# **Capital Assessment Plan for the Yarmouth Public Schools**

Station Avenue Elementary School

Marguerite E. Small Elementary School

Mattacheese Middle School



Prepared by







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The Dennis-Yarmouth Regional School District has been proactive in dealing with the maintenance and upkeep of all the school buildings. A Capital Assessment Plan for all of the elementary schools and middle school was completed in 2008. Some of the recommended improvements noted in that plan have been implemented. There are many recommended improvements that were not completed and a re-assessment of the needs is in order. This study is a re-evaluation of the needs presented in the 2008 report and also provides a series of new needs that have emerged since the last survey. This report will allow for a prioritized list of work items and funding to be scheduled before the conditions change and major repairs became necessary.

Although the facility maintenance department continues to schedule routine maintenance improvements and upgrades, there are items in each of the schools that should be reviewed that fall outside the prevue of regular maintenance review.

The current school administration is seeking to be able to forecast building needs and funds and seek to produce a current assessment plan for all of the schools in the DY District. This assessment report will serve as the "master plan" of building components that should be addressed. This report projects costs for the next 5 years and establishes a hierarchy of when the components should be dealt with based on the observed present conditions.

## CAPITAL ASSESSMENT PLAN DESCRIPTION

### General

Knight, Bagge & Anderson, Inc. was requested by the Dennis-Yarmouth Regional School District to review and update the Capital Assessment Study of all public schools in the District that was completed in 2008. The study includes:

- Field assessment of existing conditions including site, architectural, plumbing, mechanical and electrical components
- Quality Assessment of potential work items
- · Generate plan documents of each building
- Note and photo documentation of existing conditions
- Cost estimates based on a 5-year projection of phased expenditures

The engineering firm of Garcia, Galuska, DeSouza. provided services for plumbing, mechanical and electrical systems.

## **Methods Employed**

Facility Analysis

Initially KBA produced all of the existing site plans and floor plans for each school on CADD. Site visits were made to confirm the accuracy of the plans. Team members for all disciplines (Architectural, plumbing, mechanical and electrical) made field observations of all systems and components in each building. Conditions were photographed and documented. Questionnaires about systems at each school were issued to the district and their responses have been incorporated into this report. Interviews of maintenance and school administrators were conducted to gain input about the history and observed performance of the building systems and components.

### Cost Estimates

Quantity take offs were made of all building components. Based on field evaluation and assessments of each building element, a hierarchy was established that predicts the anticipated life expectancy remaining for each element. Cost estimates were then generated that reflect the hierarchy of work items and forecast both the critical time and projected cost impact of addressing the capital improvements over the next 5-year period.

## **Assessment Report Intent**

This report is a review of the conditions of numerous items and systems throughout each school building. We have presented out professional opinions as to when each item should need to be addressed. It is recommended that this report be reviewed annually and updated to address any items that may not have performed as anticipated that need to be adjusted as to when it should be addressed.

## PERTINENT CODE ISSUES & SCHOOL BUILDING ASSESSED VALUES

There are many Building Code issues that come into play in evaluating the triggers for work that must be performed as part of any school renovation project. Several building codes are triggered based on the cost of a project. The Massachusetts Architectural Access Board (MAAB) and the codes governing when a building must have sprinklers installed are two such items that must be evaluated in determining the scope of work for any proposed work at the schools.

### 1. Building Accessibility for Persons with Disabilities

### Requirements

Alterations to the building must comply with the requirements of the Massachusetts Architectural Access Board Regulations (521 CMR). For existing school buildings the requirements of 521 CMR are based on the cost of the proposed work. If the cost of the proposed work is **less** than \$100,000, only the new work must comply. 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 repairs or replacement, window repairs or replacement and repointing and masonry repair work. The total amount of exempt work allowed to be deducted from this compliance threshold totals \$500,000 in any three-year period. If the cost of the proposed work is **greater than 30% of the fully assessed cash value** of the existing building, then the entire building is required to fully comply with 521 CMR (521 CMR Section 3.3.2). There is no exempt work in determining the 30% criteria.

As described above, any proposed work that exceeds \$100,000 will require that an accessible entrance, toilet rooms and drinking fountain be provided. The full assessed value of each of the existing school buildings is presented in this report. Therefore, any proposed work over a 36 month period exceeding the 30% threshold mandates that that entire school be brought into compliance.

### 2. Fire Protection Systems:

## Requirements

780 CMR. Fire protection systems required by 780 CMR 9 (including fire sprinklers, standpipe systems, fire alarm systems, fire detection systems, and/or fire extinguishers) are required to be provided in existing buildings (or portions thereof), which are substantially altered or substantially renovated. A substantial renovation or alteration is defined as work, which is major in scope and expenditure when compared to the work and expenditure, required for the installation of a fire protection system. The building official makes the determination of whether a particular renovation is substantial (780 CMR Section 3404.12 & 3401.1). Although the definition of substantial renovation does not contain a specific dollar threshold, if the cost of the fire protection system can be included in the project budget without increasing the project budget by more than 15% the renovation is generally considered substantial. A 15% threshold has been added to the fire protection requirements for existing buildings in the 7th edition of 780 CMR which is now governing project design since September, 2008.

As described above, if the cost to install a new sprinkler system in any of the schools is less than 15% of the cost of the proposed renovation, then the project is considered to be a substantial renovation and if so, then installing a sprinkler system would be required.

## PERTINENT CODE ISSUES & SCHOOL BUILDING ASSESSED VALUES

## SCHOOL ASSESSED VALUES

The fully assessed values for each of the schools was provided by the Yarmouth Assessor's Office. The following are the values for the schools in Yarmouth:

School	Building Assessed Value
Station Avenue Elementary	\$7,498,043
Marguerite E. Small Elementary	\$4,947,238
Mattacheese Middle School	\$10,402,400

Therefore, it is important to evaluate the possible increased scope of work that may be the result of the dollar value of proposed work during any 36 month period that could trigger the need for code improvement upgrades, most notably the Massachusetts Architectural Access Code.

From the MAAB perspective, if the value of permitted work over any 36 month period exceeds 30 percent of the full assessed value of the building, then the work must include bringing the entire building into compliance with MAAB. Those values for the schools in Yarmouth are as follows:

Station Avenue Elementary \$7,498,043 x 30% = \$2,249,413

Marguerite E. Small Elementary \$4,947,238 x 30% = \$1,484,171

Mattacheese Middle School \$10,402,400 x 30% = \$3,120,720

## SCHOOL BUILDING HISTORY/ DESCRIPTION

## Station Avenue Elementary School

276 Station Avenue South Yarmouth, MA

Principal: Peter Crowell

Grades: K-3

2013-2014 Student Enrollment: 450 Total Square Footage: 56,080

This single-story building was constructed in 1995 on a portion of a large 29.5-acre parcel of land. Since that time there hasn't been any major repairs or changes in the building layout. The exterior walls are brick veneer, the roofs are asphalt shingles and PVC membrane and the windows are thermal aluminum with insulated glass. The exterior envelope is aging very well. Likewise the material selection for finishes on the interior have minimized the cost for maintenance. There is a good distribution of parking to the south and southwest of the site. The bus drop off is separated from the vehicular traffic very well. There is a playground area on the southeast side of the site and a large grass playfield on the east side of the site.

## Marguerite E. Small Elementary School

440 Higgins-Crowell Road West Yarmouth, MA

Principal: Carole Eichner

Grades: PK-3

2013-2014 Student Enrollment: 300 Total Square Footage: 49,000

The building was constructed in 1965. The classrooms and corridors were laid out in a circular layout to form a massive interior courtyard. It was said that small animals were allowed to graze in this courtyard. A major exterior renovation project was done in 1999 where all siding, windows and exterior doors were replaced. Within the past 2 years selected sections of the flat roofs were replaced. The original shingle roofs remain on the majority of the building. The interior floors are predominantly terrazzo and tile throughout. The cafeteria is located on the second floor above the music and mechanical spaces. There are cathedral wood plank ceilings and exposed wood beams throughout the building. The building is located on a flat site that also contains the Mattacheese Middle School. There is a large visitor parking lot at the southern side of the site and a small staff/parking lot at the southwest side. There is a limited amount of paved walkways at the southwest side that lead to a playground area and some paved play areas.

## SCHOOL BUILDING HISTORY/ DESCRIPTION

Mattacheese Middle School 400 Higgins-Crowell Road West Yarmouth, MA

Principal: Ann Knell

Grades: 6-7

2013-2014 Student Enrollment: 500 Total Square Footage: 156,600

The building was constructed in 1969 as a 2-story structure with 2 classroom wings, a wing with a 2<sup>nd</sup> floor cafeteria with classrooms below, a central 2-story core with offices on the 1<sup>st</sup> floor and a library above and a connected wing that houses a gymnasium and auditorium. The floor and roof structure is an exposed concrete "waffle" slab. The exterior walls are concrete and dark-toned brick. The flat roofs have been partially reroofed. The windows are single-pane, non-thermal, floor to ceiling windows in the corridor and thermal pane, floor to ceiling windows in all the classrooms. The floors are predominantly tiled, painted and unpainted block walls and the ceilings are exposed concrete. Aside from the partial reroofing and flooring replacement projects there have not been any major expenditures at the Mattacheese. There are two parking lots at the south and southwest side of the site. There is a large paved parking lot at the west side of the site that serves the crowds using the gym and auditorium. There is a limited amount of concrete walkways at the west side of the building and there is a concrete amphitheatre located at the southwest side of the site. To the north of the site there is a large baseball diamond and field and an unkempt quarter-mile cinder running track.

## ASSESSMENT SURVEY INFORMATION

## ASSESSMENT SURVEY INFORMATION

All components of the buildings and site were viewed, documented and photographed. A professional judgment of the observed conditions was made and a priority scale value of 1, 2 or 3 was assessed to each item. The Conditions scale is as follows:

## **Priority**

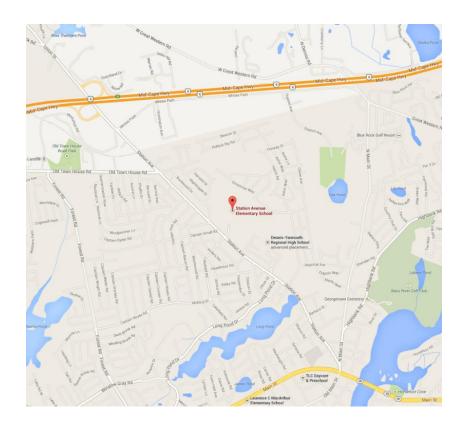
- 1. Is given to an item where action is recommended immediately (within 1 3 years). These items include life safety issues.
- 2. Is given to an item where immediate action is not warranted, however, repairs should be anticipated within 4 5 years.
- 3. Is given to an item that is performing as designed and no actions to repair/replace should be required within the next 5 years.

## **COST ESTIMATE DESCRIPTION**

The format for the cost estimate is broken down into the priority assessment mentioned in the Existing Conditions Survey. This breakdown provides a clear listing and cost for items that are recommended to be addressed in the coming 1 - 3 years and also projects the costs to address anticipated items in the next 4 - 5 years.

There is a tabulation of costs, according to priority, at the end of the estimate for each school.

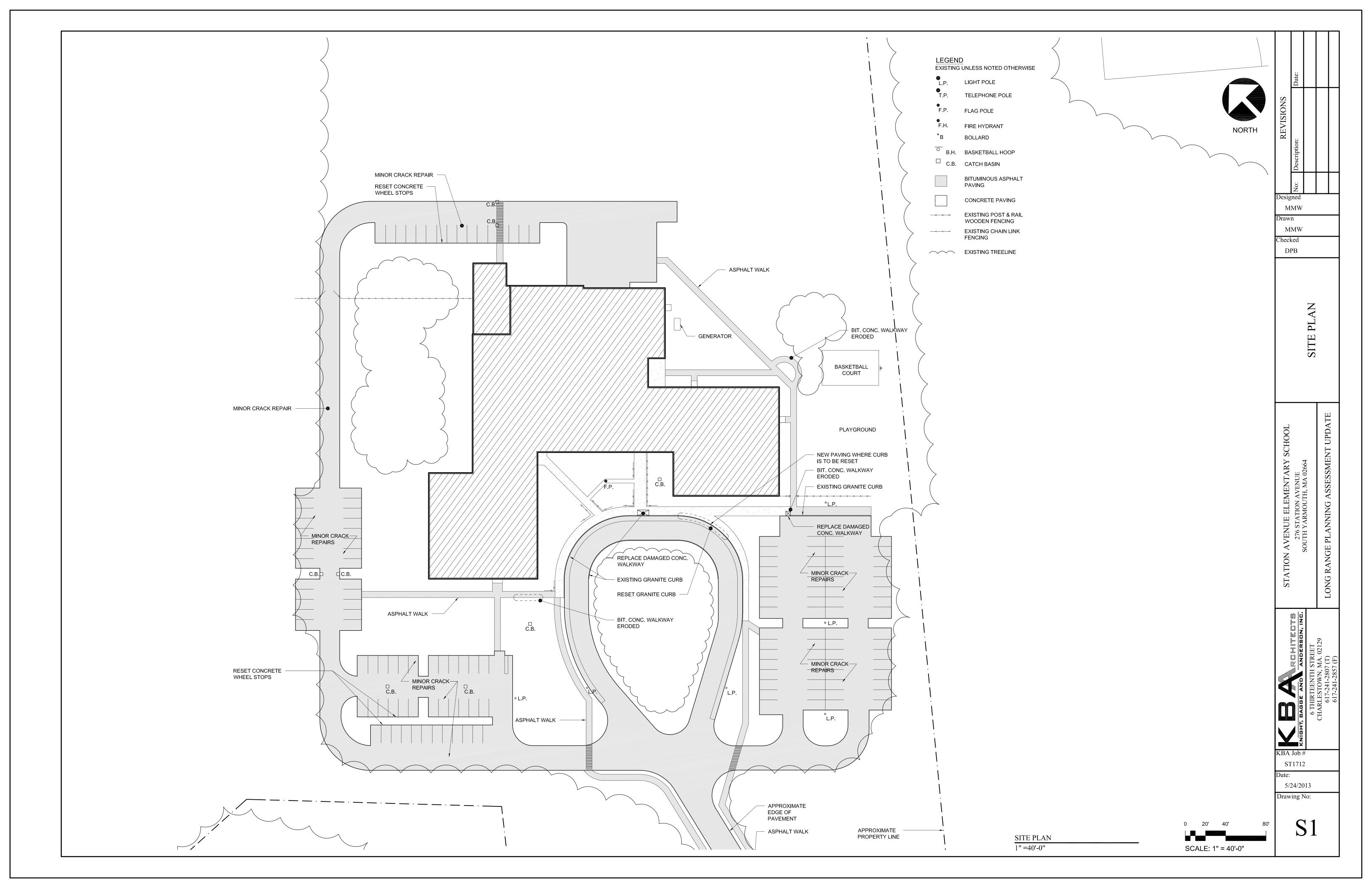
Station Avenue Elementary School 276 Station Avenue South Yarmouth, Massachusetts



