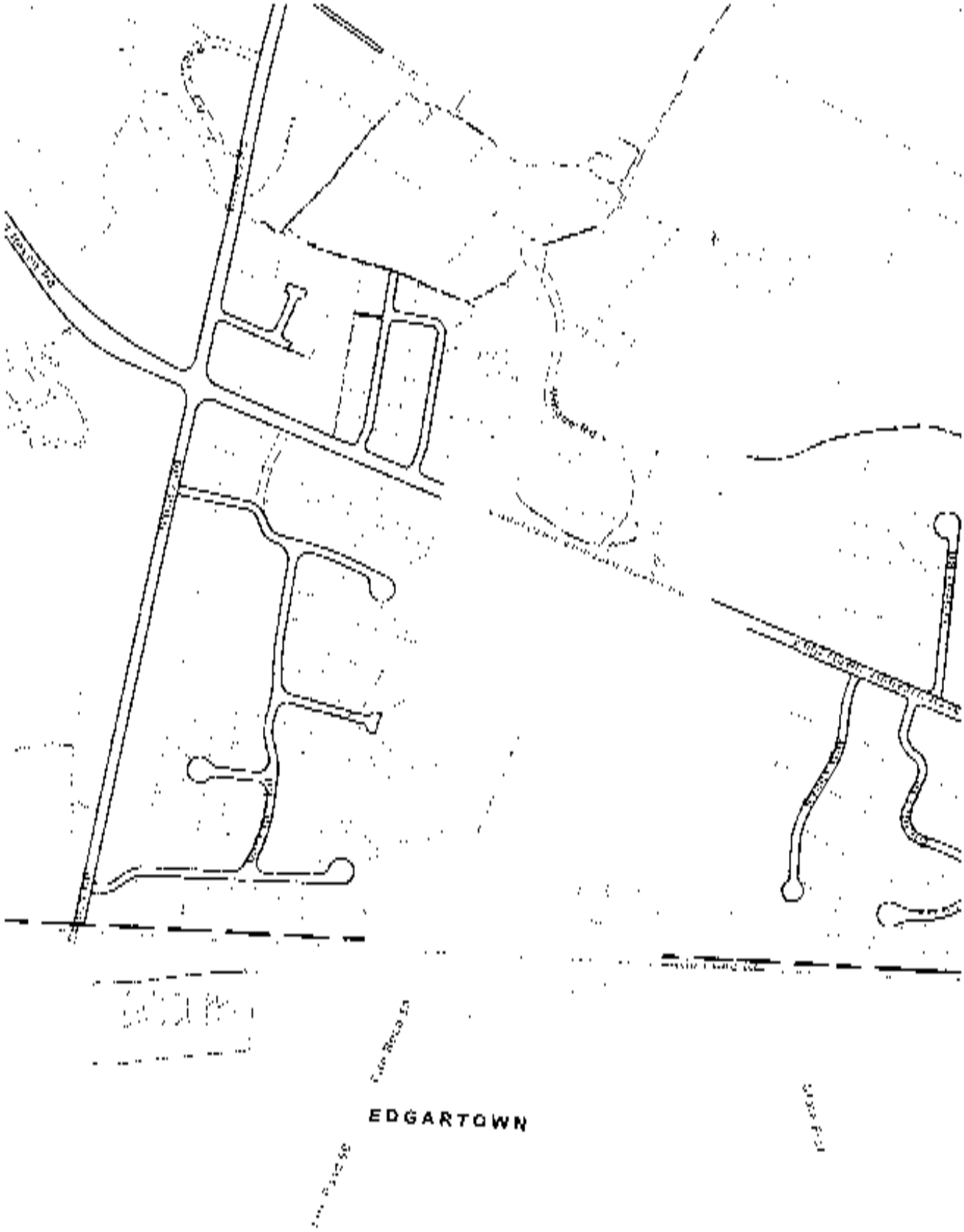
(terminated!) Amended @ 481/884 d. / 198/

See Notice of Lease @ 1551/1043 d. 2-10-2020 which terminates/replaces the above Lease and Amendment. The term for this lease expires 2-9-2119

2) YMCA of Martha's Vineyard @ 1213/256 d.11-6-2006
The term for this lease expires 1-29-2047.

I found no lease on record for the OB Skate Park, nor the MV Skate Park

Let me know if you need any additional information (ie. Easement agreements, etc)


EDGARTOWN

Bradford L. Norton
Lynn G. Murphy

Katherine M. Norton

THE COMMONWEALTH OF MASSACHUSETTS Dukes County, ss: August 4th 1955 Then personally appeared the above named Bradford L Norton and Katherine M. Norton and acknowledged the foregoing instrument to be their free act and deed. before me. Dorothy Flanagan Notary Public My commission expires Nov. 13 1959 Notrl Seal. Edgartown, August 5, 1955 at 8 o'clock and 20 minutes A.M. Recorded and entered with Dukes County Deeds Book 204, page 50.

Attest: Philip J. Norton Register.

THE MARTHA'S VINEYARD REGIONAL HIGH SCHOOL DISTRICT ORDER OF TAKING

A meeting of the Regional District School Committee was held at Vineyard Haven in Tisbury, at Tisbury School upon August 3rd, 1955, due notice of which was given. All the members of the Regional District School Committee were present. Upon motion duly seconded it was VOTED that the committee adopt an Order of Taking seisin in the name and behalf of The Martha's Vineyard Regional High School District, a body corporate and politic, it was ORDERED that there be taken in fee simple, land and rights in land and all easements, privileges and appurtenances thereto belonging, including all roads or structures affixed thereto for the purpose of constructing, reconstructing, adding to, equipping and operating a school or schools for the benefit of the towns of Tisbury, Oak Bluffs, Edgartown, West Tisbury, Chilmark and Gay Head. all in accordance with General Laws, Chapter 71 Sec. 16 and General Laws Chapter 70 and section fourteen of Chapter 40 of the General Laws and that Irving Wigler, Chairman and William M. Fenely, Treasurer. be and they hereby are authorized to execute, acknowledge and file an instrument of taking, with a copy of this order, in the Registry of Deeds for the County of Dukes County within thirty days of its adoption. Land to be taken with bonds and appurtenances thereto are as set forth on a plan drawn by Hollis A.Smith, M. E., Entitled "Plan of Land in Oak Bluffs, Mass. Surveyed for Marshals Vineyard Regional High School District Oct. 17, 1954 Scale 1"=200' Hollis A. Smith, M.E. Reg'd Land Surveyor, Vineyard Haven, Mass." Parcel A. From: David J. McBride, Edgartown, Mass., Fred C. Pease or Frederick C. Pease, Vineyard Haven, Mass., John L. Look, Oak Bluffs, Mass., Elizabeth P. Blankenship, Oak Bluffs, Mass., Elizabeth Pierce, Ernest, Mass., Heirs of Clinton Howard, residence unknown: Bounded: Westerly by land of Newton and Mary N. Silvia two thousand nine hundred thirty-seven (2,937.88) eighty-eight hundredths feet; Northerly by Edgartown-Vineyard Haven Road seventy (70) feet; Easterly by land of the heirs of Parnell C. Pease, being Parcel B on said plan, two thousand one hundred fifteen (2115) feet; Southerly by State Forest eighty-six (86) feet. Parcel B. From: Heirs of Parnell C. Pease, viz: Gladys D. Reid, Edgartown, Mass., Caroline J. Pease, Edgartown, Mass., Miss S. Rose 1707 Delaware Avenue, Do, Wilmington, Wilmington, Parnell H. Pease, Edgartown, Mass. Bounded: Westerly by land

of David J. McBride, two thousand one hundred fifteen (2115) feet; Northerly by Edgartown-Vineyard Haven Road, three hundred ninety-one (391) feet; Easterly by Parcel C on said plan, one thousand nine hundred ninety eight (1,998) feet; Southerly by State Forest two hundred seventy-five (275) feet. Excepting, however as it crosses Parcel B, the United States Government right of way for the Navy Pole Line. Parcel C. From: Town of Oak Bluffs and May Stern Weiner, 611 N. 16th Street, Philadelphia, Pennsylvania, bounded: Westerly by Parcel B on said plan, one thousand nine hundred ninety-eight (1,998) feet; Northerly by Edgartown-Vineyard Haven Road eight hundred twenty-three (823) feet; Easterly by Parcel D on said plan, one thousand seven hundred eighteen (1,718) feet, Southerly by State Forest eight hundred eight (808) feet. Excepting, however, United States Government right of way used for the Navy Pole Line. Parcel D. From: Heirs of Margaret D. Norton, Wife Mayes M. Norton, Vineyard Haven, Mass., Helen M. Andreason, 443 Holmes Way, Pasadena, California, bounded: Westerly by Parcel C on said plan one thousand seven hundred eighteen (1718) feet, Northerly two hundred seventy-eight (278) feet, by the Edgartown-Vineyard Haven Road; Easterly by)-ne of the heirs of Simon Vincent one thousand six hundred seventy-five and ninety-four one hundredths (1675.94) feet; and Southerly by State Forest two hundred forty-seven (247) feet. Lot A1. From: David J. McBride, Edgartown, Mass., Fred C. Pease of Wendwich C. Pease, Vineyard Haven, Mass., John L. Hagg, Oak Bluffs, Mass., Elizabeth F. Blankenship, Oak Bluffs, Mass., Kenneth Fisher, Cpnet, Mass., heirs of Clinton Howard residence unknown: bounded: Westerly by land of David J. McBride eight hundred thirty-four and two one hundredths feet (834.02); Northerly by the Old County Road from Edgartown to Holmes Hole seventy (70) feet; Easterly by Lot B 1 on said plan, eight hundred thirty-one (831) feet; Southerly by the Edgartown-Vineyard Haven Road seventy (70) feet. Lot B1, From: Heirs of Parnell C. Pease, wife Gladys P. Reid, Edgartown, Mass., Christine J. Pease, Edgartown, Mass., Elva A. Kerr, 1205 Fairview Avenue, So. Milwaukee, Wisconsin, Parnell H. Pease, Edgartown, Mass, bounded: Westerly by Lot A1 on said plan, eight hundred thirty-one (831) feet; Northerly by the Edgartown-Holmes Hole Road, thirty-five and seventy-five (35.75) feet; one hundred fifty and eighty-four hundredths (150.84) feet; east two hundred eighty-one and fifty hundredths (281.50) feet; Easterly by Lot C1 on said plan, eight hundred sixteen (816) feet: Southerly by the Edgartown-Vineyard Haven Road, three hundred ninety-two (392) feet. Lot C1. From: Town of Oak Bluffs, and May Stern Weiner, 611 N. 16th Street, Philadelphia, Pennsylvania; bounded: Westerly by Lot B1, eight hundred and sixteen (816) feet; Northerly by the Old County Road, Edgartown to Holmes Hole, one hundred fifty-two (152) feet, three hundred twelve and ninety hundredths (312.90) feet, and three hundred eighty-two and eleven hundredths (382.11) feet, easterly by Lot D1, on said plan, seven hundred (700) feet, southerly by the Edgartown-Vineyard Haven Road eight hundred twenty-three (823) feet. Lot D1. From: Heirs of Margaret D. Norton, Wife Mayes M. Norton, Vineyard

Haven, Mass., Helen W. Andrewson, 141 Hillcrest Way, Pasadena, California. Bounded: Westerly by Lot 61 on said plan seven hundred (700) feet; Northerly by the road known as the Old County Road to Edgartown, one hundred three and seventy-nine hundredths (103.79) feet; ninety-nine and sixty-three hundredths (99.63) feet; seventy-five and twenty-eight hundredths (75.28) feet; twenty-three and eight hundredths (23.08) feet; easterly by land of the heirs of Steven Vincent seven hundred forty-nine and ninety-two hundredths (749.92) feet; Southerly by the Edgartown-Vineyard Haven Road two hundred seventy-nine (279) feet.

William M. Roney Secretary

A true record, Attest: William M. Roney Secretary Corp. Seal.

Commonwealth of Massachusetts Dukes County ss. Aug. 1957 Personally appeared the above named William M. Roney Secretary and acknowledged the foregoing instrument to be his free act and deed, before me. Henry Corey, Notary Public My Commission Expires October 13, 1957. Notarial Seal.

THE MARTHA'S VINEYARD REGIONAL HIGH SCHOOL DISTRICT, WHEREAS The Martha's Vineyard Regional High School District, a body politic and corporate created and existing in accordance with the provisions of Chapter 71 of the General Laws of Massachusetts, Sections 14, 14A, 14B, 14C, 15, 16, 16A, 16B, 16C, 16K, 16N, 16O, 16P, 16Q, 16R, and acts in amendment and in addition thereto as authorized by virtue of the provisions of General Laws Chapter 71A, Sec. 16, sub-section O. "To acquire property within the towns comprising the District under the provisions of General Laws Chapter 79 and Section 14 of Chapter 40 for the purposes of the District, and to construct, maintain, and to equip, organize and operate a school or schools for the benefit of the towns comprising the District, and to make any necessary contracts in relation thereto", and WHEREAS it is necessary to acquire property for the purpose of constructing, maintaining and operating a school to serve the needs of The Martha's Vineyard Regional High School District, created under the provisions of said Chapter 71 and in accordance with an agreement dated on or about March 30, 1954, forming a Regional school district for the towns of Tisbury, Oak Bluffs, Edgartown, West Tisbury, Chilmark and Gay Head in the Commonwealth of Massachusetts, said Agreement having been approved by the Emergency Finance Board and the Department of Education of the Commonwealth of Massachusetts, and adopted by the several towns herein named in accordance with law, and WHEREAS the Regional District School Committee exercising the powers of The Martha's Vineyard Regional High School District in accordance with said Agreement under the provisions of General Laws, Chapter 71, Sec. 16A, having at a meeting duly called for the purpose at which all the members of the Regional District School Committee were present, voted to take by eminent domain under the provisions of Chapter 79 of the General Laws and Sec. 14 of Chapter 40 of the General Laws, land and interests in land in Oak Bluffs, Dukes County, Massachusetts, a town within the Regional School District, for the public purposes of The Martha's Vineyard Regional High School District, and to construct, reconstruct, add to,

equip, organize and operate a school or schools for the benefit of the towns of Tisbury, Oak Bluffs, Edgartown, West Tisbury, Chilmark and Gay Head, comprising said District, an appropriation having been unanimously made therefor, now therefore, said Committee having first complied with all the preliminary requirements prescribed by law, doth order that the land hereinafter described, all rights in land and all easements, privileges and appurtenances thereto belonging, be taken in fee simple for the purposes herein set forth, including all those of structures affixed thereto in behalf of The Martha's Vineyard Regional High School District, which land consists of parcels of land located on the north and south sides of the Edgartown Vineyard Haven Road, described as follows, viz: The descriptions of said lands taken are as set forth on a plan drawn by Hollis A. Smith, R.S., Entitled "Plan of Land in Oak Bluffs, Mass. surveyed for Martha's Vineyard Regional High School District, October 15, 1958, scale 1"=200' Hollis A. Smith, R.S.Reg'd. Land Surveyor, Vineyard Haven, Mass." Parcel A. From: David J. McBride, Edgartown, Mass., Fred G. Fowler of Friendship C. Peakes, Vineyard Haven, Mass., John L. Pease, Oak Bluffs, Mass., Elizabeth P. Blankenship, Oak Bluffs, Mass., Aldworth Vinyard, Trust, Mass., Heirs of Clinton Howard, residence unknown: Bounded: Easterly by land of Newton and Mary N. Silvia two thousand one hundred thirty-seven (2,137.08) eighty-eight hundredths feet: Northerly by Edgartown-Vineyard Haven Road seventy (70) feet; Westerly by land of the heirs of Parnell C. Pease, being Parcel B on said plan, two thousand one hundred fifteen (2115) feet: Southerly by State Forest sixty-six (66) feet. Parcel B. From: Heirs of Parnell C. Pease, viz: Gladys P. Reid, Edgartown, Mass., Christine J. Pease, Edgartown, Mass., Elva A. Hoar Irby Fairview Avenue, Ap, Milwaukee, Wisconsin, Parnell C. Pease, Edgartown, Mass. Bounded: Easterly by land of David J. McBride, two thousand one hundred fifteen (2115) feet: Northerly by Edgartown-Vineyard Haven Road, three hundred ninety-one (391) feet: Westerly by Parcel C on said plan, one thousand nine hundred ninety-eight (1,998) feet; Southerly by State Forest two hundred seventy-five (275) feet. Excepting, however as it concerns Parcel C, the United States Government right of way for the Navy Pole Line. Parcel C. From: Town of Oak Bluffs and Max Stern Weiner, 611 N. 16th Street, Philadelphia, Pennsylvania, Bounded: Westerly by Parcel B on said plan, one thousand nine hundred ninety-eight (1,998) feet; Northerly by Edgartown-Vineyard Haven Road eight hundred seventy-three (873) feet; Easterly by Parcel D on said plan, one thousand seven hundred eighteen (1,718) feet, Southerly by State Forest eight hundred eight (808) feet. Excepting, United States Government right of way used for the Navy Pole Line. Parcel D. From: Heirs of Margaret H. Norton, viz: Wayne W. Norton, Vineyard Haven, Mass., Helen M. Anderson, 611 Mellores Way, Pasadena, California. Bounded: Westerly by Parcel C on said plan one thousand seven hundred eighteen (1718) feet, Northerly two hundred seventy-eight (278) feet, by the Edgartown-Vineyard Haven Road; Easterly by land of the heirs of Simon Vincent one thousand six hundred twenty-five and

ninety-four one hundredths (1675.94) feet; and southerly by State Forest one hundred forty-seven (147) feet. Lot A1. From: David J. McBride, Edgartown, Mass., Fred C. Peakes or Frederick C. Peakes, Vineyard Haven, Mass., John L. Leme, Oak Bluffs, Mass., Elizabeth P. Blankenship, Oak Bluffs, Mass., Aldworth Fisher, Ontario, Mass., Heirs of Clinton Howard, residence unknown; Bounded: Westerly by land of David J. McBride eight hundred thirty-four and two one hundredths feet (834.02); Northerly by the Old County Road from Edgartown to Holmes Hole seventy (70) feet; Easterly by Lot B1 on said plan, eight hundred thirty-one (831) feet; Southerly by the Edgartown-Vineyard Haven Road seventy (70) feet. Lot B1. From: Heirs of Forrest C. Pease, viz: Gladys P. Reid, Edgartown, Mass., Christine J. Pease, Edgartown, Mass., Elva E. Hoar, 1205 Fairview Avenue, So. Milwaukee, Wisconsin, Forrest C. Pease, Edgartown, Mass. Bounded: Westerly by Lot A1 on said plan, eight hundred thirty-one (831) feet; Northerly by the Edgartown-Holmes Hole Road, thirty-five and seventy-five (35.75) feet; one hundred fifty and eighty-four hundredths (150.84) feet; and two hundred sixty-one and fifty hundredths (261.50) feet; Easterly by Lot C1 on said plan, eight hundred sixteen (816) feet; Southerly by the Edgartown-Vineyard Haven Road, three hundred ninety-two (392) feet. Lot C1. From: Town of Oak Bluffs, and May Sharp Weiner, 613 W. 16th Street, Philadelphia, Pennsylvania; Bounded: Westerly by Lot B1, eight hundred and sixteen (816) feet; Northerly by the Old County Road-Edgartown to Holmes Hole, one hundred fifty-two (152) feet, three hundred twelve and ninety hundredths (312.90) feet, and three hundred eighty-two and eleven hundredths (382.11) feet; easterly by Lot D1, on said plan, seven hundred (700) feet, southerly by the Edgartown-Vineyard Haven Road eight hundred twenty-three (823.11) feet, ~~easterly by Lot D1 on said plan, seven hundred (700) feet; southerly~~ (823) feet. Lot D1. From: Heirs of Margaret D. Norton, viz: Hayes M. Norton, Vineyard Haven, Mass., Helen N. Anderson, 443 Baltimore Way, Pasadena, California. Bounded: Westerly by Lot C1 on said plan seven hundred (700) feet; Northerly by the Road known as the Old County Road to Edgartown, one hundred three and seventy-nine hundreds (103.79) feet; ninety-nine and sixty-three hundredths (99.63) feet; seventy-five and twenty-eight hundredths (75.28) feet; twenty-five and eighteen hundredths (25.18) feet; Easterly by land of the heirs of Alonzo Vincent seven hundred forty-nine and ninety-two hundredths (749.92) feet; Southerly by the Edgartown-Vineyard Haven Road two hundred seventy-nine (279) feet. Outside distances bounding the several parcels taken are generally approximate but substantially accurate.

The committee awards damages as follows:

David J. McBride	$1.00	Town of Oak Bluffs	$1.00
Fred C. Peakes or Frederick C. Peakes	1.00	Gladys P. Reid	1.00
John L. Leme	1.00	Christine J. Pease	1.00
Elizabeth P. Blankenship	1.00	Elva E. Hoar	1.00
Aldworth Fisher	1.00	Forrest C. Pease	1.00
Heirs of Clinton Howard	1.00	May Sharp Weiner	1.00
		Hayes M. Norton	1.00
		Helen N. Anderson	1.00

The names of owners of land from whom premises have been taken in fee simple are considered as matters of information and belief only. IN WITNESS WHEREOF The

Martha's Vineyard Regional High School District had caused its corporate seal to be hereunto affixed and these presents to be signed in its name and behalf by Irving Kligler , its Chairman, and William M. Money, its Treasurer, duly authorized and so to do, by vote of the Committee, this 6th day of August, 1956.

The Martha's Vineyard Regional High School District,
By Irving Kligler Chairman
William M. Money Treasurer

Corp. Seal,

COMMONWEALTH OF MASSACHUSETTS Dukes County, ss. August 6, 1956. On this 6th day of August, 1956, before me appeared Irving Kligler and William M. Money, to me personally known, who being by me duly sworn, did say that they are Chairman and Treasurer, respectively of The Martha's Vineyard Regional High School District, a body corporate organized according to law and that the seal affixed to the above instrument is the corporate seal of said body corporate, and that said instrument was signed and sealed in behalf of said body corporate by authority of its Committee and said Irving Kligler and William M. Money acknowledged said instrument to be the free act and deed of said body corporate. Henry Corey Notary Public My Commission expires October 18, 1957 Notrl Seal. I,William M. Money, Secretary of The Martha's Vineyard Regional High School District, hereby certify that at the date of this attestation hereto annexed, Irving Kligler and William M. Money were Chairman and Treasurer respectively for The Martha's Vineyard Regional High School District, and in their said official capacities as such full faith and credit ought to be given in and out of Court and further that their signatures to the annexed instrument are genuine. William M. Money Secretary Edgartown, Mass., August 9, 1956 at 9 o'clock and 40 minutes A.M. received and entered with Dukes County Deeds Book 379, Page 51.

Attest: Philip J. Morton, Register.

RELEASE OF LIEN KNOW ALL MEN BY THESE PRESENTS Town of Oak Bluffs in the County of Dukes the holder of a lien on the real property of Dennis Machado recorded in Registry of Deeds, Dukes County, Book 6?1, Page #192 Land Court, County, Document # , noted on Certificate # acknowledges satisfaction and hereby releases the aforesaid lien. Executed and sealed this 6th day of August 1956.

Town Seal.

Town of Oak Bluffs
By Irene V. Caron
Being (the duly delegated agent or) the Board of Public Welfare of Oak Bluffs

THE COMMONWEALTH OF MASSACHUSETTS County of Dukes Ss. August 6, 1956 Then personally appeared the above named Irene V. Caron and acknowledged the foregoing instrument to be the free act and deed of the town of Oak Bluffs , before me Anne L. Gilder Notary Public My Commission expires Jan. 31, 1958, Notrl Seal. Edgartown, Mass. August 9, 1956 at 9 o'clock and 40 minutes A.M. received and entered with Dukes County Deeds Book 379, Page 50.

Attest: Philip J. Morton Register.

481 867

LEASE

Agreement made this 16th day of September, 1986, by and between MARTHA'S VINEYARD REGIONAL HIGH SCHOOL DISTRICT COMMITTEE, a body politic with offices in Oak Bluffs, Massachusetts (hereinafter referred to as "Lessor") and MARTHA'S VINEYARD COMMUNITY SERVICES, INC., a Massachusetts corporation organized pursuant to the provisions of M.G.L. Chapter 180, and having a principal place of business in Tisbury, Massachusetts (hereinafter referred to as "Lessee").

1. Premises: Lessor hereby leases to Lessee and Lessee hereby leases from Lessor, the unimproved land situate in the Town of Oak Bluffs, County of Dukes County, Massachusetts, more particularly shown as "Martha's Vineyard Community Services 3.0 A" on the plan attached hereto as Exhibit A (hereinafter referred to as the "premises").

2. Term: The said lease shall be for a term of ninety-nine (99) years to commence on September 16, 1986, and to end on September 15, 2085.

3. Rent: Lessee shall pay to Lessor rent in the amount of Ten Dollars ($10.00) per year payable on the 16th day of September of each year during the term of this lease commencing September 16, 1986. Lessee agrees to pay promptly when due all amounts for water use charges and any

1

5. Use: Lessee shall use and occupy the premises only for such activities as are presently conducted by Lessee (except as hereinafter provided) and for those further activities as shall be approved in writing by Lessor. No other activity shall be carried on, in, or about the said premises, or any use made thereof, which shall be offensive or contrary to the laws of the Commonwealth, or any ordinance or by-law, for the time being, in force in the Town of Oak Bluffs, or injurious to any person, or persons or property. Lessee shall not permit the conduct of any activity in the nature of a retail commercial business, including, but not limited to, its presently operated Thrift Shop.

6. Insurance:

a. Lessee shall procure, keep in force, and pay for comprehensive public liability insurance indemnifying Lessor and Lessee against all claims and demands for injury to or death of persons or damage to property which may be claimed to have occurred on the premises in amounts which shall be not less than one Million ($1,000,000.00) Dollars combined single limit for bodily injury and property damage liability. Such insurance shall be effected with insurers qualified to do business in Massachusetts and in good standing therein insuring Lessor as well as Lessee, as their interests shall appear, against injury to persons or damage to property as provided. Lessee shall deposit with Lessor certificates for such insurance at or prior

c. Lessor and Lessee agree to review all limits of liability every five (5) years for adequacy.

7. Maintenance: Lessee shall at his expense maintain, repair and renew (as necessary) all mechanical and utility systems servicing the premises including electrical, plumbing and heating. Lessee shall be responsible for all structural, interior and exterior repairs to the buildings, which repairs shall be made when, in Lessee's sole judgment, they shall need to be made. Lessee shall also be responsible for the maintenance of the building and grounds in a clean and safe condition and for the removal of ice and snow from the driveways and sidewalks on the premises. At the termination of the lease, Lessee agrees to deliver up the premises in the same condition they were in at the commencement of the lease (after the construction of all buildings) reasonable wear and tear excepted. Lessor shall have the right to enter the premises on a periodic basis to determine that the condition of the premises is in compliance with the provisions of this Paragraph 7.

8. Lessee's Property: It is understood and agreed that any goods or other property owned or otherwise possessed by Lessee and stored or otherwise maintained by Lessee at the premises shall be kept there at Lessee's sole risk and without

c. Lessee shall provide the shared use of two counselling/tutoring areas upon reasonable notice from Lessor.

d. Lessee agrees to provide a large group meeting area for special meetings when adequate space is not available in the Martha's Vineyard Regional High School (e.g. two week mini-courses; parents' meetings).

e. Lessee shall provide classroom space upon reasonable notice from Lessor.

f. Lessee shall make the weight room and aerobics space available during school hour times.

g. Priority for available space in the day care center operated by Lessee shall be given to children of students and employees of the Martha's Vineyard Regional High School.

h. Lessee shall provide classroom space in the evening for Adult Education purposes when there is no available space in the Martha's

or liens on the property of which the leased premises are a part and the Lessor shall, when requested, promptly execute and deliver such written instruments as shall be necessary to show the priority of this lease to said mortgages or other instruments in the nature of a mortgage.

11. Right to Terminate: This lease is subject to the express condition that, if Lessee shall default in the payment of rent or other sum herein specified and said default shall continue for thirty (30) days after written notice thereof, or shall default in the performance or observance of any of the other covenants contained in these presents on Lessee's part to be performed or observed and said failure shall continue for thirty (30) days after written notice thereof, or if the estate hereby created shall be taken on execution or by other process of law, or if Lessee shall be declared bankrupt or insolvent according to law, or if any assignment shall be made of Lessee's property for the benefit of creditors, or if Lessee shall no longer be in operation as it presently exists or as that existence may change during the term hereof (meaning and intending that so long as Lessee continues to provide human services to people of Martha's Vineyard, whether as a corporation or otherwise, Lessee shall be deemed to be "in operation" within the meaning of this paragraph), and that failure to be in operation shall continue for three (3) months after written notice thereof, then, and in any of the said cases, or at the

proposes to make use of the premises for activities similar to those conducted by Lessee.

13. Destruction - Fire. If the demised premises shall be damaged or destroyed by fire or other cause, the buildings on the premises shall be restored and/or the damages shall be repaired by and at the expense of the Lessee, and Lessee shall as promptly as practical under all circumstances undertake to restore and repair the premises to their condition prior to the loss, but in no event shall Lessee be obligated to spend a sum for such work in excess of the insurance proceeds received.

14. Eminent Domain. If the whole or any part of the demised premises shall be acquired or condemned by eminent domain, for public or quasi-public use or purpose, then and in that event, the term of this lease shall cease and terminate from the date of title vesting in such proceeding and rent shall be apportioned as of said date. Lessee reserves and Lessor grants to Lessee, all rights which Lessor may have for damages or injury to the premises for any taking by eminent domain, except for the fair market value of the premises.

15. Notices. Any and all notices given or required to be given hereunder shall be in writing and delivered in hand or by certified or registered mail, postage prepaid, addressed to

Lessee's part to be observed and performed, Lessee may peaceably and quietly enjoy the premises hereby demised, subject, nevertheless, to the terms and conditions of this lease.

18. Conditions. All obligations of the parties to this lease shall be contingent upon Lessee obtaining a special permit from the Zoning Board of Appeals of the Town of Oak Bluffs imposing no conditions that are unacceptable to both Lessor and Lessee, and all other permits necessary from any person, board or agency of any sovereignty having jurisdiction, so that Lessee may construct the buildings and conduct the activities it contemplates constructing and conducting on the premises. Said obligations shall be further contingent upon Lessee receiving a loan by a date not later than January 1, 1987, on terms acceptable to Lessee to construct the contemplated buildings. The recording of this lease or a notice thereof in the Dukes County Registry of Deeds shall be conclusive evidence that all such permits and a loan have been obtained.

19. Indemnification. Lessee agrees at all times during the term of this lease and for such further time as Lessee occupies the premises or any part thereof, to assume exclusive control of the premises, and the adjacent sidewalks, all tort liabilities incident to the control or leasing thereof, and to defend, indemnify and save Lessor harmless from all injury, loss, claim or damage to or of any person or property

21330351

IN WITNESS WHEREOF, the parties hereto have set their hands, seals and corporate seals, respectively, intending to be bound thereby, and intending to bind their successors and assigns, the day and year first written above.

MARTHA'S VINEYARD REGIONAL HIGH SCHOOL DISTRICT COMMITTEE

By: _____
Lynne O. Silva
Chairman

MARTHA'S VINEYARD COMMUNITY SERVICES, INC.

