

# Massachusetts School Building Authority

## Maintenance and Capital Planning Record

The Maintenance and Capital Planning Record is one of the pre-requisite documents required during the application process that the Massachusetts School Building Authority (MSBA) has established for the new grant program for school construction and renovation projects. This report was generated by the MSBA's online Maintenance and Capital Planning System. It contains information entered by representatives selected by the school district regarding district maintenance and capital planning budgets and practices.

For more information on the terms used in this report, the new grant program, or the Massachusetts School Building Authority, please see the MSBA website at <http://www.massschoolbuildings.org>. Information about the Maintenance and Capital Planning System can be found in the User Guide located in the Policies and Guidelines section.

This Maintenance and Capital Planning Report (MCP Report) contains the following sections:

- | Staffing
- | Capital Program
- | Maintenance Planning
- | Capital Budget
- | Facilities Condition Index
- | Attachments
- | Environment
- | Submission
- | Maintenance Budget

Attachments are described by their file name and the date that they were uploaded and have not been reproduced within this report. Enter the Maintenance and Capital Planning System to print each attachment uploaded by the district in its entirety.

District:	Belmont
Submission Date:	8/8/2016 3:46:39 PM
Project(s) for which this maintenance and capital planning information was submitted:	Belmont High - 201500260505
Comments:	

**Disclaimer:** A Maintenance and Capital Planning Record is NOT an application for funding. Submission of the Maintenance and Capital Record in no way commits the MSBA to accept an application, approve an application, provide a grant, or any other type of funding, or places any other obligation or requirement on the MSBA.

## Staffing

1.	Is school facility maintenance performed by the municipality or the school district?	Combination of both
2.	Are vendors used for any aspect of school facility maintenance?	Yes
	Vendor Details	<p>Elevators, Three Years</p> <p>HVAC, Three Years</p> <p>Plumbing, Three Years</p> <p>Fire Alarm System, One Year</p> <p>Pest Management, One Year</p> <p>Other, Emergency Generators, One Year</p> <p>Other, Boiler Water Treatment, One Year</p> <p>Other, Kitchen Stive Hoods Inspections, One Year</p> <p>Other, Fire Extinguishers Inspections, One Year</p> <p>Other, Overhead Doors, One Year</p> <p>Other, Indoor Pool Maintenance, One Year</p> <p>Other, Custodial Services, Three Years</p>
3.	Full Time Equivalent: the number of FTE custodial and maintenance staff positions for the years displayed.	<p>2016: 27 Maintenance FTE's</p> <p>2015: 27 Maintenance FTE's</p> <p>2014: 27 Maintenance FTE's</p>
4.	Is there a Director of Facilities for the district?	Yes
5.	Does the district have defined job descriptions for custodial and maintenance staff roles?	Yes
	Attachment: Job Descriptions	<a href="#">Head Custodian - High School.doc</a> , Date Uploaded: 7/28/2016
6.	Is there a system of performance evaluations of the district's custodial and maintenance staff?	Yes
7.	Is training required and/or provided for the district's custodial and maintenance staff?	Yes
	If "Yes," please describe:	Refer to Appendix X of the Belmont Facilities Manual

## Maintenance Planning

1.	Is there a written Maintenance Plan for the district that details minimum custodial and maintenance standards and which governs day to day operations?	Yes
	Attachment: Maintenance Plan	<a href="#">Belmont Maint Manual 160808.pdf</a> , Date Uploaded: 8/8/2016
	Does the Maintenance Plan include standards and benchmarks for maintenance?	Yes
	Please describe how the standards and benchmarks are established and monitored, OR note the page number in your uploaded Maintenance Plan that contains this information.	Refer to Section 3.04 of the Belmont Buildings Maintenance Manual
2.	Is there a preventative or predictive maintenance plan for the district's facilities?	Yes
	Attachment: Preventative or Predictive Maintenance Plan	
	Or, if it is included in the district's Maintenance Plan, please provide the page number in that document where this information can be found.	Section Three, Preventive Maintenance Procedures
3.	Does the district have a work order system?	Yes
	Please describe the work order system and how it addresses planned and unplanned maintenance.	The District uses the Solar Winds Web Desk Help work order system to track work order requests submitted by a variety of sources, and tracks progress. Work orders are assigned to planned maintenance as is appropriate. A review of the current status of work orders is undertaken for each school on a monthly basis.
	Attachment: Work Order	<a href="#">Belmont Facilities Work Order 17386.pdf</a> , Date Uploaded: 8/4/2016