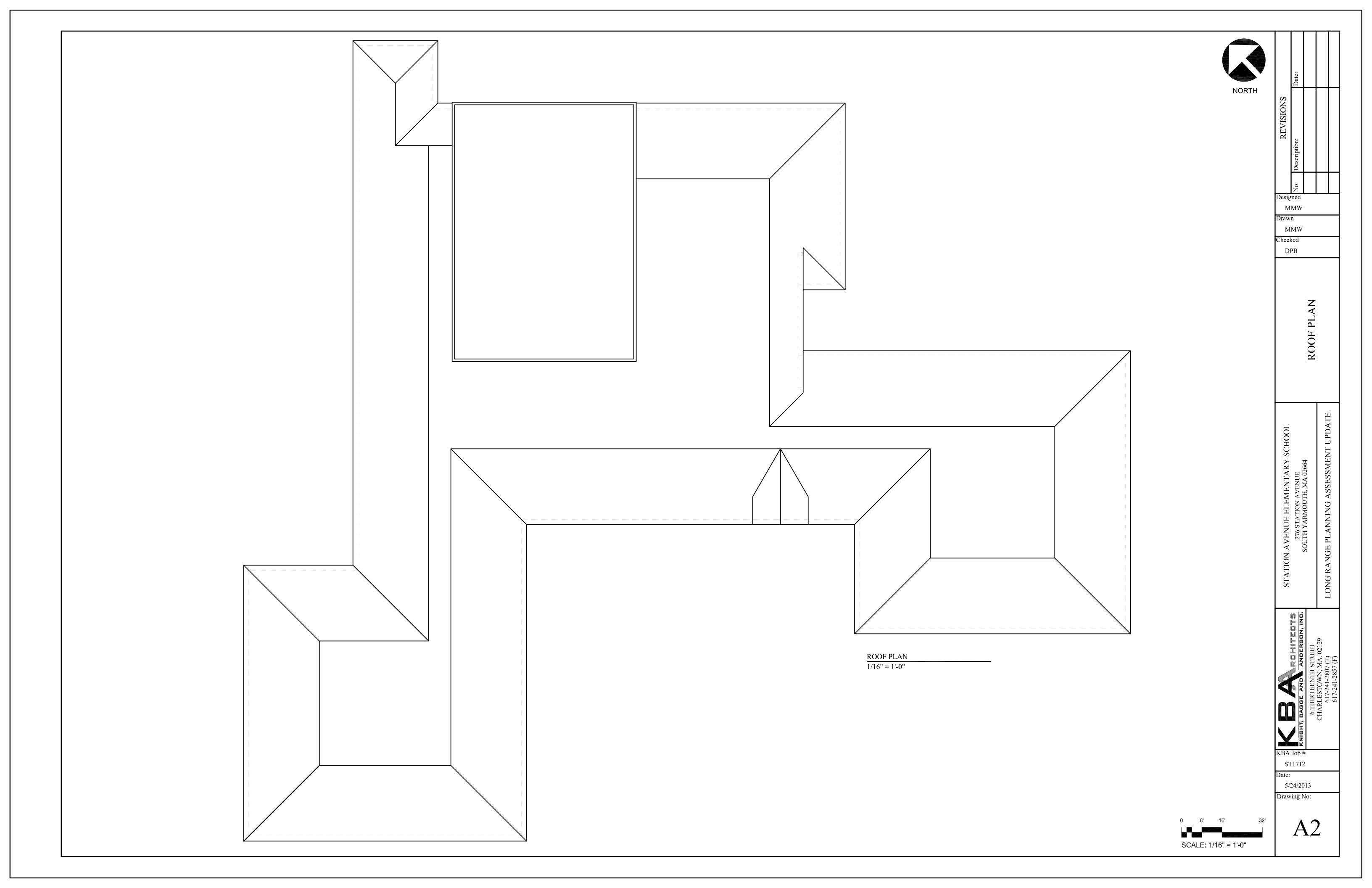


Locus Map

**Aerial Site Plan** 









SITE	WORK								
		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
		Dalamana					Priority 1	Priority 2	Priority 3
1		Driveways							
2		Crack Repairs Sealer		SF	\$0.75 \$0.90		\$27,000 \$32,400		
				01	ψ0.30	30,000	Ψ02,400		
3		Parking  Crack Repairs		SF	\$0.75	47,000	\$35,250		
4		Sealer		SF	\$0.90	47,000	\$42,300		
5	ARCOAS CONTRACTOR OF THE CONTR	Line Painting  Bituminous Pulverize and replacement		LS	\$3,000.00	15,000	\$3,000		

Priority Code Legend

<sup>1.</sup> Action recommended in 1-3 years (life safety, imminent failure or code compliance) 2. Action recommended in 4-5 years 3. No immediate action recommended



SITE V	VORK								
		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
8		Replace/ repair eroded bituminous curb		LF	\$20.00 \$10.00	200	\$4,000 \$5,000		
		Walkways		LF	\$10.00	300	\$5,000		
9		Concrete Repairs/Replacement		LS	\$2,000.00	1	\$2,000		
10		Bituminous Repair/Replacement		LS	\$5,000.00	1	\$5,000		
11		Bituminous Edging		LF	\$20.00	100			



Test   Priorities   Priorities   Priority   Priority									WORK	SITE V
Cost							Cost & Priorities	FY14 Recommendations		
Site Improvements		Cost		Qty		Unit	Remarks	Recommendations	Photographs	Item
Wood post and rail fence is in good condition  Landscaping  LS \$5,000.00 1 \$5,000  Loam and seeding  LS \$5,000.00 1 \$5,000  Site Work Subtotals  \$285,450 \$5	Priority 3	Priority 2	Priority 1							
Wood post and rail fence is in good condition  Landscaping  Landscaping  LS \$5,000.00 1 \$5,000  LS \$5,000.00 1 \$5,000  Drainage (Playground)  Site Work Subtotals  Site Work Subtotals								Site improvements		12
Landscaping  Landscaping  LS \$5,000.00 1 \$5,000  LS \$5,000.00 1 \$5,000  Drainage (Playground)  LS \$35,000.00 1 \$35,000  Site Work Subtotals										12
Landscaping  LS \$5,000.00 1 \$5,000  Loam and seeding  LS \$5,000.00 1 \$5,000  Drainage (Playground)  Site Work Subtotals  Site Work Subtotals								Wood post and rail fence is in good condition	Part.	40
Loam and seeding  LS \$5,000.00 1 \$5,000  Drainage (Playground)  LS \$35,000.00 1 \$35,000  Site Work Subtotals			\$5,000	1	\$5,000.00	LS		Landscaping		13
Drainage (Playground)  LS \$35,000.00 1 \$35,000  Site Work Subtotals \$285,450 \$0				1						14
Site Work Subtotals \$285,450 \$0										15
	SO \$0			1	\$35,000.00	LS	Site Work Subtotals	prainage (Playground)		
Priority 1 Priority 2			Priority 1				Site WOLK Subtotals			



EXTE	RIOR ENVELOPE								
		FY14 Recommendations, (	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
_		Roofs							
1		Sloped asphalt roofs are in fair/good condition - replacement should be considered in 4-5 years		SF	\$9.00	40,000		\$360,000	
		PVC Membrane roofing should be replaced in 4-5 years		SF	\$14.00	23,000		\$322,000	
2		Gutters/Downspouts are in good condition  Exterior Walls		LS	\$1,000	1	\$1,000		
3		Brick repointing/ repairs - The masonry is in good condition							
4		Brick cleaning and dampproofing		SF	\$5.00	8,500	\$42,500		



EXTER	RIOR ENVELOPE								
		FY14 Recommendations, 0	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
		Doors/Windows							
5		Exterior doors are in good condition							
6		Windows are in good condition							
			Exterior Envelope						
			Subtotals				\$43,500		
							Priority 1	Priority 2	Priority 3



AITOI	TECTORAL INTERIORS									
		FY14 Recommendations,	Cost & Priorities							
Item	Photographs	Recommendations	Remarks	Unit	Unit C	ost	Qty		Cost	
								Priority 1	Priority 2	Priority 3
		Space Types								
1		Classrooms								
1		Resilient tile floors - Generally, floors are in good condition but local replairs are required	Lump sum allowance for repairs: (23,500 sqft Total)	LS	\$2	,000,	1	\$2,000		
2		ioodi ropidiio dio roquilod	Total		ΨΖ	,000		Ψ2,000		
		Painted CMU walls are in good condtion - Maintain as needed		SF						
3	10	Painted plaster walls are in good condition - Maintain as needed		SF						
4										
		Suspended acoustical tile ceilings are cupping and bowing and should be replaced within the next 1-2 years		SF	Ф	3.75	23,500	\$88,125		
		should be replaced within the flext 1-2 years		SF	Ъ	3.13	23,500	φοο, ι 25		



7111011	TIECTORAL INTERIORS								
		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
5		Corridors		SF		400			
6	1	Resilient tile flooring is in good condition - Maintain as needed		5F		400			
o o		Torrage fleering is in good condition. Maintain as needed		ee.		7.500			
7	A A	Terrazo flooring is in good condition - Maintain as needed		SF		7,500			
		Painted CMU walls are in good condition - Maintain as needed		SF					
8		Painted plaster walls w/ceramic tile wainscot are in good condition - Maintain as needed		SF					
9	The state of the s	condition - Maintain as needed		SF					
		Suspended acoustical tile ceilings are cupping and bowing and should be replaced within the next 4-5 years		SF	\$3.75	7,600		\$28,500	



ARCH	IITECTURAL INTERIORS								
		FY14 Recommendations, C	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
10		Library/ Media Center  Resilient tile floors in Media Room is in good condition		SF		1,000			
11		Carpet in Library is in fair condtion and should be replaced in 4-5 years		SY	\$33.00	245		\$8,085	
12		Suspended acoustical tile ceilings are cupping and bowing and should be replaced within the next 1-2 years		SF	\$3.75	3,200	\$12,000	<b>\$</b> 0,000	
		Gymnasium							
13	The state of the s	Wood gym floor is in good condition - Maintain as needed		SF		7,200			
14		Painted CMU walls are in good condition - Maintain as needed		SF					
15		Tectum paneled ceiling is in good condition		SF		7,200			



## ARCHITECTURAL INTERIORS FY14 Recommendations, Cost & Priorities Unit Cost Qty Item **Photographs** Recommendations Remarks Cost Unit Priority 1 Priority 2 Priority 3 Toilets 16 Ceramic tile flooring is in good condition - Maintain as needed SF 1,800 Ceramic tile walls are in good condition - Maintain as needed 18 Suspended acoustical tile ceilings are cupping and bowing and SF should be replaced within the next 1-2 years \$3.75 1,800 \$6,750 Administration Resilient tile floors - Generally, floors are in good condition but SF 2,200 local replairs are required Painted plaster walls are in good condition - Maintain as needed SF Suspended acoustical tile ceilings are cupping and bowing and should be replaced within the next 4-5 years SF \$3.75 2,200 \$8,250



## ARCHITECTURAL INTERIORS FY14 Recommendations, Cost & Priorities Unit Cost Qty Item **Photographs** Recommendations Remarks Cost Unit Priority 1 Priority 2 Priority 3 Health Suite Resilient tile floors - Generally, floors are in good condition but local replairs are required SF 300 Painted plaster walls are in condition - Maintain as needed SF Suspended acoustical tile ceilings are cupping and bowing and should be replaced within the next 4-5 years SF \$3.75 300 \$1,125 Cafeteria 25 Terrazzo Floors are in good condition - Maintain as needed SF 2,700 26 Painted CMU walls are in good condtion - Maintain as needed

Suspended acoustical tile ceilings are cupping and bowing and

should be replaced within the next 1-2 years

SF

\$3.75

2,700 \$10,125



		FY14 Recommendations,	Cost & Priorities		T				
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
		Kitchen							
28		Quarry tile floors are in good condition - Maintain as needed		SF		1,300			
29		CMU painted walls are generally in good condition - repairs required on South wall in dishwashing area where noticable crack runs the length of the wall		LS	\$5,000.00	1	\$5,000		
30		Suspended acoustical tile ceiling is in good condition		SF		1,300			
		Miscellaneous							
31		Interior doors and frames - replace		LS	\$5,000.00	1		\$5,000	
32		Interior doors and frames - repair		LS	\$5,000.00	1		\$5,000	
33	O PRODUCTION OF THE PROPERTY O	Chalk boards/marker boards - replace		LS	\$5,000.00	1		\$5,000	