By: _____
Arthur X. Morgan
President

COMMONWEALTH OF MASSACHUSETTS

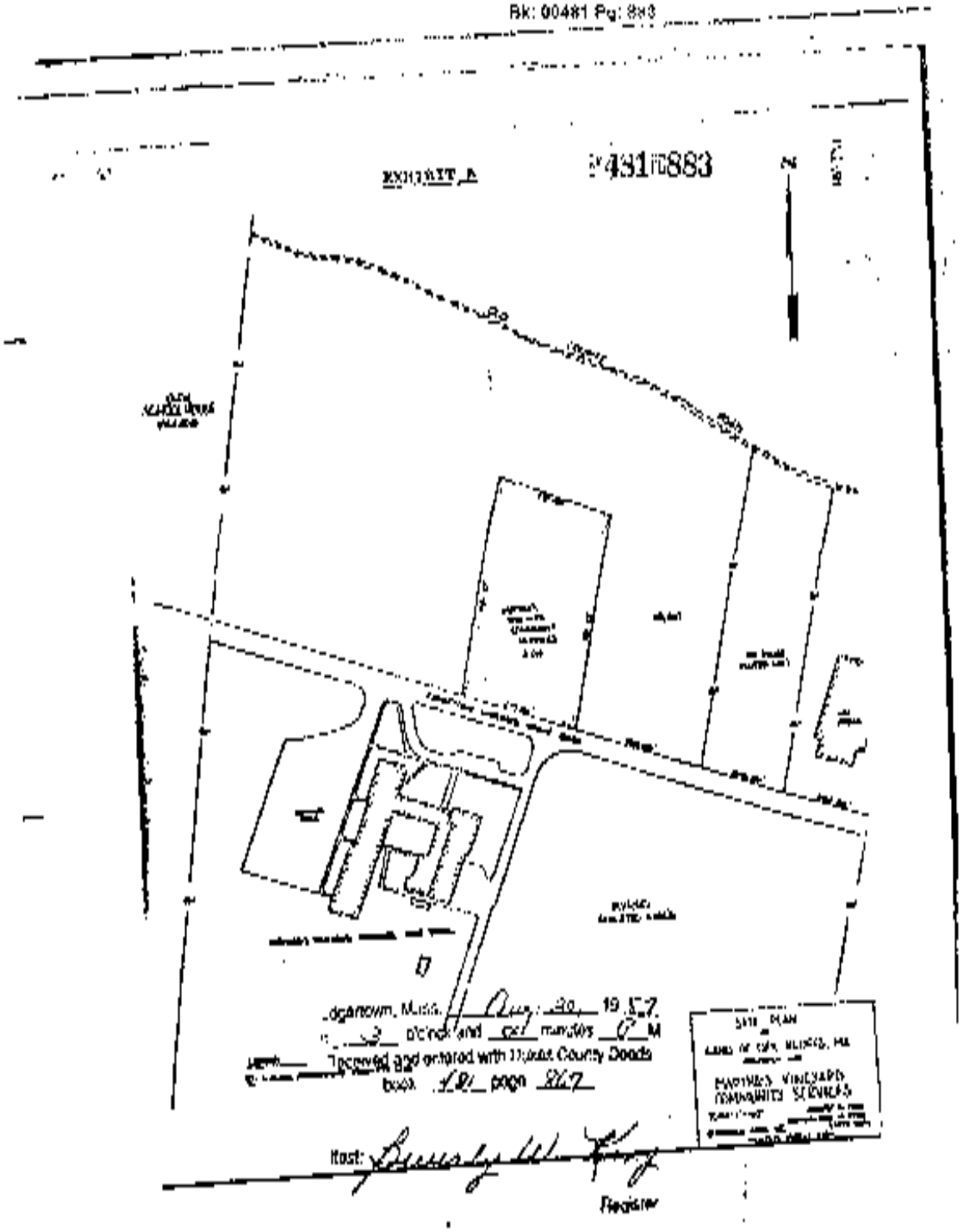
September 16, 1986

Dukes County, ss.

Then personally appeared the above-named Lynne O. Silva, Chairman, and acknowledged the foregoing instrument to be the free act and deed of the Martha's Vineyard Regional High School District Committee, before me

_____
Notary Public

My commission expires: December 19, 1991


Bk: 00481 Pg: 883
EXHIBIT A
431 883
Edgartown, Mass. Aug. 20 1957
3 o'clock and 25 minutes P M
Received and entered with Dukes County Deeds
book 48 page 207
SITE PLAN
MARTHA'S VINEYARD COMMUNITY SERVICES
Attest:
Register

3342K

481 884

AMENDMENT TO LEASE

The parties to a Lease dated September 16, 1985, (hereinafter referred to as the "Lease") the Martha's Vineyard Regional High School District Committee, a body politic with offices in Oak Bluffs, Massachusetts (hereinafter referred to as "Lessor") and Martha's Vineyard Community Services, Inc., a Massachusetts corporation organized pursuant to the provisions of M.G.L., chapter 180, and having a principal place of business in Tisbury, Massachusetts (hereinafter referred to as "Lessee"), hereby agree and stipulate that the Lease is hereby amended in the following respects:

A. The first sentence of Paragraph 5 of the Lease is hereby deleted and in its place shall be inserted the following:

> Lessee shall use and occupy the Premises for such activities as are presently conducted by Lessee (except as hereinafter provided), and for ancillary activities related thereto, and for those further activities as shall be approved in writing by Lessor.

B. Paragraph 12 of the Lease is hereby amended by inserting the words "which consent shall not be unreasonably withheld" after the word Lessor in line 3 thereof. Paragraph 12 is further amended by the addition of the following language at the end of said paragraph: "The Lessor specifically consents to the assignment by Lessee of this Lease as collateral to the Farmers Home Administration, its successors and assigns."

in and to the area denoted as "Granted Area" in the Plan attached hereto as Exhibit B to use said area for passage by vehicle and otherwise, and for the installation and maintenance of utilities, and for the right to use such Granted Area for all purposes for which ways and easements now or may hereafter be used in the Town of Oak Bluffs. Subsequent to initial construction by the Lessee, Lessee shall have the right to improve the Granted Area at its sole cost and expense provided that it shall be reimbursed for said expense by others who are granted easements over the Easement Area in the same proportion as such persons shall participate in the costs of maintenance of the Easement Area. In the event third parties, other than governmental entities and/or utilities, are granted easements over the Easement Area, such third party grantees other than governmental entities and/or utilities shall participate together with Lessee in sharing the costs of the maintenance of the Easement Area on a basis to be determined by each such third party grantee's estimated proportionate share of the vehicular usage over said Easement Area, which percentage shall be determined by the Martha's Vineyard Commission or in the event that said Martha's Vineyard Commission is unavailable or unwilling to make such determination, to be determined by an independent third party mutually agreed upon by Lessor and Lessee at such time as further easements are granted. A provision requiring the sharing of costs of such maintenance shall be incorred by Lessor in all subsequent grants of easements to such third party grantees other than governmental entities and/or utilities. In the event that the parties are unable to reach an agreement as to the proportionate share of vehicular usage for said Easement Area, then each such third party grantee, other than governmental entities and/or utilities to whom an easement is granted shall share equally with Lessee in the costs of maintaining said Easement Area. The proportionate shares of maintenance shall be readjusted every five (5) years following the granting of any easements, based upon a determination of the percentage of actual vehicular usage by said third party grantees over said Easement Area.

D. The provisions of this Amendment to Lease shall take affect as of the effective date of the Lease, September 15, 1986.

87216388

COMMONWEALTH OF MASSACHUSETTS

DUKES, SS. July , 1987

Then personally appeared the above-named

, Chairman and acknowledged the foregoing instrument to be the free act and deed of the Martha's Vineyard Regional High School District Committee, before me,

Notary Public
My Commission expires: April 23, 1993

COMMONWEALTH OF MASSACHUSETTS

DUKES, SS. July , 1987

Then personally appeared the above-named Arthur I. Worrzel, President and acknowledged the foregoing instrument to be the free act and deed of Martha's Vineyard Community Services, Inc., before me.

Notary Public
My Commission Expires:

-5-

Bk: 1213 Pg: 256 Doc: LEASE
Page: 1 of 4 08/02/2010 01:47 PM

NOTICE OF GROUND LEASE

Notice is hereby given of the following Ground Lease of real estate:

OWNER, LANDLORD:	**Martha's Vineyard Regional High School District**, a body politic
TENANT:	**YMCA of Martha's Vineyard, Inc.**, a Massachusetts not for profit corporation
DATE OF GROUND LEASE:	November 6, 2006.
REAL ESTATE SUBJECT TO GROUND LEASE:	The parcel of land comprised of approximately five (5) acres situated on the north side of Vineyard Haven-Edgartown Road in Oak Bluffs, Massachusetts and shown as "YMCA Lease Lot 5.0 Acres +" on a certain plan entitled "As-built Plan Oak Bluffs, Mass. Prepared For the YMCA of Martha's Vineyard Scale: 1" = 50' April 22, 2010 Schofield, Barbini & Hoehn, Inc. Land Surveying Civil Engineering" attached hereto as **Exhibit A** (the "Premises").
TERM OF LEASE:	January 30, 2007 to January 29, 2047. Tenant has the option to extend the Lease for two additional terms of ten (10) years each as provided in the Lease.
SPECIAL LIMITATIONS:	The lease is created pursuant and subject to Chapter 178 of the Acts of 2006 of the Commonwealth of Massachusetts, *An Act Authorizing the Martha's Vineyard Regional High School District to Lease Certain Land.*

EXECUTED as a sealed instrument as of this 2nd day of June, 2010.

MARTHA'S VINEYARD REGIONAL HIGH SCHOOL DISTRICT

By: _____
Name:
School Committee Chairman

YMCA OF MARTHA'S VINEYARD, INC.

By: _____
Name: Charles T. Hughes
Title: President

COMMONWEALTH OF MASSACHUSETTS

County of Dukes County: ss

On this 2nd day of June, 2010, before me, the undersigned notary public, personally appeared Susan D. Manning, proved to me through satisfactory evidence of identification, which was (circle one) personal knowledge of identity of the principal/ passport or drivers license bearing photographic image of principal/ other _____, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose as Chairman of the Martha's Vineyard Regional High School District (Acting) Committee.

GEORGIAN E. COOGAN NOTARY PUBLIC COMMONWEALTH OF MASSACHUSETTS

Notary Public
My Commission expires: 7/16/15

COMMONWEALTH OF MASSACHUSETTS

County of Dukes County: ss

On this 2nd day of June, 2010, before me, the undersigned notary public, personally appeared Charles T. Hughes, proved to me through satisfactory evidence of identification, which was (circle one) personal knowledge of identity of the principal/ passport or drivers license bearing photographic image of principal/ other _____, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose as President of YMCA of Martha's Vineyard, Inc.

GEORGIAN E. COOGAN NOTARY PUBLIC COMMONWEALTH OF MASSACHUSETTS

Notary Public
My Commission expires: 7/16/15

1176-001\Notice of Lease - 6-1 Revision.doc

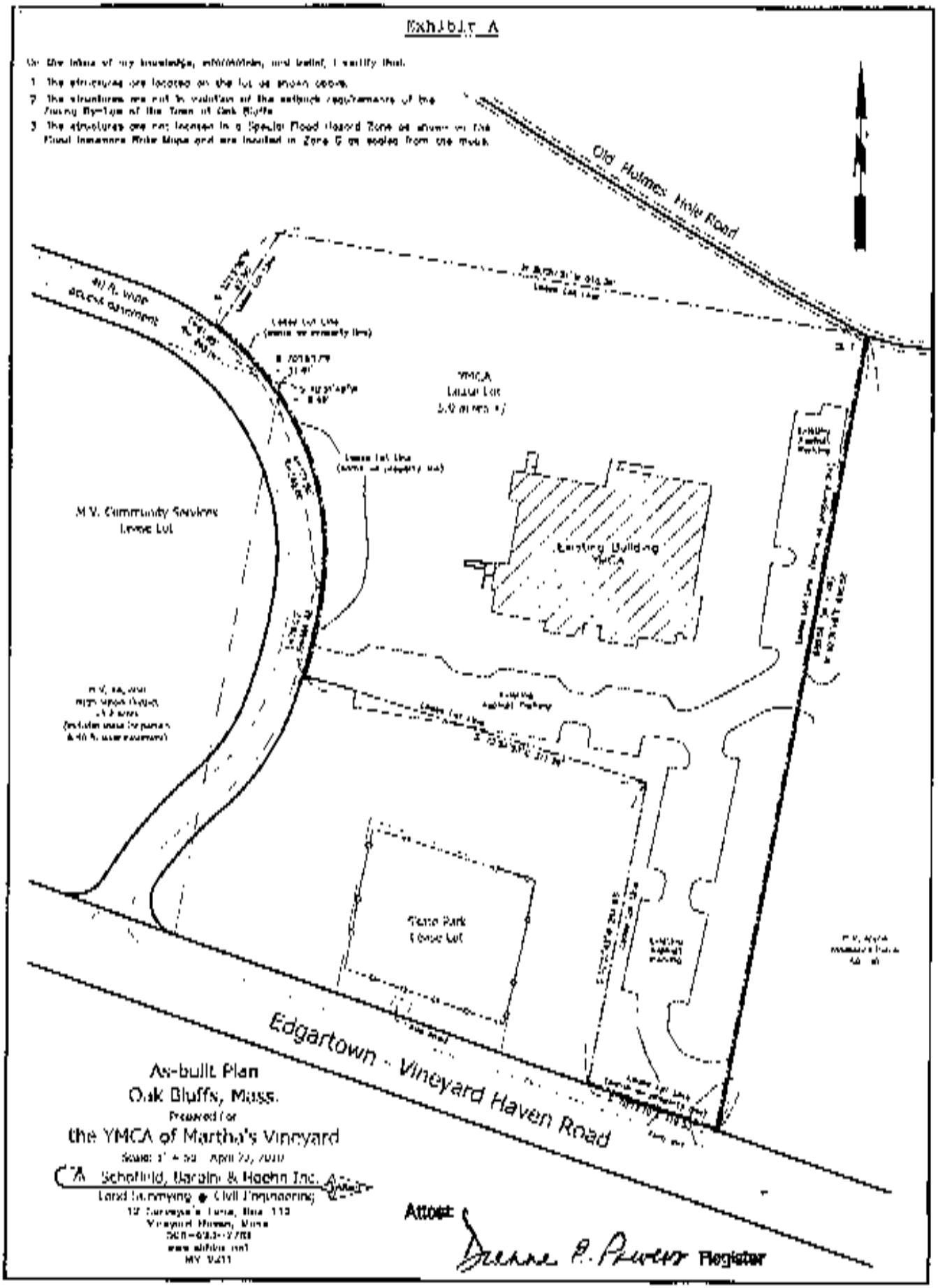


Exhibit A
Old Holmes Hole Road
YMCA
Leased Lot
Existing Building
M.V. Community Services
Leased Lot
Tisbury Park
Leased Lot
Edgartown - Vineyard Haven Road
As-built Plan
Oak Bluffs, Mass.
Prepared for
the YMCA of Martha's Vineyard
Schofield, Barsotti & Hachn Inc.
Land Surveying • Civil Engineering
Attest:
Register

Bk: 1661 Pg: 1043 Doc: LEASE
Page: 1 of 3 11/19/2020 01:05 PM

MARTHA'S VINEYARD LAND BANK FEE
☐ PAID $ ——6——
☒ EXEMPT $ ———
623612 11/19/20 WLH
NO. DATE CERTIFICATION

NOTICE OF LEASE

Pursuant to the provisions of Massachusetts General Laws, Chapter 183, Section 4, as amended, the undersigned hereby give notice of the following:

1. Parties to Lease:

Lessor: Martha's Vineyard Regional High School District, a body politic, acting by and through its School Committee
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA 02557

Lessee: Martha's Vineyard Community Services, Inc.
111 Edgartown Vineyard Haven Road
Oak Bluffs, MA 02557

111 Edgartown Vineyard Haven Rd. Oak Bluffs, MA

2. Date of Execution of Lease:

February 10, 2020

3. Description of Premises

That certain parcel of land consisting of approximately 4.90 acres and known and numbered as 111 Edgartown Vineyard Haven Road located in Oak Bluffs, Massachusetts, as shown on a certain Plan of Lease Land entitled "111 Edgartown-Vineyard Haven Road, Martha's Vineyard Community Services Lease Lot, 4.9 acres±" on a certain Plan of Land titled "Granted Area Plan, Oak Bluffs, Mass., Prepared For Martha's Vineyard Regional High School and Martha's Vineyard Community Services." prepared by Schofield, Barbini & Hoehn Inc., dated January 28, 2020 and recorded with the Dukes County Registry of Deeds, Book 19, Page 9.

4. Term of Lease.

The term of the Lease is for a period of ninety-nine (99) years, commencing on February 10, 2020 and continuing until February 9, 2119.

5. Termination of Prior Lease

By Special Legislation enacted in January of 2019, namely Chapter 415 of the Acts of 2018, the Massachusetts State Legislature has authorized Lessor to enter into a lease of up to ninety-nine (99) years with Lessee regarding the Premises (the "Special Legislation"). In accordance with the Special Legislation, Lessor and Lessee have entered into the Lease, pursuant to which that certain Lease by and between Lessor and Lessee dated September 16, 1986 and recorded with the Dukes County Registry of Deeds at Book 481, Page 867, as amended by that certain Amendment to Lease dated July, 1987 and recorded with the Dukes County Registry of Deeds at Book 481, Page 884 (as amended, the "Prior Lease"), regarding approximately 3.0 acres of land located in Oak Bluffs, Massachusetts, as more particularly described in the Prior Lease, is terminated as of the date of the commencement of the term of the Lease, excepting from such

C. Barasch
P.O. Box 130182
Boston, MA 02113

termination the rights and obligations set forth in Paragraph C of said Amendment to Lease, which rights and obligations shall be amended and restated as set forth in a certain Easement Agreement by and between Lessor and Lessee dated as of the date of the Lease and recorded herewith.

This Notice of Lease (this "Notice") has been executed pursuant to the Lease for recording purposes only, does not purport to include all provisions of the Lease, and is not intended nor deemed to amend, supplement or vary the terms and provisions of the Lease. In the event of any conflict between the provisions of this Notice and the provisions of the Lease, the provisions of the Lease shall control.

[Signatures Follow on Next Page]

IN WITNESS WHEREOF, Lessor and Lessee have executed this Notice of Amended and Restated Lease under seal as of the 10th day of February, 2020.

MARTHA'S VINEYARD REGIONAL HIGH SCHOOL DISTRICT COMMITTEE

By: [signature]
Name: Kimberly S. Reed
Title: Chair

MARTHA'S VINEYARD COMMUNITY SERVICES, INC.

By: [signature]
Name: Julianne Gay
Title: Executive Director

COMMONWEALTH OF MASSACHUSETTS
COUNTY OF Dukes

Before me, the undersigned notary public, on this 10th day of February, 2020, personally appeared Kimberly Reed, who is personally known to me or was proved to me through a current document issued by a federal or state government agency bearing a photographic image of the signatory's face and signature, to be the person whose name is signed to the foregoing instrument and acknowledged to me that [he/she] signed it voluntarily as [his/her] free act and deed and the free act and deed of Martha's Vineyard Regional High School District Committee, as Chair of Martha's Vineyard Regional High School District Committee, for its stated purpose.

Noelle Nicole Warburton
Notary Public, Commonwealth of Massachusetts
My Comm. Expires May 24, 2024

[signature]
(notary seal)

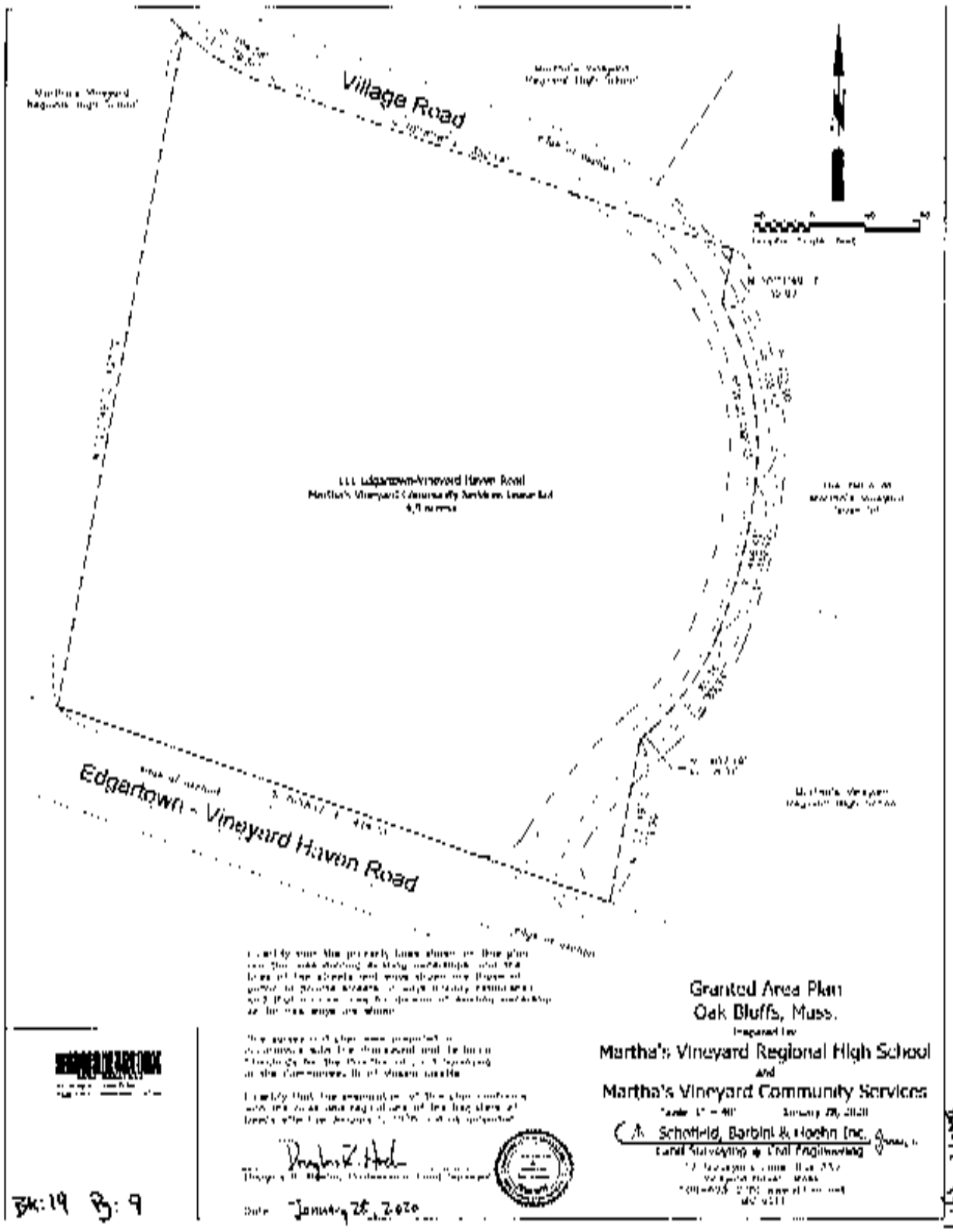
COMMONWEALTH OF MASSACHUSETTS
COUNTY OF Dukes County

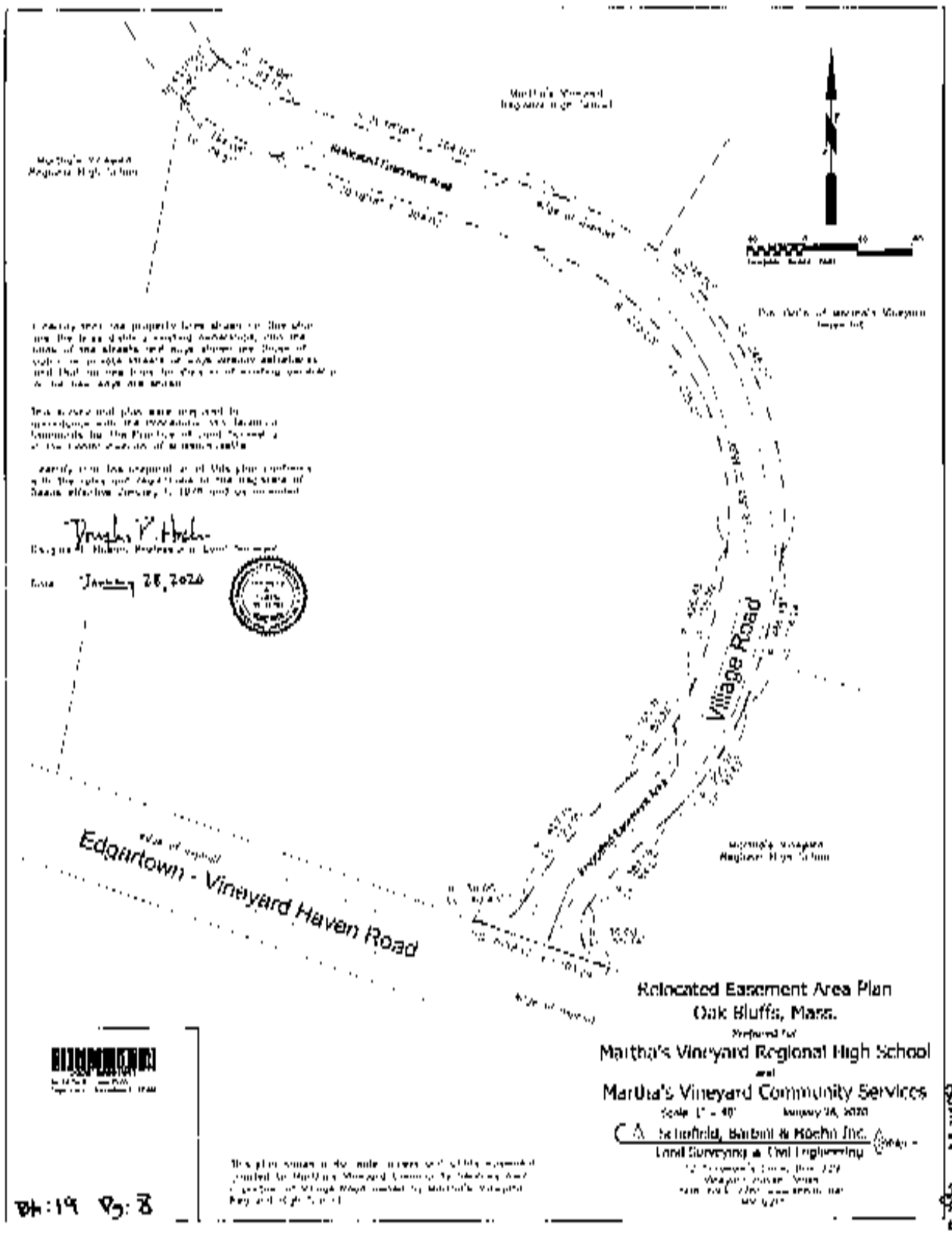
Before me, the undersigned notary public, on this 10th day of February, 2020, personally appeared Julianne Gay, who is personally known to me or was proved to me through a current document issued by a federal or state government agency bearing a photographic image of the signatory's face and signature, to be the person whose name is signed to the foregoing instrument and acknowledged to me that [he/she] signed it voluntarily as [his/her] free act and deed and the free act and deed of Martha's Vineyard Community Services, Inc., as Executive Director of Martha's Vineyard Community Services, Inc., for its stated purpose.

[signature]

SUSAN D. MERCIER
NOTARY PUBLIC
COMMONWEALTH OF MASSACHUSETTS
MY COMM. EXPIRES JULY 20, 2024
(notary seal)

ATTEST: Paula C. DeOliveira, Register
Dukes County Registry of Deeds


Village Road
Edgartown - Vineyard Haven Road
Granted Area Plan
Oak Bluffs, Mass.
Martha's Vineyard Regional High School
and
Martha's Vineyard Community Services
Schofield, Barbini & Hoehn Inc.
January 28, 2020
Bk: 19 Pg: 9


Village Road
Edgartown - Vineyard Haven Road
Relocated Easement Area Plan
Oak Bluffs, Mass.
Martha's Vineyard Regional High School
and
Martha's Vineyard Community Services
January 28, 2020
Land Surveying & Civil Engineering