## Facilities Condition Index

1.	Does the district conduct periodic inspections of school facilities to ascertain their condition?	Yes
	If "Yes," please describe what is inspected, who conducts the inspections, and how they are documented.	See Section Three of the Belmont Buildings Maintenance Manual
2.	Does the district have a Facilities Condition Index? A Facilities Condition Index (FCI) keeps track of school systems, identifies major system components, and tracks information about those components, including their expected useful life, age, and condition. For example, an FCI would track information not just about the HVAC system as a whole, but about each boiler.	Yes
	If "Yes," what year was it last updated?	2016
	Data Collected: Please indicate whether your FCI tracks data for the following:	
	Building Systems	Yes
	Building Systems Components	Yes
	System Component Age	No
	System Component Condition	No
	Expected Useful Life	No
	Remaining Useful Life	No
	Estimated Replacement Costs	Yes
	Please describe any other categories of data that are captured.	Building square footage and cost/SF of certain improvements.
	Attachment: FCI Sample	<a href="#">Belmont Schools FCI 160808.xlsx</a> , Date Uploaded: 8/8/2016
	Please describe your methodology for keeping the FCI up to date.	Monthly visits to each school include meeting with the Principal and Head Custodian to review and update work orders and maintain a list of building deficiencies that require efforts of outside vendors. The costs to remedy these deficiencies are noted for current operating budgets and possible Capital Budget requests. These figures are then incorporated to the FCI.
3.	Please describe how the district analyzes facility condition information and how that analysis impacts decisions on the budget, capital improvements, staff performance, etc.	The process of maintaining data is noted above. This data will be reviewed during the Capital Budget process.
4.	Does the district have an existing protocol for commissioning/re-	Yes

<p>commissioning or retro-commissioning of any of its facilities or does the district have any plans to perform any commissioning activities (do not include any MSBA funded commissioning or re/retro-commissioning)?</p>	
<p>If "Yes," identify the school(s) and year(s) of re- or retro-commissioning:</p>	<p>The Department will typically commission new construction. The Department has performed in-house retro-commissioning on a limited basis. Beyond that, the Department does not have a formal plan for re-commissioning.</p>