ARCHI	TECTURAL INTERIORS								
		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
34	10 F	Toilet compartments - repairs/replace		LS	\$3,000.00	1		\$3,000	
35						·			
36		Toilet room accessories - repairs/replace		LS	\$1,000.00	1		\$1,000	
		Drinking fountains - repairs		LS	\$3,000.00	1		\$3,000	
37		Library Accordian Wall - replace		LS	\$5,000.00	1		\$5,000	



		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
		Accessibility (if triggered)							
39		Make Classroom sinks accessible		EA	\$2,500.00	22			\$55,000
		Entrance acquirity acquence modification							
40	-	Entrance security sequence modification							
40		Install new partitions, doors and electricnoc hardware to create a security point for check in during occupied times		LS	\$30,000.00		\$30,000		
		Install new keyless access door including work at head end		LS	\$38,000.00	1	\$38,000		
			Architectural Interiors						
			Subtotals				\$192,000		
							Priority 1	Priority 2	Priority 3



## FIRE PROTECTION

The dry sprinkler mains are run low in the limited height ceiling cavity. As long as no pipe or sprinkler freeze ups occur the piping may remain as is.  Many low point drain valves are exopsed due to sprinkler mains run low in limited height ceiling cavity. The dry sprinkler mains are low due the the required pitch for drainage. If exposed drain valves are not wanted, conceal with dropped ceilings.  Backflow preventer is in good condition  Sprinkler heads are in good condition  Dry sprinkler piping corrodes from the inside & may have limited liftspan depending on system conditions. Replace piping when necessary.  In the library storage area the addition of a movable curtain wall has changed the coverage to non code compliant. Two sprinklers need to be moved or two added for correct coverage.  LS 1 \$3,000	Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
cavity. As long as no pipe or sprinkler freeze ups occur the piping may remain as is.  Many low point drain valves are exopsed due to sprinkler mains run low in limited height ceiling cavity. The dry sprinkler mains are low due the the required pitch for drainage. If exposed drain valves are not wanted, conceal with dropped ceilings.  Backflow preventer is in good condition  Sprinkler heads are in good condition  Dry sprinkler piping corrodes from the inside & may have limited lifspan depending on system conditions. Replace piping when necessary.  In the library storage area the addition of a movable curtain wall has changed the coverage to non code compliant. Two sprinklers need to be moved or two added for correct coverage.								Priority 1	Priority 2	Priority 3
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annually.  Sprinkler heads are in good condition  Dry sprinkler piping corrodes from the inside & may have limited lifspan depending on system conditions. Replace piping when necessary.  In the library storage area the addition of a movable curtain wall has changed the coverage to non code compliant. Two sprinklers need to be moved or two added for correct coverage.	2		run low in limited height ceiling cavity. The dry sprinkler mains are low due the the required pitch for drainage. If exposed drain							
Dry sprinkler piping corrodes from the inside & may have limited lifspan depending on system conditions. Replace piping when necessary.  In the library storage area the addition of a movable curtain wall has changed the coverage to non code compliant. Two sprinklers need to be moved or two added for correct coverage.	3		Backflow preventer is in good condition							
lifspan depending on system conditions. Replace piping when necessary.  In the library storage area the addition of a movable curtain wall has changed the coverage to non code compliant. Two sprinklers need to be moved or two added for correct coverage.	4									
has changed the coverage to non code compliant. Two sprinklers need to be moved or two added for correct coverage.	5		lifspan depending on system conditions. Replace piping when							
	6		has changed the coverage to non code compliant. Two		LS		1	\$3,000		
Fire Protection Subtotals \$3,000				Fire Protection Subtotals				' '	\$0 Priority 2	\$( Priority



## **PLUMBING**

Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
1		The sanitary drainage piping, grease trap, & floor drains are in good condition	Service grease traps regularly						
2		The domestic hot & cold water piping & valves are in fair condition. Piping is developing pinhole leaks. Repair piping and reinsulate.	Replace domestic water piping, valves & insulation	LS	\$7,000	1	\$7,000		
3		The domestic water heater & recirculation system is in good condition							
4		Pipe insulation is in good condition. Some cold water piping is uninsulated at the mixing valve in the boiler room							
5		Valves, backflow preventers & mixing valves are in good condition	Test backflow preventers annually						
6		Electric water coolers are in good condition							
7	<b>f</b>	Urinals & flush valves are in good condition							

### Priority Code Legend



## **PLUMBING**

		FY14 Recommendations, (	Cost & Priorities	1 1	Unit				
Item	Photographs	Recommendations	Remarks	Unit	Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
							Priority 1	Priority 2	Priority 3
8		Lavatory china is in good condition however the faucets are severely corroded & operate poorly. Recommend replacing all faucets with a water conserving, code compliant faucet.		LS	\$6,000	1	\$6,000		
9		Water closets & flush valves are in good condition			ψ0,000	•	ψ0,000		
10		Classroom sinks & faucets are in good condition							
11		Mop receptors, faucets & backflow preventors are in good condition	Test backflow preventers annually						
			Plumbing Subtotals				\$13,000		\$0
							Priority 1	Priority 2	Priority 3



## HVAC

Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
1	Pumps & Expansion Tank  Hole in Boiler Breeching  Boiler	A new oil tank monitoring and lock system should be installed. Mechanical Room: Boilers: Burnahm, PF-511 cast iron gas/oil, 1711 MBH gross output, 3-way pneumatically controlled mixing valve for HWS reset. Lochinvar boiler/indirect water storage tank, Summer Boiler - HB Smith 28A-6, 1246 gross output, Circulating pumps: 250 gpm at 50' TDH. Boiler breeching into masonry chimney - could not determine if chimney waas lined, separate flues for boilers and atmospheric gas water heaters, large testing hole in boiler breeching. (1) 54"x42" combustion air louver for high opening damper cloud. (1) 54"x42" combustion air louver ducted down to 18" AFF for low openeing damper open. Fuseomatic controls over boiler burners and at ceiling. Emergency boiler shutoffs at boiler entrance. Piping insulation in good shape. Duplex air compressor for pneumatic controls. Johnson controls pneumatic controls. Oil tank - double wall. Recommendation: Replace all pneumatic controls with DDC controls. Plug hole in boiler breeching to prevent exhaust gases from escaping.	Equipment is at 50% life expectancy.						
			Install new tank						
			monitoring and lock	LS		1	\$20,000		
			DDC Controls	SF	\$6.00	56080		\$336,480	
2		Maintenance Office: Fintube radiation, barber coleman controls, veeder root TLS-300C monitor/gauge.							
3		Public Spaces/Telephone/IDF/EMS: Generally fintube radiation for heating with no provisions for ventilation or AC.							
4		Gymnasium: (2) HV units at upper level of gymansium with horizontal supply ductwork distribution; return through return registers at floor level back to units. Economizer relief at high wall grilles.	Equipment is at 50% life expectancy.						
5		Cafeteria: HV unit to above ceiling horizontal supply ductwork return in walls to mechanical closet.							

## Priority Code Legend



## HVAC

Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
							Priority 1	Priority 2	Priority 3
6	Kitchen Hood  Dishwasher Exhaust	Kitchen: HV unit above ceiling horizontal supply ductwork return in walls to mechanical closet. Dishwasher hood exhaust, kitchen hood exhuast, kitchen hood partially protected by Ansul system washer/dryer in space. Air transfer wall grilles above walk-in cooler for ventilation.							
7		Toilets: All toilet rooms have been provided with toilet exhuast from a central system and hot water heating where applicable.							
8		Corridors/Entries: Hot water heating/limited exhaust for ventilation. Hot water cabinet units heaters.							
9	Unit Ventilator	Classrooms: UVs for ventilation/heat, fintube radiation along exterior wall, remote thermostat control, operable windows.	Equipment is at 50% life expectancy.						
10		Art Classrooms: UV's for ventilation/heat, fintube radiation along exterior wall, remote thermostat control, operable windows, kiln hood in storage vented to outdoors.							
11		Music Classrooms: Fintube radiation along exterior wall, remote thermostatic control, operable windows.							
12		MDF Room: Liebert computer room unit. Ceiling mounted AC.	Equipment is at 50% life expectancy.						



HVAC

Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
							Priority 1	Priority 2	Priority 3
13		General: Add ductless AC units for office spaces	Add at various offices	SF	\$15.00	1000	\$15,000		
14		Administrative Offices: Horizontal Uvs for heating/cooling/ventilation with remote air cooled condensing units	Equipment is at 50% life expectancy.						
15		Library: Horizontal Uvs for heating/cooling/ventilation with remote air cooled condensing units. Bare fintube in casework.	Equipment is at 50% life expectancy.						
16		Computer Lab Adjacent to Library: Interior Room - no ventilation. Recommendation: Add ventilation.	Add ventilation.	LS	\$20,000	1	\$20,000		
	-		HVAC Subtotals				\$55,000	\$336,480	\$(
				_			Priority 1	Priority 2	Priority



### ELECTRICAL

Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
1	明の開	Power Service: Equipment is in good working order. Recommendations: None	Equipment is only at 50% life expectancy.						
2		Panels: Equipment is in good working order. Recommendations: None	Equipment is only at 50% life expectancy.						
3		Exterior/Site Lighting: Light fixtures are in good condition. New roadway lighting pole fixtures have been installed. Recommendations: None	Item has been adressed since previous study.						
4		Classroom Lighting: Lighting is in good condition. Recommendations: Add occupancy sensors to classrooms.		EA	\$300.00	30		\$9,000	
5		Gym Lighting: Lighting level is low. Recommendations: Replace lighting with high output fluorescent.	Added item from previous report.						



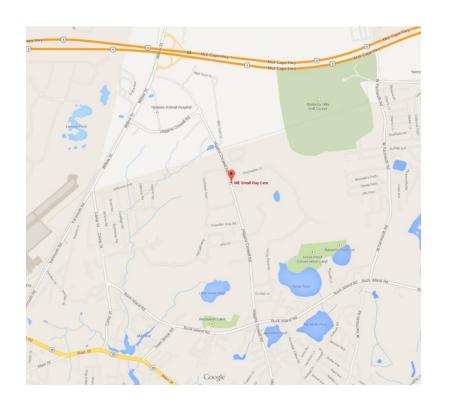
### ELECTRICAL

ELEC	TRICAL								
		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
			A 11 12 6				Priority 1	Priority 2	Priority 3
6	Application of the state of the	Cafeteria Lighting: Lighting is metal halide. Recommendations: Replace lighting with fluorescent cylinders.	Added item from previous report.						
				LS	\$15,000	1		\$15,000	
7		Exit Signs: Exit signs have been replaced with LED type.	Item has been adressed		ψ10,000			ψ10,000	
		Recommendations: None	since previous study.						
8		Power Distribution: The panels presently are in good condition. Recommendations: None							
9		Equipment Wiring: The wiring is in good condition. New circuits are only needed as areas are renovated.  Recommendations: None							
10		Clock/Bell/Paging:The intercom system is in good condition. Recommendations: None	Item has been adressed since previous study.						
11		Telephone: A new phone system is being contemplated system-							
		wide. Recommendations: Install a new phone system to match new			<b>A</b> =6	_	0.5		
				LS	\$50,000	1	\$50,000		1



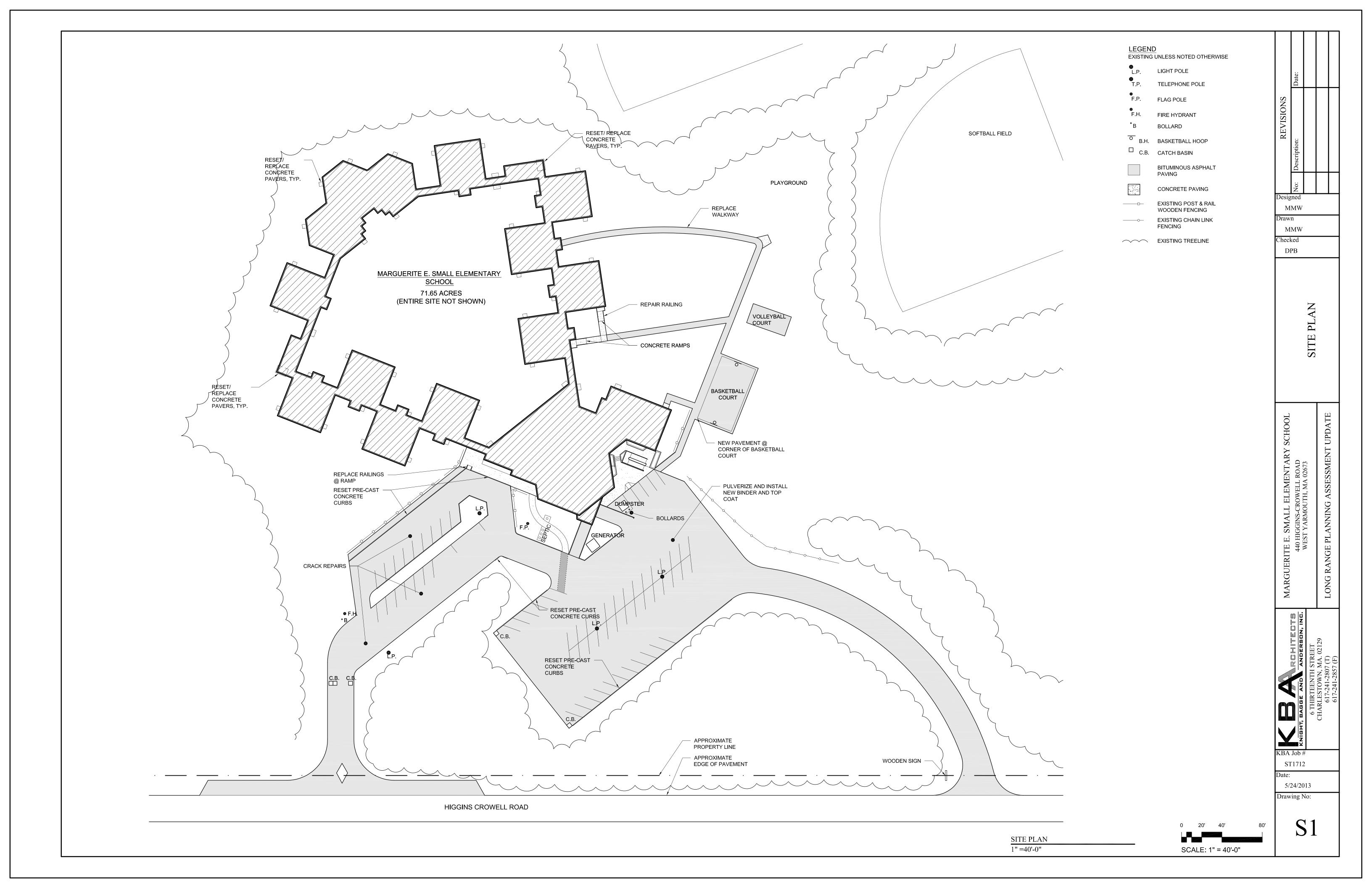
ELECT	TRICAL								
		FY14 Recommendations, 0	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
12		Fire Alarm: The fire alarm system is in good condition and code compliant. Recommendations: None					Priority 1	Priority 2	Priority 3
13		Technology: The data infrastructure is in good condition. Recommendations: Add dual cat 6 drops for wireless access points throughout corridors.	Added item from previous report.	EA	\$400.00	44			\$17,600
14		Emergency Power & Lighting: The emergency lighting system is code compliant. Recommendations: None							
15		Generator: The generator is in good condition and appears to be well maintained. Recommendations: None							
16		Security: The security system has been updated and appears to be in good condition. Recommendations: None	Item has been adressed since previous study.						
			Electrical Subtotals				\$50,000		\$17,600
							Priority 1	Priority 2	Priority