SEARCH RESULTS

MASSACHUSETTS - Dukes

Recorded Land Name Search

Search Time: [illegible] AM

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[illegible]	MARTHAS VINEYARD REGIONAL HIGH SCHOOL	[illegible]	DECISION	[illegible]			[illegible]	[illegible]
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[illegible]	MARTHAS VINEYARD REGIONAL HIGH SCHOOL	[illegible]	DECISION	[illegible]			[illegible]	[illegible]
[illegible]	MARTHAS VINEYARD REGIONAL HIGH SCHOOL	[illegible]	DECISION	[illegible]			[illegible]	[illegible]
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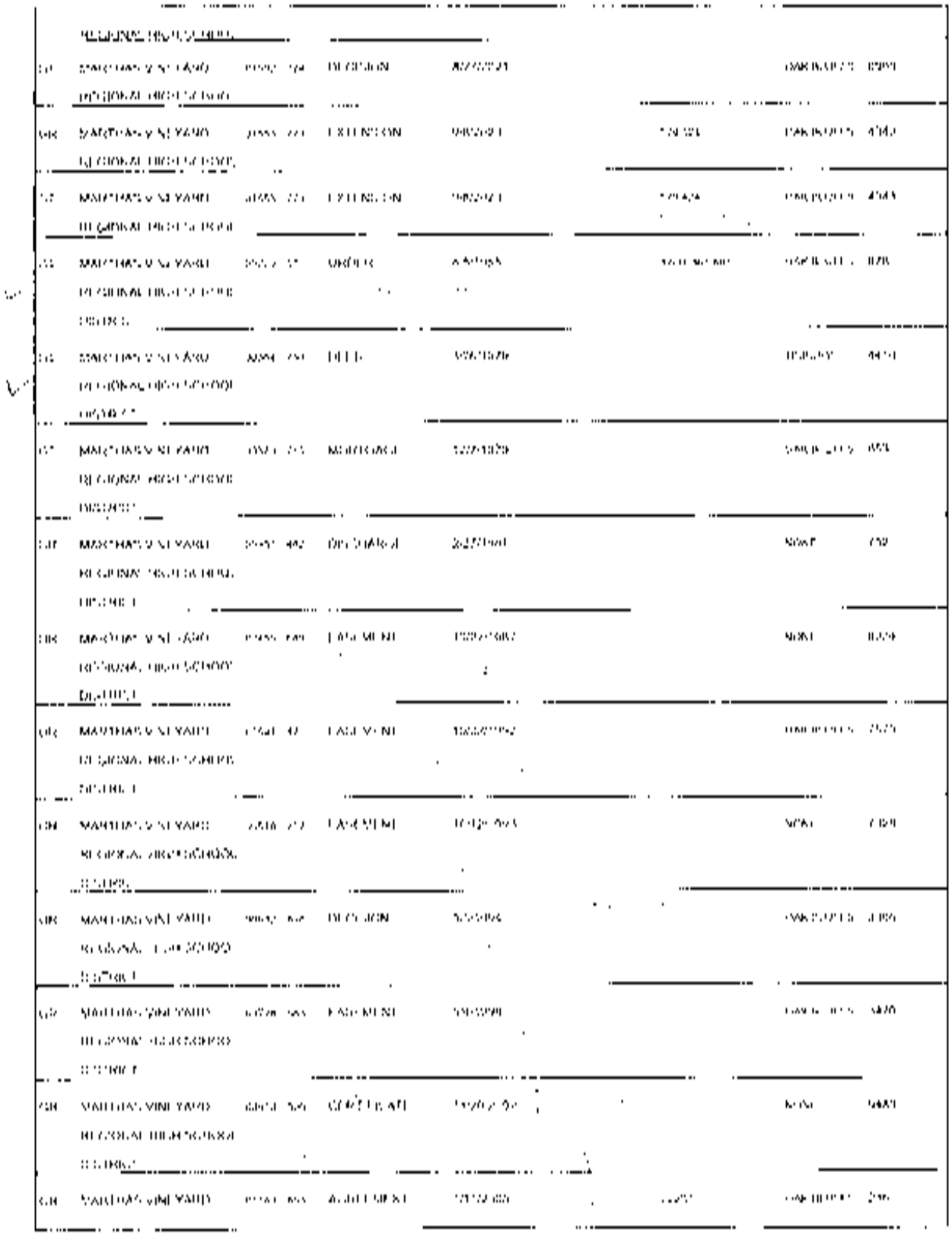
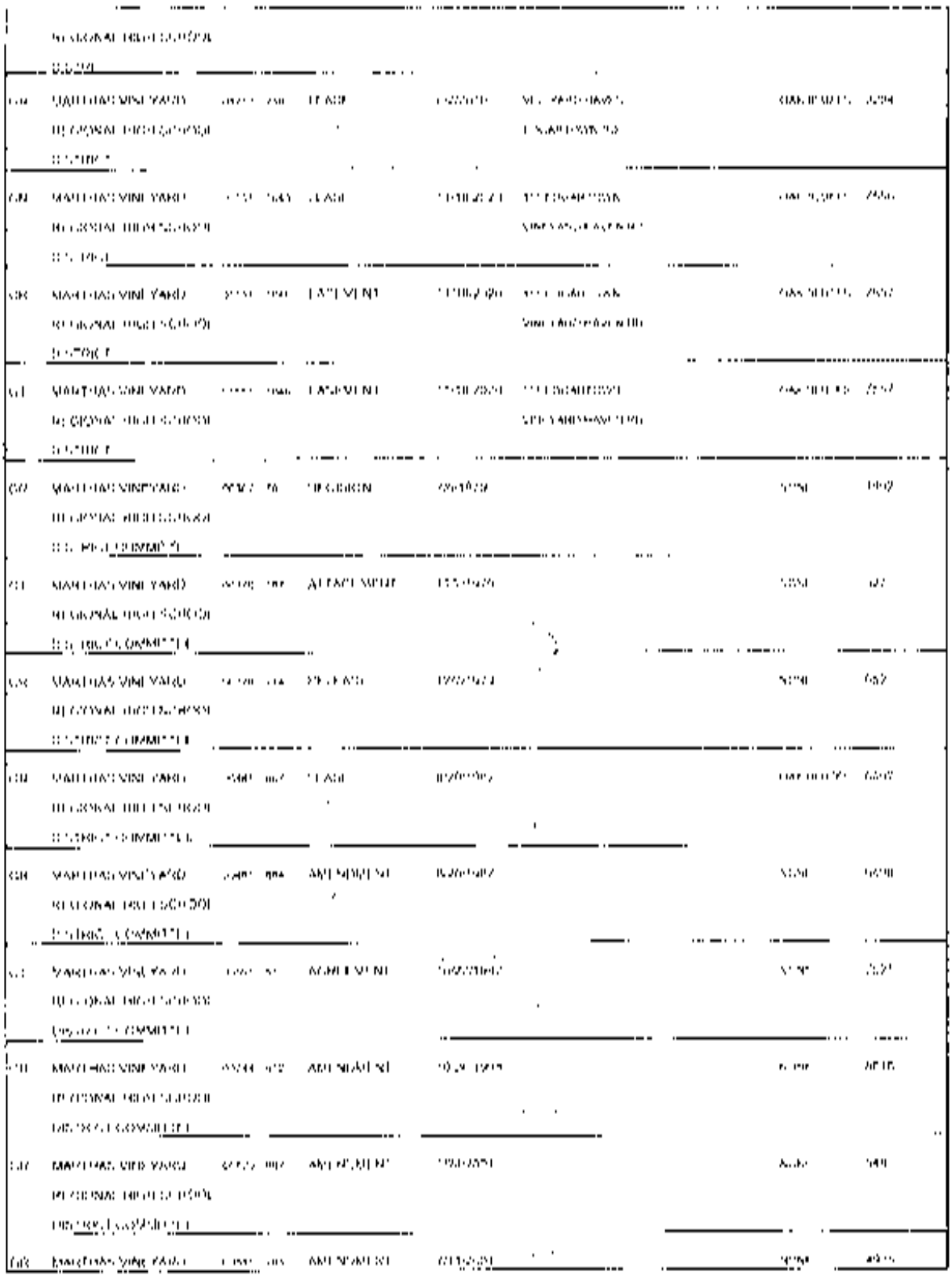
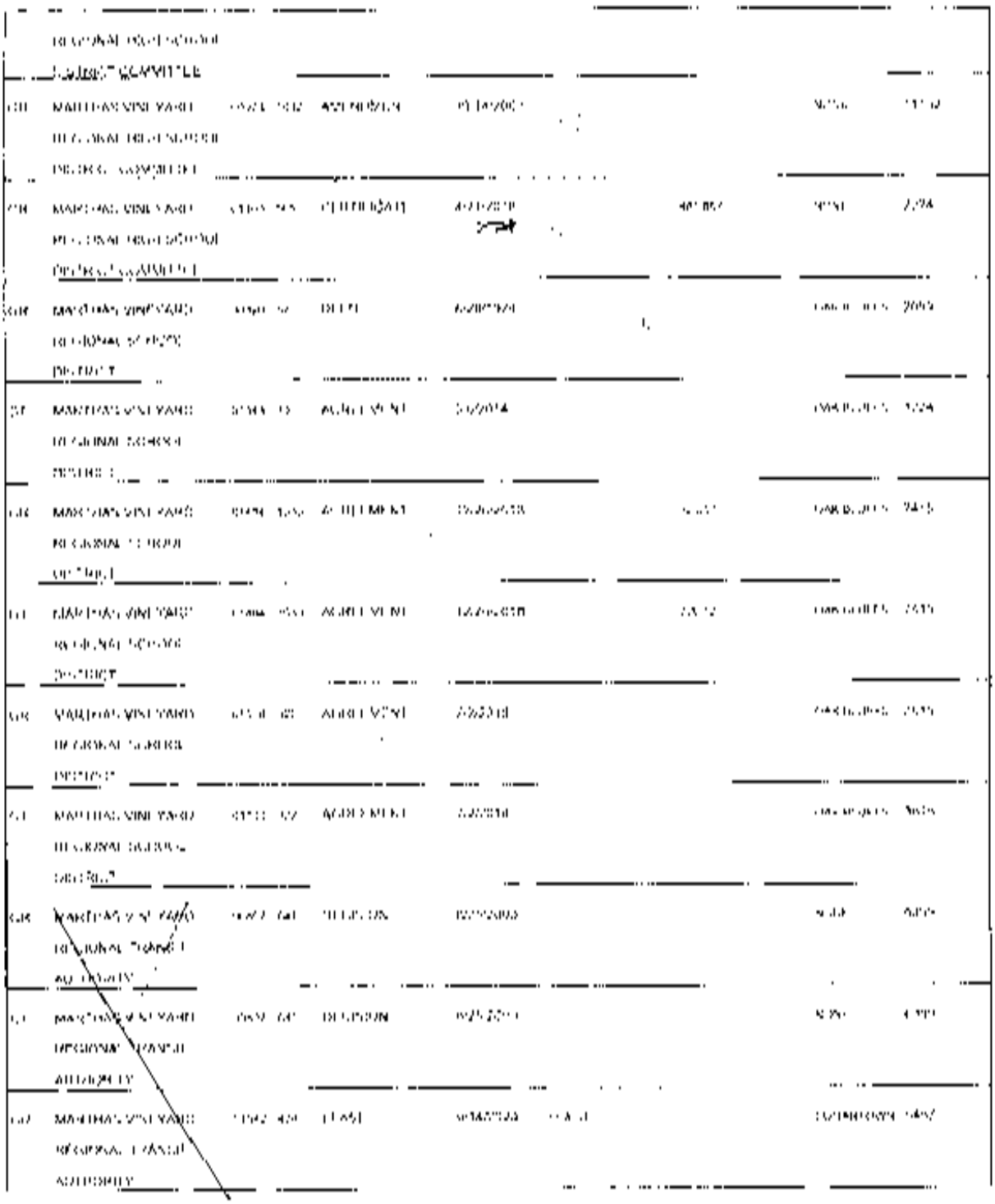
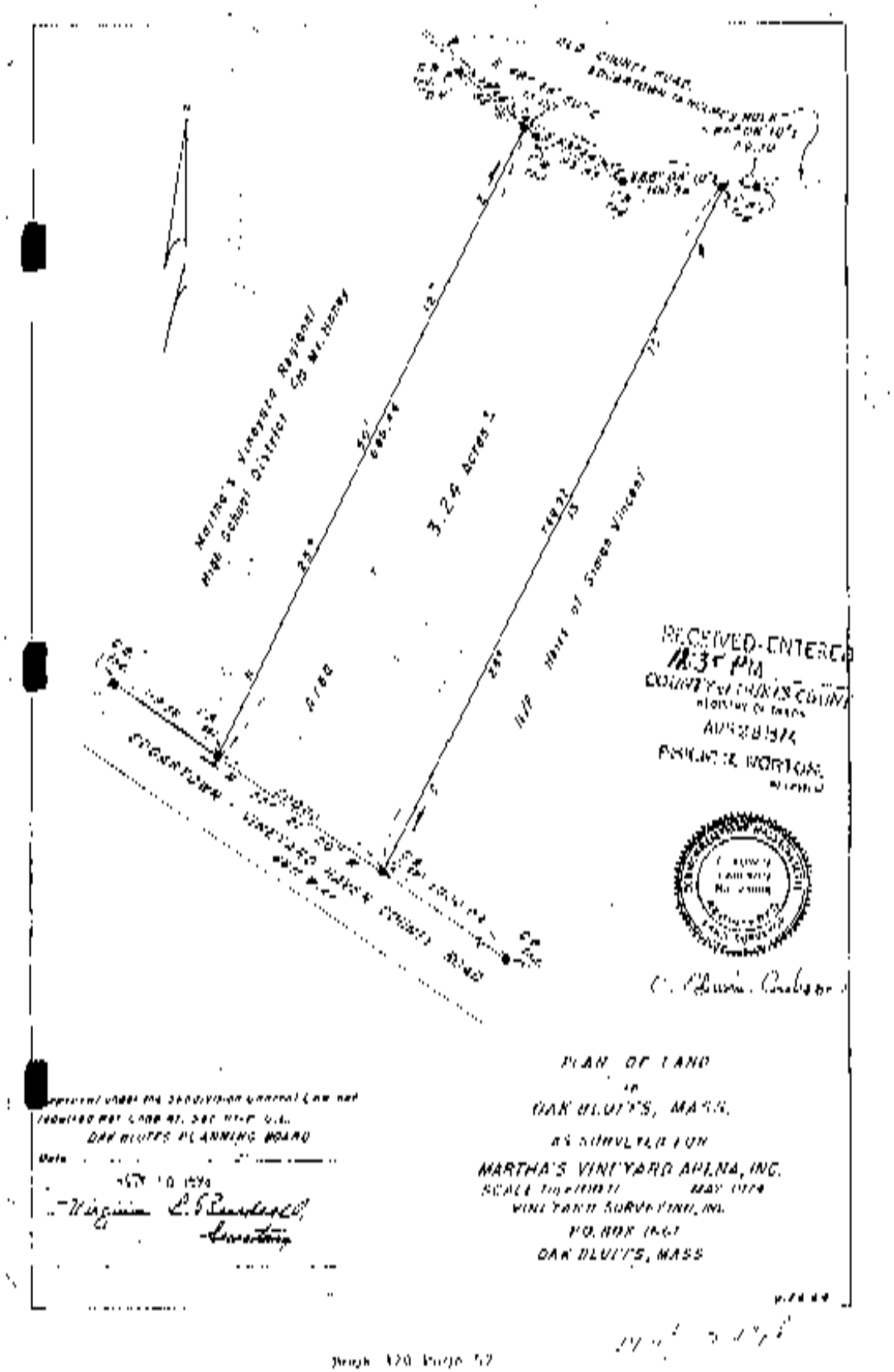
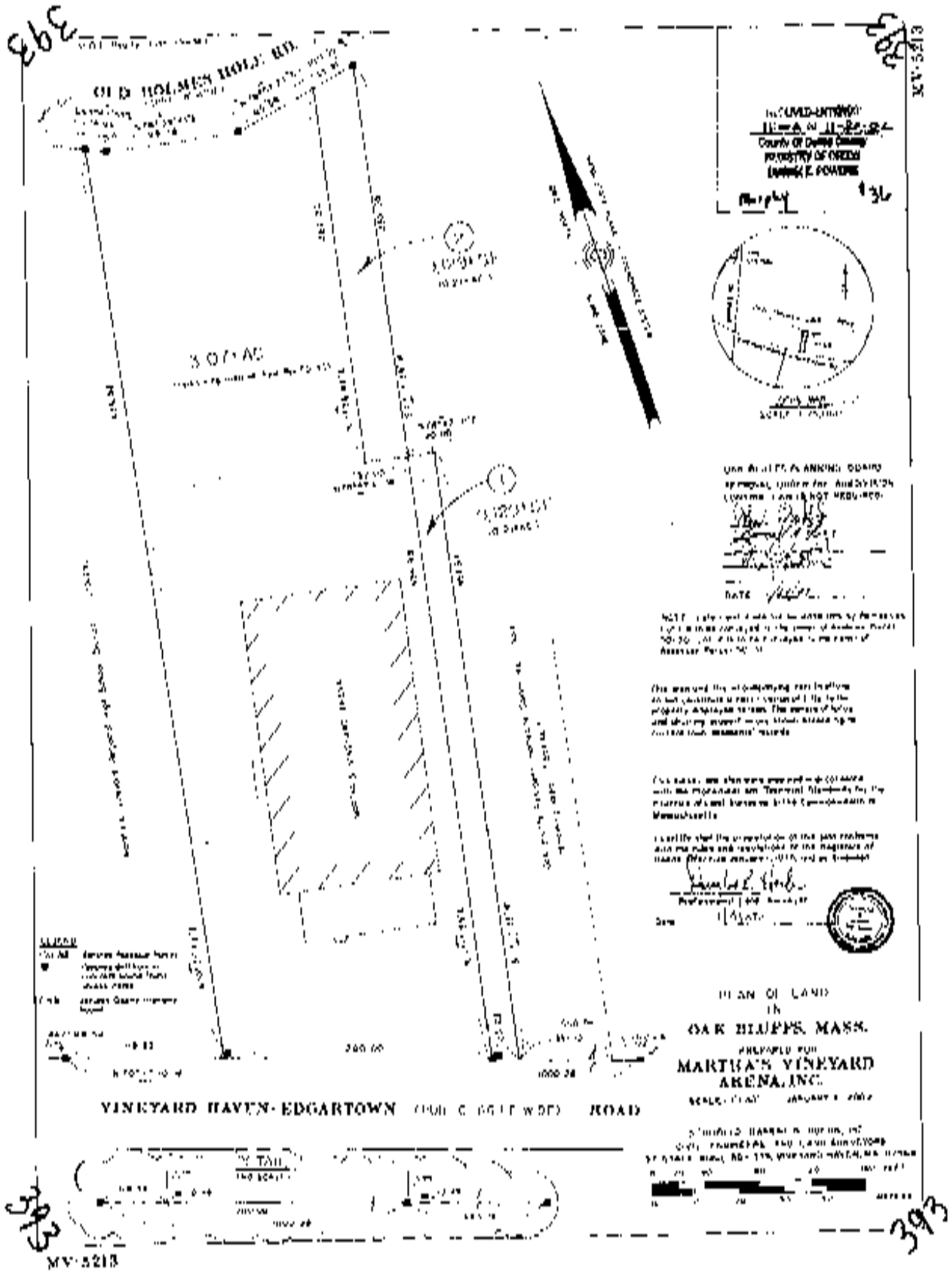






OLD HOLMES HOLE ROAD
VINEYARD HAVEN-EDGARTOWN ROAD


Martha's Vineyard Regional High School Dist
3.24 Acres ±
RECEIVED-ENTERED
PLAN OF LAND
IN
OAK BLUFFS, MASS.
AS SURVEYED FOR
MARTHA'S VINEYARD APLNA, INC.
VINEYARD SURVEYING, INC.
P.O. BOX
OAK BLUFFS, MASS


OLD HOLMES HOLE RD.
VINEYARD HAVEN-EDGARTOWN
PLAN OF LAND
IN
OAK BLUFFS, MASS.
PREPARED FOR
MARTHA'S VINEYARD
ARENA, INC.
MV-5213

4.3

CODE AND ACCESSIBILITY ANALYSIS

MARTHA'S VINEYARD REGIONAL HIGH SCHOOL- CODE REVIEW

Introduction

The Martha's Vineyard Regional High School is an existing mixed occupancy building. The proposed scope of work involves the renovation of the existing building as well as various additions. This code summary is based on a site visit to review existing conditions and a review of the proposed architectural plans.

Following is a list of applicable codes:

Code Type	Applicable Code (Model Code Basis)
Building	780 CMR: Massachusetts State Building Code, 10th Edition • Amended 2021 International Building Code (IBC) • Amended 2021 International Existing Building Code (IEBC)
Fire Prevention	527 CMR: Massachusetts Fire Prevention Regulations M.G.L. Chapter 148 Section 26G – Sprinkler Protection
Accessibility	521 CMR: Massachusetts Architectural Access Board Regulations 2010 ADA Standards
Electrical	527 CMR 12.00: Massachusetts Electrical Code • Amended 2023 National Electrical Code
Elevators	524 CMR: Massachusetts Elevator Code • Amended ASME A17.1-2013/CSA B44-13
Mechanical	2015 International Mechanical Code (IMC)
Plumbing	248 CMR: Massachusetts Plumbing Code
Energy Conservation	2021 International Energy Conservation Code (IECC) Oak Bluffs is a stretch community so applicable 225 CMR

International Existing Building Code

The 2021 International Existing Building Code with Massachusetts amendments allows for 3 separate compliance methods, the Prescriptive Method (in general, altered areas must comply with the code for new construction), Work Area Method (level of compliance is based on the classification of work), and Performance Compliance Method (numerical method that allows tradeoffs for deficiencies). This report is based on the Work Area Method.

1. Work Area and Classification of Work:

The requirements in the IEBC, work is based on the classification of the work as Alteration Level 1, 2 or 3. This is based on the extent of the project "work area", which is defined as the area within which architectural reconfiguration will occur (IEBC Chapter 2). Areas where the only work will be new finishes, furnishings, or installation of new building systems are not classified as part of the work area. The levels of work are defined as follows:

Level 1 Alteration	No architectural reconfiguration, no work area.
Level 2 Alteration	Aggregate size of work areas (architectural reconfigured area) does not exceed 50% of the gross building area.
Level 3 Alteration	Aggregate size of all work areas (architectural reconfigured area) exceeds 50% of the gross building area.

The proposed work area is expected to exceed 50% of the gross existing building area and therefore the project will be classified as a Level 3 Alteration and IEBC Chapters 7, 8 and 9 apply. The proposed scope of work also includes additions which requires compliance with IEBC Chapter 11.

2. Occupancy Classification:

- Use Group E (educational)
- Use Group A-1 and A-3 (assembly with and without fixed seating)
- Use Group B (business)

3. Construction Type:

The 1954 original building was constructed with glue-laminated beams and a wooden roof deck that has no fire rating. Those characteristics require that the building be classified as Type VB, unprotected combustible construction.

Based on the apparent non-fire rated, noncombustible construction of the 1980s and 1995 additions, those buildings would be classified as Type IIB Construction, unprotected.

The building is protected by an automatic sprinkler system.

Construction Type IIB (noncombustible-Unprotected) is proposed for any new additions. Fire separations and / or firewalls may be required to maintain building areas within maximum allowed by code for this type of construction. Any addition would be fully sprinkled.

4. Height and Area Limitations

A new addition cannot increase the building height or area beyond that allowed by IBC Chapter 5 for new construction:

Code Reference	Type IIB– Use Group A1,A3, E Fully Sprinklered			
	Height	**Area**		
IBC Tables 504.3, 504.4 & 506.2: Tabular Value	3 St. (75 ft)	A1; 34,000 sf (S1) A3: 38,000 sf (S1) E: 43,500 sf (SM) B: 69,000 sf (SM)		
IBC Section 506.2 Frontage Increase (100% Open Perimeter	-	+ 6,000 ft^2		
Height and Footprint Area Allowed	**3 St. (75 ft)**			
Actual Height and Footprint Area	**1St. (<70 ft) 165,000 SF total [See note below.]**			

Existing building contains mixed-use occupancies with and without fire separations. Any additions must comply with IBC section 508 Mixed Use and Occupancy in order to determine whether firewalls between existing and addition are required. For any addition/renovation, firewalls will be needed based on the size of the building and the allowable area for type IIB construction and the occupancy classification of spaces.

5. Fire Resistance Ratings:

The following table summarizes the required fire resistance ratings for new building elements of Type IIB construction, based on IBC **Table 601** and other applicable code provisions:

Building Element	Fire Resistance Rating (Hours)
Primary Structural Frame	0
Exterior Bearing Walls	0
Interior Bearing Walls	0
Exterior Non-Bearing Walls	0 (Fire Separation Distance > 10 feet)
Interior Non-Bearing Walls	0
Floor Construction	0
Roof Construction	0

Building Element (Within the Work Area)	Fire Resistance Rating (Hrs)	Opening Protectives (Hrs)
Existing shafts < 4 stories (IEBC 803.2.1) Fully Sprinklered	0	0
New shafts < 4 stories (IBC 713.4)	1[A, C]	¾ (1 @ stairs)
New shafts 4 stories (IBC 713.4)	2[C]	1½
Corridor walls - Fully Sprinklered (IBC Table 1020.1)	0	0
Storage Under Stairs (IBC 1011.7.3) (Not less than stair rating if enclosed, otherwise 1-hour rating required)	1	¾
Elevator Control Room (IBC 3005.4 & 524 CMR 13.03(2))	1	¾
Emergency Electrical Room (527 CMR 12.00 700-10(D)(2))	2[B]	1½
BDA Room (NFPA 72 Section 24.3.6.8)	2	1 1/2

A. In lieu of rated shaft enclosure, the annular space around a duct penetrating a floor may be protected by approved noncombustible material that resists the passage of flames and smoke (IBC 717.6.3).
B. No rating is required for the room when fully sprinklered, however a 2-hr rating is still required for the emergency feeder-circuit wiring and rooms containing an emergency generator (NFPA 110 Section 7.2.1.1).
C. Where walls expose the stair at an angle of less than 180 degrees either the stair wall or adjacent wall must be 1 hour rated with 3/4 hour opening protectives for a distance of 10 feet from the stair wall. Otherwise, the exterior walls of the stairs do not require a fire rating (IBC Section 1023.7).

Incidental Accessory Occupancies (IBC Table 509)	
Room or Area	**Separation and/or Protection**
Furnace room where any piece of equipment is over 400,000 Btu per hour input	Smoke Resistant*
Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower	Smoke Resistant*
Waste and linen collection rooms over 100 square feet.	Smoke Resistant*

*Must be separated from the remainder of the building by construction capable of resisting the passage of smoke and doors shall be self- or automatic-closing upon detection of smoke.

6. Exterior Wall Openings & Fire Resistance Rating:

The exterior walls of the new addition must comply with the fire rating requirements of the IBC. The exterior wall rating requirements and opening limitations are based on the fire separation distance for each wall. The fire separation distance is measured perpendicular to the exterior wall to the centerline of a public street, an interior lot line, or an imaginary lot line between two buildings on the same lot (IBC 702.0). Where the fire separation distance is more than 10 ft the wall is not required to be rated and the allowable area of openings is not limited (IBC Table 602 and Section 705.8.1 Exception 2).

All new exterior walls shall have a fire separation distance greater than 10 feet in order to not require a fire rating and openings are not limited.

7. Vertical Openings:

All existing vertical openings in the work area connecting two or more floors must be enclosed with 1 hour rated construction and approved opening protectives unless the openings meet one of the exceptions in IEBC 803.2.1. New vertical openings are required to comply with IBC 712 & 713. If the building is fully sprinklered existing shafts connecting no more than three stories do not require a fire-resistance rating (IEBC 803.2.1 Exception 6).

Existing Building is fully sprinklered.

8. Interior Finishes:

The existing interior finish of walls and ceilings in the work area and in all exits and corridors serving the work area must comply with the code requirements for new construction (IEBC 803.4). All newly installed wall and ceiling finishes, and interior trim materials must also comply with IBC Table 803.11 (IEBC 702.1, 702.2, 702.3). The requirements are summarized below:

Walls & Ceilings (IBC Table 803.11) – Fully Sprinklered

Use Group:	B	A
Exit Enclosures	Class B	Class B
Exit Access Stairs & Corridors	Class C	Class B
Rooms & Enclosed Spaces	Class C	Class C

The existing wall finishes generally consist of brick, structural glazed tile, painted CMU or plaster that complies with the above requirements. All new finishes will follow these requirements.

New Floor Finishes

Since the building will be equipped with an automatic sprinkler system, traditional floor coverings such as vinyl and other resilient floor coverings as well as carpeting passing the DOC FF-1 pill test are allowed throughout the building, including exit passageways and exit access corridors (IBC Section 804.4.2).

9. **Exterior Finish**

Exterior wall finishes must fully comply with the requirements of IBC 14. Combustible materials are permitted to be used as an exterior wall finish for this building in accordance with IBC Section 1406.0; however, all exterior wall finishes, and architectural trim located greater than 40 feet above grade plane must be constructed of approved noncombustible materials and must be secured to the wall with metal or other approved noncombustible brackets (IBC Section 1406.2.2).

Existing Exterior Wall Cladding materials (brick, metal panel) are non- combustible as permitted by Code. The use of plastic materials as part of the new exterior wall assembly, i.e. foam plastic rigid insulation, shall comply with IBC 1404.8. The wall assembly must be tested in accordance with NFPA 285 (IBC 2603.5.5).

10. Means of Egress:

Existing means of egress conforming to the requirements of the building code under which the building was constructed shall be considered compliant means of egress if, in the opinion of the code official, they do not constitute a distinct hazard to life (IEBC 805.2).

The new means of egress must comply with the code requirements for new construction, including the following:

- Maximum exit access travel distance must not exceed 250 feet in this fully sprinklered buildings (IBC Table 1017.2).

- Maximum dead-end corridor length must be less than 20 ft or 2.5 times the least width of space (up to 50 ft is permitted in Use Group E areas) (IBC 1020.4).

- All rooms or spaces with an occupant load greater than 49 people or a common path of travel distance over 75 ft must be provided with two egress doors swinging in the direction of egress and illuminated exit signs at each exit (IBC Table 1006.2.1 & Sections 1010.1.2.1 & 1013.1). Boiler rooms require two means of egress if the room is greater than 500 sqft. and includes individual fuel-fired equipment greater than 400,000 Btuh input capacity. If required one of the two required exit access routes from the boiler room is permitted to be a fixed ladder or alternating tread device (IBC Section 1006.2.2.1).

- Doors serving rooms and spaces with more than 49 people and doors along the path of egress travel from such rooms must be provided with panic hardware (IBC

1010.1.10). Doors from main electrical rooms with equipment rated 1,200 amps and over 6 feet wide must swing in the direction of egress with panic hardware (IBC 1010.1.10).

- All means of egress lighting and exit signs throughout the building must be provided with an emergency power supply to assure continued illumination for not less than 1.5 hours in case of primary power loss (IBC 1008.2 & 1008.3.4).

- Remote means of egress must be separated by ⅓ of the diagonal dimension of the room or space they serve (IBC 1007.1.1). The distance between exits must otherwise be measured in a straight line between exit doors.

- Permanent means of access to any roof containing mechanical equipment must be provided in accordance with the Mechanical Code. If the roof contains any gas-fired equipment access via a hatch and permanent or foldaway inside stairway or ladder is required in accordance with Section 9.4.3 of the National Fuel Gas Code (NFPA 54).

- All exits must discharge to the exterior of the building except that a maximum of 50% of the number and capacity of the exit enclosures are allowed to exit through areas on the level of discharge if the exit enclosures discharge to a free and unobstructed path of travel to an exterior exit that is readily visible from the discharge of the exit enclosure (IBC 1028.1).

- All exits must provide access to a public way (IBC 1028.5). At least two of the exit discharge paths must be accessible, they cannot include exterior stairs along the path (IBC 1009.1 & 1009.2(4)). Where two accessible discharge paths cannot be provided, an exterior area for assisted rescue in accordance with IBC Section 1009.7 is required.

- A two-way communication system is required outside each elevator on the 2nd (IBC 1009.8).

- The elevators must be sized to accommodate the loading and transportation of an ambulance gurney or stretcher sized 24” wide by 84” long with 5” radius corners (524 CMR 35.00 (2.27.12(1)).

The existing building is one-story and does not have an elevator. Any addition has potential to be multi-story.

The MA Elevator Code also does not require a stretcher sized elevator when elevators are installed within the footprint of an existing building (524 CMR 35 Section 2.27.12(1))

A two-way communication system will be installed outside any elevator.

11. Energy Code Provisions for Existing Buildings

New work is subject to the International Energy Conservation Code (IECC) with Massachusetts Amendments (Stretch Code where adopted. Since Oak Bluffs is a stretch community, stretch code 225 CMR is applicable.
Energy Code requirements for existing buildings are described in IECC 2021 Chapter 5 (modified in 225 CMR) .C503.1 indicates that the alterations (new elements and addition) must conform to the energy requirements of the IECC (225CMR) as they relate to new construction only, without requiring the unaltered portions to comply.

All new construction will meet Energy Code provisions for new buildings.

All altered elements will meet the requirements of Chapter 5 as amended.

12. Accessibility for Persons with Disabilities

Massachusetts Architectural Access Board Regulations

Alterations to the building must comply with the requirements of the Massachusetts Architectural Access Board Regulations (521 CMR). For existing building alterations the requirements of 521 CMR are based on the cost of the proposed work:

A. If the cost of the proposed work is **less than $100,000,** only the new work must comply.

B. If the cost of the proposed work is **greater than $100,000** then all new work must comply and the existing building must include an accessible public entrance, toilet room, telephone and drinking fountain (if public phones and drinking fountains are provided) (521 CMR Section 3.3.1(b)). Exempt work when calculating the cost of work includes roof repair or replacement, window repair or replacement, and repointing and masonry repair work unless the exempt work exceeds $500,000.

C. If the cost of the proposed work is **greater than 30% of the full and fair cash value** of the existing building, the entire building is required to comply with 521 CMR (521 CMR Section 3.3.2). There is no exempt work, i.e. the entire project costs apply to determining the 30% criteria.

The cost of all work performed on a building in any 36 month period must be added together in determining the applicability of 521 CMR (521 CMR Section 3.5). The full and fair cash value of the existing building is determined by using the 100% equalized assessed value of the building on record with the city assessor's office.

Since it is expected that the cost of the renovation will trigger the 30% threshold, all portions of the building open to the general public (students) must be upgraded to comply in full with the current requirements of 521 CMR. Any employee-only areas such as staff lounges, staff bathrooms, and staff work areas are not required to comply with 521 CMR, as long as public access is not permitted.

Full compliance with 521 CMR includes the following major provisions:

- All public entrances must be accessible (521 CMR 25.1).

Existing entrances are located at grade level however many of the entrances need to be addressed to fully comply.

- All public and common use areas must be accessible and provided with an accessible route thereto (521 CMR Section 12.2.2 and 20.1).

- Each toilet room must include accessible fixtures (521 CMR 30.1).

New plumbing code has more stringent requirements for plumbing fixture counts. Additional Code compliant plumbing fixtures including toilets, urinals, lavatories and drinking fountains will be provided.

Americans with Disabilities Act Guidelines

The ADA Guidelines are not enforced by the Commonwealth of Massachusetts, they can only be enforced through a civil lawsuit or complaint filed with the U.S. Department of Justice. Compliance with the ADA Guidelines is triggered by renovations to the existing building. All renovations to the building must be made to ensure that, to the maximum extent feasible, the altered portions of the facility are readily accessible to and usable by individuals with disabilities (28 CFR Part 36 Section 36.402(a)). Alterations made to provide an accessible

path of travel to altered areas and accessible facilities (i.e. provide accessible toilet facilities) are not required if the cost exceeds 20% of the total cost of the alteration (28 CFR Part 36 Section 36.403(f)). However, if the cost to meet these accessibility requirements does exceed 20%, alterations are still required to the maximum extent that the area can be made accessible without exceeding the 20% criteria (28 CFR Part 36 Section 36.403(g)). The ADA also contains less stringent dimensional requirements for some building elements in an existing building where it is infeasible to meet the requirements for new construction (ADA Section 4.1.6).