## Environment

1.	Does the district routinely monitor air quality and air changes in its facilities?	Yes
	If "Yes," describe how and how often air quality is monitored:	Air quality and air changes are monitored as a function of the Town's commitment to maintaining its HVAC systems per the manufacturer's recommendations. A review of a systems ability to provide recommended air circulation is a component of quarterly preventive maintenance tasks.
2.	Does the district implement practices in the EPA's Tools for Schools program?	Yes
	If "Yes," please describe:	The District has recently acquired the EPA's IAQ Tools for School Action Kit, and will begin implementing procedures during the summer 2016 school break.
3.	Does the district have a protocol to eliminate toxic chemicals and use 'green' products for cleaning and repairs?	Yes
	If "Yes," please describe:	The District uses the Johnson Diversy High Performance Cleaning System to properly dispense the appropriate amount of product for each cleaning procedure. The system reduces waste and avoids excess materials from entering the waste system. In addition, the District exclusively uses Green Seal cleaning products.
4.	Best practices for building operators typically include regular inspecting, testing, balancing, and cleaning of HVAC components in order to make them operate more efficiently and improve air quality. Does the district have a protocol for doing this?	Yes
	If "Yes," please describe:	Equipment assessments are a standard element of all maintenance contract specifications.
5.	Does the district monitor energy consumption and spending?	Yes
	If "Yes," please describe:	The District participates in Mass Energy Insight and periodically generates usage reports for comparison to previous seasons and to determine the effects of installed Energy Conservation Measures..
6.	Does the district implement energy conservation measures and/or has the district made improvements to its facilities that result in energy savings?	Yes
	If "Yes," please describe:	The Town of Belmont received Green Communities designation in 2014. The Town has recently completed Energy Management System installation and upgrades to Belmont High School and the Chenery Middle School for the expenditure of its \$151,850 Initial Grant Award. In addition, the Facilities Department has performed some in-house retro-commissioning of its building systems and routine improvements to other systems from operating funds. These measures would include lighting retrofits and HVAC equipment upgrades. The District expects to apply for and receive an annual Green Communities Competitive Grant in the amount of \$250,000 annually for the foreseeable future. In addition, the District will continue to funds line items for a soon-to-be-retired ESCO project, and use these funds for continued energy efficiency projects. In FY17, this will total over \$100,000; in FY18 and beyond, this figure will exceed \$200,000.

## Maintenance Budget

1.	Does the person in charge of facility maintenance have a role in establishing the maintenance budget?	Yes
	Please describe:	The Director of Facilities initially develops a draft budget proposal with input from the administrative staff of the department. The Director then makes presentations on the budget to the appropriate in-house and elected officials that determine the final Town budget.

The following section requests information regarding the history of budget requests made to and allocated by the school committee as well as actual and projected district expenditures. The budget categories mirror those used to report to the DESE. The following DESE cost categories are used in the budget details captured in this section.

### 2. Requested Budget

FY	4100 Cust Svcs	4120 Bldg Heat	4130 Utility Svcs	4210 Grnd Maint	4220 Bldg Maint	4225 Bldg Scry	4230 Equip Maint	4300 Extra Maint	4400 Netw Tele	4450 Tech Maint	Total
2016	1,074,872	371,105	1,213,784	341,144	1,122,469	15,375	83,035	513,560	77,000	49,000	4,861,344
2015	1,021,995	375,867	1,144,386	293,866	949,823	15,000	82,660	0	206,000	35,000	4,124,597
2014	1,033,434	490,104	1,338,943	235,849	882,818	115,000	82,660	0	68,000	10,000	4,256,808
2013	1,038,839	832,139	1,050,510	282,757	1,303,749	15,000	82,660	0	60,000	10,000	4,675,654

### 3. Allocated Budget

FY	4100 Cust Svcs	4120 Bldg Heat	4130 Utility Svcs	4210 Grnd Maint	4220 Bldg Maint	4225 Bldg Scry	4230 Equip Maint	4300 Extra Maint	4400 Netw Tele	4450 Tech Maint	Total
2016	1,074,872	371,105	1,213,784	341,144	1,122,469	15,375	83,035	513,560	77,000	49,000	4,861,344
2015	1,021,995	375,867	1,144,386	293,866	949,823	15,000	82,660	0	206,000	35,000	4,124,597
2014	1,033,434	490,104	1,338,943	235,849	882,818	115,000	82,660	0	68,000	10,000	4,256,808
2013	1,038,839	832,139	1,050,510	282,757	1,303,749	15,000	82,660	0	60,000	10,000	4,675,654

4. If there is a variance of 20% or greater between the total requested and total allocated amounts in the same year, please provide details on the reason for the difference.

N/A.