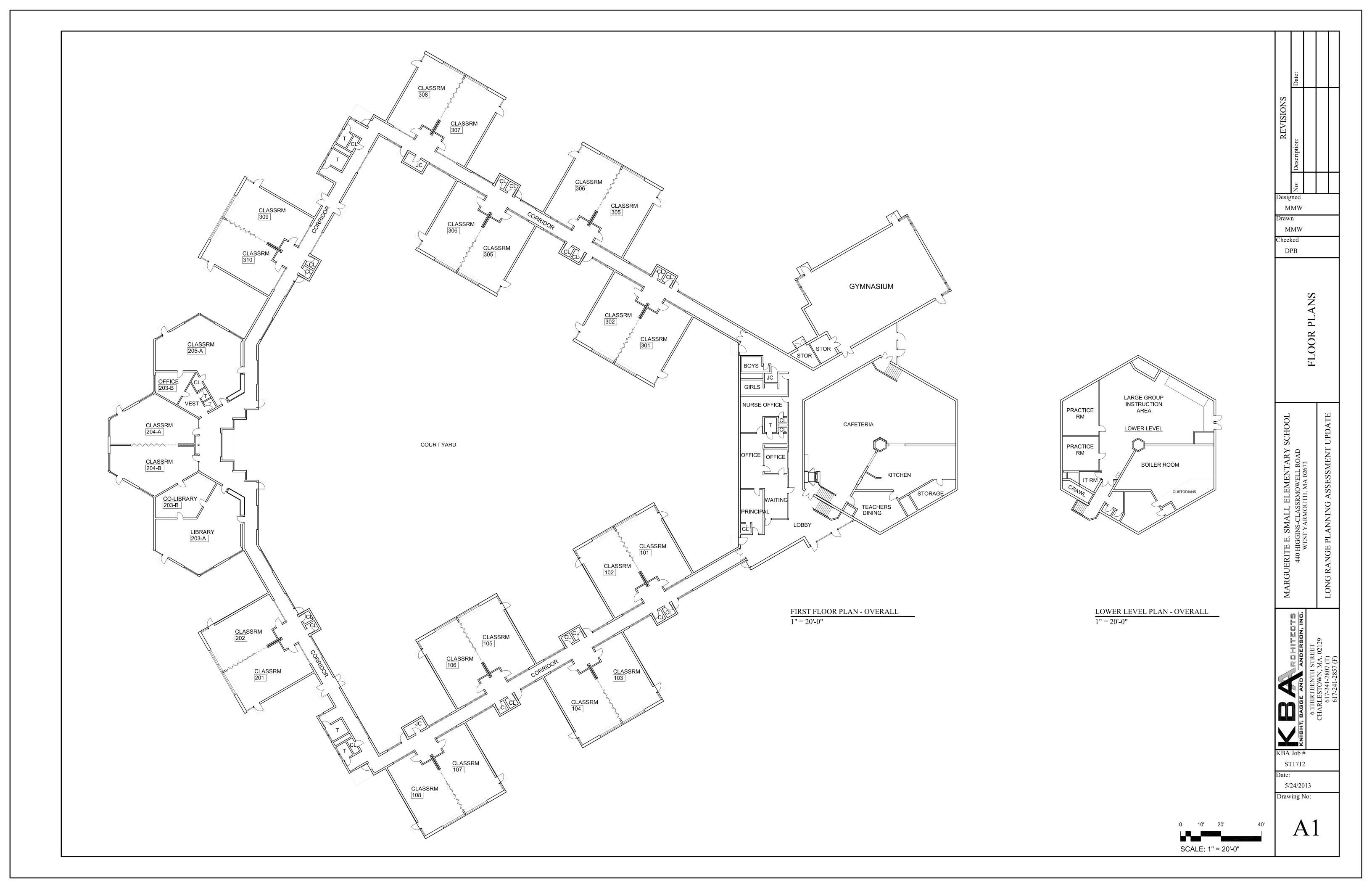
Marguerite E. Small Elementary School 440 Higgins Crowell Road West Yarmouth, Massachusetts

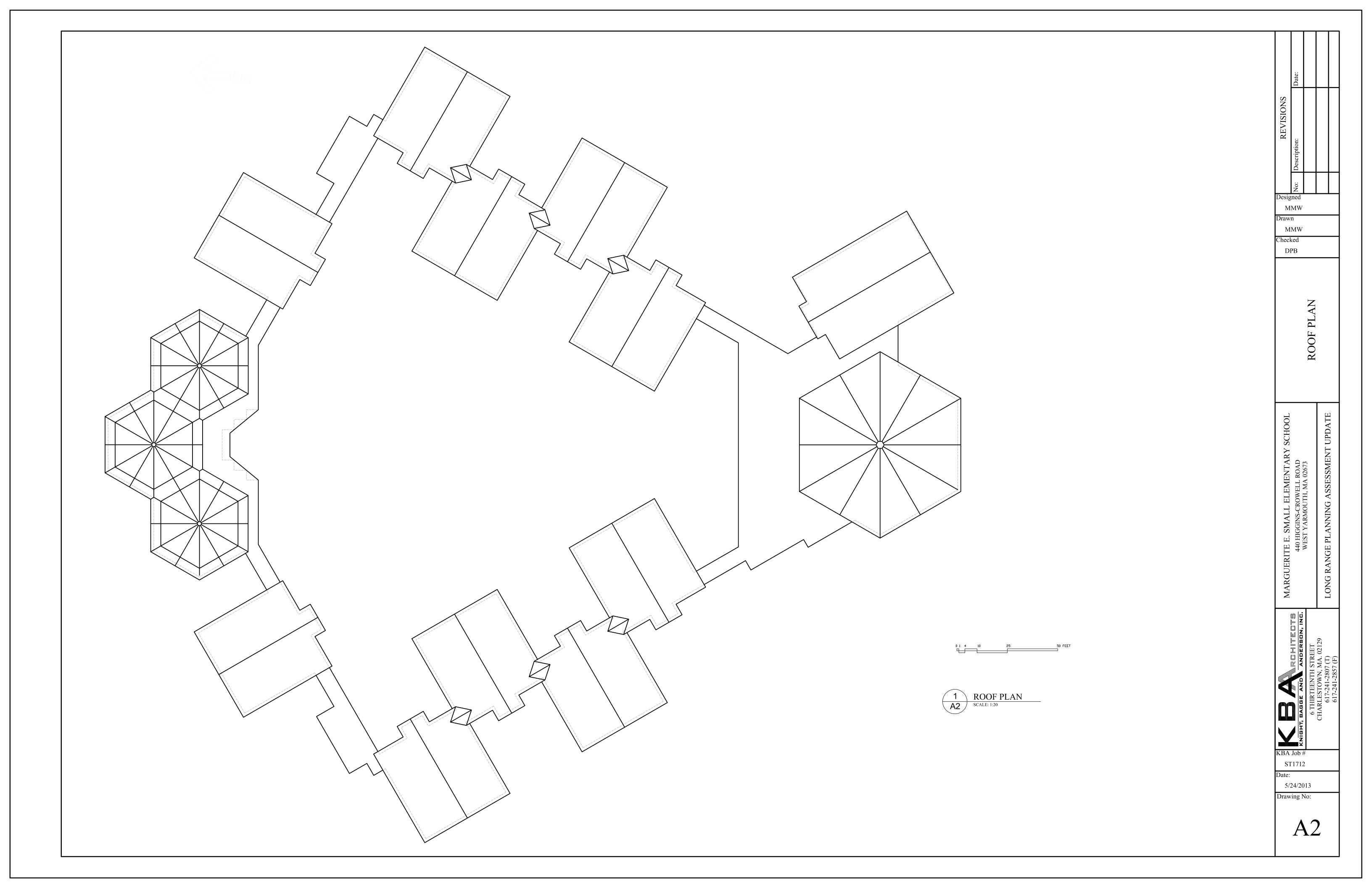




**Aerial Site Plan** Locus Map









SITE V	VORK								
		FY14 Recommendation	ons, Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
4		Driveways							
1									
		Crack Repairs		SF	\$0.75	15,000	\$11,250		
2		Sealer		SF	\$0.90	15,000	\$13,500		
		Parking	_						
7 8		Crack Repairs Sealer Line Painting		SF SF LS	\$0.75 \$0.90 \$3,500	15,000 15,000	\$11,250 \$13,500 \$3,500		
		Reset Concrete Curbs		LF	\$40.00	620	\$24,800		
11		Walkways							<u> </u>
11		Concrete Repairs/Replacement		SF	\$1.10	12,000	\$13,200		



SITE V	VORK								
		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
12							Priority 1	Priority 2	Priority 3
12									
		Bituminous Repair/Replacement		SF	\$5.50	2,000	\$11,000		
		Site Improvements							
13		Wood post and rail fence are in fair condition - replace rail sections as required		LS	\$1,000	1		\$1,000	
14		Chain link fencing is in good condition							
15		Landscaping		LS	\$5,000	1	\$5,000		
16		Loam and seeding		LS	\$5,000.00	1	\$5,000		
17		Railings		LS	\$5,000.00	1	\$5,000 \$2,000		



SITE \	WORK								
		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
18		Reset concrete bollards		EA	\$750.00	8		\$6,000	
	_		Site Work Subtotals				\$114,000		
							Priority 1	Priority 2	Priority 3



EXTE	RIOR ENVELOPE								
		FY14 Recommendation	ıs, Cost & Prioritie	S					
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
		Roofs					Priority 1	Priority 2	Priority 3
		TOOIS							
1	CS	Replace sloped and flat membrane roofs		SF	\$17.00	35,000	\$595,000		
		Exterior Walls							
2	i	Repair/Reseal stucco @ Gym		SF	\$10.00	1,900	\$19,000		
3		Exterior siding and trim is in good condition							
4		Replace Kalwall @ Gym		SF	\$70.00	600	\$42,000		



EXTER	RIOR ENVELOPE								
		FY14 Recommendations	, Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
		Doors/Windows					Priority 1	Priority 2	Priority 3
5		Replace exterior doors		SF	\$1,500.00	45	\$67,500		
6		Caulk at exterior windows where needed		LS	\$5,000.00	1	\$5,000		
			Exterior Envelope Subtotals				\$728,500 Priority 1		



AICOI	ITECTURAL INTERIORS								
		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
		_					Priority 1	Priority 2	Priority 3
		Space Types Classrooms							
1		VAT Floors should be abated and replaced with VCT	Lump sum allowance for repairs: (23,000 sqft Total)	SF	\$14	23,000	\$322,000		
2		Wood paneled walls are in good condition - Maintain as needed		01	<b>Ψ</b> 14	23,000	\$322,000		
3		Wood ceilings are in good condition - Maintain as needed		SF		20,000			
4		Resilient tile floors - Generally, floors are in good condition but local replairs are required				20,000			
5		Painted CMU walls are in good condition - Maintain as needed							



		FY14 Recommendations, 0	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
6		Painted plaster walls area in good condition - Maintain as needed							
7		Suspended acoustical tile in lower level classroom ceilings are cupping and bowing and should be replaced within the next 4-5 years		SF	\$3.75	3,000		\$11,250	
		Library							
8		Carpet should be replaced		SY	\$33.00	200	\$6,600		
9		Painted CMU walls are in good condition - Maintain as needed							
10									
		Wood ceilings are in good condition			ı				



		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
11	-	Corridors  Terrazo flooring - Generally, floors are in good shape but local repairs are required	Lump sum allowance for repairs: (7,400 sqft Total)	LS	\$15,000	1	\$15,000		
12		Wood paneled walls area in good condition - Maintain as needed	,						
13		Painted CMU walls are in good condition - Maintain as needed							
14		Wood Ceilings in general are in good condition - Wood should be refinished when roof leaks are fixed.	Lump sum allowance for repairs: (7,400 sqft Total)	LS	\$5,000.00	1	\$5,000		
		Gymnasium							
15		Gym wood floor and base should be replaced		SF	\$12.00	3,000	\$36,000		