The proposed scope of work will bring all public areas in the building into compliance with MAAB access code requirements. All non-public areas will also follow MAAB requirements (most stringent) to the extent possible. (i.e. all new elements will comply.)

4.4

EXISTING CONDITIONS | BUILDING CONDITIONS

The Martha's Vineyard Regional High School (MVRHS) is built on a 90.1 acre campus located in the center of the island of Martha's Vineyard. The High School and its related athletic fields and facilities are located on approximately 62 acres on the south side of Edgartown Vineyard Haven Road that is split by Sanderson Ave. The High School is a sprawling single-story structure that has been developed over many years with a series of additions. The original building dates from 1959 with subsequent additions constructed in the 1980's and 1995. Areas of the building were reprogrammed over time with the library in the former gym and the cafeteria in the former theater. While the building is on a single floor, there are changes in floor level that are navigated by pedestrian ramps. The weight room and greenhouse are in separate buildings across Sanderson Ave from the main portion of the school.

The original 1959 portion comprised of approximately 60,000 square feet on a single level, the building included 22 classrooms & laboratories, cafeteria, & kitchen, gymnasium, auditorium, nurse's office, boiler room, guidance office, and administrative offices. Student enrollment was projected to be 417 students.

The MVRHS undertook its first major expansion in 1979 with the addition of approx. 35,000 square feet comprised of 12 new classrooms and facilities for new Chapter 74 Programs, Building Trades, Culinary Arts, and Automotive Technology. This addition was planned to accommodate between 550-600 students. The addition continued the building's original single level design and did not include a new boiler room.

The second and last major expansion in 1995 included an addition of approximately 70,000 square feet comprised of 28 new classrooms, a new gymnasium, conversion of the old gymnasium into a library, new music rooms, and expansion of the original cafeteria, and a new performing arts center designed to accommodate 800 persons. The 1995 addition was focused on an expansion of science rooms and art/media classrooms, all on a single level.

There was a major renovation of the cafeteria in 1993 because of a defect in the roof trusses. The room was closed, and emergency repairs were made. In addition, approximately 85% of the exterior roof was replaced in the summer of 2013 due to leaks throughout the building. Finally, in the winter of 2016/2017 MVRHS completed a renovation of approximately 2,600 square feet of the south facing Career & Technical Education (CTE) exterior wall. This included removing deteriorated siding, windows, exterior egress doors and wall studs, and replacing with 42 new exteriors windows, 2 new exterior doors, new metal wall studs and then sheathing and shingling.

The 1995 addition completed the "figure 8" diagram of corridors seen in the current building. This arrangement creates many blind corridors and corners which can lead to collisions with students as well as poor wayfinding in a large building. In addition, there are several grade level exit doors which may present challenges to operational security. There are cameras throughout the building but no way for the building to be sealed off in case of lock down or other emergencies.

BUILDING ENVELOPE

Exterior Walls

The original exterior façade is red brick with wood-frame windows. The masonry is deteriorating, and mortar joints have cracks. Large amounts of masonry sealant have failed. The siding on the 1979 and 1995 additions is cedar shingles with wood trim and aluminum windows. The cedar shingles have weather-related damage, curling, breaking, and disintegrating. Many are missing. The school has begun to replace small portions of the exterior shingles with new cedar shingles and in some locations have replaced the cedar shingles with cement board mimicking shingles.

Based on available drawings, it is expected the insulating value of the current wall assembly to be low and not conform to current code requirements. As per Chapter 5- Existing Buildings, alterations to the existing building envelope shall comply with the code requirements for new construction without requiring the unaltered portions to comply with Energy Code. (IECC 2021-C503.1)

On the other hand, altered components need to comply with stretch code amendments to section 503.1, effectively requiring a component performance alternative to be no greater than 110% UA.

According to the 1959 drawings, no insulation is called for. In the subsequent additions, insulation was provided but does not meet today's standards. Currently unit ventilators are at multiple locations along exterior walls. Removal of these units will trigger insulating requirements for those portions of the wall becoming exposed / accessible. Code wise, these areas would need to be insulated. In practical terms it may be difficult to be selective and avoid opening walls to install new building systems. Therefore, it is recommended to take it one step further and insulate the remaining portions. This approach would provide more resilience in the building envelope, and help the project meet its sustainability goals.

Openings

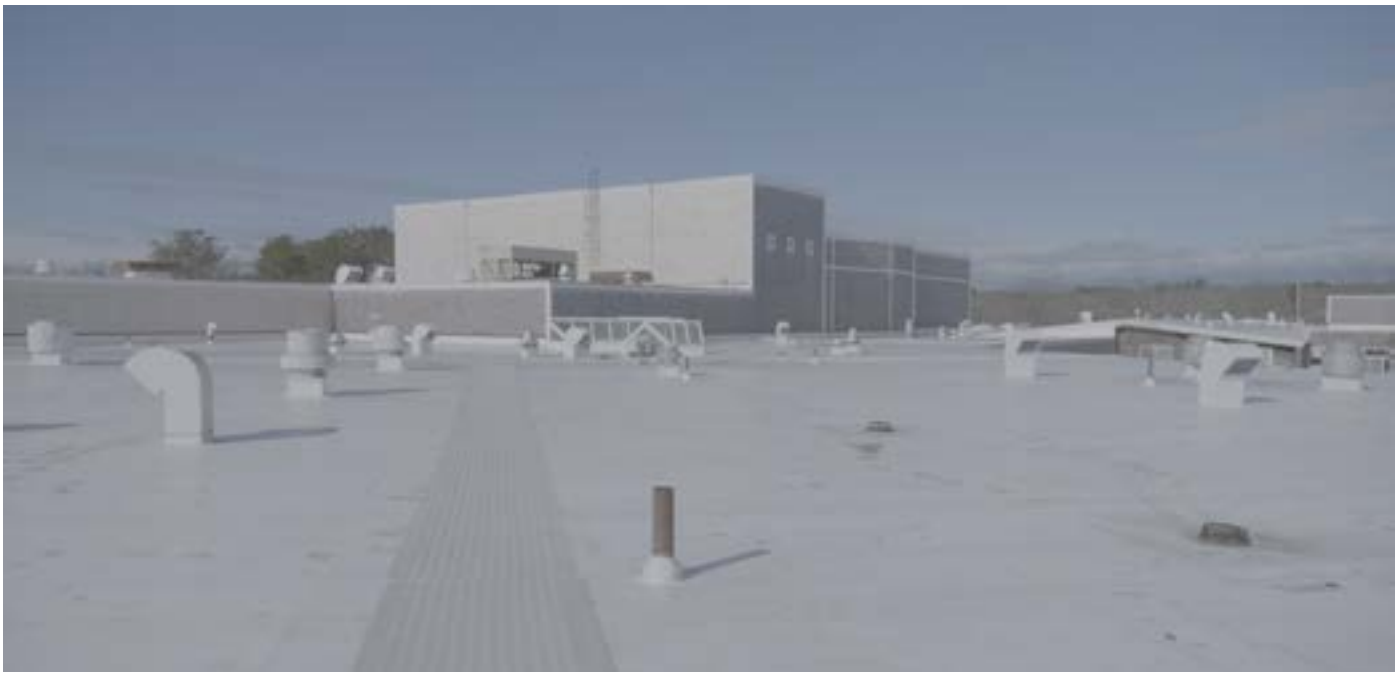
Exterior windows are mostly aluminum framed, with some vinyl and wood frames windows. Exterior doors are metal with mostly metal frames. Dozens of windows are fogged from failed glazing, and hardware is broken or missing. Window screens and brackets are torn or non-existent. It is also reported that the attempts to fix the skylights in the gym from leaking have not been sufficient. Leaks from those skylights and others in the building have been reported. It is also reported that many windows leak during heavy rains, causing damage to the interior.

To meet current energy code standards, any new or replaced fenestration in the existing building must be a High-Performance triple glazing insulated glass system. See additional recommendation in the Conclusions section below. Rotted wood window frames in the 1995 addition have also allowed water to infiltrate the interior, allowing mold to grow.

Roof

The building has predominantly flat roofs with some slightly pitched areas. As a result of roof leaks approximately 85% of the roof was replaced in 2013 with PVC that comes with a 20-year warranty. The remaining roof that was not replaced is either EPDM that is approaching the end of its useful life span, or there is a small amount of copper roofing on certain features of the 1995 addition. Gutters with downspouts exist around most of the entire building and are either copper or aluminum. Consequential problems exist in all areas of the building envelope. Water damage to ceiling tiles and wallboard have resulted.

Any roof alterations (beyond basic repairs) as a result of renovation or new work must comply with the current Energy Code. (2021 IECC with Stretch Code amendments). Therefore, it is recommended to do a full replacement with Code compliant insulation thickness. This approach not only improves thermal performance overall, but also gives a single starting point for the entire roof as far as expected longevity and warranties.



Building Entrances

The main entrance is covered by a canopy. Some of the other side entrances have canopies while others do not. Some entrances including the main entrance are ADA noncompliant because their slope exceeds the maximum 2% limit. The majority of the exterior doors are noncompliant. Any renovation will have to address this.

FREESTANDING BUILDINGS

The Horticulture facility has significant deficiencies, including crumbling foundations, inoperable/ unsecured doors and windows, hazed over transparency panels and inoperable venting, and inadequate HVAC and ADA accessibility. The facility does not have bathrooms.

The weight room is separate from the main building and has inadequate HVAC and ADA accessibility. The ACT ceiling and rubber flooring appear to be in decent condition. Having the small weight room away from the school is not conducive for PE class use or helpful for the athletic program.

There is an abandoned free-standing classroom building that is in total disrepair. The ceilings have been severely damaged by water and have fallen in some parts. The flooring appears to be VCT and there are tiles missing. Mold is visible in multiple areas on the ceiling and walls of the building. It appears that this building is used for storage. Athletic mats were seen stored in the building.

INTERIOR

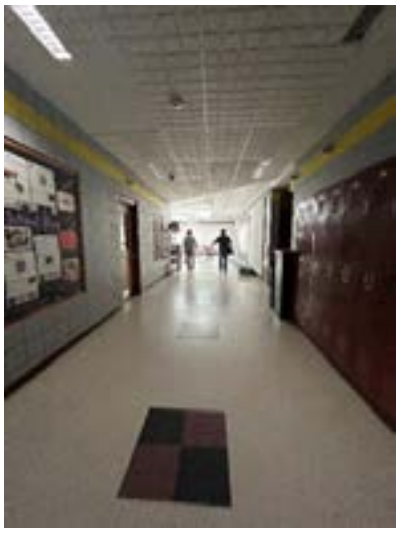
The building finishes, in general, appear to be tired and in some areas, they do seem to be failing. There are floor tiles with cracks and divots, ceiling tiles with leak marks, peeling paint around skylights, fasteners exposed where the roof was replaced, exposed pipes and conduit runs, etc. The paint seems to be updated, and the school does have some murals throughout.

One of the largest problems in the building is the indoor air quality. The environmental building analysis measured very high levels of mold in several spaces in the building including the guidance area, cafeteria, school counseling and some classrooms. Users of the building report indoor air quality has had an adverse impact on learning and teaching. Absences have been attributed to the poor indoor air quality.

Flooring is predominately VCT in all classrooms and public spaces. There is carpet in the administration areas and in the library, there is a mix of carpet and LVT. Some of the flooring has been replaced as asbestos abatement has been happening periodically. The flooring in the main kitchen and CTE spaces is concrete. The flooring in the Culinary Arts kitchen is tile. The ramps connecting the different additions have rubber flooring. The flooring throughout the building is worn.

The casework throughout the building (especially in the science labs) should be replaced. The science labs have reported unsafe storage conditions and other areas are showing signs of general wear and tear. Fixed lab stations in the middle of the classroom reduces flexibility and can create congestion. Renovation considerations must include casework upgrades to meet MAAB requirements. In addition to the replacement of casework, any future project should consider the actual utility of the metal lockers located throughout the building. To replace the lockers with a more appropriate size unit would be costly and it is reported that the sprawling nature of the high school the lockers are not used particularly well and are hard to get to in the short amount of time between classes. Removing lockers could allow for space saving design changes and more space in classrooms or directed toward 21st century learning initiatives.

The nature of a one-story figure eight shaped school means that there is a lot of corridor space. The travel distance and time around the school is significant. The corridors are narrow and provide no space for 21st century learning initiatives. The corridor walls in the original portion of the building are brick. In the later additions the corridor walls are painted CMU, concrete block and painted plaster. The brick adds a nice character to the corridors, but the corridors are generally dark apart from the areas where two corridors meet, and overhead skylights provide daylighting. The ACT ceiling in parts have water stains. The corridors lack property HVAC systems which can make them very cold in the winter. There are a lot of exposed pipes throughout the corridors.

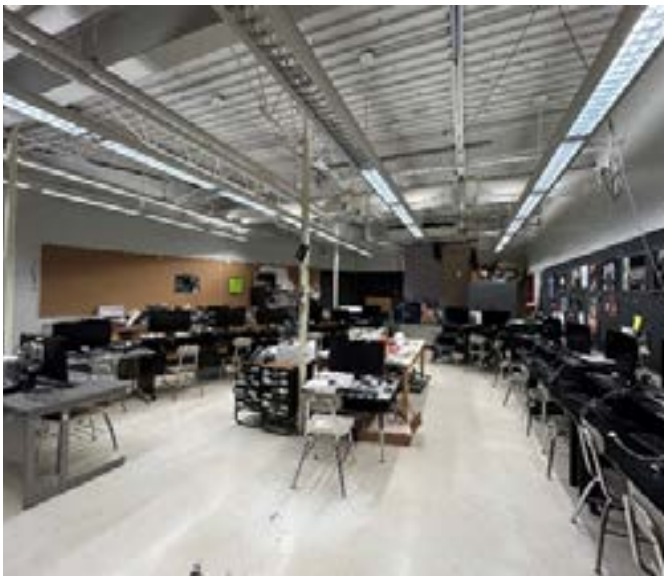


Generally, the toilet rooms have painted CMU walls and epoxy floors. There are portions of the epoxy flooring in some toilet rooms that appear to be deteriorating with chips and holes around the perimeter of the room. Fixtures appear to be in decent condition but may not meet code requirements for accessibility or flow rates. However, due to the most recent (and more stringent) version of the plumbing code, additional code compliant plumbing fixtures including toilets, lavatories, urinals and drinking fountains will be required. Most of the toilet rooms appear to have epoxy flooring. There are portions of the epoxy that appear to be deteriorating.

Currently room signs are mounted above the doors, which is not in compliance with MAAB. Signage needs replacement to meet MAAB requirements and to address proposed room numbering.

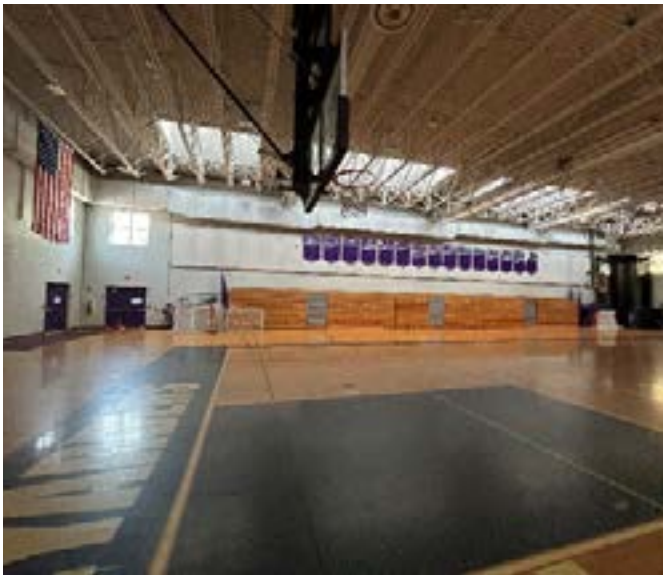
All the CTE program spaces are too small compared to the state standards. The automotive and carpentry programs have the most space out of all the programs. However, they do not have any instructional space that is accessible. There is lofted space above that doubles as storage and instructional space. The automotive and carpentry spaces have had the most extensive remodel to date due the failings of the exterior wall. The finishes are worn in the culinary arts teaching kitchen and better instructional and preparation space is needed. The health assist and early education programs are currently located in general classrooms which do not meet the needs of the programs. The marine technology program does not have a dedicated space and bounces from space to space depending on the year. The horticultural program's greenhouse and facilities do not meet the needs of the program and are deficient.

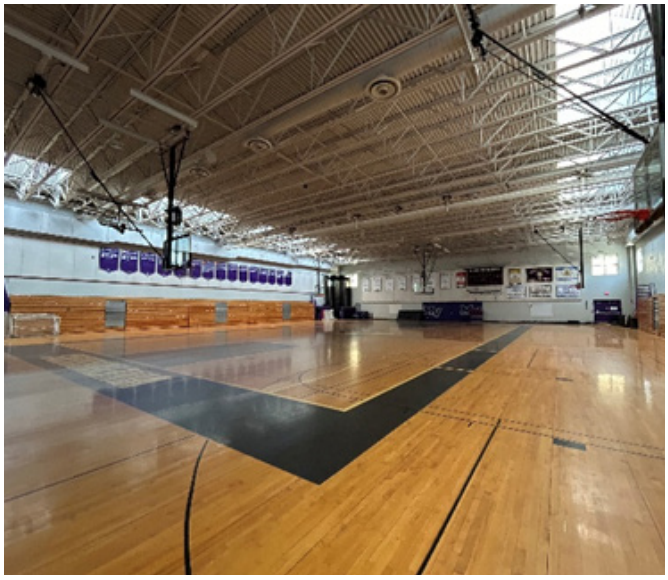
The ceramics art room was the prop and set building room in the original plans. It has tall ceilings and CMU walls with concrete floors. It has many little storage nooks while being dirty and cluttered with limited accessibility for any disabled persons. One of the art classrooms doesn't have windows or proper ventilation for the equipment used in that space. All of the casework and storage in the art rooms will need to be replaced and brought up to MAAB standards.



The music classrooms are tall spaces with CMU walls with exposed roof structure and systems. They are lacking acoustical treatment. The VCT flooring is worn. The department has insufficient space for all of their programs.

The gym walls are painted CMU. The roof is supported by structural bar joists. Bleachers appear to be original and appear to be in good shape. However, the bleachers do not have cutouts for HC wheelchair space and companion seating. Gym equipment appears functional but is reaching its life expectancy. Renovation considerations shall include full replacement with HC compliant bleachers and should include replacement of gym equipment (backboards, scoreboard and curtain). It has been noted that the skylights leak.



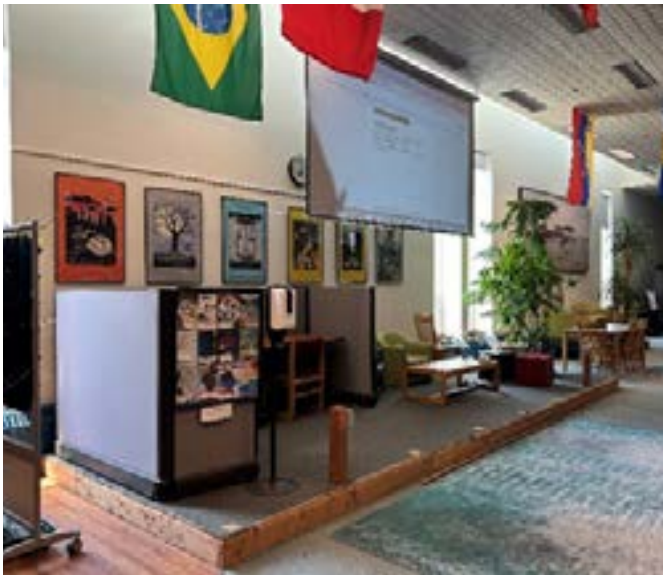


The locker rooms/ showers are worn but in relatively decent condition. The walls are painted CMU and the ceiling is painted drywall. Any renovations would have to make sure the restroom and showers in the locker rooms comply with the latest code and ADA requirements. Currently, the showers are used for storage. Renovation considerations should include full reorganization and renovation of these spaces.

The Auditorium (PAC) is in good condition. Seating capacity is just under 800 seats. Access to the stage is via a ramp and side doors from the corridor. There is no dedicated control room for audio and lighting. All new MEP systems will be needed. At a minimum, cosmetic finish upgrades would be necessary in any renovation considerations. Further evaluation of ceiling acoustic baffles and wall acoustic baffles will be needed.

The cafeteria is too small for the current student capacity. Some ceiling tiles have water stains and are wavy. The VCT flooring is cracked in some locations. The painted walls need to be repainted.

The Media center is well maintained and is one of the only spaces in the school that is air-conditioned. However, layout modifications (say, stacks or circ desk) and / or new building systems installation will require replacement of carpet and ACT. There is a raised platform that is not accessible. Any renovation will need to address it and make the entire space completely accessible.



Most doors open into the classrooms, which is acceptable for spaces under 50 occupants. There are some spaces where the occupancy may exceed 50-music rooms for example- therefore the door swing must be in the direction of egress.

Most doors have lever handles, but a few locations still have knob type, which is not MAAB compliant. Hardware may need selective or complete replacement to comply with applicable accessibility code requirements, life safety requirements and user requirements for student and staff safety based on school security protocols. It is assumed that a number of doors will require replacement given the age of the building and condition of many doors, and the need in certain locations for abatement. Door knobs need to be replaced.

CONCLUSIONS

Major parts of the interior of the building are obsolete and worn-out. No major renovations have been done to the instructional rooms with a few exceptions. There are certain deficiencies that need to be addressed in conjunction with any proposed work. These issues can be divided in two categories: Code related issues and General Upgrades.

Among Code related issues are the thermal value of the existing envelope, and certain aspects of HC accessibility compliance with MAAB, namely, lack of HC accessibility to the automotive and carpentry instructional spaces, too steep of slopes at exterior doors, room signage and HC accessible hardware at certain doors.

- The current envelope is not energy efficient. Exterior Walls lack insulation, roof appears to have insufficient insulation, and windows, most likely do not meet the latest Energy Code requirements, let alone today's industry standards for energy efficient buildings. By Code, if a fenestration component is altered, that component would have to be replaced with Energy Code compliant window systems. (Code base U-value 0.30 as a minimum; high performance glazing – triple glazing, U-value .28 or better is recommended) Considering that the Owner reported failures on some of the existing windows and skylights, compounded with the expected life expectancy left on day-one once this project is completed, and the expectation of energy efficiency in a 21st century educational facility, it is recommended to replace ALL the windows with thermally efficient triple glazing and thermally broken aluminum frames.
- Similarly, exterior walls may need upgrading. By Code, if a wall is altered, or a component is removed so that access to the wall cavity becomes accessible, that portion of the wall would have to comply with Energy Code. Moreover, if the Project has energy performance LEED requirements or is pursuing utility incentives, it will be difficult to achieve the goals with a poorly insulated building. Logistically, rather than avoiding disruption to the wall it may be more practical to remove interior finishes to allow flexibility for building systems installations and insulation.
- Room signage is mounted above doors which is not in compliance with MAAB. New signage, with braille will be required on the wall adjacent to the door.

Recommended General upgrades would include the following:

- Removing and replacing dropped ceilings to facilitate access to new building systems installations.
- flooring replacement at areas required to be removed due to abatement (at locations with 9x9 VAT. Refer to HazMat report).
- General painting of interiors, Updating visual display surfaces in conjunction with proposed visual display devices.
- Casework is in acceptable condition in some locations and requires replacement in others. Renovations and modifications may also make necessary the relocation and replacement of some casework. It is assumed that most of the casework will be replaced to make all classrooms to be consistent. Casework in science classrooms would need to be replaced.
- The outbuildings - weight room and horticulture facilities would need to be addressed with proper systems.
- A number of doors will require replacement given the age of the building and condition of many doors, and the need in certain locations for abatement.

END OF REPORT

4.5

EXISTING CONDITIONS | STRUCTURAL ASSESSMENT

Martha's Vineyard Regional High School

Oak Bluffs, Massachusetts

Structural Assessment

August 11, 2024

PURPOSE

The purpose of this report is to describe, in broad terms, the structure of the existing building; to comment on the condition of the existing building; and on the feasibility of renovation and expansion of the school.

SCOPE

1. Description of existing structure
2. Comments on the existing condition
3. Comments on the feasibility of renovation and expansion

BASIS OF THE REPORT

This report is based on our visual observations during our site visit on June 25, 2024, review of the drawings of the construction of the original school prepared by Perley F. Gilbert Associates dated October 26, 1957, drawings of the renovations to the northeast wing of the school prepared The Design Partnership of Cambridge dated September 3, 1992 and drawings of additions and renovations to the school prepared by The Design Partnership of Cambridge dated January 12, 1994. Drawings from the 1980s' Additions and Renovations were not available to us at the time of writing this report.

During our site visit, we did not remove any finishes or take measurements, so our understanding of the structure is limited to the available drawings and observations of the exposed structure and the exterior facade.

BUILDING DESCRIPTION

The school is located on Edgartown Vineyard Haven Road in Oak Bluffs, Massachusetts. The original school was constructed in 1959 and subsequently the school was renovated and additions were constructed in 1980s' and 1995. The school have undergone renovations and reconfiguration of spaces over time. There are two separate structures that host the Weightlifting program and Horticulture program.

EXISTING BUILDING

The entire school is a single story structure. The floor is a concrete slab on grade. The roof of the original 1959 structure is wood decking supported on glue laminated beams and columns. The roof of the 1980s' Addition and the 1995 Additions are metal deck supported on open web steel joists spanning between wide flange steel beams and steel columns. The foundations supporting the structure are reinforced concrete walls and footings. The lateral loads on the structure are likely resisted by masonry infill walls.

The structure housing the Horticulture program is a single story, pre-engineered steel structure constructed with steel bents, light gage "Z" shaped purlins supporting metal roof deck. There is a single story Greenhouse attached to the building, the Greenhouse is constructed with aluminum framing and glazing panels.

The structure housing the Weightlifting program is a single story, pre-engineered steel structure constructed with open web steel bents, light gage metal purlins and metal deck.

EXISTING CONDITIONS

We observed some signs of leaks in the ceilings. We observed minor cracks in the masonry walls at some locations. We did not observe any exterior connections between the infill masonry walls and the steel structure.

We did not observe any signs of foundation settlement.

Based on our observations, majority of the school structure is in good condition and there are no major structural concerns at this time.

Typical Roof Framing of the Original Structure


Typical Roof Construction of the Automotive Shop – 1980s' Addition


Typical Gymnasium Roof Framing – 1995 Addition


Typical Framing of the Horticulture Bldg. Roof and Greenhouse

Typical Roof Framing of the Weightlifting Bldg.

FEASIBILITY OF RENOVATION AND EXPANSION OF THE STRUCTURE

Depending on the scope of the renovations to the school, it may be feasible to make modifications to the existing structure without requiring full compliance with the code requirements for new construction. We would recommend that any additions be separated from the existing structure by way of expansion joints.

GENERAL CODE CONSIDERATIONS

If any repairs, renovations, additions or change of occupancy or use are made to the existing structure, an evaluation of the structure is required to demonstrate compliance with 780 CMR, Chapter 34 "Existing Building Code" (Massachusetts Amendments to The International Existing Building Code 2015). The intent of the IEBC and the related Massachusetts Amendments to IEBC is to provide alternative approaches to alterations, repairs, additions and/or a change of occupancy or use without requiring full compliance with the code requirements for new construction.

The IEBC provides three compliance methods for the repair, alteration, change of use, or additions to an existing structure. The three compliance methods are as follows:

1. Prescription Compliance Method.
2. Work Area Compliance Method.
3. Performance Compliance Method.

A summary of the structural implications of the various compliance methods follows.

Prescriptive Compliance Method

In this method, compliance with Chapter 4 of the IEBC is required. As part of the scope of this report, the extent of the compliance requirements identified are limited to the structural requirements of this chapter.

Alterations

- If the proposed alterations of the structures increase the demand-capacity ratio of any lateral load resisting element by more than 10 percent, the structure of the altered building or structure shall meet the requirements for the code for new construction.
- Where alterations increase the design gravity loads by more than 5 percent on any structural members, those members would have to be strengthened, supplemented, or replaced.

Additions

Additions can be designed to be structurally separate or structurally connected to the existing building. Based on the project scope, the following structural issues must be addressed: The requirements applicable to the existing structure for connected additions are similar to those for altered structures.

- All construction of all addition areas must comply with the code requirements for new construction in the IBC.
- For additions that are not structurally independent of an existing structure, the following rules apply to the existing building:
    - The existing structure and its addition - acting as a single structure - must meet the requirements of the code for new construction for resisting lateral loads. Exceptions allow that structural elements that only resist lateral forces whose demand-capacity ratio is not increased by more than 10 percent may remain unaltered.
    - Any load-bearing structural element for which the addition or its related alterations causes an increase in the design gravity load of more than 5 percent shall be strengthened, supplemented or replaced. This may invoke or cause additional renovation work to access the structure.

In order to avoid invoking required structural modifications to the existing building, any planned additions should be designed as structurally separate buildings.

Work Area Compliance Method

In this method, compliance with Chapter 5 through 13 of the IEBC is required. The extent of alterations has to be classified into LEVELS OF WORK based on the scope and extent of the alterations to the existing building. Refer to the Regulatory Overview section of this report for an explanation of the Levels of Work.

This report addresses the scenario that planned renovation schemes would affect more than 50 percent of the floor area and invoke Level 3 Alteration requirements, and the following analysis is based on that assumption. In addition, there are requirements that have to be satisfied for additions to the existing structure.

Level 3 Alterations

- Any existing load-bearing structural element for which an alteration causes an increase in the design gravity load of more than 5 percent shall be strengthened, supplemented or replaced.
- If the proposed structural alterations of an existing structure exceed 30 percent of the total floor and roof areas of an existing structure, we have to demonstrate that the altered structure complies with the IBC for wind loading and with reduced IBC level seismic forces.
- Existing anchorage of all unreinforced masonry walls to the structure have to be evaluated. If the existing anchorage of the walls to the structure is deficient, the tops of the masonry walls will require new connections to the structure.
- If the proposed structural alterations of an existing structure are less than 30 percent of the total floor and roof areas of the existing structure, the project must demonstrate that the altered structure complies with the loads applicable at the time of the original construction (or the most recent major renovation) and that the seismic demand-capacity ratio is not increased by more than 10 percent on any existing structural element. Those structural elements whose seismic demand-capacity ratio is increased by more than 10 percent must be strengthened, supplemented, or replaced in order to comply with reduced IBC level seismic forces.

Additions

- All additions shall comply with the requirements for the code for new construction in the IBC.
- Any existing gravity, load-carrying structural element for which an addition or its related alterations cause an increase in design gravity load of more than 5 percent shall be strengthened, supplemented or replaced.
- For additions that are not structurally independent of any existing structures, the existing structure and its additions, acting as a single structure, shall meet the requirements of the code for new construction in the IBC for resisting wind loads and IBC Level Seismic Forces (may be lower than loads from the Code for New

Construction in the IBC), except for small additions that would not increase the lateral force story shear in any story by more than 10 percent cumulative. In this case, the existing lateral load resisting system can remain unaltered.

Performance Compliance Method

Following the requirements of this method for the alterations and additions may be onerous on the project because this method requires that the altered existing structure and the additions meet the requirements for the code for new construction in the IBC.

Summary

The existing school structure appears to be in fair condition. All of the structural components that are visible appear to be in sound condition except the items noted above.

The compliance requirements of the two Prescriptive and Work Area Compliance methods are very similar in most respects for a major renovation. The Prescriptive Compliance Method would be more restrictive, as it would likely require that the existing lateral load resisting systems of the existing building meet the requirements of the code for new construction of the IBC, even for small increases of design lateral loads. Based on this, we would recommend the Work Area Compliance Method for the project.