### 5. Expended Budget: This information was pre-populated based on information the district provided to the DESE.

FY	4100 Cust Svcs	4120 Bldg Heat	4130 Utility Svcs	4210 Grnd Maint	4220 Bldg Maint	4225 Bldg Scry	4230 Equip Maint	4300 Extra Maint	4400 Netw Tele	4450 Tech Maint	Total
2014	1,056,946	709,605	933,671	411,699	1,584,985	67,370	120,937	79,154	70,087	50,827	5,085,281
2013	1,107,507	715,950	891,336	381,083	1,091,069	42,826	88,191	171,228	62,845	144,333	4,696,368

2012	1,040,153	593,922	909,657	292,528	1,032,075	7,332	92,679	33,357	67,348	27,791	4,096,842
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Expended Budget (District-Entered): This information was entered by the district as it was not yet available through the DESE.

FY	4100 Cust Svcs	4120 Bldg Heat	4130 Utility Svcs	4210 Grnd Maint	4220 Bldg Maint	4225 Bldg Scry	4230 Equip Maint	4300 Extra Maint	4400 Netw Tele	4450 Tech Maint	Total
2015	1,015,873	279,940	1,200,226	303,083	1,451,970	5,242	76,144	0	112,992	121,072	4,566,542

6. If there is a variance of 20% or greater between consecutive years in the district's total expended amounts please provide details on the reason for the difference.

N/A.

7. Projected Budget:

FY	4100 Cust Svcs	4120 Bldg Heat	4130 Utility Svcs	4210 Grnd Maint	4220 Bldg Maint	4225 Bldg Scry	4230 Equip Maint	4300 Extra Maint	4400 Netw Tele	4450 Tech Maint	Total
2019	1,172,025	402,436	1,464,078	333,914	1,055,466	79,268	86,782	0	63,038	51,481	4,708,488
2018	1,143,439	383,272	1,394,360	325,770	1,029,723	77,335	84,665	0	61,500	50,225	4,550,289
2017	1,115,550	365,021	1,327,962	317,824	1,004,607	75,449	82,600	55,000	60,000	49,000	4,453,013

8. What does the district believe that the appropriate amount of spending on operations and maintenance should be to allow for the routine maintenance of the district's facilities and to achieve a sound preventative and predictive maintenance program? Please provide both an absolute value and a percentage of the total district budget.

The District believes the current budget is adequate to allow for basic maintenance, but could benefit from a budgeted amount for Extraordinary Maintenance. Currently the District makes use of a Rental Revolving Fund to act in this manner. The District would benefit from an annual budget in the area of \$5,000,000, or an equivalent of approximately 8.3% of the FY15 Total District Expenditure. This would allow for an additional custodial position to provide flexibility in staffing coverage as well as additional Capital funding.

9. Please provide any other comments on your budget history and forecast that would help the MSBA understand variances or the district's budgeting process.

The Projected Budget carries a zero balance in line 4300 as that is typically for Capital Budget allocations which are unknown at this time.

10. The DESE has not provided us with your Total District Expenditures for the most recent completed fiscal year. Please provide us with this information.

Total District Expenditures for 2015: \$59,816,890





## Capital Budget

### Capital Budget History

The following is a list of all tax overrides, capital exclusions, and debt exclusions sought by the district and any of its associated municipalities and schools as provided by the Massachusetts Department of Revenue.

Vote Date	Municipality	Category	Description	Amount	Yes Votes	No Votes	Win / Loss
11/14/2005	Belmont	Debt Exclusion	DESIGN AND CONSTRUCT SENIOR CENTER INCLUDING ALL COSTS		2181	1548	Win
06/08/2009	Belmont	Debt Exclusion	renovate and reconstruct the wellington elementary school		3849	2022	Win
06/14/2010	Belmont	Override	GENERAL OPERATING EXPENDITURES	2,000,000	3044	3431	Loss
04/01/2014	Belmont	Debt Exclusion	Pay for bonds/notes for design, demolish and reconstruct Underwood Pool facility on Cottage Street, including replacement of swimming pool, bath house, filter house and associated work		3377	2093	Win