20

ARCH	ITECTURAL INTERIORS								
		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
16							Priority 1	Priority 2	Priority 3
17		Painted CMU walls are in good condition - Maintain as needed  Wood plank ceiling is in good		SF		3,000			
						,	\$0	\$0	\$0 \$0
		Toilets					\$0	\$0	\$0
18	Ø-9	Terrazo flooring - Generally, floors are in good shape but local repairs are required	Lump sum allowance for repairs: (1,000 sqft Total)	LS	\$2,000.00	1	\$2,000		
19		Painted CMU walls are in good condition - Main as needed							

Wood Ceilings are good condition - Maintain as required



		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
21		Administration  Resilient tile floors are in good condition - Maintain as required		SF		1,200			
22		Painted CMU Walls are in good condition - Maintain as required							
23		Wood ceiling is in good condition - Maintain as required		SF		1,200			
		Health Suite							
24		VAT Floors should be abated and replaced with VCT		SF	\$14.00	400	\$5,600		
25		Painted CMU walls are in good condition - Maintain as needed		51	¥17.00	700	ψ0,000		



ARCH	ITECTURAL INTERIORS								
		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
26							Priority 1	Priority 2	Priority 3
20		Wood Ceiling is in good condition - Maintain as needed  Cafeteria							
27	y a	Odieteria							
		Terrazo flooring - Generally, floors are in good shape but local repairs are required	Lump sum allowance for repairs: (3,600 sqft Total)	LS	\$3,000.00	1	\$3,000		
28		Painted CMU walls are in good condition - Maintain as needed							
29	3+A	Wood Ceiling is in good condition - Maintain as needed		SF		3,600			
30		Kitchen						·	
30		Terrazo flooring - Generally, floors are in good shape but local repairs are required	Lump sum allowance for repairs: (1,000 sqft Total)	LS	\$1,000.00	1	\$1,000		



	TEOTORAL INTERIORO	FY14 Recommendations, O	Sagt & Drianities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
31		Painted CMU walls are in good condition - Maintain as needed					Priority 1	Priority 2	Priority 3
32		Wood Ceiling is in good condition - Maintain as needed		SF		1,000			
		Miscellaneous							
33		Interior doors and frames - replace		LS	\$5,000.00	1			\$5,00
34 35		Interior doors and frames - repair  Interior door hardware - repair/replace		LS	\$5,000.00 \$5,000.00	1			\$5,000 \$5,000
36		Chalk boards/marker boards Toilet compartments - repair/replace		LS LS	\$3,000 \$3,000	1			\$3,00 \$3,00
31				LO	\$3,000				\$3,000
38		Toilet room accessories - repair/replace		LS	\$1,000	1			\$1,00



Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	ty 1	Priority 3
		Entrance security sequence modification							
39		Install new partitions, doors and electronic hardware to create a							
		security point for check in during occupied times		LS	\$20,000	1	\$20,000		
40		Install new keyless access door including work at head end		LS	\$34,000	1	\$34,000		
		Accessibility (if triggered)							
41		Toilet room renovations including reconfiguration, accessible fixtures, accessories and toilet compartments		LS	\$80,000	1			\$80,000
42		Toilet room and sink in Office area renovations including reconfiguration, accessible fixtures and accessories		LS	\$8,000	1			\$8,000
43		Many egress doors and entrance doors and spaces are not wide enough or have proper clearances. Install new frames,							
		doors and hardware.		EA	\$4,500	8			\$36,000
			Architectural Interiors						
			Subtotals				\$450,200	\$11,250	\$146,00
							Priority 1	Priority 2	Priority



## FIRE PROTECTION

Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
1		Fully Sprinkler building	Provide in major system						
			upgrade.	LS	\$221,000	1			\$221,000
2		Provide fire pump if necessary	Provide in major system						
			upgrade.	LS	\$65,000	1			\$65,000
3		Fire service	Provide in major system	LS	\$20.000	1			\$20,000
			upgrade.	LS	\$20,000	1			\$20
			Fire Protection Subtotals				\$0		
							Priority 1	Priority 2	Priority



## PLUMBING

Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
1		The sanitary drainage piping, grease trap, & floor drains are in fair condition w/ piping replaced as required	Continue to replace piping as needed until major upgrade	LS	\$9,500	1	\$9,500		
2		Domestic hot & cold water piping & valves are in fair condition, corrorion visible. Piping being replaced as required	Continue to replace piping as needed until major upgrade	LS	\$7,000	1	\$7,000		
3		The domestic water heater & storage tank (2006) is in good condition except for corrosion at heater connections There is no master mixing valve or recirculation pump. Recommend providing a master mixing valve and storing water at 140F to avoid Legioneres Disease. Also provide a recirculation system piping, pump, aquastat and timeclock.		LS	\$15,000	4	<b>\$15,000</b>		
4		Pipe insulation is in fair condition in the crawlspace/tunnels. In the boiler rooms most water piping is not insulated. The new horizontal rainleaders in the rear corridors are not insulated. Recommend insulating all water piping in the boiler room and the three rainleaders.				ı	\$15,000		
5		Original valves and fittings are in fair condition. The backflow preventer is in good condition.	Continue to test backflow preventers annually	LS	\$5,000 \$2,000	1	\$5,000 \$2,000		
6		Original drinking fountains are aged in fair condition. Replace drinking fountains with accessible drinking fountains or water coolers.			\$18,000		\$2,000		



## **PLUMBING**

Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
							Priority 1	Priority 2	Priority 3
7		New urinals & flush valves are in good condition. Original urinals are in fair condition.	Replace original urinals & flush valves with water conserving accessible fixtures.						
				LS	\$18,000	1	\$18,000		
8		A high percentage of lavatories & faucets have been replaced & are in good condition. Newer faucets are single lever type which are not code compliant. Replace lavatory faucets with water conserving code compliant type faucets.		LS	\$14,000	1	\$14,000		
9	94	A percentage of water closets & flush valves have been replaced & are in good condition. Replace remaining original water closets with water conserving accessible fixtures.		LS	. ,	1	\$36,000		
10		Classroom sinks, faucets & bubblers are generally in good condition w/ some original sinks are in fair condition.  Repair/replace original sinks and faucets until major upgrade.				,			
11		Janitors sinks are original in fair to good condition however faucets do not have integral vacuum breakers. Provide screw-on vacuum breakers to janitor's sink faucets to avoid contamination of potable water.		LS	\$4,000 \$200	1	\$4,000 \$200		



PLUMBING

		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
							Priority 1	Priority 2	Priority 3
12		There are essentially no accessible fixtures throughout the facility. Provide accessible water conserving plumbing fixtures in major upgrade.	Cost in individual fixtures.						
			Plumbing Subtotals				\$128,700	\$0	\$0
							Priority 1	Priority 2	Priority 3



### HVAC

tem	Photographs	FY14 Recommendations,	Remarks	Unit	Unit	Qty		Cost	
	9.4				Cost	,			
1	Heating Pump Pneumatic 3-way valve  Heating Pump  Boiler in Mech. Rm.  Summer Water Htr & Tank	A new tank monitring and lock system should be installed. Mechanical Room: Boilers: HB Smith model 640 14 seciton gas/oil, induced draft fans, cyclomatric burners dual fuel, individual fuel oil pumps at each burner. Brandford White water heaer 119 gallon, separate flue to chimney. Zone Pumps: 1 - Office, 2 - Gym (new pump 2012), 3 - Cafe/Kitchen, 4 - Classroom, coupling guards missing. Boiler Breeching into masonry chimney, could not determine if chimney was lined. Combustion air provisions. RPBP and water meter for boiler makeup water. Fuseomatic controls over boiler burner. Emergency boiler shutoffs at boiler entrance. Piping insulation in good shape. Duplex air compressor for pneumatic controls. Pneumatic 3-way valves for hot water reset. Double wall oil tank. Honeywell DDC - ENE currently integrating controls - controlling start/stop, zone control, night setback, pump zones and boiler fail alarms. Recommendation: Reinstall pump coupling guards. Expand DDC control of building.	Equipment 50 years old - at end of useable life.				Priority 1	Priority 2	Priority 3
			Install new tank		_				
			monitoring and lock	LS SF	\$20,000	1		\$20,000	
-			Expand DDC controls.	SF	\$6.00	49000		\$294,000	1
			New boilers and pumps.	SF	\$2.25	49000	\$110,250		
			HVAC system replacement (buildingwide).	SF	\$24.00	49000		\$1,176,000	



HVAC

		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
2		Public Spaces/Telephone/IDF/EMS: Generally fintube radiation for heating with no provisions for ventilation or AC.							
3		Gymnasium: UVs for ventilation/heat, pneumatic controls, exhuast air ductwork/exhuast fan.	Equipment at end of useable life.						
4		Cafeteria: UVs for ventilation/heat, pneumatic controls. Exhuast air ductwork/exhuast fan (fan also serves kitchen exhaust).	Equipment at end of useable life.						
5	Kitchen Hood	Kitchen: UV for kitchen ventilation/heat. Dishwasher hood exhaust, kitchen hood exhuast, kitchen hood partially protected by Ansul system washer/dryer in space. Walk-in condenser reject heat to space wall fan exhausts rejected heat. Recommendation: Locate walk-in condenser outside.	Equipment at end of useable life.						
6		Toilets: All toilet rooms have been provided with toilet exhaust from a central system and hot water heating where applicable.							
7		Corridors/Entries: Hot water heating/no mechanical ventilation. Hot water cabinet unit heaters.							
8	Classroom Unit Vent	Classrooms: UVs for ventilation/heat, fintube radiation along exterior wall, remote thermostat control, operable windows. Console exhaust for UV relief.	Equipment at end of useable life.						
9		Administrative Offices: Hot water radiation for heating, operable windows for ventilating and window AC units for cooling.							
10		Library: UVs for ventilation/heat, pneumatic controls. Exhaust ductwork to exhaust fan (fan also serves dishwasher exhaust).	Equipment at end of useable life.						
11		Computer Lab: Window air conditioning for cooling.							
12		Band Practice Room: Exhaust only - transfer from main band room.	Recently constructed room.						
13			Add supply air for ventilation.	LS	\$5,000		\$5,000		
14		General - Add Ductless AC Units for office spaces	Add at various offices	SF	\$15	2000	+ ,		
			HVAC Subtotals				\$145,250	\$1,490,000	
							Priority 1	Priority 2	Prior



## ELECTRICAL

Item	Photographs	FY14 Recommendations, (	Remarks	Unit	Unit Cost	Qty		Cost	
					0031		Priority 1	Priority 2	Priority 3
1		Power Service: Main switchboard has a 1200 amp and is in poor condition. Recommendations: Replace switchgear.	Added item from previous report.	SF	<b>#4</b> 00	49000		Priority 2	Priority 3
2		Panels: Equipment is in poor condition. Recommendations: Replace existing panelboards.	The service and panelboards should be done at the same time.	SF	\$1.00 \$1.50	49000	\$49,000 \$73,500		
3		Exterior/Site Lighting: Light fixtures are in good condition. New roadway lighting pole fixtures have been installed with LED lighting.  Recommendations: None	Item has been addressed since previous study.	0.	ψποσ	10000	Ψ10,000		
4		Classroom Lighting: Lighting is in good condition. Recommendations: Add occupancy sensors with wall switches to classrooms.		EA	\$300.00	25		\$7,500	
5		Corridor Lighting: Lighting is energy efficient. Recommendations: Provide occupancy sensor for every other fixture.		EA		15		\$4,500	



## ELECTRICAL

Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
6		Power Distribution: The panels presently are in poor condition. Recommendations: Replace the panels.	Cost for this item is included in Item 2 above.				Priority 1	Priority 2	Priority 3
7		Equipment Wiring: The wiring is in good condition. New circuits are only needed as areas are renovated. Recommendations: None	Item has been addressed since previous study.						
8		Clock/Bell/Paging: The clock system has not been upgraded, each classroom has been provided with a phone handset for communication. Recommendations: The paging and clocks system needs to be upgraded.		SF	\$1.25	49000	\$61,250		
9		Fire Alarm: The fire alarm system is in good condition and code compliant.  Recommendations: None					V = 7,14		



## ELECTRICAL

		FY14 Recommendations, 0	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
							Priority 1	Priority 2	Priority 3
10		Technology: The data infrastructure is in fair condition. Equipment includes Dell switches, 100 Base FX. Recommendations: Add Cat 6 wiring for wireless access points.	Added item from previous report.						
	1			EA	\$400.00	20			\$8,000
11		Technology: New phone system is being contemplated system- wide.  Recommendation: Install a new phone system to match new system-wide.		LS	\$50,000	1	\$50,000		
12		Emergency Power & Lighting: Katolight battery units are used in corridors.Generator has been installed for emergency lighting and optional equipment.  Recommendations: None	Added item from previous report.						
13		Generator: The generator is in good condition and is tested on a weekly schedule.  Recommendations: None							
14		Security: New security system with buzzer and intercom system	Item has been						
		has been installed.	addressed from						
		Recommendations: None	previous study.						
			Electrical Subtotals				\$233,750	\$12,000	\$8,000
							Priority 1	Priority 2	Priority