Any major proposed renovations requiring modifications to the existing structure and additions would likely require that the structure be updated to meet the requirements for the Code for New Construction.

4.6

EXISTING CONDITIONS | MECHANICAL, ELECTRICAL, TECHNOLOGY & SECURITY ASSESSMENTS

October 7, 2024

Tappe
6 Edgerly Place
Boston, MA 02116

Attn: Chris Sharkey, AIA

RE: Martha's Vineyard Regional High School – Existing Conditions – HVAC/Electrical

Please find our existing conditions assessment for HVAC and Electrical systems at Martha's Vineyard Regional High School (MVRHS) as observed from our site visit on June 20, 2024. The existing MVRHS was originally constructed in 1959 with additions/renovations in 1992 and 1994. The school is a single story, 160,000 sf building. The spaces consist of classrooms, Career Technical Education (CTE) classrooms, (2) kitchens, gymnasium with locker rooms, performing arts center, library, computer lab and administration. There are also auxiliary buildings including storage and greenhouse that have power and heating.

The major building systems include two electrical services and two boiler rooms. One electric service and one boiler room are original to the building and serve the original section. The second electric service and boiler room were built with the addition and serve the newer portions of the building. Approximately fourteen air handling units (AHU) provide heating and ventilation air to the building.

HVAC and electrical systems are a combination of original 1959 and 1992 vintage. Overall, systems have been maintained and are in good condition but are well past their expected service life.

There are (2) exterior pad mounted Eversource transformers serving the building. One is 2000A 480Y/277V, and the other is 2000A 208Y/120V. There are (3) Switchboards within the building, in fair to poor condition. There is an electric interconnection system for a single wind turbine that has not been maintained and is not operational.

There is a 100 kW Diesel generator in an exterior enclosure, feeding a single transfer switch that serves a mixture of emergency loads and is not code compliant (NFPA 70). The fire alarm system is Simplex series 4100. This is in poor condition and is not code compliant (NFPA 72). Light fixtures are in fair to poor condition. Lighting controls do not meet current energy requirements.

A. <u>Mechanical/HVAC</u>

1. Heating Systems

- Boiler Plant #1 – Original 1959 Building
  - Heating is provided with (4) oil-fired hot water boilers that are original to the building. Boilers are 6 section, cast iron, standard efficiency Burnham FF-506 with Carlin 702CRD oil fired burners with 8.3 gallons per hour (GPH) capacity. These boilers are original to the building and have been maintained. The boilers are over 60 years old and in good condition for their age, but they are past their expected life span. Each boiler has an output capacity of 825 MBH for a total boiler plant capacity of 3,300 MBH.

- #2 fuel oil is stored in a 10,000 gallon underground storage tank. Condition of the tank could not be verified during the site visit. The duplex fuel oil pumps are located indoors but in a separate room from the boiler room.
- Hot water is distributed by two sets of two pumps with a primary/standby configuration for a total of four pumps. The pumps have been replaced and are in good condition. Age of the pumps is not known. Variable frequency drives (VFD) have been installed but are in Hand mode and do not modulate.
- Combustion air for the boilers is via roof mounted intake hood which is not compliant with current code.
- The insulated boiler flues tie together and turn up in a chimney that terminates on the roof.

Boiler Plant #1 – 1969

- Boiler Plant #2 – 1992 Addition
  - Heating is provided with (4) oil-fired hot water boilers that are original to the building. Boilers are 9 section, cast iron, standard efficiency Burnham FF-509 with Carlin 801CRD oil fired burners with 12.6 gallons per hour (GPH) capacity. These boilers are original to the building and have been maintained. The boilers are over 30 years old and in good

condition for their age, but are at their expected life span. Each boiler has an output capacity of 1,250 MBH for a total boiler plant capacity of 5,000 MBH.

- #2 fuel oil is stored in a 10,000 gallon underground storage tank. Condition of the tank could not be verified during the site visit. The duplex fuel oil pumps are located indoors but in a separate room from the boiler room.
- Hot water is distributed by two sets of two pumps with a primary/standby configuration for a total of four pumps. One set of pumps serves the Performing Arts Center (PAC), and the other set of pumps serves the remainder of the 1992 and 1994 additions. The pumps are original and in good condition. Variable frequency drives (VFD) have been installed but are in Hand mode and do not modulate.
- Combustion air for the boilers is via a wall mounted louver with ductwork that turns down to 12" above the floor.
- The double wall boiler flues tie together, turn up and terminate on the roof.

Boiler Plant #2 - 1992

- The Horticulture building is served by a 175 gallon #2 fuel oil tank.
- Liquified Petroleum (LP) tanks are also utilized. The Greenhouse is served by a 500# tank. Cooking and Science area are also served by LP tanks.
- Corridors are served by a total of (5) cabinet unit heaters (CUH) located at egress doors. The corridors have extended exterior walls, and the CUH are not able to maintain an acceptable space temperature during heating season.
- Terminal Space Heating
  - Hot water serves air handling unit (AHU) and unit ventilator (UV) heating coils, cabinet unit heaters, unit heaters and fin tube radiation (FTR) throughout the building.
  - Heating coils are served by 3 way valves that are fed by the constant flow pumping system.
  - Classrooms are served by unit ventilators that provide heating and ventilation.

2. Cooling Systems
   - The building does not have a central air-conditioning system to provide space cooling. Cooling has been added with packaged or split DX units to individual spaces including: Performing Arts Center, Library, some Administration spaces, interior classroom spaces and IT spaces.
   - These systems contain refrigerant that is being phased out due to high Global Warming Potential (GWP) and Ozone Depleting Potential (ODP). Most of these systems are at or near the end of their expected service life and are recommended for replacement with refrigerant systems that meet current standards.

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3. Classrooms
   - Each classroom is served by a wall or ceiling mounted unit ventilator (UV) that provides heating and ventilation. The UV has a heating coil with 3 way valve and a wall louver for ventilation (outdoor) air. The UV are American Air Filter (AAF) and were installed during the 1992/1994 additions. They have been maintained, are in good condition and at the end of their expected service life.
   - Exhaust is provided by roof mounted exhaust fans that are ducted to ceiling grilles in each classroom. Fans are in good condition but most are at the end of their expected service life.
4. Performing Arts Center (PAC)
   - One AHU serves the PAC with overhead duct distribution and supply grilles. The AHU provides heating, cooling and ventilation and is located in a mechanical room with limited service access. The AHU are original to the 1992 construction and past their expected service life.
5. Gymnasium
   - Two air handling units (AHU) serve the gymnasium with overhead duct distribution and supply grilles and wall mounted return grilles. The AHU provide heating and ventilation and are located above a storage room and a locker room with limited service access. The AHU are original to the 1992 construction and past their expected service life.
6. Wood and Auto Shops
   - Each space is served by an AHU for heating and ventilation and also exhaust systems. The AHU are ceiling mounted and exposed in the space with overhead duct distribution with supply grilles. These operate continuously with no nighttime or weekend setback. These spaces also utilize exterior overhead doors for natural ventilation during moderate outdoor conditions. The Wood Shop includes a dust collection system that is new and appears code compliant. The Auto Shop contains a vehicle exhaust collection system that is routed in the floor slab. This system old and past its expected service life.
   - Each space also has a ceiling mounted hot water unit heater to temper the large exterior glass walls.

Wood Shop AHU

Wood Shop Dust Collection

Auto Shop AHU

7. Art Rooms and Art Storage
   - These spaces are served by AHU for heating and ventilation and also exhaust hoods. These operate continuously with no nighttime or weekend setback.
8. Kitchens/Caféteria
   - The main Kitchen and Cafeteria are served by an AHU with overhead duct distribution and supply grilles. The AHU provides heating and ventilation and is located in a ceiling in an adjacent room

with limited service access. The AHU is original to the 1992 renovation and past the expected service life.

- The Kitchen has a Type I exhaust hood and a Type II dish exhaust hood. This equipment runs continuously though Kitchen operation is only a portion of the day. The equipment is in good condition but past the expected service life.
- The Culinary Kitchen is served by an AHU with overhead duct distribution and supply grilles. The AHU provides heat and ventilation and is located in a mezzanine with limited service access. The AHU is original to the 1992 renovation and past the expected service life.

Main Kitchen Type I Exhaust Hood

Main Kitchen Type II Exhaust Hood

9. Building Management System (BMS)
    - There is an updated BMS serving a majority of the equipment. The BMS is Johnson Controls Metasys but is not accessible to the facilities group due to a computer network issue. There are (10) ductless mini splits that are not on the BMS. Throughout the building, equipment is operated manually, and systems operate 24/7 with no setback mode. This includes air handling units and kitchen exhaust hoods.

B. Electrical

1. Normal Power Systems
    - The main electrical services are fed from (2) exterior pad mounted utility transformers. One transformer provides a 208Y/120V service. The other transformer provides a 480Y/277V Service. The 480Y/277V transformer has been replaced in the past year and is in new condition. The 208Y/120V transformer is old and needs to be inspected by the utility to assess its lifespan. These transformers are located on the side of the building and are fed via underground conduit.
    - The 208Y/120V, 3-phase, 4-wire 2000-amp service is in a dedicated electrical room. This room does not have proper NFPA required clearances. The main switchboard (Switchboard #1) is from the 1970s and is in fair condition. This serves a 1200A 208Y/120V switchboard (Switchboard #2) and various distributed panelboards throughout the facility. Switchboard #2 is at the end of its useful life and should be replaced. The actual capacity of the service needs to be verified by the utility provider.
    - The 480Y/277V, 3-phase, 4-wire 2000-amp service is in a dedicated electrical room. This switchboard (Switchboard #3) is from the 1990s and is in good to fair condition. This serves HVAC loads, panels and Outbuilding power. This feeds the normal side of the automatic transfer switch. The actual capacity of the service needs to be verified by the utility provider.

- The main electrical service and power systems are aged and should be replaced for the potential inclusion of building-wide electrified heating, ventilating and air conditioning systems. The existing electrical rooms may not be physically large enough for the newer switchboards. Additionally, the transformers may not be providing (2) 2000A services. This should be verified by the utility.
- There are panelboards located throughout the facility, including the Shop and Kitchen spaces. Panelboards are in fair to poor condition, with some being original to the building, and some from additions in the 90's. There are some small dry-type transformers used to step down to 208Y/120V.
- There is a wind electric interconnection system for a single wind turbine that has not been maintained and is not operational.

Exterior Utility Transformers

Switchboard #1 (208Y/120V, 2000A)

Switchboard #2 (208Y/120V, 1200A)

Switchboard #3 (480Y/277V, 2000A)

Branch Panelboards

Dry Type Transformer

2. Lighting Systems
   - Lighting is primarily T8 fixtures.
   - Lighting does not meet latest energy code requirements requiring local control of fixtures. Not all required spaces have lighting controls beyond switching. Emergency lighting controls shall be reviewed.

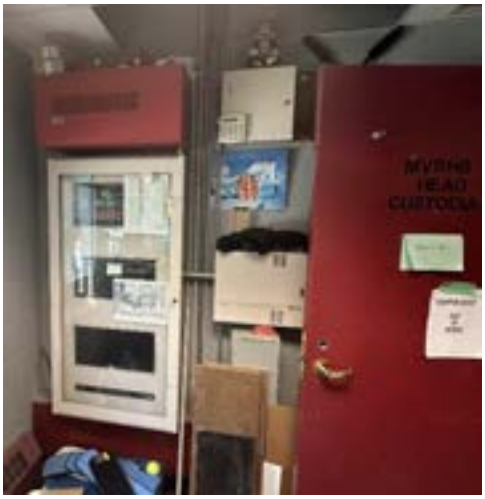
- Most classrooms and restrooms have local wall switches with occupancy sensors.
- Exit signs are located throughout the building. Coverage will need to be reviewed. All exit signs were not functional.
- A mixture of lay-in fixtures, indirect pendants, surface mounted fixtures, downlights, and track lighting were observed.
- Site lighting is primarily building mounted. Pole-mounted fixtures were observed in the parking lots. Exterior lighting appears to be newer LED fixtures.

Typical Lighting Systems

3. Emergency Power Systems
   - A 100-kW 480Y/277V diesel emergency power generator manufactured by Kohler is installed in an exterior standalone enclosure. The generator appears very old and to be beyond its useful life.
   - The enclosure contains a 260A, 480Y/277V automatic transfer switch. This feeds emergency distribution panelboard EDP, also located within the enclosure. This feeds a variety of panelboards, and some HVAC equipment. This feeds mixed loads- both life safety and optional standby loads.
   - Modern codes required separate transfer switches for life safety systems and other optional standby loads. A second transfer switch and separation of loads should be studied further and planned as part of the generator upgrades. 2-hour rated wiring should be provided for all life safety emergency equipment.
   - There appears to be a new temporary docking station adjacent to the building exterior for connection to a roll-up generator. This is code required and allows for a generator to be on-site if the main generator is down for maintenance or repair. This is in new condition.

4. Fire Alarm
   - The fire alarm system is a Simplex 4100 located in the Janitors Room in the back of the building. This is an addressable panel but not set up for voice evacuation. Microphone nor drill switch were observed. Some horn/strobes are located in the building. Toilet rooms have strobes. Air handling units have duct smoke detectors where required. Devices appear to be original to the building. Sound systems do not turn down upon activation of the fire alarm system. Devices appear to have been code compliant at time of installation but are not compliant with current code. The system is recommended to be upgraded.
5. Systems

- There are various data connections throughout the facility. It appears all instructional spaces include teaching technology systems, but all systems should be modernized as part of future upgrades.
- The installation of a security system was observed to include indoor cameras.



Fire Alarm Control Panel

Fire Alarm Annunciator and Device

EXISTING TECHNOLOGY SYSTEMS

Utilitarian Spaces and Systems

Utilitarian technology spaces are located strategically throughout the school. The MDF, located adjacent to the automotive shop, houses networking equipment and cabling distribution and also acts as a storage space for the school. There are three IDF spaces in the building: two are dedicated rooms, and one is a wall-mounted location installed last Summer.

Data Cabling Systems and Connectivity

The networks of each school on Martha's Vineyard are not connected in any way. All connections are made internally within each building.

The closets in MVHS are connected via 6 strands singlemode fiber.

Data cabling is mostly Category 6, with legacy Category 5e in some instances. There are several instances of exposed fiber and cabling throughout the building.

Newer network switches are Cisco 9200's, installed last Summer. Wireless access points are Wi-Fi 6 Meraki MR46's. Rick noted that coverage is sufficient throughout the building. The district has standardized on Cisco as a manufacturer for network switch electronics and Meraki for wireless technology.

MDF Network Switch Electronics

MDF Patch Panels

IDF Patch Panels and Electronics

Intercom/Clocks/Phones

The school contains a legacy but functional Simplex 5120 public address system located in an IDF. Installation of new IP speakers is in progress. The school uses an on-premise Cisco Unity telephone system (VoIP). Classrooms have one analog phone which functions as a call button, and one Cisco VoIP handset used for inner school and outside communication. Handsets are also capable of accessing the public address system.

Simplex 5120 Equipment

Classroom PA Speaker

Classroom Phone

Instructional Technology

There are Cisco Meraki wireless access points strategically located in approximately every other classroom and in larger communal spaces.

Typical Wall AP

Typical Printer

Classroom display technology is a mix of interactive SMART displays, projectors, and non-interactive flat panel displays. SMART displays are a combination of newer MV-65s and older models.

The high school is moving to Chromebooks for student one-to-one devices. Teachers computing devices are Macbooks. There are multiple labs in the school which use a mix of M1 and M2 chip Mac Minis. Each is paired with an Asus monitor. These rooms include Photo Graphics, Animation, and Printing / Gaming. A lack of ethernet drops in these specialty locations was mentioned and noted.

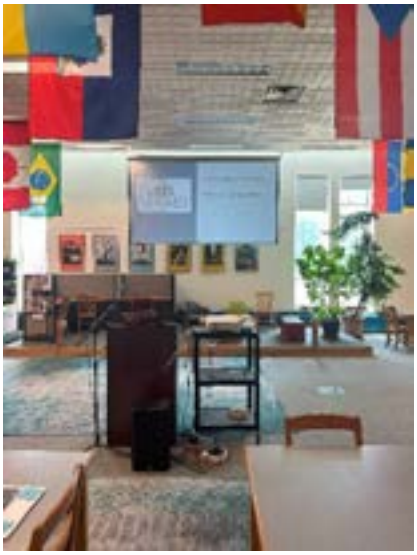
Typical Projector

Wall-mounted SMART Display

Typical Lab Configuration

Miscellaneous

- The high school has a line of sight wireless connection to the press box.
- There are two digital signage locations in the main lobby.
- For digital signage, the school casts a slideshow to non-interactive displays throughout gathering areas in the building.
- There is a large venue projector stationed next to a lectern in the library for group presentations and gatherings. It is a portable projector solution with a retractable screen surface.



MSBA Project

Confidential Security Existing Conditions Report

Martha’s Vineyard Regional High School

100 Edgartown Vineyard Haven Rd, Oak Bluffs, MA 02557

Provided by: ***Pamela Perini, PSP***

Pamela Perini Consulting, LLC

Date: ***August 7, 2024***

Confidential

Introduction

Pamela Perini Consulting, LLC (herein referred to as PPC) is an independent security consulting firm located in Waltham, MA, and Providence, RI. PPC provides a number of security consulting services that include risk, vulnerability and security assessments; security master planning; security program assessment, development, evaluation and creation; security plans/drawings and specifications for construction, constructability assessments; peer reviews; service and maintenance contract assessments, creation and bid; and overall security programs, planning, implementation and oversight. PPC and its principal, Pamela Perini holds a number of security credentials that are necessary for multiple security consulting functions.

Pamela Perini, PSP

Principal Security Consultant

DATE: 08/2024

Credentials, Certifications, Training, etc.

1. Certified Physical Security Professional (PSP), ASIS International **
2. Certified Crime Prevention Through Environmental Design (CPTED), Facilities Management International
3. PREPaRE WS1: Crisis Prevention & Preparedness: Comprehensive School Safety Planning, Northeast Homeland Security Regional Advisory Council/NASP (National Association of School Psychologists)
4. SANS Isaca/Audit Serve; IT Auditing for Disaster Recovery & Business Continuity Planning
5. OSHA10 Construction, OSHA Training Institute
6. Certification Commonwealth of Massachusetts MCPPO Program, Cyber Threats to Local Government
7. Rhode Island School Safety Committee, Annual School Safety & Security Conference 2019
8. Infrastructure Protection (Master Certification), Texas A&M University Engineering Extension, National Emergency Response and Recovery Center
9. AMTRAK Passenger Train Emergency Response Certification

FEMA Certifications

1.	FEMA AWR-136	Essentials of Community Cybersecurity
2.	FEMA AWR-175	Information Security for Everyone
3.	FEMA AWR-375	Risk Management for After School Activities & Interscholastic Athletics
4.	FEMA ISC-100	Introduction to Incident Command
5.	FEMA IS-120.c	Introduction to Exercises
6.	FEMA IS-700	National Incident Management System (NIMS)
7.	FEMA IS-906	Workplace Security Awareness
8.	FEMA IS-907	Active Shooter
9.	FEMA MGT-384	Community Preparedness for Cyber Incidents

10. FEMA AWR-213	Critical Infrastructure Security & Resilience
11. FEMA MGT-310	Jurisdictional Threat & Hazard Identification and Risk Assessment
12. FEMA MGT-414	Advanced Critical Infrastructure Protection
13. FEMA MGT-315	Critical Asset Risk Management
14. FEMA AWR-383	Cybersecurity Risk Awareness for Officials and Senior Management

*** The Physical Security Professional (PSP) ASIS credential is subject to The Department of Homeland Security's Safety Act. The SAFETY Act Designation gives ASIS board-certified professionals and their customer's immediate protection from lawsuits involving ASIS certification and the ASIS certification process that arise out of an act of terrorism. Not only does it limit the types of liability claims that can be brought against a certificant, but it also entitles the certificant to immediate dismissal of those specific types of claims.*

PPC has been engaged by Tappe' Architects, as their security consultant for the Martha's Vineyard Regional High School in Oak Bluffs MA. PPC has developed this security existing conditions narrative and report, to identify the systems, functions and operations associated with the school's security program that are to be assessed and potentially included in the project, or to conclude that the systems are not functioning or worthy of their consideration moving forward from a certified Security Professional opinion. PPC shall also provide information regarding architectural features that assist in the security programs strength or weaken the level of protection of the school. Our ultimate goal of School Building projects, is to provide 21st Century learning in a safe environment without institutionalizing the building and site.

Security Existing Conditions

This document is provided as a **CONFIDENTIAL** informational outline for the existing conditions and design considerations of the Electronic Security Systems and function for the new Martha's Vineyard Regional High School project. The existing school is being independently assessed for the security needs of students, teachers, faculty, staff and visitors of the existing building during normal school hours and after-school hours, during after-school programs and during non-Martha's Vineyard School programs such as athletics and tournaments, recitals and shows that may have out-of-school and out-of-town participants and visitors. This view and standpoint will assist in ensuring that the school's security posture will meet the needs of all who enter the school grounds and building.

Creating a safe and secure environment that promotes and supports 21st Century learning is the goal of all PreK-12 school construction projects, and assessing existing conditions is the first step in the process. School safety and security protects students, teachers, faculty, staff, administration and visitors, and must be addressed from the whole facility concept and feasibility through to the facility use, during both school hours and non-school/after-school hours. Cybersecurity is a contributing factor and ensuring the critical

infrastructure and supporting information security is protecting the information being shared by the systems is critically important. Additionally, protecting the privacy of children, students, teachers, faculty, staff and visitors is paramount. The school is a learning environment.

The school's perimeter, the site, the building, the interior design and the function of the existing building systems are all taken into consideration when addressing safety, security and the school's security program. Given the current climate, safety and security are of primary importance to every PK-12 construction school project, and a necessary part of all school security programming.

FEMA states that school districts must: prevent, protect, mitigate against, respond to and recover from incidents that may be disruptive to our PK-12 schools and their building/facility occupants. All of these components should be addressed in the development of an overall School Security Program. This process and subsequent program include the review of processes and policies, and providing electronic measures that complement these processes and policies to protect the school from human-caused, technological, and natural disaster threats, hazards, risks and incidents.

All security programs need processes, policies, technology and training to support the Electronic Security System measures that are in use and installed. This use is most important to those stakeholders responsible for the response to incidents; the First Responders. By assessing and applying various security concepts, we are able to review the existing conditions of the site, and lead us to understanding the gaps and needs of the North Andover Kitteridge Elementary School.

The following are the findings and existing conditions reported:

- Building Site, Information and Grounds
    - The building is sprawling building made up of a single floor with approximately 100,000square feet of space.
    - The School has an SRO.
    - There are multiple parking areas surrounding the building.
    - There are two main entrances that are utilized; the front main with administrative offices and the rear entrance where Vocational programs (example being Automotive) enter.
    - The school roadway approach is confusing and has poor signage and direction.
    - The school has two interior courtyards/gardens that are unable to be secured.
    - There are beautiful trees and greenery that surround the building but are detrimental to camera views and utilization.
- Building Flow and Security:
    - The building does have a Secure Vestibule configuration at publicly used entrances, and there is no access control or Video Intercom to secure the space or the school. There is no conversational window in the vestibule and no ability to screen entrants before entering the school.

- The building layout is choppy, and appears to be expanded and added to over the years.
- There was no evidence of any ballistic or bullet resistant glass or glazing at the entrances, windows or at the administrative suite.
- Doors are numbered on the inside and outside.

- Access Control and Video Management System
  - There is a limited amount of Card Readers, approximately 4 that were viewed. They are not multi-technology card readers, standard aging Weigand card readers. 2 of the card readers are interior on bathrooms. This was a solution the vendor recommended for gender friendly bathrooms.
  - None of the perimeter doors are monitored. There are no door contacts, leaving the school exposed and vulnerable 24/7.
  - The perimeter doors are not monitored during the day. If a door is left ajar, no one will be the wiser.
  - There are no monitoring points on the overhead doors in the automotive and vocational spaces (roughly 4 overhead doors).
  - The Video Management System is currently the Avigilon platform, which can be expensive and complex. The district is moving to the Axis Camera Station Pro. There is no Access Control System conceivably. The platforms are sufficient for the back-end function, but the field devices are insufficient in comparison.
  - The Video Management System has far more interior cameras than exterior, and the interior was not thought about from a wholistic stand point. There are odd concentrations that would be a challenge for exterior live feed should an active assailant video feed be needed.
  - The cameras are sporadic with some multi-sensor cameras at the bus lot.
  - There are roughly 70 Interior Cameras which are a mishmash of manufacturers and 10 Exterior Cameras. There are some existing ANALOG Cameras and media converters.
  - There are roughly 4 interior card readers.
  - The school has utilized DETEX monitor and sounder mechanisms on two perimeter doors to deter door propping. I understand these are often disabled locally and require a simple key switch turn to disable (This cannot be done centrally.)
  - Cypher lock box configurations are utilized internally for a “hide a key” use.

- Video Intercom
  - There is no Video Intercom, but the school is assessing the N2 (Axis Communications) platform which is complimentary to the Axis

Communications Video Management System.

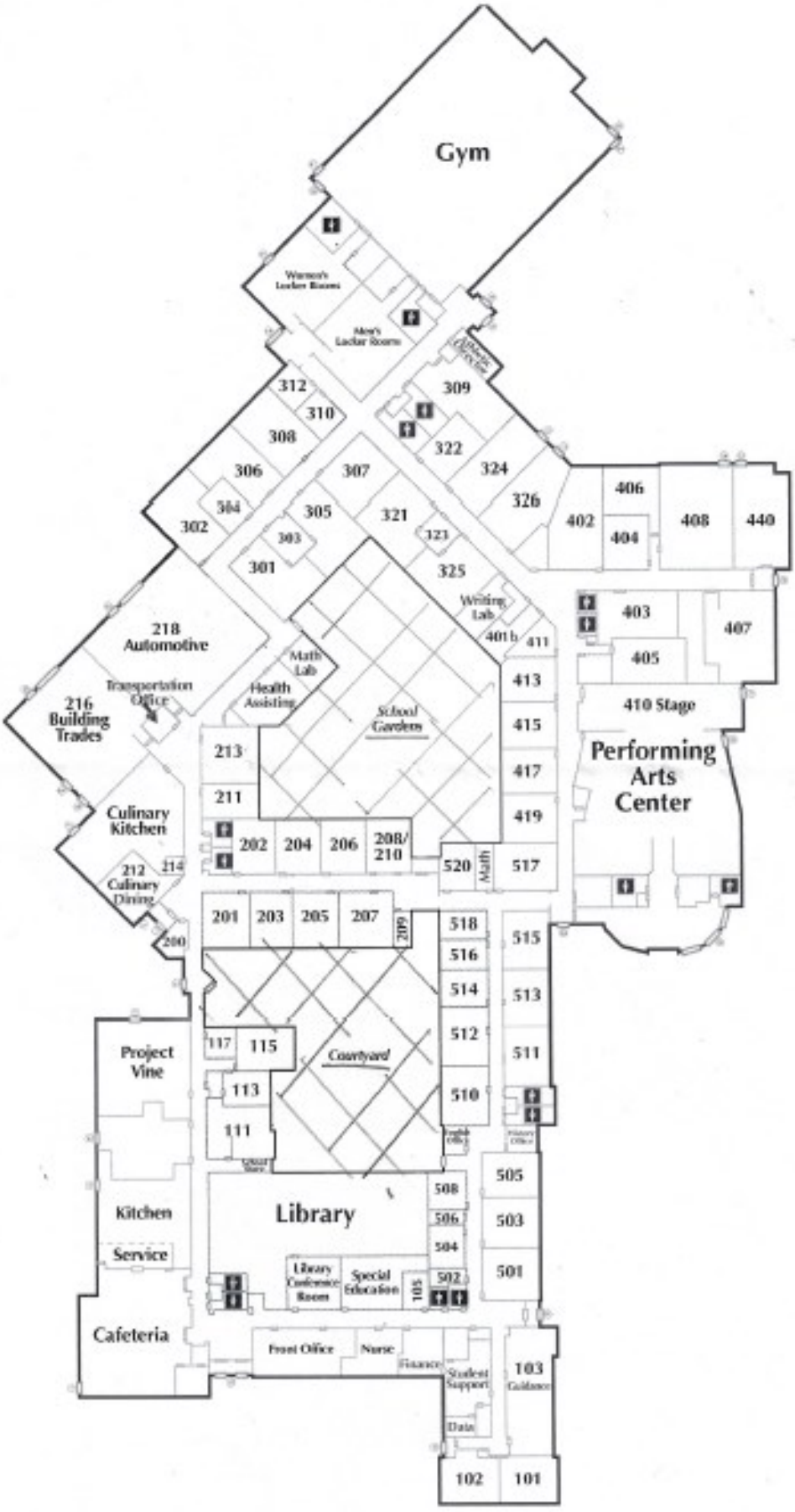
- Intrusion Detection
    - There is no Intrusion Detection System.
- Critical Infrastructure
    - There is an MDF/IDF room configurations.
    - The IDF/MDFs room are not controlled by any Access Control, but are covered by Video Surveillance.
    - The PoE Switches for the school are Cisco.
    - There is a 1 gig comcast link to the school.
    - The school utilizes HP file servers.
    - It is unclear if the school is connected to anywhere via fiber.
    - It is unclear if any Security System components are on backup power.
    - It is unclear how the Police Department is connected to the school's limited Security systems.

In part and in whole, there were very limited Security Program considerations with many of the installed equipment components and systems at the Marthas Vineyard Regional High School. Many of the systems field devices have reached their useful end of life. Additionally, the Architectural configuration does not meet modern standards and in many instances is not in line with CPTED standards.

The Security Program in any PK-12 School, is a combination of People, Technology, Policies and Operations, all working together to mitigate risks, and provide a safe and effective community and learning environment for the students, faculty, staff, administration and visitors.

All of the school stakeholders should participate in the development of a whole Security Program for the school, whether the school be slated for demolition and new construction, an add/reno project or a renovation. The school needs to ensure the district is prepared with Emergency Response Plans for incidents in any building they work with.

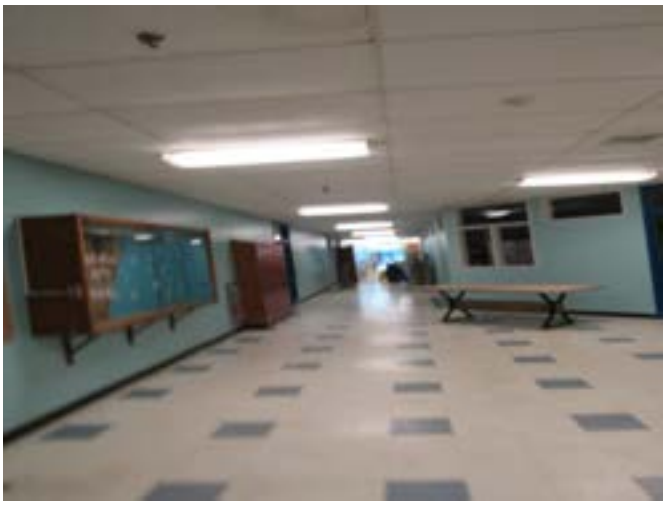
The Marthas Vineyard Regional High School truly requires a Security overhaul should the existing building be utilized in any way. From Critical Infrastructure to securing the facility to remote viewing and monitoring, the location as a whole would require a very large budget to bring this school and site to current school security standards.