- |    |   |   |
|----|---|---|
| 1. | Please provide any comments, corrections, or additions to the information listed above. | The debt exclusion amount of the April 1, 2014 vote for the Underwood Pool was \$2.9 million. On April 7, 2015 an override in the amount of \$4,500,000 was approved by a vote of 4,733 to 3,837. |
| 2. | Please describe any capital projects that were deferred due to funding constraints.     | The Town acknowledges that unfunded major capital projects include the Library, Police Headquarters, and the Department of Public Works complex.  |

### Capital Improvement Plan and Budget

- |    |  |
|----|--|
| 1. | <p>Please upload a document or documents that list, by year and by item, your anticipated district, municipal, and school capital spending for the next five years. Your attachment(s) can be in any format, but must include the following information:</p> <ul style="list-style-type: none"> <li>  Fiscal year of expected implementation for each item</li> <li>  Whether each item is for the entire district, an individual municipality( and which), or a school ( and which)</li> <li>  Description of scope or need for work</li> <li>  Estimated Cost</li> <li>  Funding mechanism(override or debt exclusion, if known)</li> <li>  Term of debt (if known)</li> </ul> |
|----|--|

Attachment(s)	<a href="#">Belmont School Capital FY13 - FY22 160803.xlsx</a> , Date Uploaded: 8/4/2016
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- |    |   |   |
|----|---|---|
| 2. | Please provide any information the district has about the availability of non-public funds for school facility purposes.  | None identified.  |
| 3. | Please provide information from the Treasurer, Finance Committee, and/or Capital Planning Committee regarding the current outstanding debt and future bonding capacity inside the debt limit for the municipality/municipalities. | <p>Roughly 95% of the Town of Belmont's outstanding debt is either debt exclusion or paid for by light, water and sewer rate payers.</p> <p>Calculation of Debt Capacity:</p> <p>Gross Debt Capacity -- \$ 329,918, 400<br/> Less Outstanding Debt — 82,613,404 (6/30/15 Statement of Indebtedness)<br/> Less Outstanding Pension Liability 61,000,401 (6/30/2015 Audited Financials)<br/> Net Debt Capacity \$ 186,304,595</p> <p>The above information will change as the 12/31/15 Pension Valuation is updated and</p> |

		6/30/16 Town Year End Close is finalized and Powers and Sullivan completes the external audit in the fall.
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## Attachments

The following is the list of attachments that the district provided to the MSBA as a part of this MCP Record.	
Job Descriptions	<a href="#">Head Custodian - High School.doc</a> , Date Uploaded: 7/28/2016
Maintenance Plan	<a href="#">Belmont Maint Manual 160808.pdf</a> , Date Uploaded: 8/8/2016
Preventative Maintenance Plan	
Sample Work Order	<a href="#">Belmont Facilities Work Order 17386.pdf</a> , Date Uploaded: 8/4/2016
Facilities Condition Index	<a href="#">Belmont Schools FCI 160808.xlsx</a> , Date Uploaded: 8/8/2016
Capital Plan Budget	<a href="#">Belmont School Capital FY13 - FY22 160803.xlsx</a> , Date Uploaded: 8/4/2016
Supplemental Document (s)	<a href="#">Belmont School Capital FY13 - FY22 160803.pdf</a> , Date Uploaded: 8/8/2016 Please note the Capital Budget submitted is for the periods FY13 - FY17 on one tab, and FY18 - FY22 on a second tab. The supplemental submission is a duplicate from the Capital Budget section.

## Submission

This section will remain blank until a record is submitted. When submitting, the district representatives are required to affirm the following:	
<p>ⓑ</p>	<p>The district has reviewed all of the information entered in the MCP system and the documents attached and affirms that the answers are responsive to the questions and accurately and completely represent the maintenance procedures, budgeting history, capital planning process, expenditure history, and planned budget of the district.</p>
<p>ⓑ</p>	<p>The district acknowledges that by submitting this form electronically it is providing the MSBA with the final, definitive version of the district's maintenance and capital planning information as of this date, and that this information will be used to determine the district's eligibility for reimbursement and potential incentive points.</p>
Submission comments or notes:	
Submission date:	8/8/2016 3:46:39 PM

**BELMONT PUBLIC SCHOOLS  
Belmont, Massachusetts**

**JOB DESCRIPTION**

POSITION: HEAD CUSTODIAN - HIGH SCHOOL

QUALIFICATIONS:

1. Successful experience and demonstrated ability in custodial work.
2. Custodial background with hands-on experience and supervisory skills.
3. Working knowledge and experience in the operation of building systems – boilers, univents, electrical, plumbing , swimming pool, and custodial equipment.
4. Working knowledge and experience in minor maintenance repair work including painting.