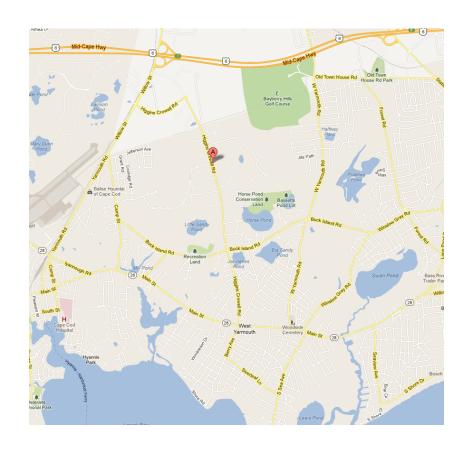
## COST SUMMARY

tem	Trade Item		Cost			
		Priority 1	Priority 2	Priority 3		
1	Site Work	\$114,000	\$7,000	\$0		
2	Exterior Envelope	\$728,500	\$0	\$0		
3	Architectural Interiors	\$450,200	\$11,250	\$146,000		
4	Fire Protection	\$0	\$0	\$306,000		
5	Plumbing	\$128,700	\$0	\$(		
6	Mechanical	\$145,250	\$1,490,000	\$(		
7	Electrical	\$233,750 \$1,800,400	\$12,000	\$8,000		

Project Budget Costs		
General Conditions	\$ 180,040 \$ 152,025	\$ 46,00
OH & Profit	\$ 198,044 \$ 167,228	\$ 50,60
Construction Totals	\$2,178,484 \$1,839,503	\$ 556,60
Administrative Costs	\$ 10,892 \$ 9,198	\$ 2,78
A/E Fees	\$ 217,848 \$ 183,950	\$ 55,66
Total Project costs	\$2,407,225   \$2,032,650	\$ 615,04
	Priority 1 Priority 2	Priorit

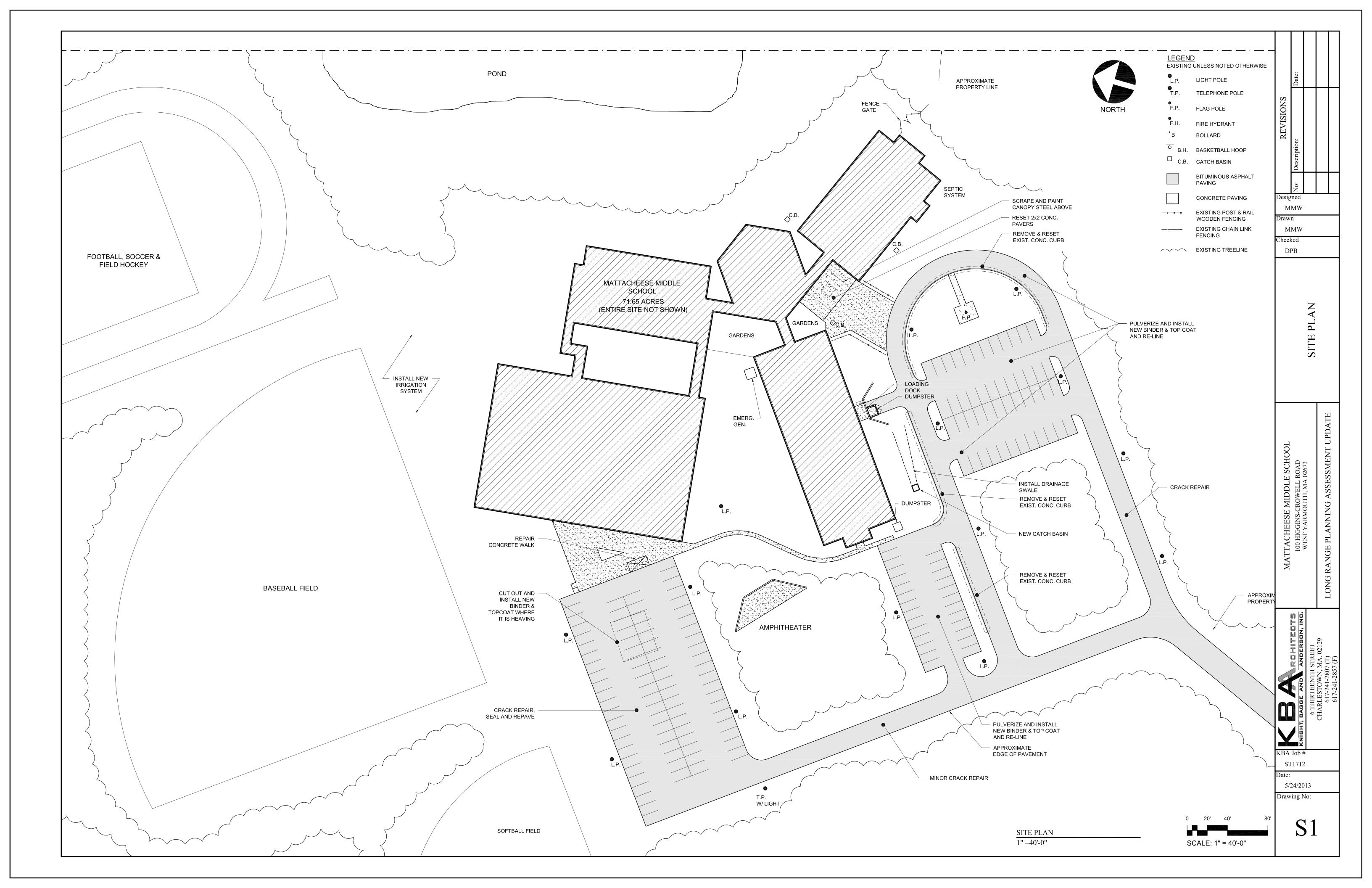
# **Mattacheese Middle School**

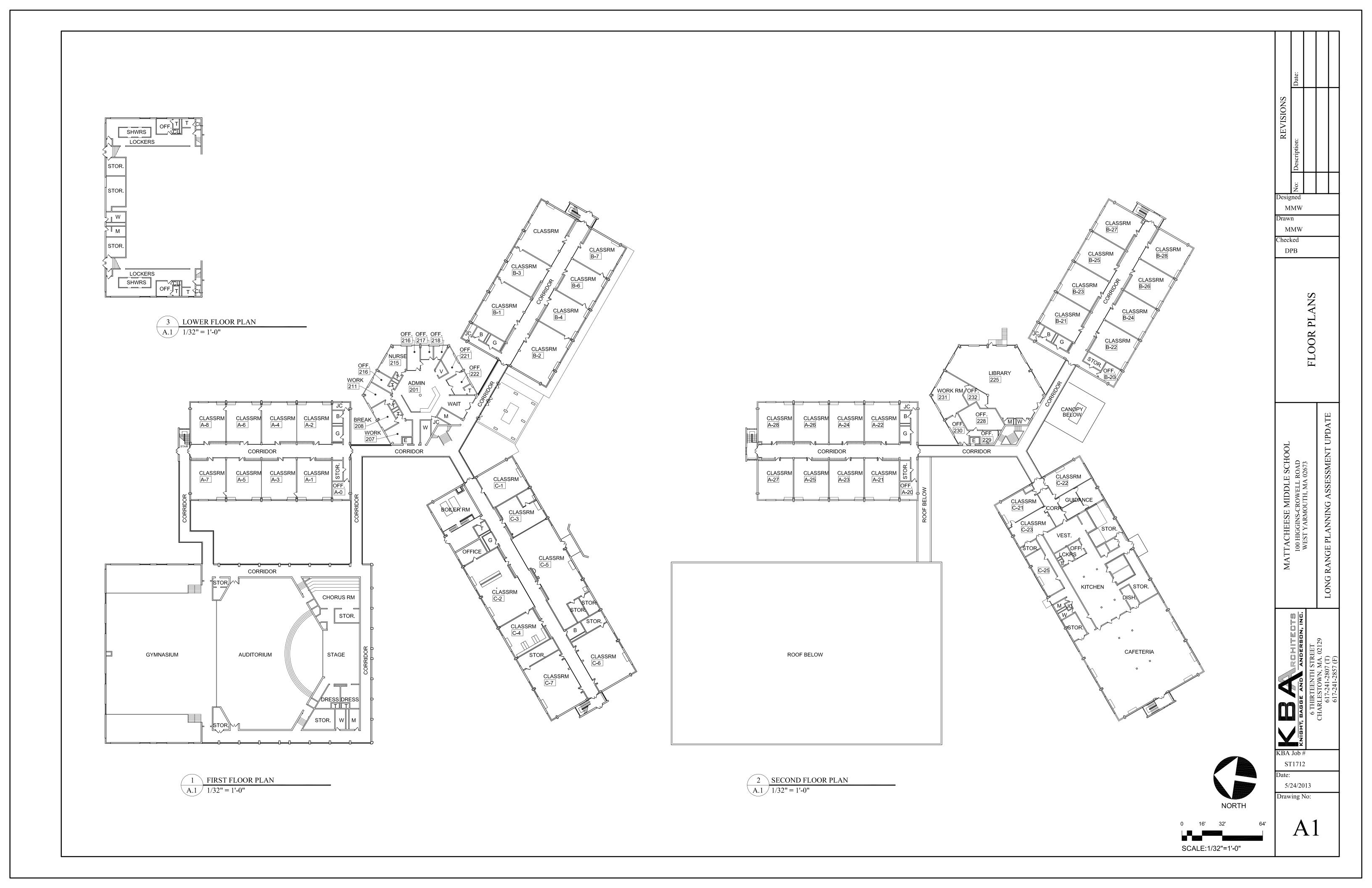
400 Higgins-Crowell Road W. Yarmouth, Massachusetts

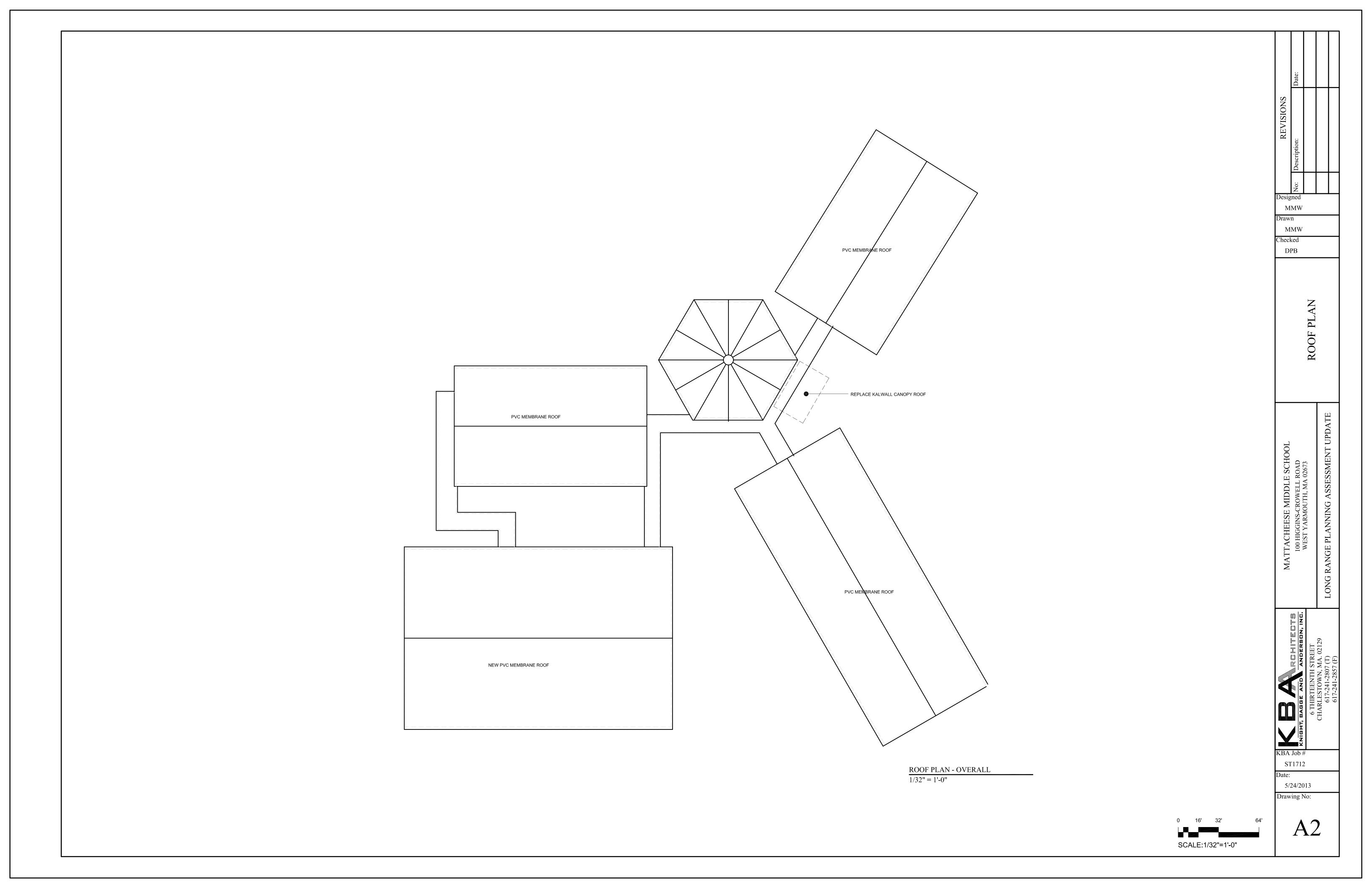




Locus Map Aerial Site Plan









SITE V	VORK								
		FY14 Recommendations, 0	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
		Driveways							
1									
	The same								
2		Crack Repairs Sealer		SF LS	\$0.75 \$0.90	17000 17000	\$12,750 \$15,300		
3		Sediei		LO	Φ0.90	17000	\$15,500		
		New Drainage Swale and Catch Basin		LS	\$5,000	1	\$5,000		
4									
	1 *								
		Pulverize and Repave		SF	\$5.50	13500	\$74,250		
		Parking							
5		- uning							
		Crack Repairs		SF	\$0.75	25000	\$18,750		
6		Sealer		SF	\$0.90	25000			
7		Line Painting		LS	\$5,000	1	\$5,000		