Gym
Women's Locker Rooms
Men's Locker Rooms
Athletic Director
309
312
310
308
322
306
307
324
326
406
402
404
408
440
304
305
321
302
303
121
301
325
Writing Lab
401b
411
403
407
405
218 Automotive
Math Lab
Health Assisting
School Gardens
413
410 Stage
216 Building Trades
Transportation Office
415
Performing Arts Center
213
417
211
419
Culinary Kitchen
202
204
206
208/210
520
Math
517
212 Culinary Dining
214
201
203
205
207
209
518
515
200
516
513
514
512
511
Project Vine
117
115
Courtyard
113
510
111
505
508
Kitchen
Library
506
503
504
Service
Library Conference Room
Special Education
105
502
501
Cafeteria
Front Office
Nurse
Finance
Student Support
103
Guidance
Data
102
101

MULTIPLE CAMERAS AT A SINGLE APEX INTERNALLY

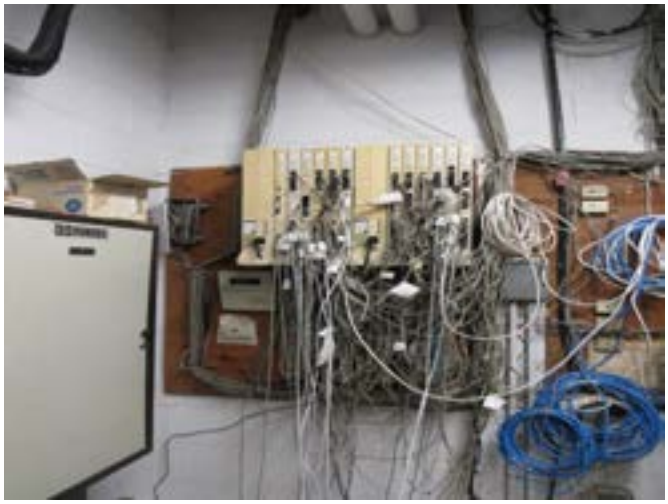
POOR CONDITION OF DROP CEILING AND MULTIPLE CAMERAS AT APEX.

DIFFERENT CAMERA MANUFACTURERS AND MOUNTING METHODOLOGIES. NO CONSISTENCY.



NO CAMERAS IN LENGTHY HALLWAY.

CAMER IN MDF/IDFs



NO COHESIVE COLOR CODING TO PATCH CABLES FOR SYSTEMS.

BEAUTIFUL GARDENS, BUT UNSECURE SCHOOL ENTRANCES FROM GARDENS AND COURTYARD.

INTERIOR CAMERA MOUNTING INCONSISTEvNCY.

LONG HALLWAY WITH CAMERA LOCATIONS

CONVERTERS

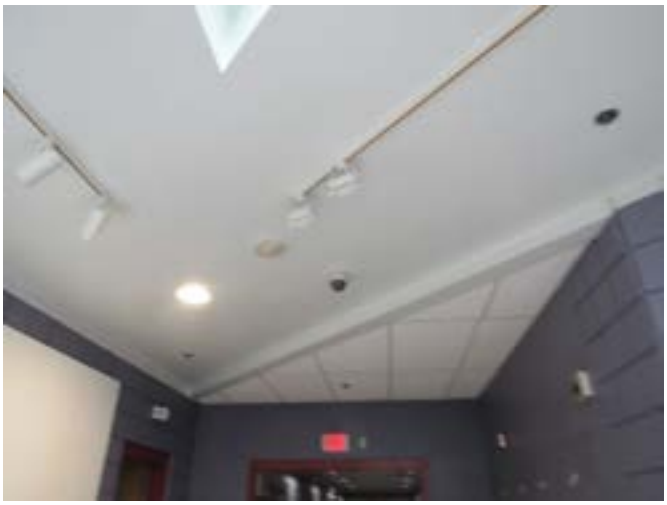
CAMERA PATCH PANEL WITH SOME CONSISTENCY.

INTERIOR MM FIBER

MORE CLEAN CAMERA WIRE INSTALLATION

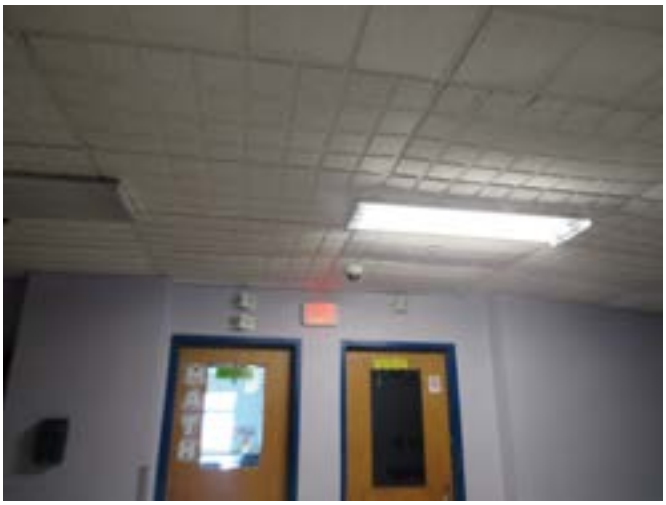
IDF VIDEO MONITORING

MORE CLEAN CABLE INSTALLATION



OLD SENSOR FOR LIGHTING NOT INTRUSION. CAMERA.

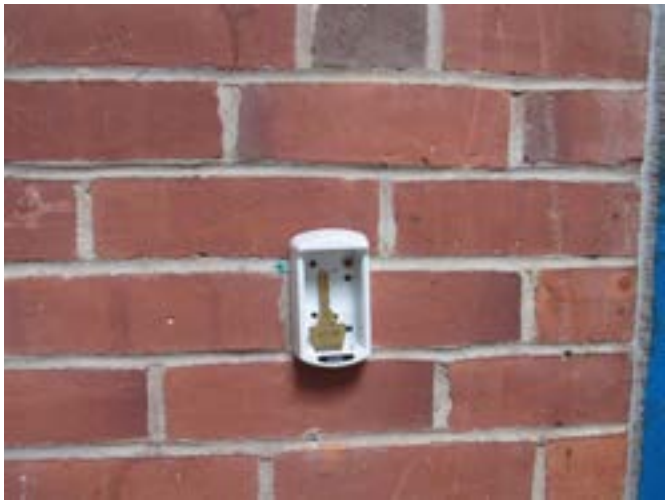
LIMITED UTILIZATION OF MULTI-SENSOR CAMERAS.



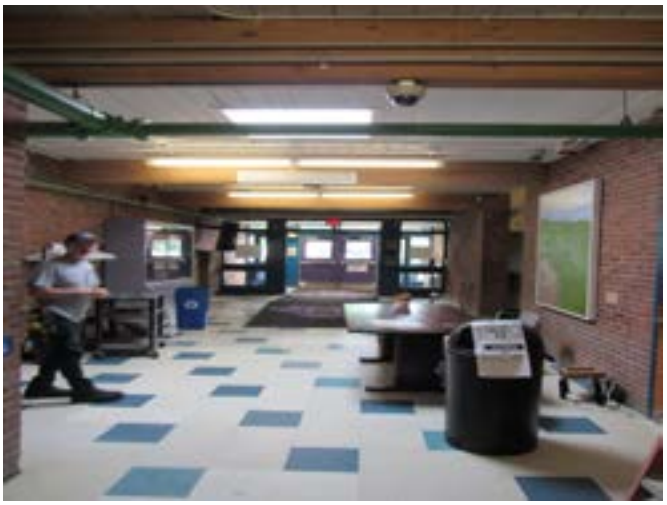
NO PERIMITER DOOR MONITORING.

EXTERIOR COURTYARD WITH UNSECURE DOORS.

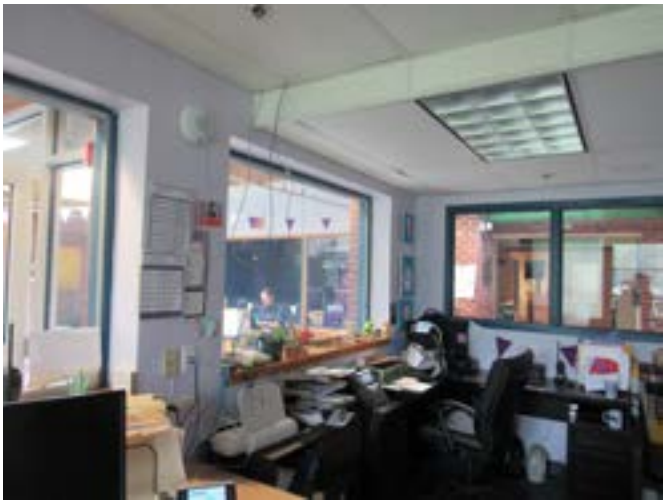
CYPHER LOCK BOX WITH INTERNAL KEY FOR DOOR.

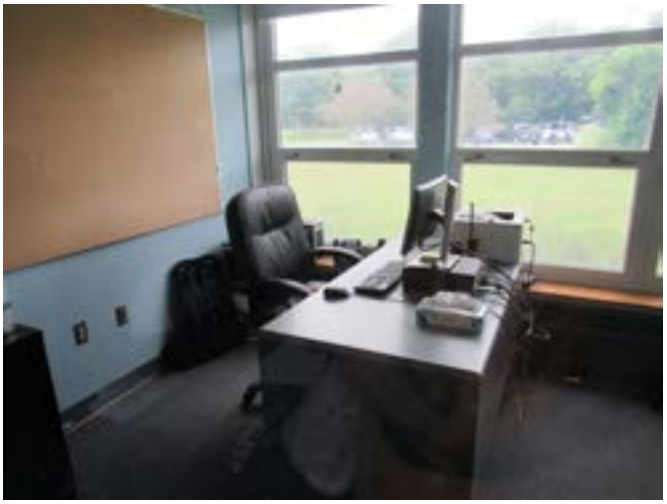


VIDEO AT ENTRANCE. SECURE VESTIBULE CONFIGURATION.



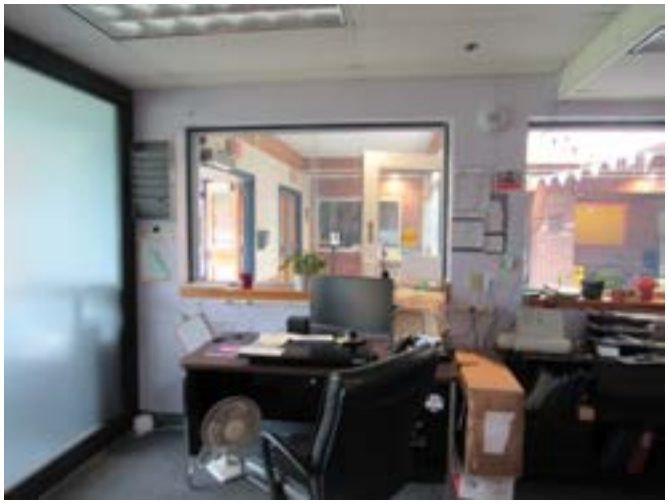
OLD CABLE TRAY TOP RIGHT.



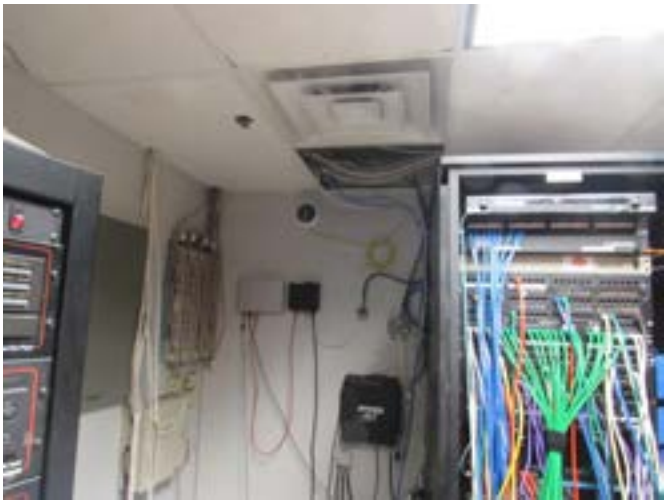


HANGING WIRES

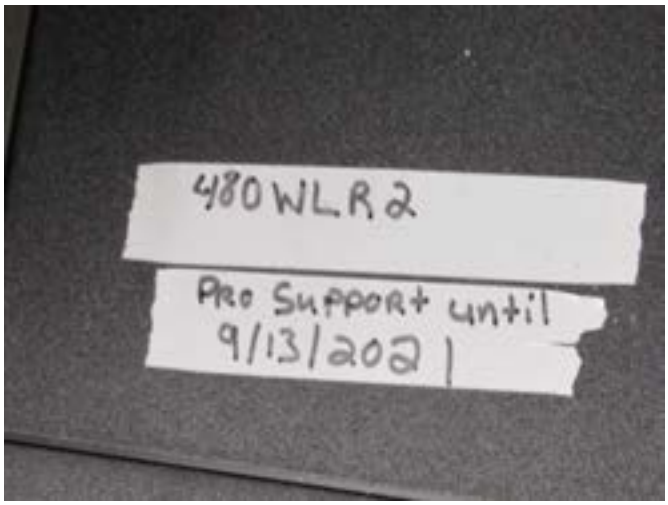
SRO OFFICE WITH EXTERIOR VISIBILITY.



NO INTERIOR PASS THRU OR COMMUNICATION WINDOW INTO ADMIN SUITE.



BETTER IDF INSTALLATION

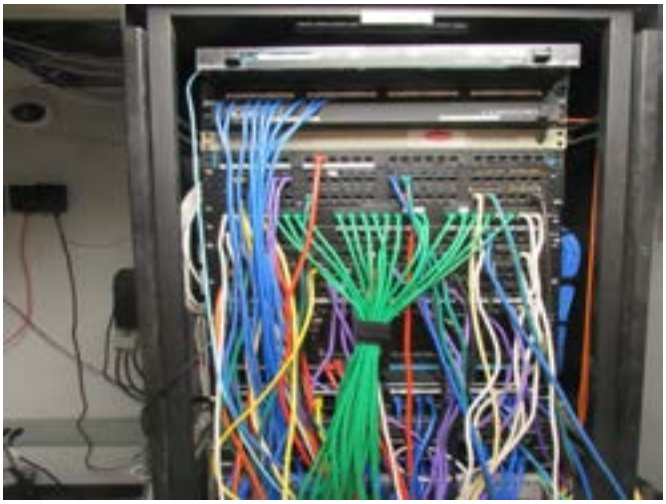


EXPIRED LICENSE

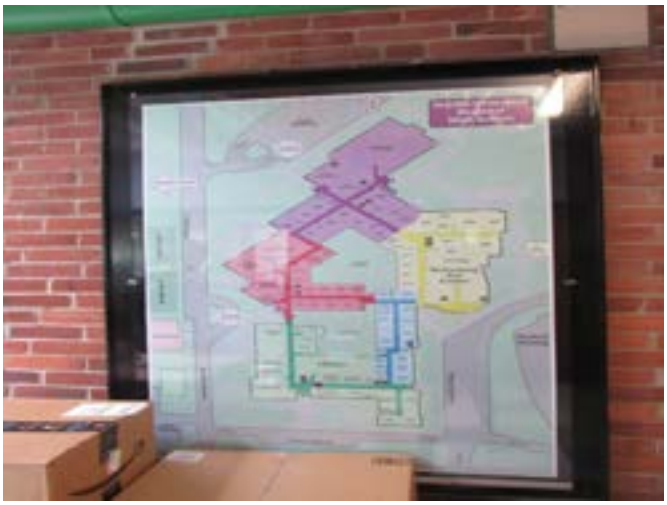
WINDOWS 10 OS REQUESTED BY VENDOR PROVIDED BY OWNER.

2014 SERVER

IDF CAMERA MONITORING

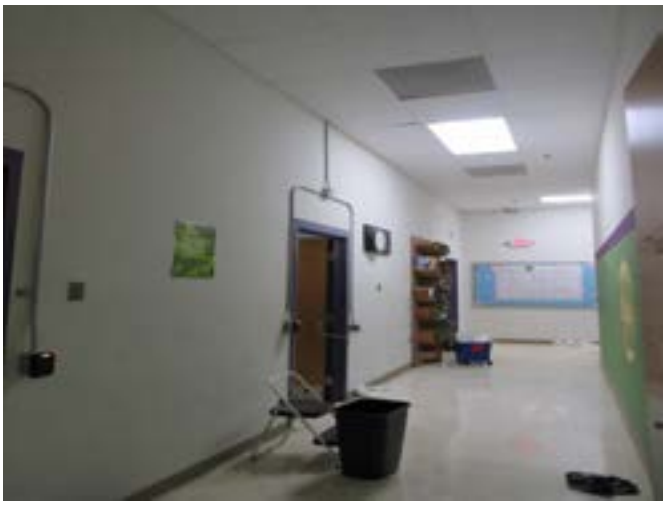


SURFACE MOUNT BANANA CABLE FOR ACCESS CONTROL.



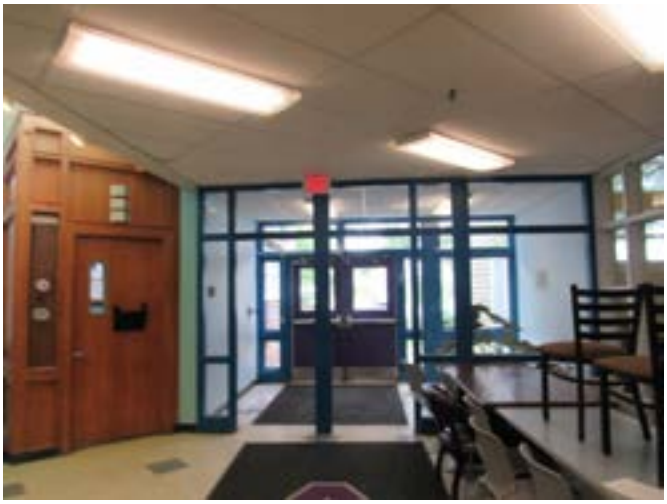
VARIOUS PARKING LOCATIONS AND ROADWAY LAYOUT.

SINGLE INTERIOR CARD READER. DO NOT KNOW WHAT IT IS CONFIGURED TO.



BATHROOM CARD READER CONFIGURATIONS.

DETEX DEVICE FOR MONITORING WITH SOUNDER AND KEYSWITCH.




N BEST

4.7

EXISTING CONDITIONS | PLUMBING & FIRE PROTECTION ASSESSMENTS

Plumbing

Existing Conditions

Plumbing Systems

The existing school building is equipped with several plumbing systems including domestic hot and cold water; sanitary drain, waste, and vent; natural gas; storm drainage; laboratory waste and vent; and compressed air.

The building's domestic water is supplied underground through two separate water services. The original six-inch (6") ductile iron service with four-inch (4") water meter is located in the mechanical room and serves the original building and 1980's addition. The second service serves the 1990's additions and is located in an exterior mechanical room. This service is four-inch (4") with a three-inch (3") meter. Each domestic water supply is equipped with an isolation valve, but do not include strainers, pressure reducing valves or backflow preventers. The water service piping is a mixture of ductile iron and copper, appears to be in fair condition.

1959 Water Service

1990's Water Service

Only the exposed piping scattered throughout the building could be observed and evaluated. The domestic water piping is hard drawn copper tube and appears to be in fair to good condition, with some evidence of previous leaks.

The domestic water heating plant is located in the mechanical room and consists of four (4) Navien gas-fired high efficiency wall hung water heaters. The domestic hot water is a dual-temperature system (120°F and 135°F) with a Leonard high-low mixing valve stations and recirculation pumps. The piping around the water heaters, pumps, and mixing valves is in good condition. The water heaters' combustion air and exhaust gas vent piping appear to be schedule 40 and schedule 80 PVC respectively, and terminate through the roof.

Gas-Fired Water Heaters

Electric Water Heater

There is a wall-mounted high-kw electric water heater located in the custodial/maintenance staff area.

There is a thermostatic mixing valve located in the exterior mechanical room in the shop area. It is unclear at this time what fixture(s) this valve serves, but we suspect it provide tempered water to the emergency safety stations.

Master Mixing Valve

Exterior Mech Room Mixing Valve

What could be seen of the existing sanitary drain, waste and vent system appears to be a combination of drainage pattern copper, cast iron, and galvanized steel. The majority of the piping is hub and spigot cast iron with either gasketed or leaded and caulked joints, with some no-hub cast iron pipe with rubber couplings and stainless steel bands with shields. Copper drainage piping is limited primarily to fixture connections. Galvanized steel appeared to be limited to vents only. Visible piping appeared to be in good condition, with little evidence of active leaks.

Hub & Spigot Cast Iron Vent Pipe

Copper Vent Pipe

What could be seen of the existing storm drainage piping is hub and spigot cast iron with either gasketed or leaded and caulked joints, along with some no-hub cast iron pipe with rubber couplings and stainless steel bands with shields. Visible piping appeared to be in good condition. Storm water is collected through roof drains with interior storm drainage piping. It appears that flat roofs are equipped with overflow scuppers.

The building is equipped with multiple exterior LP tanks located sporadically around the building. The tanks serve the kitchen, culinary arts, domestic water heaters, and science classrooms. The kitchens and science classrooms appear to be equipped with emergency gas shutoffs, although the kitchen system may not be interlocked with the kitchen exhaust and does not have a manual shutoff. Gas piping is steel with pressed or threaded fittings, and appears to be in good condition.

Pressed Gas Pipe Fitting

LP Tank and Piping

The total combined load of all gas fired equipment is unknown at this time.

A Speedaire 1WD82A tank mounted air compressor provides compressed air to the shops. Compressed air piping is threaded schedule 40 steel or copper tube and appears to be in good condition.

The science classrooms are equipped with a laboratory waste and vent system. Neither an acid waste neutralization system nor a non-potable water source were encountered. The laboratory waste piping system appears to be polypropylene with mechanical fittings. Visible piping appears to be in good condition.

Air Compressor

Lab Waste Piping

Plumbing Fixtures

Restroom plumbing fixtures include wall hung toilets, urinals, and lavatories with sensor operated flush valves and mechanical metering faucets.

There are various other fixtures located throughout the building including drinking fountains and bottle fillers, multiple user handwashing sinks, service sinks, laboratory sinks, classroom and general use sinks, gang style and single-user showers, emergency eye wash and shower stations, floor drains, and kitchen equipment.

Various original plumbing fixtures, flush valves, and faucets have been replaced over the years.

Wall Hung Flush Valve Toilet

Floor Mounted Tank Toilet

Lavatory

Lab Sink

Water Cooler with Bottle Filler

Urinals

Gang Lavatory

Emergency Shower

Mop Sink

Lab Gas Valve

Exterior Wall Hydrant

Floor Drain

Kitchens are equipped with grease interceptors.

Art room sinks are equipped with sediment traps.

Hand Sink

Kitchen Gas Solenoid Valve

Dishwasher

Trough Drains

Hose Reel & Detergents

Floor Sink

The automotive shops' floor drains appear to be piped through an oil separator prior to connection to the sanitary building drain, evidence of which is two adjacent 4" vents which run up through the roof of the carpentry shop. One is assumed to be the chamber vent, the other is assumed to be the separator discharge pipe vent. These assumptions should be investigated and confirmed.

Scullery Sink w/Recessed Grease Interceptor

Low Profile Grease Interceptor

Auto Shop Area Drain

Roof Drain and Oil Separator Vents

Deficiencies

There were various deficiencies noted. While many of the items may have been allowed by the codes in force at the time of construction, they do not meet the latest edition of the codes and would most likely need to be addressed during any major renovation.

These items include:

- We suspect that the hot water recirculation piping for lavatories is not installed in accordance with the current energy efficiency code requirement (piped to within 24" of the fixture supply) and would have to be modified.
- Plumbing fixtures appear to be in good condition, but may not meet current codes for flow rates and/or accessibility.
- Grease traps do not have proper signage.
- Kettle and steam oven floor sinks do not drain through a grease trap.
- Automatic detergent and sanitizer dispenser water connections are not protected with backflow preventers.
- Various hose connections throughout the building are not equipped with vacuum breakers.
- Floor drains throughout the building do not appear to be equipped with automatic trap primers.
- Kitchen gas supply may not be properly interlocked with the kitchen hoods.
- Domestic water piping insulation thickness may not meet current energy code requirements should be inspected and replaced where it has been damaged or does not meet current energy code requirements.
- The science classroom acid waste neutralization should be investigated and evaluated.
- Science classrooms are not protected with backflow preventers.
- Science classroom faucets are not equipped with vacuum breakers.

Recommendations

All deficiencies noted above should be addressed.

Although the storm and sanitary drainage system piping appears to be in good condition, a minimal amount was visible during our visit, therefore extensive investigation should be conducted prior to reuse or

modifications if the existing cast iron drainage piping system needs to last for an extended period of time, as should be expected with a major renovation.

Although it appears to be in fair to good condition, we do not believe that the existing domestic water piping system in the building would last for an extended period of time, as should be expected with a major renovation, and would be prone to failure before the building reached its life expectancy. Due to its' unknown condition and age, any major renovation should consider the replacement of the domestic water piping system in the building.

With the replacement of the water piping in the original building, the hot water piping system should be modified to provide the proper water temperature to the various fixtures, with the hot water serving the kitchen and janitorial sinks, and tempered water serving the remainder of the fixtures. Hot water piping for the lavatories should be re-piped to meet the energy code requirements, and all emergency eye wash and shower stations should be equipped with thermostatic mixing valves and tempered water.

The water heaters are in good condition and could remain in service.

The circulators and mixing valves appear to be in good condition and could remain in service, although the piping should be replaced, rearranged, and equipped with pressure gauges and balancing valves.

The natural gas and compressed air piping could remain and be modified as needed. The kitchen and culinary arts gas systems should be interlocked with the kitchen hoods, and all emergency shut-off systems should be tested. Kitchens should be equipped with manual shutoffs. The science classroom emergency shutoff should be readily accessible.

In general, the existing plumbing fixtures, while dated and worn, are in fair to good condition and functional and could remain in service. However, many fixtures may fail to comply with current accessibility and water conservation standards. In addition, the existing water closets and urinals may not function properly with the newer water conserving flush valves. Given the assessed value of the existing building, the respective cost of any proposed building renovation or addition could require replacement of most of the existing fixtures.

The existing laboratory acid neutralization system should be evaluated and modified as required. Depending on the chemicals in use, the system may need to be equipped with a chemical injection type system. All acid waste and the sump discharge piping should be investigated for deterioration.

Substantial renovations would require the existing floor drains, floor sinks, and unused showers to be retrofitted with automatic trap primers.

Any work to the building should include an analysis of the current fixture count and plumbing code requirements, and provide the correct type and quantity of plumbing fixtures, including separate restroom facilities for faculty and kitchen staff.

If not replaced, damaged or malfunctioning fixtures or equipment should be repaired.

Fire Protection

Existing Conditions

The existing school building is protected by four separate wet-pipe automatic sprinkler systems. The sprinkler systems provide complete building coverage.

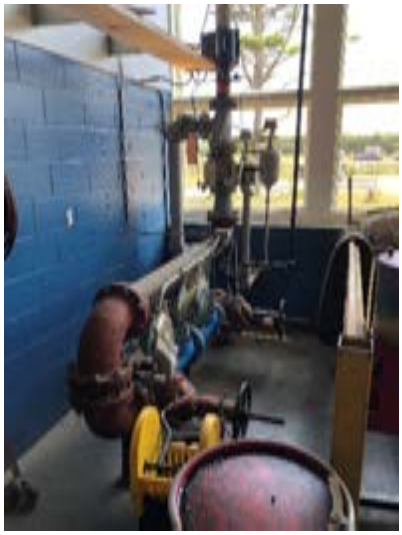
The original 6" fire service main enters the building through the floor in a mechanical room adjacent to the kitchen. The system riser is equipped with a double check valve assembly, supervised control valves, riser alarm check valve with gauges and main drain, pressure switch, flow switch, water motor gong, excess pressure pump, and fire department connection with check valve.

The 6" fire service main serving the 1980s addition enters the building through the floor in the corner of the automotive shop. The system riser is equipped with a double check valve assembly, supervised control valves, riser alarm check valve with gauges and main drain, pressure switch, water motor gong, excess pressure pump, and fire department connection with check valve.

A 6" fire service main serving the 1990s addition enters the building through the floor in the exterior mechanical room. The system riser is equipped with a double check valve assembly, supervised control valves, riser alarm check valve with gauges and main drain, flow switch, water motor gong, and fire department connection with check valve.

An 8" fire service main serving the 1990s addition enters the building through the floor in the maintenance shop. The system riser is equipped with a double check valve assembly, supervised control valves, riser alarm check valve with gauges and main drain, flow switches, water motor gong, and fire department connection with check valve.

1959 Fire Service



1980'sFire Service

The sprinkler system includes upright, pendent, and sidewall sprinklers of the fusible link or glass bulb style throughout the building.

Flexible dry sprinklers have been installed in the dust collector ductwork serving the carpentry shop. The sprinklers are fed from a dedicated branch with a supervised control valve and a flow switch.

The stage is equipped with fire hose stations on each side of the stage. The proscenium opening appears to be protected with a fabric curtain.

1990's Fire Service

1990's Fire Service

Sprinkler system piping is a combination of schedule 10 and schedule 40 pipe with either grooved or threaded joints. Observable piping appeared to be in good condition, with evidence of corrosion at various fittings throughout the system.

Upright Sprinkler & Piping

Upright Sprinkler – Soffit Obstruction

Flexible Dry Sprinklers in Dust Collector Ductwork

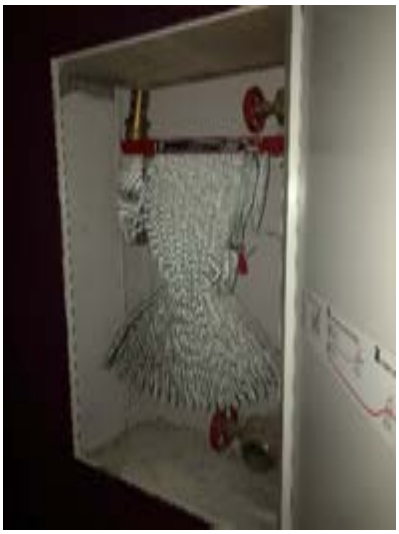
Evidence of Leaks at Grooved Fittings

The existing kitchen hoods are equipped with integral chemical type fire suppression systems.

Kitchen Hood Suppression

Press Fit Pipe Fittings

Culinary Arts Hood Suppression



Hose Station at Stage

Deficiencies

Sprinkler positioning does not appear to meet current code requirements. However, we will assume that the sprinklers were installed in accordance with the code in effect at the time of construction and the sprinklers' listings, and that the system was inspected and accepted by the local authorities.

With the exception of a few locations, sprinkler spacing, distance from heat sources, distance from obstructions, thermal sensitivity, and temperature rating appear to be compliant with current codes.

Sprinklers have not been installed in locker room shower areas.

Recommendations

In accordance with Chapter 34 of the current Massachusetts State Building Code, existing buildings in Use Group E are not required to be retrofitted with an automatic fire sprinkler system or brought into full compliance with the new codes in force unless they undergo major alterations or additions.

However, because of the proven property and life-saving benefits of these systems, this office would recommend modifications of the existing systems for compliance with current codes.

In addition, the system should flushed and internally inspected for obstructions, and corroded fittings should be replaced.

4.8

ENVIRONMENTAL BUILDING ANALYSIS

FINAL REPORT
FOR
HAZARDOUS MATERIALS IDENTIFICATION
STUDY
AT THE
MARTHA's VINEYARD REGIONAL HIGH SCHOOL
OAK BLUFFS, MASSACHUSETTS

PROJECT NO: 224 436.00

Survey Dates:
September 16, 2019
July 26-29, 2024

CONDUCTED BY:

UNIVERSAL ENVIRONMENTAL CONSULTANTS
12 Brewster Road
Framingham, MA 01702

UEC universal environmental consultants

August 1, 2024

Mr. Christopher Blessen
Principal
Tappe' Architects
6 Edgerly Place
Boston, MA 02116

Reference: Report for Hazardous Materials Identification Study
Martha's Vineyard Regional High School, Oak Bluffs, MA

Dear Mr. Blessen:

Thank you for the opportunity for Universal Environmental Consultants (UEC) to provide professional services.