SITE V	VORK								
		FY14 Recommendations, (	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
8							Priority 1	Priority 2	Priority 3
	Side Adams								
		Pulverize and Repave		SF	\$5.50	21000	\$115,500		
9	A STATE OF THE STA				Ų DIEGO		<b>V</b>		
10		New Cape Cod Burm Curb New Binder and Top Coat		LF SF	\$20.00 \$7.50	200 1500	\$4,000 \$11,250		
10				0.	ψσσ		ψ, <u>2</u> 00		
		Walkways							
11		Concrete Repairs/Replacement		SF	\$25.00	200	\$5,000		
12		Concrete Repairs/Replacement		01	Ψ23.00	200	ψ5,000		
12		Re-set 2x2 concrete pavers at entrance or new concrete		LS	\$50,000	1	\$50,000		
13									
	A COMMENT	New Cape Cod berm curbs		LF	\$20.00	200	\$4,000		
							-		



SITE V	VORK								
		FY14 Recommendations, C	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
		Site Improvements							
14		Wood post and rail fence is in good condition							
15									
		Chain link fencing needs to be replaced		LF	\$20.00	50	\$1,000		
16		Landscaping		LS	\$5,000	1	\$5,000		
17		Loam and seeding		LS	\$5,000	1	\$5,000		
18		Railings are in good condition							
19		De est wood bellevie			Ф2 222		Ф2 222		
		Re-set wood bollards		LS	\$3,000	1	\$3,000		
20		Irrigation to the baseball fields		LS	\$45,000	1	\$45,000		



SITE W	/ORK								
		FY14 Recommendation	ons, Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty	Cost		
							Priority 1	Priority 2	Priority 3
		Accessibility							
21		New HC concrete curb cuts with tactile warning		LS	\$4,000	1			\$4,000
22		Accessible parking signage and access route		LS	\$1,000	1			\$1,000
23		New concrete ramp and rails to the main entrance		LS	\$50,000	1			\$50,000
			Site Work Subtotals				\$402,300 Priority 1		· · ·



EXTE	RIOR ENVELOPE								
		FY14 Recommendations, 0	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
		Parife.					Priority 1	Priority 2	Priority 3
1		Roofs							
'		Replace existing membrane roof with new PVC membrane at							
		Library		SF	\$17.00	5500	\$93,500		
2		Replace existing membrane roof with new PVC membrane at the classroom wings		SF	\$17.00	36000		\$612,000	
3	HIPUTTU	PVC Roofs @ Aud/Gym have been replaced within the past 5							
4		years and are in good condition  Kalwall Skylights at the entry canopy are delaminating and should be replaced		SF	\$60.00	1200	\$72,000		
5		Scrape and Paint Canopy Support Steel Framing		LS	\$5,000	1	\$5,000		



EXTER	RIOR ENVELOPE								
		FY14 Recommendations, 0	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
		Fatarian Walla					Priority 1	Priority 2	Priority 3
6		Exterior Walls  Masonry is in very good condition but there are several minor							
6		repairs to be made to brick joionts		LS	\$4,000	1		\$4,000	
7		repairs to be made to blick joints		LO	ψ4,000	'		ψ4,000	
	1	Concrete fascia repairs		SF	\$30.00	1700	\$51,000		
8		Concrete rascia repairs		31	φ30.00	1700	φ51,000		
				0.5	<b>#40.00</b>	4.4000	<b>#4.42.000</b>		
9		Concrete waffle soffit repairs/seal		SF	\$10.00	14380	\$143,800		
		Concrete stair repair/repaint		EA	\$7,500	2	\$15,000		
10		Repair mosaic tile at auditorium		LS	\$3,000	1	\$3,000		
11	400 50°s	Concrete column repairs		LS	\$5,000	1	\$5,000		
12				SF		25000			
12		Masonry cleaning/ power-washing Masonry sealer		SF	\$0.50 \$0.50	25000	\$12,500 \$12,500		
13 14		Caulking		LS	\$5,000	25000	\$5,000		
. –		Cadming		120	ψυ,υυυ	I I	ψυ,υυυ		



EXTER	RIOR ENVELOPE								
		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
		Doors/Windows							
15		Corridor windows replacement		SF	\$95.00	13700	\$1,301,500		
16		Classroom windows replacement		SF	\$85.00	4200			
17		Kalwall replacement		SF	\$70.00	2700			
18		HM corridor window wall replacement with new storefront		SF	\$90.00	900	\$81,000		
19									
	1	Entrance door replacement		EA	\$2,500	18	\$45,000		
			Exterior Envelope Subtotals				\$2,391,800	\$616,000	\$0
							Priority 1	Priority 2	Priority 3



		FY14 Recommendations,			Unit				
ltem	Photographs	Recommendations	Remarks	Unit	Cost	Qty		Cost	
		Space Types					Priority 1	Priority 2	Priority 3
		Classrooms							
1		Resilient tile floors - Generally, floors are in good condition but							
		local repairs are required.	40,800 sqft	LS	\$5,000	1		\$5,000	
3		Painted CMU Walls are in good condition - maintain as needed							
		Exposed waffle slab ceiliing are in good condition							
		Corridors							
4		Resilient tile floors - Tile floors were replaced around 2000 with new VCT. Generally, floors are in good condition but local repairs are required.		LS	\$2,000	1		\$2,000	
5		Quarry tile floors at corridor and lobby around gymnasium and auditorium are in bad condition, are loosened from the concrete							



AROH	ITECTURAL INTERIORS								
		FY14 Recommendations,	<b>Cost &amp; Priorities</b>						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
6		Painted CMU walls are in good condition - maintain							
7									
8		Exposed waffle slabs - painted and in good condition Lockers need to be maintained. Consider replacement in the							
		future		EA	\$200.00	500			\$100,000
		Media Center							
9 10		Carpet - in good condition. Consider replacement in the future  Painted CMU walls are in good condition and should be maintained							
11		Ceilings - Exposed painted steel and tectum are in good condition							



ARCH	HECTURAL INTERIORS								
		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
12		Gymnasium							
		Wood floor are in good condition - refinish as per a maintenance schedule		SF	\$7.50	4500		\$33,750	
13									
14		Painted plaster walls are in good condition - maintenance paint as required  Exposed steel and tectum ceilings are in good condition							
		Laskay Paama							
15		Painted concrete floors are in good condition and need to be manitained							
16		Painted CMU above ceramic tile							



		FY14 Recommendations, 0	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
17							Priority 1	Priority 2	Priority 3
		Shower/toilets - ceramic tile flooors and walls are in good condition							
18		Painted exposed concrete ceilings are in good condition							
		Auditorium							
19		Carpet - in good condition , consider future replacement		SY	\$33.00	750			\$24,75
20		Retractable acoustical separation wall between the auditorium and the gym was recent;y replaced		SF		3000			
21		Auditorium seating - many seats have been replaced with mongrol seating - replacement with padded seating could be considered in the future		EA	\$120.00	700		\$84,000	
22		Exposed brick walls are in good condition							



		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
23		Exposed steel and painted GWB							
		Toilets							
24		Seamless resin flooring are in decent shape but should be recoated		SF	\$7.50	4000		\$30,000	
25	5	Painted CMU and accent ceramic tile walls are in good condition but should be maintained		LS	\$13,000			\$13,000	
26		Exposed waffle slab in good condition			, -,			, -,	
27		Cafeteria		-					
21		Vinyl tile floors replaced around 2000 are oin good condition							



AROH	TECTORAL INTERIORS								
		FY14 Recommendations,	Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
28		Painted CMU walls are in good condition							
29	1	Acoustical tile ceiling - tiles are cupping and should be replaced in the future		SF	\$4.50	5500	\$24,750		
		Kitchen							
30		Quarry tile floors have areas that are failing that need to be removed and repaired/replaced		SF	\$20.00	2500	\$50,000		
31		Unpainted and painted CMU walls - all walls should be painted		LS	\$8,000	1	\$8,000		



AICH	TIECTURAL INTERIORS								
		FY14 Recommendations,	<b>Cost &amp; Priorities</b>						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
32		Painted exposed concrete waffle slab is in good condition and should be repainted		LS	\$5,000	1	\$5,000		
33	and the same of th	Administration							
		VCT floors are in good condition							
34		Painted CMU walls are in good condition and should be maintained							
35		Acoustical tile ceilings are in good condition							
		Health Suite							
36		VCT floors are in good condition							
37		Painted CMU walls are in good condition							
38		Acoustical tile ceilings are in good condition							
		+ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	1						



ltem	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
		Miscellaneous							
39		Interior doors and frames - repair		LS	\$5,000	1		\$5,000	
40		Interior door hardware - repair/replace		LS	\$5,000	1		\$5,000	
41		Chalk boards/marker boards - replace		LS	\$5,000	1		\$5,000	
42		Toilet compartments - rpairs		LS	\$3,000	1		\$3,000	
43		Toilet room accessories		LS	\$1,000	1		\$1,000	
44		Drinking fountains - repairs		LS	\$3,000	1		\$3,000	
		Install new keyless access door including work at head end		LS	\$34,000	1	\$34,000	+ - /	
		Accessibility (if triggered)			<b>,</b> , , , , , , , , , , , , , , , , , ,		, , , , , , , , , , , , , , , , , , , ,		
45		Corridor passage doors to be widened		EA	\$15,000	13			\$195,00
46		Modify stairways, risers, treads and rails		EA	\$20,000	4			\$80,00
47		Ramp to the gym is too steep, install a lift		EA	\$40,000	1			\$40,00
48		Make student toilets accessible		EA	\$8,000	13			\$104,00
49		Install accessible drinking fountains		EA	\$7,500	6			\$45,00
50		Replace one elevator and install one new elevator		EA	\$150,000	2			\$300,00
51		Make classroom sinks accessible		EA	\$2,500	36			\$90,00
52		New accessible hardware		LS	\$5,000	1			\$5.00
53		Install whiteboards at each classroom		EA	\$650	32			\$20,80
		Entrance security sequence modification							
		Install new partitions, doors and electronic hardware to create a							
		security point for check in during occupied times		LS	\$30,000	1	\$30,000		
			Architectural Interiors Subtotals				\$159,750	\$189,750	\$1,004,55
			Cubidiais				Priority 1	Priority 2	Priority



# FIRE PROTECTION

Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
1		Fully sprinkler building	Provide in major						
			upgrade.	LS	\$705,000	1			\$705,000
2		Provide fire pump if necessary	Provide in major						
			upgrade.	LS	\$65,000	1			\$65,000
3		Fire Service	Provide in major upgrade.	LS	\$20,000	1			\$20,000
			Fire Protection Subtotals				\$0 Priority 1		+,



# **PLUMBING**

Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
1							Priority 1	Priority 2	Priority 3
		The sanitary drainage piping, grease trap, & floor drains are in fair condition w/ piping replaced as required.	Continue to replace piping as needed until major upgrade	LS	\$10,000	1	\$10,000		
2		Domestic hot & cold water piping & valves are in fair condition, corrorion visible. Piping being replaced as required.	Continue to replace piping as needed until major upgrade	LS	\$7,000	1	\$7,000		
3		The domestic water heater & recirculation system is in good condition, no master mixing valve noted	Provide master mixing valve, store water @ 140F avoid Legioneres Disease	LS	\$3,500	1	\$3,500		
4		Pipe insulation is in good condition. Some cold water piping is uninsulated at backflow preventer & hot water piping at circupator pumps in the boiler room	Insulate uninsulated water piping	LS	\$2,300	1	\$2,300		
5		Valves, backflow preventers & mixing valves are in good condition	Test backflow preventers annually	LS.	\$1,200	1	\$1,200		
6		Electric water coolers are aged in fair condition.	Recommend replacing with accessible fixtures in major upgrade.	LS	\$24,000	1	\$24,000		



# PLUMBING

tem	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
7	500.	Urinals & flush valves are in good condition. Replace fixture with hgih efficiency fixture.		LS	\$16,000	1			\$16,000
8		Vanity type lavatories are in good condition. Newer faucets are single lever type which are not code compliant. Original wall hung lavatiries have widespread faucets & are in fair condition.	Replace faucets w/ metering type faucet, code compliant, water conserving type.	LS	\$16,000	1	\$16,000		
9	9	Water closets and flush valves are in good condition. Replace original fixtures with high efficiency fixtures.	Replace fixtures in major upgrade.	LS	\$28,000	1	V - 3,2 - 2		\$28,000
10		Classroom sinks & faucets which are in fair to good condition. Replace with water conserving accessible fixtures.	Replace fixtures in major upgrade.	LS	\$16,000	1			\$16,000
11		Original mop receptors are in fair condition; faucets & backflow preventors are in good condition	Test backflow preventers annually						
12		There are essentially no accessible fixtures throughout the facility. Some fixtures have been removed & not replaced so fixture counts may be low in some areas presently.	Provide accessible water conserving plumbing fixtures in major upgrade. Cost is under indivitual fixtures.						
13		There is ponding at roofs that were recently reroofed. Drainage required.	Install supplemental roof drains	LS	\$20,000	\$1	\$20,000		
ı		<u> </u>	Plumbing Subtotals		,	*	\$84,000 Priority 1	\$0 Priority 2	+ /



## HVAC

		FY14 Recommendations	, Cost & Priorities		T		T		
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
1	Heating Pump  2012 Variable Frequency Drives  Circulating Pumps	A new oil tank monitoring and lock system should be installed.  Room: Boilers: HB Smith 4500 Mills 22 section 5823 MBH net output, Webster - dual fuel burners. Cumbustion air: high louver ducted down to 12" AFF. Fuseomatic above boiler, fire eye opacity control. Fuel oil pump for each boiler burner. Zone pumps: Building: 290 GPM @35TDH 5HP, A wing: 182 GPM @39TDH 3HP, Admin: 70 GPM@21.5TDH, 2HP, 2HP, A wing: 130 GPM@35TDH 2 HP. 2012 new variable speed drives, super E motoers with aegis bearing protection on all pumps except spare pumps. Pump #5 is a new pump. All pumps are missing couplings guards. Pneumatic Controls/Compressor. Heat exchanger for domestic hot water heater. Summer boiler for domestic hot water heater. Burner shutoff at upper level of boiler room. Breeching into masonry chimney (Asbestos?). RPBP and meter for makeup water to each boiler. Expansion tanks overhead. Recommendation: Reinstall pump coupling guards. Expand DDC control of building.	Equipment 48 years old and at end of useable life.					Thomas 2	
			Install new tank monitoring and lock	LS	\$20,000	1	\$20,000		
			New Boilers & Equipment	SF	\$2	156,500	\$352,125		
			DDC Controls	SF	\$6	156,500	\$939,000		
			HVAC Equipment Replacement (Building-wide)	SF	\$24	156,500	\$3,756,000		
2		Corridors - General: Radiation for heating.							
3		Corridors - A Wing: Cabinet unit heaters for heating.							
4		Crawlspace: Unventilated. Recommendaiton: Add ventilation.	Crawlspace Ventilation	SF	\$0.30	156,500	\$46,950		
5		Electric Room: ATC compressor/air dryer for pneumatic controls. Fuel oil pumps, oil tank. No ventilation. Recommendation: Add ventilation.	Electric Room Ventilator	LS	\$8,500	1	\$8,500		
6		Administrative Offices: UV for heating and ventilating, operable windows and window AC units for cooling.	Equipment at end of useable life.						