Enclosed please find the report for the hazardous materials identification study at Martha's Vineyard Regional High School, Oak Bluffs, MA.

Please do not hesitate to call should you have any questions.

Very truly yours,

Universal Environmental Consultants

Ammar M. Dieb
President

UEC:\224 436.00\Report.DOC

Enclosure

INTRODUCTION:
Universal Environmental Consultants (UEC) has been providing comprehensive asbestos services since 2001 and has completed projects throughout New England. We have completed projects for a variety of clients including commercial, industrial, municipal, and public and private schools. We maintain appropriate asbestos licenses and staff with a minimum of thirty-six years of experience.

UEC was contracted by Tappe' Architects to conduct the following services at the Martha's Vineyard Regional High School, Oak Bluffs, Massachusetts:

- Asbestos Containing Materials (ACM) determination inspection and sampling.
- Polychlorinated Biphenyls (PCB's)-Electrical Equipment and Light Fixtures inspection.
- PCB's Caulking Inspection.
- Lead Based Paint (LBP) inspection.
- Mercury in Rubber Flooring inspection and sampling.
- Airborne Mold inspection and sampling.
- Radon sampling.

The scope of work included the inspection of accessible ACM, collection of bulk samples from materials suspected to contain asbestos, determination and quantities of types of ACM found and cost estimates for remediation. ***A comprehensive survey per the Environmental Protection Agency (EPA) NESHAP regulation would be required prior to any renovation or demolition activities.***

Bulk samples analysis for asbestos was performed using the standard Polarized Light Microscopy (PLM) Method in accordance with EPA standard. Bulk samples were collected by a Massachusetts licensed asbestos inspectors Mr. Jason Becotte (AI-034963) and analyzed by a Massachusetts licensed laboratory Asbestos Identification Laboratory, Woburn, MA. Previous sampling was performed part of the AHERA inspection of the school.

Airborne mold samples were analyzed by an EPA approved laboratory EMSL, Woburn, MA.

Radon samples were analyzed by an EPA licensed laboratory AccuStar, Ward Hill, MA.

Samples results are attached.

FINDINGS:
Asbestos Containing Materials (ACM):
The regulations for asbestos inspection are based on representative sampling. It would be impractical and costly to sample all materials in all areas. Therefore, representative samples of each homogenous area were collected and analyzed or assumed.

All suspect materials were grouped into homogenous areas. By definition, a homogenous area is one in which the materials are evenly mixed and similar in appearance and texture throughout. A homogeneous area shall be determined to be ACM based on findings that the results of at least one sample collected from that area shows that ACM is present in an amount equal to or greater than 1 percent in accordance with EPA regulations. Per the Department of Environmental Protection (DEP) regulations, any amount of asbestos found would trigger compliance for proper disposal as asbestos. No additional suspect and accessible ACM were found during this survey.

Hidden ACM may be found during the renovation and demolition activities.

Number of Samples Collected:
September 16, 2019:
Eighty-four (84) bulk samples were collected from materials suspected of containing asbestos, including:

Type and Location of Suspect Material

1. Spray-on fireproofing at auditorium

2. Spray-on fireproofing at auditorium
3. Spray-on fireproofing at auditorium
4. Spray-on fireproofing at auditorium
5. Spray-on fireproofing at auditorium
6. Spray-on fireproofing at auditorium
7. Spray-on fireproofing at auditorium
8. Boiler exhaust insulation
9. Boiler exhaust insulation
10. Boiler exhaust insulation
11. Grey sink coating
12. Grey sink coating
13. Interior window glazing black caulking
14. Interior window glazing black caulking
15. Interior window glazing grey caulking
16. Interior window glazing grey caulking
17. Interior door glazing caulking
18. Interior door glazing caulking
19. Science lab countertop
20. Science lab countertop
21. Tackboard glue
22. Tackboard glue
23. Textured ceiling plaster
24. Textured ceiling plaster
25. Textured ceiling plaster
26. Textured ceiling plaster
27. Textured ceiling plaster
28. Textured ceiling plaster
29. Textured ceiling plaster
30. Joint compound
31. Joint compound
32. Joint compound
33. Joint compound
34. Rough wall plaster
35. Rough wall plaster
36. Rough wall plaster
37. 2’ x 4’ Suspended acoustical ceiling tile type I
38. 2’ x 4’ Suspended acoustical ceiling tile type I
39. 2’ x 4’ Suspended acoustical ceiling tile type II
40. 2’ x 4’ Suspended acoustical ceiling tile type II
41. 2’ x 4’ Suspended acoustical ceiling tile type III
42. 2’ x 4’ Suspended acoustical ceiling tile type III
43. 1’ x 1’ Suspended acoustical ceiling tile
44. 1’ x 1’ Suspended acoustical ceiling tile
45. Hidden 9” x 9” vinyl floor tile
46. Hidden 9” x 9” vinyl floor tile
47. Mastic for hidden 9” x 9” vinyl floor tile
48. Mastic for hidden 9” x 9” vinyl floor tile
49. White 12” x 12” vinyl floor tile
50. White 12” x 12” vinyl floor tile
51. Yellow glue for white 12” x 12” vinyl floor tile
52. Yellow glue for white 12” x 12” vinyl floor tile
53. Off white/red 12” x 12” vinyl floor tile
54. Off white/red 12” x 12” vinyl floor tile
55. Yellow glue for off white/red 12” x 12” vinyl floor tile
56. Yellow glue for off white/red 12” x 12” vinyl floor tile

57. White/black 12” x 12” vinyl floor tile
58. White/black 12” x 12” vinyl floor tile
59. Mastic for white/black 12” x 12” vinyl floor tile
60. Mastic for white/black 12” x 12” vinyl floor tile
61. Off white/blue 12” x 12” vinyl floor tile
62. Off white/blue 12” x 12” vinyl floor tile
63. Yellow glue for off white/blue 12” x 12” vinyl floor tile
64. Yellow glue for off white/blue 12” x 12” vinyl floor tile
65. White/blue 12” x 12” vinyl floor tile
66. White/blue 12” x 12” vinyl floor tile
67. Mastic for white/blue 12” x 12” vinyl floor tile
68. Mastic for white/blue 12” x 12” vinyl floor tile
69. Joint compound at AMOIS building
70. Joint compound at AMOIS building
71. 2’ x 4’ Suspended acoustical ceiling tile at AMOIS building
72. 2’ x 4’ Suspended acoustical ceiling tile at AMOIS building
73. White 12” x 12” vinyl floor tile at AMOIS building
74. White 12” x 12” vinyl floor tile at AMOIS building
75. Yellow glue for white 12” x 12” vinyl floor tile at AMOIS building
76. Yellow glue for white 12” x 12” vinyl floor tile at AMOIS building
77. Joint compound at MVTV building
78. Joint compound at MVTV building
79. 2’ x 4’ Suspended acoustical ceiling tile at MVTV building
80. 2’ x 4’ Suspended acoustical ceiling tile at MVTV building
81. White 12” x 12” vinyl floor tile at MVTV building
82. White 12” x 12” vinyl floor tile at MVTV building
83. Yellow glue for white 12” x 12” vinyl floor tile at MVTV building
84. Yellow glue for white 12” x 12” vinyl floor tile at MVTV building

Sample Results:

Type and Location of Suspect Material	**Sample Result**
1. Spray-on fireproofing at auditorium	No Asbestos Detected
2. Spray-on fireproofing at auditorium	No Asbestos Detected
3. Spray-on fireproofing at auditorium	No Asbestos Detected
4. Spray-on fireproofing at auditorium	No Asbestos Detected
5. Spray-on fireproofing at auditorium	No Asbestos Detected
6. Spray-on fireproofing at auditorium	No Asbestos Detected
7. Spray-on fireproofing at auditorium	No Asbestos Detected
8. Boiler exhaust insulation	No Asbestos Detected
9. Boiler exhaust insulation	No Asbestos Detected
10. Boiler exhaust insulation	No Asbestos Detected
11. Grey sink coating	No Asbestos Detected
12. Grey sink coating	No Asbestos Detected
13. Interior window glazing black caulking	No Asbestos Detected
14. Interior window glazing black caulking	No Asbestos Detected
15. Interior window glazing grey caulking	2% Asbestos
16. Interior window glazing grey caulking	2% Asbestos
17. Interior door glazing caulking	2% Asbestos
18. Interior door glazing caulking	2% Asbestos
19. Science lab countertop	No Asbestos Detected
20. Science lab countertop	No Asbestos Detected
21. Tackboard glue	No Asbestos Detected
22. Tackboard glue	No Asbestos Detected
23. Textured ceiling plaster	No Asbestos Detected

24. Textured ceiling plaster	No Asbestos Detected
25. Textured ceiling plaster	No Asbestos Detected
26. Textured ceiling plaster	No Asbestos Detected
27. Textured ceiling plaster	No Asbestos Detected
28. Textured ceiling plaster	No Asbestos Detected
29. Textured ceiling plaster	No Asbestos Detected
30. Joint compound	No Asbestos Detected
31. Joint compound	No Asbestos Detected
32. Joint compound	No Asbestos Detected
33. Joint compound	No Asbestos Detected
34. Rough wall plaster	No Asbestos Detected
35. Rough wall plaster	No Asbestos Detected
36. Rough wall plaster	No Asbestos Detected
37. 2’ x 4’ Suspended acoustical ceiling tile type I	No Asbestos Detected
38. 2’ x 4’ Suspended acoustical ceiling tile type I	No Asbestos Detected
39. 2’ x 4’ Suspended acoustical ceiling tile type II	No Asbestos Detected
40. 2’ x 4’ Suspended acoustical ceiling tile type II	No Asbestos Detected
41. 2’ x 4’ Suspended acoustical ceiling tile type III	No Asbestos Detected
42. 2’ x 4’ Suspended acoustical ceiling tile type III	No Asbestos Detected
43. 1’ x 1’ Suspended acoustical ceiling tile	No Asbestos Detected
44. 1’ x 1’ Suspended acoustical ceiling tile	No Asbestos Detected
45. Hidden 9” x 9” vinyl floor tile	2% Asbestos
46. Hidden 9” x 9” vinyl floor tile	2% Asbestos
47. Mastic for hidden 9” x 9” vinyl floor tile	2% Asbestos
48. Mastic for hidden 9” x 9” vinyl floor tile	5% Asbestos
49. White 12” x 12” vinyl floor tile	No Asbestos Detected
50. White 12” x 12” vinyl floor tile	No Asbestos Detected
51. Yellow glue for white 12” x 12” vinyl floor tile	No Asbestos Detected
52. Yellow glue for white 12” x 12” vinyl floor tile	No Asbestos Detected
53. Off white/red 12” x 12” vinyl floor tile	No Asbestos Detected
54. Off white/red 12” x 12” vinyl floor tile	No Asbestos Detected
55. Yellow glue for off white/red 12” x 12” vinyl floor tile	No Asbestos Detected
56. Yellow glue for off white/red 12” x 12” vinyl floor tile	No Asbestos Detected
57. White/black 12” x 12” vinyl floor tile	2% Asbestos
58. White/black 12” x 12” vinyl floor tile	2% Asbestos
59. Mastic for white/black 12” x 12” vinyl floor tile	5% Asbestos
60. Mastic for white/black 12” x 12” vinyl floor tile	5% Asbestos
61. Off white/blue 12” x 12” vinyl floor tile	No Asbestos Detected
62. Off white/blue 12” x 12” vinyl floor tile	No Asbestos Detected
63. Yellow glue for off white/blue 12” x 12” vinyl floor tile	No Asbestos Detected
64. Yellow glue for off white/blue 12” x 12” vinyl floor tile	No Asbestos Detected
65. White/blue 12” x 12” vinyl floor tile	No Asbestos Detected
66. White/blue 12” x 12” vinyl floor tile	No Asbestos Detected
67. Mastic for white/blue 12” x 12” vinyl floor tile	3% Asbestos
68. Mastic for white/blue 12” x 12” vinyl floor tile	3% Asbestos
69. Joint compound at AMOIS building	No Asbestos Detected
70. Joint compound at AMOIS building	No Asbestos Detected
71. 2’ x 4’ Suspended acoustical ceiling tile at AMOIS building	No Asbestos Detected
72. 2’ x 4’ Suspended acoustical ceiling tile at AMOIS building	No Asbestos Detected
73. White 12” x 12” vinyl floor tile at AMOIS building	No Asbestos Detected
74. White 12” x 12” vinyl floor tile at AMOIS building	No Asbestos Detected
75. Yellow glue for white 12” x 12” vinyl floor tile at AMOIS building	No Asbestos Detected
76. Yellow glue for white 12” x 12” vinyl floor tile at AMOIS building	No Asbestos Detected
77. Joint compound at MVTV building	No Asbestos Detected
78. Joint compound at MVTV building	No Asbestos Detected

79. 2’ x 4’ Suspended acoustical ceiling tile at MVTV building	No Asbestos Detected
80. 2’ x 4’ Suspended acoustical ceiling tile at MVTV building	No Asbestos Detected
81. White 12” x 12” vinyl floor tile at MVTV building	No Asbestos Detected
82. White 12” x 12” vinyl floor tile at MVTV building	No Asbestos Detected
83. Yellow glue for white 12” x 12” vinyl floor tile at MVTV building	No Asbestos Detected
84. Yellow glue for white 12” x 12” vinyl floor tile at MVTV building	No Asbestos Detected

July 29, 2024:
Sixteen (16) bulk samples were collected from materials suspected of containing asbestos, including:

Type and Location of Suspect Material

1. Exterior window framing caulking
2. Exterior window framing caulking
3. Exterior window framing caulking
4. Exterior window framing caulking
5. Exterior window framing caulking
6. Exterior window glazing caulking
7. Exterior window glazing caulking
8. Exterior window glazing caulking
9. Exterior window glazing caulking
10. Exterior window glazing caulking
11. Exterior door framing caulking
12. Exterior door framing caulking
13. Exterior door framing caulking
14. Exterior door framing caulking
15. Exterior expansion joints caulking
16. Exterior expansion joints caulking

Sample Results:

Type and Location of Suspect Material	**Sample Result**
1. Exterior window framing caulking	No Asbestos Detected
2. Exterior window framing caulking	No Asbestos Detected
3. Exterior window framing caulking	No Asbestos Detected
4. Exterior window framing caulking	No Asbestos Detected
5. Exterior window framing caulking	No Asbestos Detected
6. Exterior window glazing caulking	No Asbestos Detected
7. Exterior window glazing caulking	No Asbestos Detected
8. Exterior window glazing caulking	No Asbestos Detected
9. Exterior window glazing caulking	No Asbestos Detected
10. Exterior window glazing caulking	No Asbestos Detected
11. Exterior door framing caulking	No Asbestos Detected
12. Exterior door framing caulking	No Asbestos Detected
13. Exterior door framing caulking	No Asbestos Detected
14. Exterior door framing caulking	No Asbestos Detected
15. Exterior expansion joints caulking	No Asbestos Detected
16. Exterior expansion joints caulking	No Asbestos Detected

Observations and Conclusions:
The condition of ACM is very important. ACM in good condition does not present a health issue unless it is disturbed. Therefore, it is not necessary to remediate ACM in good condition unless it will be disturbed through renovation, demolition, or other activity.

Refer to the AHERA Management Plan for condition of ACM.

1. Interior window glazing grey caulking was found to contain asbestos.
2. Interior door glazing caulking was found to contain asbestos.
3. Hidden 9" x 9" vinyl floor tile was found to contain asbestos.
4. Mastic for hidden 9" x 9" vinyl floor tile was found to contain asbestos.
5. White/black 12" x 12" vinyl floor tile was found to contain asbestos.
6. Mastic for white/black 12" x 12" vinyl floor tile was found to contain asbestos.
7. Mastic for white/blue 12" x 12" vinyl floor tile was found to contain asbestos.
8. Fire curtain was assumed to contain asbestos.
9. Paper/mastic under hardwood flooring was assumed to contain asbestos.
10. Damproofing on foundation and exterior cavity walls was assumed to contain asbestos. The demolition contractor will have to segregate the ACM from non-ACM building surfaces for proper disposal in an EPA approved landfill that does not recycle. A non-traditional abatement plan would have to be prepared and submitted to the DEP for approval.
11. Thru-wall flashing was assumed to contain asbestos. The demolition contractor will have to segregate the ACM from non-ACM building surfaces for proper disposal in an EPA approved landfill that does not recycle. A non-traditional abatement plan would have to be prepared and submitted to the DEP for approval.
12. Roofing material was assumed to contain asbestos.
13. All other suspect materials were found not to contain asbestos. Hidden ACM may be found during renovation and demolition activities.

Polychlorinated Biphenyls (PCB's)-Electrical Equipment and Light Fixtures:
Observations and Conclusions
Visual inspection of various equipments such as light fixtures, thermostats, exit signs and switches was performed for the presence of PCB's and mercury. Ballasts in light fixtures were assumed not to contain PCB's since there were labels indicating that "No PCB's" was found. Tubes in light fixtures, thermostats, signs, and switches were assumed to contain mercury. It would be very costly to test those equipments and dismantling would be required to access. Therefore, the above-mentioned equipment should be disposed of in an EPA approved landfill as part of the demolition project.

PCB's in Caulking:
PCB's are manmade chemicals that were widely produced and distributed across the country from the 1950s to 1977 until the production of PCB's was banned by the US Environmental Protection Agency (EPA) law which became effective in 1978. PCB's are a class of chemicals made up of more than 200 different compounds. PCB's are non-flammable, stable, and good insulators so they were widely used in a variety of products including electrical transformers and capacitors, cable and wire coverings, sealants and caulking, and household products such as television sets and fluorescent light fixtures. Because of their chemical properties, PCB's are not very soluble in water, and they do not break down easily in the environment. PCB's also do not readily evaporate into air but tend to remain as solids or thick liquids. Even though PCB's have not been produced or used in the country for more than 30 years, they are still present in the environment, in the air, soil, and water and in our food. EPA requires that all construction waste including caulking be disposed as PCB's if PCB's level exceeds 50 mg/kg (ppm). An abatement plan might also be required.

Observations and Conclusions:
Building caulking was assumed to contain PCB's.

Lead Based Paint (LBP):
Observations and Conclusions
LBP was assumed to exist on painted surfaces. A school is not considered a regulated facility. All LBP activities performed, including waste disposal, should be in accordance with applicable Federal, State, or local laws, ordinances, codes, or regulations governing evaluation and hazard reduction. In the event of discrepancies, the most protective requirements prevail. These requirements can be found in OSHA 29 CFR 1926-Construction Industry Standards, 29 CFR 1926.62-Construction Industry Lead Standards, 29 CFR 1910.1200-Hazards Communication, 40 CFR 261-EPA Regulations.

According to OSHA, any amount of LBP triggers compliance.

Mercury in Rubber Flooring:
Observations and Conclusions:
No rubber floor exists in the building.

Airborne Mold:
Airborne mold testing was performed utilizing Zefon International Incorporated's Air-O-Cell® sampling device following all manufacturer supplied recommended sampling procedures. Air-O-Cell® is a direct read total particulate air sampling device. It works using the inertial impaction principle similar to other spore trap devices. It is designed for the rapid collection and analysis of airborne particulate including bioaerosols. The particulate includes fibers (e.g., asbestos, fiberglass, cellulose, clothing fibers) opaque particles (e.g., fly ash, combustion particles, copy toner, oil droplets, paint), and bioaerosols (e.g., mold spores, pollen, insect parts, skin cell fragments).[1]

The method involves drawing a known quantity of air through a sterile sampling cassette. Subsequent to sampling, the cassette is sealed and transferred to a microbiology laboratory under chain of custody protocol for microscopic analysis. This method counts both viable and nonviable mold spores.

AIRBORNE MOLD and PARTICULATE

Lab ID #	Location	Total Mold Counts/M^3	Pollen	Insect Fragment	Hyphal Fragments
13204483-0001	Library	220	ND	ND	40
13204483-0002	Main Office	180	ND	ND	ND
13204483-0003	Nurses Office	980	ND	ND	ND
13204483-0004	Guidance A103	14,080	ND	ND	ND
13204483-0005	Student Affairs A104	10,090	ND	ND	ND
13204483-0006	Cafeteria	3,090	ND	ND	ND
13204483-0007	Student Counseling	1,450	ND	ND	ND
13204483-0008	Weight Room	100	ND	ND	ND
13204483-0009	Classroom A111	510	ND	ND	ND
13204483-0010	Classroom E511	2,710	ND	ND	ND
13204483-0011	Classroom D419	370	ND	ND	ND
13204483-0012	Classroom B213	390	ND	ND	ND
13204483-0013	Auditorium Seating Area	940	ND	ND	20
13204483-0014	Auditorium Stage	1,040	ND	ND	20
13204483-0015	Classroom B201	2,830	ND	ND	ND
13204483-0016	Classroom C301	6,540	ND	ND	ND
13204483-0017	Classroom C307	300	ND	ND	ND
13204483-0018	Classroom C310	2,070	ND	ND	ND
13204483-0019	Classroom D404	550	ND	ND	ND
13204483-0020	Outside	2,620	ND	ND	80

[1] Zefon International Inc. <www.zefon.com>

AIRBORNE MOLD and PARTICULATE
(Subjective Scales)

Lab ID #	Location	Skin Fragment Density (SFD)	Fibrous Particulates (FP)	Total Background Particulate (TBP)
13204483-0001	Library	1	1	2
13204483-0002	Main Office	1	1	1
13204483-0003	Nurses Office	1	1	1
13204483-0004	Guidance A103	1	1	1
13204483-0005	Student Affairs A104	1	1	1
13204483-0006	Cafeteria	1	1	1
13204483-0007	Student Counseling	1	1	2
13204483-0008	Weight Room	1	1	1
13204483-0009	Classroom A111	1	1	1
13204483-0010	Classroom E511	1	1	1
13204483-0011	Classroom D419	1	1	1
13204483-0012	Classroom B213	1	1	1
13204483-0013	Auditorium Seating Area	1	1	1
13204483-0014	Auditorium Stage	1	1	1
13204483-0015	Classroom B201	1	1	1
13204483-0016	Classroom C301	1	1	1
13204483-0017	Classroom C307	1	1	1
13204483-0018	Classroom C310	1	1	1
13204483-0019	Classroom D404	1	1	1
13204483-0020	Outside	-	1	1

Legend:
ND - Not Detected

Observations and Conclusions:
There are currently no guidelines or standards promulgated by a government agency or widely recognized scientific organizations for the interpretation of airborne mold spore levels. The most commonly employed tool used to assess if mold growth is occurring and there is amplification in a structure is to evaluate the indoor levels and species as well as to compare levels and species of mold outdoors to indoors. Typically, if there were more molds indoors, and/or if species were present indoors which were not present outdoors, then growth and amplification is likely occurring and further evaluation and perhaps remediation is recommended.

Indoor airborne levels were mostly found to be lower than the outside level. Based on comparisons with historical data from projects of similar type, building utilization, geographic location and season, the indoor airborne levels are considered average to very high. Indoor mold spore counts in the summer are typically in the 2,500-7,500-spores/cubic meter range.

Mold concentration in the indoor samples collected in the guidance area (12,700 Count/m^3), student affairs (8,700 Count/m^3), cafeteria (2,400 Count/m^3), student counselling (1,100 Count/m^3), classroom E511 (2,300 Count/m^3),

classroom B201 (1,000 Count/m^3), classroom C301 (6,460 Count/m^3), and classroom C310 (1,700 Count/m^3) indicated the presence of high to very high level of Aspergillus/Penicillium. Optical methods were used to identify the airborne mold spores. This method is usually capable of differentiating the genus of mold. Yet, optical methods cannot differentiate Aspergillus from Penicillium genus as the morphology of the two is very similar.

Some species of Aspergillus and Penicillium are known to be potentially toxigenic or pathogenic. The American Conference of Governmental Industrial Hygienists does identify some specific species such as Aspergillus including A. Fumigatus, A. Niger and A. Terreus as potentially pathogenic (disease causing). Yet, the genera Aspergillus and Penicillium are very common in the environment and are commonly found both indoors and outdoors throughout the year.

Recently, hazard classifications for select molds have been developed. Of the mold present which have been classified Aspergillus/Penicillium can be A, B or C depending on species, Cladosporium, Basidiospores and Ganoderma are generally considered Class C, Chaetomium is considered Class B.

Hazard Class A: Includes fungi or their metabolic products that are highly hazardous to health. These fungi and their metabolites should not be present inside dwellings. Presence of these fungi in occupied buildings requires immediate attention.
Hazard Class B: Includes those fungi which may cause allergic reactions to occupants if present indoors over long periods.
Hazard Class C: Includes fungi not known to be hazardous to health. Growth of these fungi indoors, however, may cause economic damage and therefore should not be allowed.

Pollen, insect fragments and Hyphal fragments were either not detected or present in the samples. Hyphal fragment is a non-reproductive part of the mold.

Total background particulate on all samples was assessed as "1-2" on a scale of 1-5 where 1 is low and 5 is high. Skin fragment density on all samples was assessed as "1" on a scale of 1-4 where 1 is low and 4 is high. Total background levels are measured to determine airborne dust not related to airborne mold. Skin fragments are measured to determine proper cleaning.

Radon:
Number of Samples Collected
Twenty (20) air samples were collected at the following locations:

Location of Material

1. Nurses office
2. Weight room
3. Main office hallway
4. Student Affairs
5. Guidance
6. Student Counselling
7. Classroom E115
8. Classroom D419
9. Auditorium Office
10. Green room hallway
11. Classroom D404
12. Classroom C310
13. Classroom C307
14. Classroom C301
15. Classroom B213
16. Classroom B201
17. Classroom A111
18. Library
19. Cafeteria
20. Maintenance office

Location of Material	Sample Result
1. Nurses office	<0.4 pCi\L
2. Weight room	0.6 pCi\L
3. Main office hallway	<0.4 pCi\L
4. Student Affairs	0.4 pCi\L
5. Guidance	<0.4 pCi\L
6. Student Counselling	<0.4 pCi\L
7. Classroom E115	<0.4 pCi\L
8. Classroom D419	<0.4 pCi\L
9. Auditorium Office	0.5 pCi\L
10. Green room hallway	0.4 pCi\L
11. Classroom D404	1.3 pCi\L
12. Classroom C310	<0.4 pCi\L
13. Classroom C307	<0.4 pCi\L
14. Classroom C301	0.4 pCi\L
15. Classroom B213	<0.4 pCi\L
16. Classroom B201	<0.4 pCi\L
17. Classroom A111	<0.4 pCi\L
18. Library	<0.4 pCi\L
19. Cafeteria	<0.4 pCi\L
20. Maintenance office	<0.4 pCi\L

Observations and Conclusions:
The measured radon concentrations of the samples were found to be lower than the EPA guideline of 4 picoCuris of radon per liter of air (pCi/L). No further action is required.

COST ESTIMATES:
The cost includes removal and disposal of all accessible ACM, other hazardous material, and an allowance for removal of inaccessible or hidden ACM that may be found during renovation or demolition project.

Location	Material	Approximate Quantity	Cost Estimate ($)
Throughout	Various Types of Flooring	50,000 SF	600,000.00
	Interior Windows	110 Total	55,000.00
	Interior Doors	90 Total	45,000.00
	Chalkboards/Tackboards	125 Total	75,000.00
	Miscellaneous Hazardous Materials	Unknown	125,000.00
	Light Fixtures	1,400 Total	160,000.00
Stage	Fire Curtain	1 Total	12,500.00
Gymnasium	Flooring System	8,000 SF	160,000.00
Exterior	Roofing Materials	142,000 SF	710,000.00
	Transite Sewer Pipes	Unknown[1]	125,000.00
	Thru-Wall Flashing	Unknown[1]	100,000.00
	Damproofing on Walls	5,000 Tons[12]	2,000,000.00
Estimated costs for NESHAP Inspection and Testing Services			25,000.00
Estimated costs for Design, Construction Monitoring and Air Sampling Services			262,500.00
		TOTAL:	**$ 4,450,000.00**

[1]: Part of total demolition.
[2]: Estimated.

DESCRIPTION OF SURVEY METHODS AND LABORATORY ANALYSES:

Asbestos:
Asbestos samples were collected using a method that prevents fiber release. Homogeneous sample areas were determined by criteria outlined in EPA document 560/5-85-030a. Bulk material samples were analyzed using PLM and dispersion staining techniques with EPA 600/R-93/116 method.

Samples analyzed by a Massachusetts licensed laboratory Asbestos Identification Laboratory, Woburn, MA.

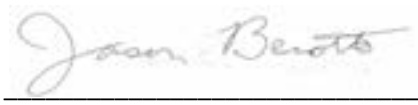
Airborne Mold:
The samples were analyzed by an EPA approved laboratory EMSL, Woburn, MA.

Radon:
Radon samples were analyzed by an EPA licensed laboratory AccuStar, Ward Hill, MA.

LIMITATIONS AND CONDITIONS:
This report has been completed based on visual and physical observations made and information available at the time of the site visits, as well as an interview with the Owner's representatives. This report is intended to be used as a summary of available information on existing conditions with conclusions based on a reasonable and knowledgeable review of evidence found in accordance with normally accepted industry standards, state, and federal protocols, and within the scope and budget established by the client. Any additional data obtained by further review must be reviewed by UEC and the conclusions presented herein may be modified accordingly.

This report and attachments, prepared for the exclusive use of Owner for use in an environmental evaluation of the subject site, are an integral part of the inspections and opinions should not be formulated without reading the report in its entirety. No part of this report may be altered, used, copied, or relied upon without prior written permission from UEC, except that this report may be conveyed in its entirety to parties associated with Owner for this subject study.

Inspected By:



_____
Jason Becotte
Asbestos Inspector

Asbestos Identification Laboratory

165 New Boston St., Ste 227
Woburn, MA 01801
781-932-9600

Web: www.asbestosidentificationlab.com
Email: mikemanning@asbestosidentificationlab.com

Batch: 46823

NVLAP Lab Code: 200919-0

September 25, 2019

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Name:	*MVRHS, Oak Bluffs, MA*
Project Number:	
Date Sampled:	2019-09-16
Work Received:	2019-09-20
Work Analyzed:	2019-09-23

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

Dear Ammar Dieb,

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project. The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.
Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Ammar Dieb for your business.

Michael Manning
Owner/Director

September 25, 2019

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Name: *MVRHS, Oak Bluffs, MA*
Project Number:
Date Sampled: 2019-09-16
Work Received: 2019-09-20
Work Analyzed: 2019-09-23

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

FieldID / LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
1 / 519399	Spray-On Fireproofing	Auditorium	gray	Fiberglass 2 Cellulose 3 Non-Fibrous 95	None Detected
2 / 519400	Spray-On Fireproofing	Auditorium	gray	Cellulose 3 Non-Fibrous 97	None Detected
3 / 519401	Spray-On Fireproofing	Auditorium	gray	Cellulose 2 Non-Fibrous 98	None Detected
4 / 519402	Spray-On Fireproofing	Auditorium	gray	Cellulose 2 Non-Fibrous 98	None Detected
5 / 519403	Spray-On Fireproofing	Auditorium	gray	Cellulose 2 Non-Fibrous 98	None Detected
6 / 519404	Spray-On Fireproofing	Auditorium	gray	Cellulose 2 Non-Fibrous 98	None Detected
7 / 519405	Spray-On Fireproofing	Auditorium	gray	Cellulose 3 Non-Fibrous 97	None Detected
8 / 519406	Boiler Exhaust Insulation	Main Boiler Room	gray	Mineral Wool 50 Non-Fibrous 50	None Detected
9 / 519407	Boiler Exhaust Insulation	Main Boiler Room	gray	Mineral Wool 50 Non-Fibrous 50	None Detected
10 / 519408	Boiler Exhaust Insulation	Main Boiler Room	gray	Mineral Wool 50 Non-Fibrous 50	None Detected
11 / 519409	Gray Sink Coating	Room A-103	gray	Cellulose 5 Non-Fibrous 95	None Detected
12 / 519410	Gray Sink Coating	Room C-326	gray	Cellulose 5 Non-Fibrous 95	None Detected
13 / 519411	Interior Window Glaze Black	Boys Locker Room	black	Non-Fibrous 100	None Detected
14 / 519412	Interior Window Glaze Black	Girls Locker Room	black	Non-Fibrous 100	None Detected

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
15 519413	Interior Window Glaze Gray	200 S Hallway	gray	Non-Fibrous 98	Detected Chrysotile 2
16 519414	Interior Window Glaze Gray	200 S Hallway	gray	Non-Fibrous 98	Detected Chrysotile 2
17 519415	Interior Wood Window Glaze	500 S Hallway	tan	Non-Fibrous 98	Detected Chrysotile 2
18 519416	Interior Wood Window Glaze	100 S Hallway	tan	Non-Fibrous 98	Detected Chrysotile 2
19 519417	Science Lab Countertop	Room C-308	black	Non-Fibrous 100	None Detected
20 519418	Science Lab Countertop	Room C-325	black	Non-Fibrous 100	None Detected
21 519419	Tackboard Glue	Room D-407	yellow	Non-Fibrous 100	None Detected
22 519420	Tackboard Glue	Room D-401B	yellow	Non-Fibrous 100	None Detected
23 519421	Textured Ceiling Plaster	Girls Locker Room	white	Non-Fibrous 100	None Detected
24 519422	Textured Ceiling Plaster	Girls Locker Room	white	Non-Fibrous 100	None Detected
25 519423	Textured Ceiling Plaster	Girls Locker Room	white	Non-Fibrous 100	None Detected
26 519424	Textured Ceiling Plaster	Girls Locker Room	white	Non-Fibrous 100	None Detected
27 519425	Textured Ceiling Plaster	Boys Locker Room	white	Non-Fibrous 100	None Detected
28 519426	Textured Ceiling Plaster	Boys Locker Room	white	Non-Fibrous 100	None Detected
29 519427	Textured Ceiling Plaster	Boys Locker Room	white	Non-Fibrous 100	None Detected
30 519428	Joint Compound	Entry Hallway	white	Non-Fibrous 100	None Detected
31 519429	Joint Compound	Auditorium	white	Non-Fibrous 100	None Detected
32 519430	Joint Compound	Auditorium Lobby	white	Non-Fibrous 100	None Detected

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
33 519431	Joint Compound	Library	white	Non-Fibrous 100	None Detected
34 519432	Rough Plaster Wall	100 S Hallway	gray	Non-Fibrous 100	None Detected
35 519433	Rough Plaster Wall	500 S Hallway	gray	Non-Fibrous 100	None Detected
36 519434	Rough Plaster Wall	500 S Hallway	gray	Non-Fibrous 100	None Detected
37 519435	2x4 SAT	Room D-417	gray	Mineral Wool 20 Cellulose 70 Non-Fibrous 10	None Detected
38 519436	2x4 SAT	Room B-213	gray	Mineral Wool 20 Cellulose 70 Non-Fibrous 10	None Detected
39 519437	2x4 SAT Decorative	Room D-401B	gray	Mineral Wool 20 Cellulose 70 Non-Fibrous 10	None Detected
40 519438	2x4 SAT Decorative	400 S Hallway	gray	Mineral Wool 30 Cellulose 60 Non-Fibrous 10	None Detected
41 519439	2x4 SAT Holes	Room C-325	gray	Mineral Wool 30 Cellulose 60 Non-Fibrous 10	None Detected
42 519440	2x4 SAT Holes	Room C-308	gray	Mineral Wool 30 Cellulose 60 Non-Fibrous 10	None Detected
43 519441	1x1 Splined AT	Room E-515	gray	Mineral Wool 90 Cellulose 2 Non-Fibrous 8	None Detected
44 519442	1x1 Splined AT	Room A-102	gray	Mineral Wool 90 Cellulose 2 Non-Fibrous 8	None Detected
45 519443	Hidden 9x9 VFT	Room E-512	gray	Non-Fibrous 98	**Detected** **Chrysotile 2**
46 519444	Hidden 9x9 VFT	Room E-511	gray	Non-Fibrous 98	**Detected** **Chrysotile 2**
47 519445	Black Mastic	On #45	black	Non-Fibrous 98	**Detected** **Chrysotile 2**
48 519446	Black Mastic	On #46	black	Non-Fibrous 95	**Detected** **Chrysotile 5**
49 519447	White 12x12 VFT	Room D-407	white	Non-Fibrous 100	None Detected
50 519448	White 12x12 VFT	Room B-213	white	Non-Fibrous 100	None Detected

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
51 519449	Yellow Glue	On #49	yellow	Non-Fibrous 100	None Detected
52 519450	Yellow Glue	On #50	yellow	Non-Fibrous 100	None Detected
53 519451	Off White w/Red Black 12x12 VFT	400 S Hallway	white	Non-Fibrous 100	None Detected
54 519452	Off White w/Red Black 12x12 VFT	300 S Hallway	white	Non-Fibrous 100	None Detected
55 519453	Yellow Glue	On #53	yellow	Non-Fibrous 100	None Detected
56 519454	Yellow Glue	On #54	yellow	Non-Fibrous 100	None Detected
57 519455	White w/Black Fleck 12x12 VFT	Room B-218	gray	Non-Fibrous 98	Detected Chrysotile 2
58 519456	White w/Black Fleck 12x12 VFT	Room B-201	gray	Non-Fibrous 98	Detected Chrysotile 2
59 519457	Black Mastic	On #57	black	Non-Fibrous 95	Detected Chrysotile 5
60 519458	Black Mastic	On #58	black	Non-Fibrous 95	Detected Chrysotile 5
61 519459	Off White w/Blue 12x12 VFT	100 S Hallway	white	Non-Fibrous 100	None Detected
62 519460	Off White w/Blue 12x12 VFT	100 S Hallway	white	Non-Fibrous 100	None Detected
63 519461	Yellow Glue	On #61	yellow	Non-Fibrous 100	None Detected
64 519462	Yellow Glue	On #62	yellow	Non-Fibrous 100	None Detected
65 519463	White w/Blue 12x12 VFT	500 S Hallway	white	Non-Fibrous 100	None Detected
66 519464	White w/Blue 12x12 VFT	200 S Hallway	white	Non-Fibrous 100	None Detected
67 519465	Black Mastic	On #65	multi	Non-Fibrous 97	Detected Chrysotile 3
68 519466	Black Mastic	On #66	multi	Non-Fibrous 97	Detected Chrysotile 3

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
69 519467	Joint Compound	AMOIS Building	white	Non-Fibrous 100	None Detected
70 519468	Joint Compound	AMOIS Building	white	Non-Fibrous 100	None Detected
71 519469	2x4 SAT	AMOIS Building	gray	Mineral Wool 20 Cellulose 70 Non-Fibrous 10	None Detected
72 519470	2x4 SAT	AMOIS Building	gray	Mineral Wool 20 Cellulose 70 Non-Fibrous 10	None Detected
73 519471	White 12x12 VFT	AMOIS Building	white	Non-Fibrous 100	None Detected
74 519472	White 12x12 VFT	AMOIS Building	white	Non-Fibrous 100	None Detected
75 519473	Yellow Glue	AMOIS Building	yellow	Non-Fibrous 100	None Detected
76 519474	Yellow Glue	AMOIS Building	yellow	Non-Fibrous 100	None Detected
77 519475	Joint Compound	MVTV Building	white	Non-Fibrous 100	None Detected
78 519476	Joint Compound	MVTV Building	white	Non-Fibrous 100	None Detected
79 519477	2x4 SAT	MVTV Building	gray	Mineral Wool 20 Cellulose 70 Non-Fibrous 10	None Detected
80 519478	2x4 SAT	MVTV Building	gray	Mineral Wool 20 Cellulose 70 Non-Fibrous 10	None Detected
81 519479	White 12x12 VFT	MVTV Building	white	Non-Fibrous 100	None Detected
82 519480	White 12x12 VFT	MVTV Building	white	Non-Fibrous 100	None Detected
83 519481	Yellow Glue	MVTV Building	yellow	Non-Fibrous 100	None Detected
84 519482	Yellow Glue	MVTV Building	yellow	Non-Fibrous 100	None Detected

Wednesday 25

Analyzed by: Erik Gorgas

End of Report

Batch: 46823

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Strawster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adlab@uec-env.com

PLM
72-hour TAT

Town/City: Oak Bluffs MA Building Name MVRHS

Sample	Result	Description of Material	Sample Location
1		Spray-On Fireproofing	Auditorium
2		"	"
3		"	"
4		"	"
5		"	"
6		"	"
7		"	"
8		Boiler Exhaust Insulation	main boiler room
9		"	"
10		"	"
11		Grey Sink Coating	Room A-103
12		"	Room C-326
13		Interior window glaze Black	Boy's Locker room
14		"	Girls Locker room
15		Interior window glaze Grey	200's Hallway
16		"	"
17		Interior wood window glaze	500's Hallway
18		"	100's Hallway
19		Science lab countertop	Room C-308
20		"	Room C-325

Reported By: Jason Beane Date: 9-16-19 Due Date:

Received By: Date: 9/20/19

UNIVERSAL ENVIRONMENTAL CONSULTANTS

CHAIN OF CUSTODY

PLM

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel. (508) 628-5466 - Fax (508) 628-5468
adieb@uec-env.com

Town/City: Oak Bluffs, MA Building Name MVRHS

Sample	Result	Description of Material	Sample Location
21		Tackboard Glue	Room D-407
22		1 1	Room D-401B
23		Textured Ceiling Plaster	Girls Locker room
24			
25			
26			
27			Boys Locker room
28			
29			
30		Joint Compound	Entry Hallway
31			Auditorium
32			Auditorium Lobby
33			Library
34		Rough Plaster wall	100s Hallway
35			500s Hallway
36			1 1
37		2x4 SAT	Room D-417
38		1 1	Room B-213
39		2x4 SAT Decorative	Room D-401B
40		1 1	400s Hallway

Reported By: Jason Beeche Date: 9-16-19 Due Date:

Received By: Date:

UNIVERSAL ENVIRONMENTAL CONSULTANTS

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Browstar Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

PLM

Town/City: Oak Bluffs, MA Building Name MVRHS

Sample	Result	Description of Material	Sample Location
41		2x4 SAT Holes	Room C-325
42		" "	Room C-309
43		1x1 Spline & AT	Room E-515
44		" "	Room A-102
45		Hidden 9x9 VFT	Room E-512
46		" "	Room E-511
47		Black mastic	on # 45
48		" "	on # 46
49		White 12x12 VFT	Room D-407
50		" "	Room B-213
51		yellow glue	on # 49
52		" "	on # 50
53		Off white w/Red Black 12x12 VFT	400s Hallway
54		" "	300s Hallway
55		yellow Glue	on # 53
56		" "	on # 54
57		White w/Black Fleck 12x12 VFT	Room B-218
58		" "	Room B-201
59		Black mastic	on # 57
60		" "	on # 58

Reported By: Jason Becotte Date: 9-16-19 Due Date

Received By Date

UNIVERSAL ENVIRONMENTAL CONSULTANTS

CHAIN OF CUSTODY

PLM

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel. (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

Town/City: Oak Bluffs, MA Building Name MVRHS

Sample	Result	Description of Material	Sample Location
61		Off white w/Blue 12x12 VFT	100's Hallway
62		" "	" "
63		Yellow Glue	on # 61
64		" "	on # 62
65		White w/Blue 12x12 VFT	500's Hallway
66		" "	200's Hallway
67		Black mastic	on # 65
68		" "	on # 66
69		Joint Compound	AMOI's Building
70		" "	" "
71		2x4 SAT	AMOI's Building
72		" "	" "
73		White 12x12 VFT	AMOI's Building
74		" "	" "
75		Yellow glue	" "
76		" "	" "
77		Joint Compound	MVTV Building
78		" "	" "
79		2x4 SAT	MVTV Building
80		" "	" "

Reported By: Jason Becotte Date: 9-16-19 Due Date: ----------

Received By: ---------- Date ----------

UNIVERSAL ENVIRONMENTAL CONSULTANTS

CHAIN OF CUSTODY

PLM

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5456 - Fax: (508) 628-5486
adieb@uec-env.com

Town/City: Oak Bluffs, MA Building Name MVRHS

Sample	Result	Description of Material	Sample Location
81		White 12x12 VFT	MVTV Building
82		" "	" "
83		Yellow Glue	" "
84		" "	" "

Reported By: Jason Becotte Date: 9-16-19 Due Date: ----------

Received By - ---------- Date ----------

UNIVERSAL ENVIRONMENTAL CONSULTANTS

Asbestos Identification Laboratory.

165 New Boston St., Ste 227
Woburn, MA 01801
781-932-9600

Web: www.asbestosidentificationlab.com Email:
mikemanning@asbestosidentificationlab.com

NVLAP Testing Lab Code: 200919-0

Batch: 120612

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Information

Vineyard Regional High,
Oak Bluffs,
MA

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

Dear Ammar Dieb,

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project. The Analysis Method is BULK PLM ANALYSIS, EPA/600/R-93/116The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.
Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Information provided by the customer can affect the validity of results. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. All customer information will be maintained in confidentiality. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Ammar Dieb for your business.

Michael Manning
Owner/Director

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Information

Vineyard Regional High,
Oak Bluffs,
MA

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
1 1335027	Window Frame Caulk	Exterior Window	white	Non-Fibrous 100	None Detected
2 1335028	Window Frame Caulk	Exterior Window	white	Non-Fibrous 100	None Detected
3 1335029	Window Frame Caulk	Exterior Window	white	Non-Fibrous 100	None Detected
4 1335030	Window Frame Caulk	Exterior Window	white	Non-Fibrous 100	None Detected
5 1335031	Window Frame Caulk	Exterior Window	white	Non-Fibrous 100	None Detected
6 1335032	Window Glass Glaze	Exterior Window	black	Non-Fibrous 100	None Detected
7 1335033	Window Glass Glaze	Exterior Window	black	Non-Fibrous 100	None Detected
8 1335034	Window Glass Glaze	Exterior Window	black	Non-Fibrous 100	None Detected
9 1335035	Window Glass Glaze	Exterior Window	black	Non-Fibrous 100	None Detected
10 1335036	Window Glass Glaze	Exterior Window	gray	Non-Fibrous 100	None Detected
11 1335037	Door Frame Caulk	Exterior Door	white	Non-Fibrous 100	None Detected
12 1335038	Door Frame Caulk	Exterior Door	white	Non-Fibrous 100	None Detected
13 1335039	Door Frame Caulk	Exterior Door	white	Non-Fibrous 100	None Detected
14 1335040	Door Frame Caulk	Exterior Door	white	Non-Fibrous 100	None Detected
15 1335041	Expansion Joint Caulk	Exterior Brick Joint	gray	Non-Fibrous 100	None Detected
16 1335042	Expansion Joint Caulk	Exterior Brick Joint	gray	Non-Fibrous 100	None Detected

Sampled: July 29, 2024 **Received:** July 29, 2024 **Analyzed:** July 29, 2024

Tuesday 30 July 2024

Analyzed by: Valerie Jasmette **Batch:** 120612

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

PLM
6-hour TAT

Town/City: Oak Bluffs, MA Building Name Vineyard Regional High

Sample	Description of Material	Sample Location
1	Window Frame Caulk	Exterior window
2	"	"
3	"	"
4	"	"
5	"	"
6	window glass glaze	"
7	"	"
8	"	"
9	"	"
10	"	"
11	Door Frame Caulk	Exterior door
12	"	"
13	"	"
14	"	"
15	expansion joint caulk	exterior brick joint
16	L L	L L

Reported By: Jason Beatte Date: 7-29-24 Due Date: **24-Hours**

Received By: [signature] Date: 7/29/24

OrderID: 132404483

UEC universal environmental consultants

12 Brewster Road
Framingham, MA 01702

Phone: 508.628.5486
Fax: 508.628.5488

132404483

CHAIN OF CUSTODY

BUILDING / SITE NAME: Martha's Vineyard Reg. HS. TOWN / CITY: Oak Bluffs

WORK AREA: Throughout building STATE: MA

Analysis Type	Turnaround Time (x)				
	6-8 Hr	12 Hr	24 Hr	48 Hr	72 hr
TEM / AHERA					
TEM / Level II					
TEM / Dust					
TEM / Bulk					
TEM / Water					
PLM					
Mold			X		
Other:					

Specific Project Notes

SAMPLE ID	MATERIAL DESCRIPTION	SAMPLE LOCATION	START	STOP	TIME	L/MIN	VOLUME
1	3830 4794	Library	10:41	10:51	10	15	150
2	3830 4771	Main Office	10:43	10:53	10	15	150
3	3830 4778	Nurses Office	1108	1118	10	15	150
4	3830 4781	Guidance A103	10:49	10:59	10	15	150
5	3830 5315	Student Affairs A104	10:55	11:05	10	15	150
6	8890 4838	Cafeteria	10:59	11:09	10	15	150
7	3830 4776	504 Student Counseling	1103	1113	10	15	150
8	3830 4770	Weight Room	1131	1141	10	15	150
9	3830 4773	Classroom A111	1149	1159	10	15	150
10	3830 4787	Classroom E511	1152	1202	10	15	150
11	3830 4760	Classroom D419	1156	1206	10	15	150
12	3830 4759	Classroom B213	1203	1213	10	15	150
13	3830 4768	Auditorium Seating Area	1209	1219	10	15	150
14	3830 4798	Auditorium Stage Right	1212	1222	10	15	150
15	3830 5369	Classroom B201	1233	1243	10	15	150
16	3830 4757	Classroom C301	1250	1300	10	15	150
17	3830 4786	Classroom C307	1246	1256	10	15	150
18	3830 4795	Classroom C310	1231	1241	10	15	150
19	3830 4758	Classroom D404	1228	1238	10	15	150
20	3830 4765	Outside	1309	1319	10	15	150

SAMPLED BY: Sydney Soune DATE/TIME: 7/26/24

RECEIVED BY: DATE/TIME:

RELINQUISHED BY: DATE/TIME:

RECEIVED IN LAB BY: SM 1200 DATE/TIME:

RECD EMSL-BOSTON JUL 29 2024

WAIN IN

Page 1 Of 1

EMSL Analytical, Inc.
5 Constitution Way, Unit A Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 132404483
Customer ID: UEC63
Customer PO:
Project ID:

Attention: Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Phone: (617) 984-9772
Fax: (508) 628-5488
Collected Date: 07/26/2024
Received Date: 07/29/2024 12:00 PM
Analyzed Date: 07/29/2024 - 07/30/2024

Project: Martha's Vineyard Reg. HS; Throughout Building; Oak Bluffs, MA

Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	132404483-0001			132404483-0002			132404483-0003		
Client Sample ID:	1			2			3		
Volume (L):	150			150			150		
Sample Location:	Library			Main Office			Nurses Office		
Spore Types	**Raw Count†**	**Count/m³**	**% of Total**	**Raw Count†**	**Count/m³**	**% of Total**	**Raw Count†**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	1	20	9.1	1	20	11.1	5	100	10.2
Aspergillus/Penicillium++	4	80	36.4	6	100	55.6	8	200	20.4
Basidiospores	1	20	9.1	-	-	-	13	270	27.6
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	6	100	45.5	-	-	-	4	80	8.2
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	3	60	6.1
Myxomycetes++	-	-	-	3	60	33.3	13	270	27.6
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	**12**	**220**	**100**	**10**	**180**	**100**	**46**	**980**	**100**
Hyphal Fragment	2	40	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	21	-	-	21	-	-	21	-
Analyt. Sensitivity 300x	-	7*	-	-	7*	-	-	7*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	2	-	-	1	-	-	1	-

† Due to method stopping rules, extrapolated raw counts are reported in parenthesis.

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

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Steve Grise, Laboratory Manager
or other Approved Signatory

Initial report from: 07/30/2024 11:56 AM

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EMSL Order: 132404483
Customer ID: UEC63
Customer PO:
Project ID:

Attention: Ammar Dieb
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12 Brewster Road
Framingham, MA 01702

Phone: (617) 984-9772
Fax: (508) 628-5488
Collected Date: 07/26/2024
Received Date: 07/29/2024 12:00 PM
Analyzed Date: 07/29/2024 - 07/30/2024

Project: Martha's Vineyard Reg. HS; Throughout Building; Oak Bluffs, MA

Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	132404483-0004			132404483-0005			132404483-0006		
Client Sample ID:	4			5			6		
Volume (L):	150			150			150		
Sample Location:	Guidance A103			Student Affairs A104			Cafeteria		
Spore Types	**Raw Count†**	**Count/m³**	**% of Total**	**Raw Count†**	**Count/m³**	**% of Total**	**Raw Count†**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	12	250	1.8	-	-	-	4	80	2.6
Aspergillus/Penicillium++	103(618)	12700	90.2	106(424)	8700	86.2	109(119)	2440	79
Basidiospores	13	270	1.9	5	100	1	3	60	1.9
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	34	700	5	34	700	6.9	19	390	12.6
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	3	60	0.4	2	40	0.4	4	80	2.6
Myxomycetes++	7	100	0.7	27	550	5.5	2	40	1.3
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	**687**	**14080**	**100**	**492**	**10090**	**100**	**151**	**3090**	**100**
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	21	-	-	21	-	-	21	-
Analyt. Sensitivity 300x	-	7*	-	-	7*	-	-	7*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	1	-

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Project: Martha's Vineyard Reg. HS; Throughout Building; Oak Bluffs, MA

Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	132404483-0007			132404483-0008			132404483-0009		
Client Sample ID:	7			8			9		
Volume (L):	150			150			150		
Sample Location:	504 Student Counseling			Weight Room			Classroom A111		
Spore Types	**Raw Count†**	**Count/m³**	**% of Total**	**Raw Count†**	**Count/m³**	**% of Total**	**Raw Count†**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium++	55	1100	75.9	5	100	100	23	470	92.2
Basidiospores	1	20	1.4	-	-	-	2	40	7.8
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	10	210	14.5	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	2	40	2.8	-	-	-	-	-	-
Myxomycetes++	4	80	5.5	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	**72**	**1450**	**100**	**5**	**100**	**100**	**25**	**510**	**100**
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	21	-	-	21	-	-	21	-
Analyt. Sensitivity 300x	-	7*	-	-	7*	-	-	7*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	2	-	-	1	-	-	1	-

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Project: Martha's Vineyard Reg. HS; Throughout Building; Oak Bluffs, MA

Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	132404483-0010			132404483-0011			132404483-0012		
Client Sample ID:	10			11			12		
Volume (L):	150			150			150		
Sample Location:	Classroom E511			Classroom D419			Classroom B213		
Spore Types	**Raw Count†**	**Count/m³**	**% of Total**	**Raw Count†**	**Count/m³**	**% of Total**	**Raw Count†**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	3	60	2.2	1	20	5.4	1	20	5.1
Aspergillus/Penicillium++	103(112)	2300	84.9	7	100	27	11	230	59
Basidiospores	1	20	0.7	-	-	-	4	80	20.5
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	14	290	10.7	11	230	62.2	3	60	15.4
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	2	40	1.5	-	-	-	-	-	-
Myxomycetes++	-	-	-	1	20	5.4	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	**132**	**2710**	**100**	**20**	**370**	**100**	**19**	**390**	**100**
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	21	-	-	21	-	-	21	-
Analyt. Sensitivity 300x	-	7*	-	-	7*	-	-	7*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	1	-

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Project: Martha's Vineyard Reg. HS; Throughout Building; Oak Bluffs, MA

Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	132404483-0013			132404483-0014			132404483-0015		
Client Sample ID:	13			14			15		
Volume (L):	150			150			150		
Sample Location:	Auditorium Seating Area			Auditorium Stage Right			Classroom B201		
Spore Types	**Raw Count†**	**Count/m³**	**% of Total**	**Raw Count†**	**Count/m³**	**% of Total**	**Raw Count†**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	1	20	2.1	2	40	4	3	60	2.1
Aspergillus/Penicillium++	43	880	93.6	33	680	67.3	51	1000	35.3
Basidiospores	2	40	4.3	1	20	2	15	310	11
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	13	270	26.7	68	1400	49.5
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	1	20	0.7
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	2	40	1.4
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	**46**	**940**	**100**	**49**	**1010**	**100**	**140**	**2830**	**100**
Hyphal Fragment	1	20	-	1	20	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	21	-	-	21	-	-	21	-
Analyt. Sensitivity 300x	-	7*	-	-	7*	-	-	7*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	1	-

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Project: Martha's Vineyard Reg. HS; Throughout Building; Oak Bluffs, MA

Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	132404483-0016			132404483-0017			132404483-0018		
Client Sample ID:	16			17			18		
Volume (L):	150			150			150		
Sample Location:	Classroom C301			Classroom C307			Classroom C310		
Spore Types	**Raw Count†**	**Count/m³**	**% of Total**	**Raw Count†**	**Count/m³**	**% of Total**	**Raw Count†**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	1	20	1
Aspergillus/Penicillium++	105(315)	6460	98.8	6	100	33.3	84	1700	82.1
Basidiospores	2	40	0.6	-	-	-	2	40	1.9
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	2	40	0.6	8	200	66.7	14	290	14
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	1	20	1
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	**319**	**6540**	**100**	**14**	**300**	**100**	**102**	**2070**	**100**
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	21	-	-	21	-	-	21	-
Analyt. Sensitivity 300x	-	7*	-	-	7*	-	-	7*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	1	-

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Project: Martha's Vineyard Reg. HS; Throughout Building; Oak Bluffs, MA

Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	132404483-0019			132404483-0020		
Client Sample ID:	19			20		
Volume (L):	150			150		
Sample Location:	Classroom D404			Outside		
Spore Types	**Raw Count†**	**Count/m³**	**% of Total**	**Raw Count†**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-
Ascospores	-	-	-	8	200	7.6
Aspergillus/Penicillium++	26	530	96.4	2	40	1.5
Basidiospores	1	20	3.6	15	310	11.8
Bipolaris++	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-
Cladosporium	-	-	-	45	920	35.1
Curvularia	-	-	-	1	20	0.8
Epicoccum	-	-	-	1	20	0.8
Fusarium++	-	-	-	-	-	-
Ganoderma	-	-	-	10	210	8
Myxomycetes++	-	-	-	34	700	26.7
Pithomyces++	-	-	-	9	200	7.6
Rust	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-
Total Fungi	**27**	**550**	**100**	**125**	**2620**	**100**
Hyphal Fragment	-	-	-	4	80	-
Insect Fragment	-	-	-	-	-	-
Pollen	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	21	-	-	21	-
Analyt. Sensitivity 300x	-	7*	-	-	7*	-
Skin Fragments (1-4)	-	1	-	-	-	-
Fibrous Particulate (1-4)	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-

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NRSB Device Code 12193

Laboratory Report for:

Universal Environmental Consultant
12 Brewster Road
Framingham MA 01702

Property Tested:

Martha's Vineyard Reg H.S.
100 Edgartown Vinyard Haven Rd
Oak Bluffs MA 02557

Log Number	Device Number	Test Exposure Duration:				Area Tested	Result pCi/L
8582516	5081737	07/26/2024	11:13 am	07/29/2024	10:08 am	Floor G Room Nurses Office	< 0.4
8582517	5081738	07/26/2024	11:33 am	07/29/2024	10:15 am	Floor G Weight Room (other building)	0.6
8582518	5081739	07/26/2024	1:39 pm	07/29/2024	9:44 am	Floor G Main Office Hallway	< 0.4
8582519	5081740	07/26/2024	1:40 pm	07/29/2024	9:54 am	Floor G A104 Student Affairs	0.4
8582520	5081741	07/26/2024	1:42 pm	07/29/2024	9:53 am	Floor G A103 Guidance	< 0.4
8582521	5081742	07/26/2024	1:43 pm	07/29/2024	9:59 am	Floor G E504 Student Counseling	< 0.4
8582522	5081743	07/26/2024	1:45 pm	07/29/2024	10:00 am	Floor G Classroom E511	< 0.4
8582523	5081744	07/26/2024	1:47 pm	07/29/2024	10:21 am	Floor G Classroom D419	< 0.4
8582524	5081745	07/26/2024	1:50 pm	07/29/2024	10:02 am	Floor G Auditorium Office	0.5
8582525	5081746	07/26/2024	1:59 pm	07/29/2024	10:22 am	Floor G Green Room Hallway	0.4
8582526	5081747	07/26/2024	2:00 pm	07/29/2024	10:29 am	Floor G Classorom D404	1.3

Comment: Universal Environmental Consultant was emailed a copy of this report. A copy of this report was emailed to adieb@uec-env.com.

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Date Received: 07/30/2024 Date Logged: 07/30/2024 Date Analyzed: 07/31/2024 Date Reported: 07/31/2024

Report Reviewed By: Blair Thornton Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

Disclaimer:

The counting uncertainty of this radon measurement is ~+/- 10 %. Factors contributing to uncertainty include statistical variations, daily and seasonal variations in radon concentrations, sample collection techniques and operation of the dwelling. Interference with test conditions may influence the test results.

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AccuStar
Professional Radon Laboratory Services Since 1984

Radon in Air

NELAC NY 11769
NRPP 101193 AL
NRSB ARL0017

EPA Method #402-R-92-004
Liquid Scintillation
NRPP Device Code 8088
NRSB Device Code 12193

Laboratory Report for:

Universal Environmental Consultant
12 Brewster Road
Framingham MA 01702

Property Tested:

Martha's Vineyard Reg H.S.
100 Edgartown Vinyard Haven Rd
Oak Bluffs MA 02557

Log Number	Device Number	Test Exposure Duration:				Area Tested	Result pCi/L
8582527	5081748	07/26/2024	2:02 pm	07/29/2024	10:26 am	Floor G Classroom C310	< 0.4
8582528	5081749	07/26/2024	2:03 pm	07/29/2024	10:29 am	Floor G Classroom C307	< 0.4
8582529	5081750	07/26/2024	2:05 pm	07/29/2024	10:29 am	Floor G Classroom C301	0.4
8582530	5081751	07/26/2024	2:07 pm	07/29/2024	10:10 am	Floor G Classroom B213	< 0.4
8582531	5081752	07/26/2024	2:08 pm	07/29/2024	10:18 am	Floor G Classroom B201	< 0.4
8582532	5081753	07/26/2024	2:11 pm	07/29/2024	10:32 am	Floor G Classroom A111	< 0.4
8582533	5081754	07/26/2024	2:14 pm	07/29/2024	10:35 am	Floor G Library	< 0.4
8582534	5081755	07/26/2024	2:13 pm	07/29/2024	10:33 am	Floor G Cafeteria	< 0.4
8582535	5081756	07/26/2024	2:16 pm	07/29/2024	10:35 am	Floor G Maintenance Office in Library	< 0.4

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4.9
METHODS AND ASSUMPTIONS

For the purposes of the PDP submission the existing conditions plan of the Martha's Vineyard Regional High School was developed using existing floor plan drawings from a study done by Tappe Architects in 2017 and confirmed in the field through visual confirmation. Site plan information consists of available record documentation including satellite images and regulatory mapping. The site has also been inspected by the landscape and civil engineering team. A site survey has been completed.

Building systems were inspected and reviewed by the applicable engineering trades and supplemented with discussions with onsite personnel who operate the building.

Preliminary test borings were completed on the High School property in locations most likely to be considered for an addition or replacement building. Results of geo technical investigation are included in the PDP submission.

Field testing has occurred for ACM's within the building including laboratory confirmation. The ACM report is included with the PDP submission.

A preliminary traffic study is complete and included in the PDP submission. This reflects the existing condition only and a future conditions report will be prepared once a preferred option is selected.

During the PSR phase at a minimum additional information will be prepared related to traffic for the proposed condition. A flow test will also be performed.

The Designer anticipates making any further recommendations on testing and field investigation based on the preferred option that is established by the District at the PSR and schematic phases. As is customary, it is anticipated at a minimum that supplementary investigations for geo-tech, ACM investigation and possibly supplementary survey will be required during the Design Development phase should be the project be approved and proceed into later phases.