# HVAC

1		FY14 Recommendations	, Cost & Priorities						
ltem	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
7		Typical Classroom: UV for heating and ventilating, operable windows. Console exhaust fan for UV relief.	useable life.						
8		Art Classrooms: UV's for ventilation/heat, operable windows, 2 kilns with hood vented to outdoors with exhaust fan and makeup air duct(works poorly).	Equipment at end of useable life.						
9		Former Shop Classroom: UVs for heating and ventilating, operable windows. Unit heaters for heating.	Equipment at end of useable life.						
10		Locker Room: UV for heaing and ventilating, propeller wall exhuast fan and dehumidifier.	Equipment at end of useable life.						
11	Gym Air Handler	Gymnasium: (2) air turnover units on one side of space, exhaust through wall registers in opposite side of space.	Equipment at end of useable life.						
12		Auditorium (2) air handling units on one side of stage, exhuast through wall registers in opposite side of space, destratification fans.	Equipment at end of useable life.						
13		Miscellaneous Spaces: Hot water heating and general exhuast.							
14		Entries/Vestibules: Cabinet unit heaters for heating.							
15		Bathrooms: Hot water heating, general exhuast makeup air through door louvers 80% of bathrooms have been renovated.							
16	Science Classroom Hood Exhuast	Science Classrooms: UV for heating and ventilating, operable windows fumehood exhaust.							
17		Practice Room: UV for heating and ventilating, operable windows.	Equipment at end of useable life.						
18		Computer Room: UV for heating and ventilating, operable windows destratification fans, No AC. Recommendation: Add cooling.							



## HVAC

		FY14 Recommendations	, Cost & Priorities						
Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
							Priority 1	Priority 2	Priority 3
19		Library: UV for heating and ventilating, operable windows.	Equipment at end of useable life.						
20		Cafeteria: UV for heating and ventilating, operable windows, general exhaust.	Equipment at end of useable life.						
21	Kitchen Hood  Kitchen Steam Boiler	Kitchen: Welded SS exhuast for dishwasher, hood exhuast with ansul for one side, UV for makeup air and heating, destratification fans and Sussman 90KW electric boiler for steam to kettles. Walk-in cooler condensing units mounted on roof outside.	Equipment at end of useable life.						
22		SPED Rooms: Toshiba ductless air conditioners.	Recently added.						
23		MDF Room: Exhaust for cooling.	]						
24		General - Add Ductless AC units for office spaces	Add at various offices	SF	\$15.00	5000	\$75,000		
25		300 Wing Classrooms: UV for heating and ventilation ductless air conditioners.	Ductless AC recently added.						
26		Building Wide: Major pieces of equipment DDC controlled, new sedona controls, new controls for cafeteria, auditorium & gym. New DDC Controls not on emergency power. Existing dampers have electric actuators. Recommendation: Convert more equipment to DDC controls.							
		•	HVAC Subtotals				\$5,197,575	\$0	\$0
							Priority 1	Priority 2	Priority 3



# ELECTRICAL

Corridor Lighting: Lighting is in fair condition. Recommendations: Provide occupancy sensory for every other fixture.			FY14 Recommendations, 0	Cost & Priorities						
Power Service: Equipment is in fair working order. Recommendations: Replace electrical switchgear.  Panels: Equipment is in fair working order. Recommendations: Life expectancy has been reached.  SF \$1 156600 \$156,600  Panels: Equipment is in fair working order. Recommendations: Life expectancy has been reached.  SF \$1 156600 \$156,600  Exterior/Site Lighting: Light fixtures on building are in good condition. New roadway lighting pole fixtures have been installed with LED lighting. Additional site lighting is needed. Recommendations: Install new sterior site lighting is needed. Recommendations: Install new sterior site lighting. Classroom Lighting: Lighting is in fair condition. Recommendations: Add occupancy sensors with wall switches to classrooms.  Corridor Lighting: Lighting is in fair condition. Recommendations: Provide occupancy sensory for every other fixture.  EA \$300 110 \$33,000  S6,000	Item	Photographs	Recommendations	Remarks	Unit		Qty		Cost	
Recommendations: Replace electrical switchgear.    Panels: Equipment is in fair working order. Recommendations: Panels should be replaced.   Panels: Equipment is in fair working order. Recommendations: Life expectancy has been reached.								Priority 1	Priority 2	Priority 3
Panels: Equipment is in fair working order. Recommendations: Panels should be replaced.  Exterior/Site Lighting: Light fixtures on building are in good condition. New roadway lighting pole fixtures have been installed with LED lighting. Additional site lighting is needed. Recommendations: Install new exterior site lighting  Classroom Lighting: Lighting is in fair condition. Recommendations: Add occupancy sensors with wall switches to classrooms.  Corridor Lighting: Lighting is in fair condition. Recommendations: Provide occupancy sensory for every other fixture.  EA \$300 110 \$33,000	1									
Panels: Equipment is in fair working order. Recommendations: Panels should be replaced.  Exterior/Site Lighting: Light fixtures on building are in good condition. New roadway lighting pole fixtures have been installed with LED lighting. Additional site lighting is needed. Recommendations: Install new exterior site lighting  Classroom Lighting: Lighting is in fair condition. Recommendations: Add occupancy sensors with wall switches to classrooms.  Corridor Lighting: Lighting is in fair condition. Recommendations: Provide occupancy sensory for every other fixture.  EA \$300 110 \$33,000					SF	\$1	156600		\$156 600	
Exterior/Site Lighting: Light fixtures on building are in good condition. New roadway lighting pole fixtures have been installed with LED lighting. Additional site lighting is needed. Recommendations: Install new exterior site lighting  Classroom Lighting: Lighting is in fair condition. Recommendations: Add occupancy sensors with wall switches to classrooms.  EA \$300 110 \$33,000  Corridor Lighting: Lighting is in fair condition. Recommendations: Provide occupancy sensory for every other fixture.  EA \$300 20 \$6,000	2									
condition. New roadway lighting pole fixtures have been installed with LED lighting. Additional site lighting is in eeded. Recommendations: Install new exterior site lighting: Lighting is in fair condition.  Recommendations: Add occupancy sensors with wall switches to classrooms.    Classroom Lighting: Lighting is in fair condition. Recommendations: Add occupancy sensors with wall switches to classrooms.    EA \$300 110 \$33,000	3		Exterior/Site Lighting: Light fixtures on building are in good		SF	\$1	156600		\$156,600	
Classroom Lighting: Lighting is in fair condition. Recommendations: Add occupancy sensors with wall switches to classrooms.  EA \$300 110 \$33,000  Corridor Lighting: Lighting is in fair condition. Recommendations: Provide occupancy sensory for every other fixture.  EA \$300 20 \$6,000	3		condition. New roadway lighting pole fixtures have been installed with LED lighting. Additional site lighting is needed.		LS	\$30,000	1	\$30.000		
Recommendations: Provide occupancy sensory for every other fixture.  EA \$300 20 \$6,000	4		Recommendations: Add occupancy sensors with wall switches				110			\$33,000
Replace the auditorium general lighting	5		Recommendations: Provide occupancy sensory for every other							\$6,000
	6		Replace the auditorium general lighting			·		_		ψ0,000



# ELECTRICAL

Item	Photographs	Recommendations	Remarks	Unit	Unit Cost	Qty		Cost	
7		Power Distribution: Recommendations: Original panels should be replaced.	Cost for this item is included in Item 2 above.				Priority 1	Priority 2	Priority 3
8		Equipment Wiring: The wiring is in fair condition. Recommendations: New circuits are only needed as areas are renovated.							
9		Locker Room Lighting: Lighting is poor and space is dark. Recommendations: Provide additional lighting in Locker Room.	Added item from previous report.	EA	\$300	24	\$7,200		
10		Clock/Bell/Paging:The intercom system is in good condition. Clocks have been replaced with Sapling. New intercom has been installed in the classrooms. Recommendations: None	Item has been addressed since previous study.		·				
11	No.	Exit Signs: Recommendations: Add illumuniated in all areas	Added item from				•		
12		such as Kitchen.  Fire Alarm: The fire alarm system is in good condition and code compliant. Recommendations: None	previous report.	SF	\$0.15 \$0	156500 0	\$23,475		
13		Toilet Room: Strobe lights are not located in toilet room.	Added item from	F.	·		<b>#</b> 000		
		Recommendations: Add strobe lights.	previous report.	EA	\$500	10	\$5,000		L



# ELECTRICAL

Item	Photographs	FY14 Recommendations, O	Remarks	Unit	Unit Cost	Qty		Cost	
14		Technology: New phone system is being contemplated system-wide.  Recommendations: Install new phone system to match sytem system		05		450500	Priority 1	Priority 2	Priority 3
15		Emergency Power & Lighting: Update new ATS-LS in 2 hr rated room. New life panel has been installed. Recommendations: None	Added item from previous report.	SF	\$0.50	156500	\$78,250		
16		Generator: The generator is in good condition and appears to be well maintained. Recommendations: None.							
17	SIGNET	Security: New Security System with door buzzer and intercom at main entrance has been installed. Recommendations: None	Item has been addressed since previous study.						
			Electrical Subtotals				\$173,925 Priority 1	\$313,200 Priority 2	



# COST SUMMARY

ltem	Trade Item		Cost	
		Priority 1	Priority 2	Priority 3
1	Site Work	\$402,300	\$0	\$55,000
2	Exterior Envelope	\$2,391,800	\$616,000	\$0
3	Architectural Interiors	\$159,750	\$189,750	\$1,004,550
4	Fire Protection	\$0	\$0	\$790,000
5	Plumbing	\$84,000	\$0	\$60,000
6	HVAC	\$5,197,575	\$0	\$(
7	Electrical	\$173,925 \$8,409,350	\$313,200	\$39,000 \$1,948,550

Project Budget Costs		
General Conditions	\$ 840,935 \$ 111,89	5 \$ 194,855
OH & Profit	\$ 925,029 \$ 123,08	5 \$ 214,341
Construction Totals	\$10,175,314 \$1,353,93	\$2,357,746
Administrative Costs	\$ 50,877 \$ 6,770	) \$ 11,789
A/E Fees	\$ 1,017,531 \$ 135,39	3 \$ 235,775
Total Project costs	\$11,243,721   \$1,496,09	2 \$2,605,309
·	Priority 1 Priority	2 Priority 3



### COMBINED YARMOUTH SCHOOLS COST SUMMARY

	FY14 Recommendations, Cost & Priorities			
			Cost	
		Priority 1	Priority 2	Priority 3
ME Small Elementary School		\$1,775,650	\$1,520,250	\$460,000
Project Budget Costs				
General Conditions		\$ 177,565	\$ 152,025	\$ 46,000
OH & Profit		\$ 195,322	\$ 167,228	\$ 50,600
Construction Totals		\$ 2,148,537	\$1,839,503	\$ 556,600
Administrative Costs		\$ 10,743	\$ 9,198	\$ 2,783
A/E Fees		\$ 214,854	\$ 183,950	\$ 55,660
Total Project costs - ME Small ES		\$ 2,374,133	\$2,032,650	\$ 615,043

Station Avenue Elementary School		\$582,550	\$1,130,440	\$72,600
Project Budget Costs				
General Conditions	\$	58,255	\$ 113,044	\$ 7,260
OH & Profit	\$	64,081	\$ 124,348	\$ 7,986
Construction Totals	\$	704,886	\$1,367,832	\$ 87,846
	•			
Administrative Costs	\$	3,524	\$ 6,839	\$ 439
A/E Fees	\$	70,489	\$ 136,783	\$ 8,785
Total Project costs - Station Ave ES	\$	778,898	\$1,511,455	\$ 97,070

Mattacheese Middle School	\$8,409,350	\$1,118,950	\$1,948,550
Project Budget Costs			
General Conditions	\$ 840,935	\$ 111,895	\$ 194,855
OH & Profit	\$ 925,029	\$ 123,085	\$ 214,341
Construction Totals	\$ 10,175,314	\$1,353,930	\$2,357,746
Administrative Costs	\$ 50,877	\$ 6,770	\$ 11,789
A/E Fees	\$ 1,017,531	\$ 135,393	\$ 235,775
Total Project costs - Mattacheese MS	\$ 11,243,721	\$1,496,092	\$2,605,309

Total Project costs - Yarmouth Schools	\$ 14,396,753	\$5,040,197	\$3,317,422
	Priority 1	Priority 2	Priority 3