RESPONSIBILITIES:

1. Responsible for overall cleaning and daily operation of the building, interior and exterior.
2. Responsible for supervision of Assistant Custodian(s), delegating work to assistants.
3. Responsible for building security.
4. Responsible for heavy lifting, moving furniture and equipment as needed.
5. Available to work Monday through Friday 6: 00 a.m. to 3: p.m. or 7:00 a.m. to 4:00 p.m. (to be determined) with one hour for lunch.
6. Responsible for snow removal and grounds maintenance as needed.
7. Responsible for minor maintenance repair work, including painting.
8. Shall be assigned these and other duties and responsibilities by the Principal and/or the Supervisor of Buildings and Grounds within this classification.

SALARY CLASSIFICATION: Classification A

SALARY AND BENEFITS: As determined by Collective Bargaining

Approved: 6/19/1995

# Town of Belmont Facilities Department

## Buildings Maintenance Manual



Gerald R. Boyle  
Director of Facilities  
19 Moore Street  
Belmont, MA 02478  
617-993-2640  
August 8, 2016

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## **SECTION ONE INTRODUCTION**

### 1.01 Mission Statement.

The Facilities Department is responsible for all Town, School and Library buildings. The Department performs skilled work in the repair, construction and maintenance of 24 facilities, encompassing just under 1,000,000 square feet of municipal office, educational, operational, public safety and athletic space. It is our goal to create a program to inspect Town, School and Library buildings on an ongoing basis. These inspections will allow timely, routine documentation of maintenance needs, and this will facilitate planning and the budget process.

The Facilities Department ensures safe and comfortable working environments for all employees, students and visitors in Town, School and Library facilities, and prompt response, quality service, and the efficient resolution of maintenance problems. The Department's method of assessments include regular on-site inspections of facilities, maintaining regular dialog with relevant staff groups and professionals to ensure standards are being met and/or improvements are communicated to guarantee efficient correction. Department staff ensures building safety and the optimal performance of building systems by providing preventive maintenance and repair of mechanical, HVAC, electrical, plumbing, building security and life-safety systems and exterior/interior repairs and renovations.

The Department is also responsible for ensuring the planning, design, construction, operation and maintenance of all Town, School and Library facilities, balancing financial and technical constraints with aesthetic and historic concerns.

The goals of the Department include the following:

1. Respond to Work Order Requests in a prioritized and expeditious manner.
2. Provide functional facilities that:
  - a. Meet the Town's, School's and Library's requirements;
  - b. Have an environmentally acceptable atmosphere for staff, students and visitors;  
and
  - c. Ensure the health, safety and security of all personnel.
3. Identify potential problems early and within the context of the planned maintenance system so that corrective action may be planned, included in the budget cycle and completed in a timely manner.
4. Establish a deferred maintenance list.
5. Follow an orderly program so that administrative costs are minimized and the workload for personnel is maintained at a relatively constant level.
6. Conserve energy and resources by ensuring maximum operating efficiency of energy-consuming equipment and systems. Investigate and implement energy efficiency improvements through programs such as the Massachusetts Department of Energy Resources' Green Communities program.

7. Maintain credible relations with users by providing well-maintained facilities and information on planned maintenance activities.
8. Identify and implement possible improvements that will reduce costs, improve services and result in more efficient operation.
9. Establish data collection systems to develop: uniform reporting formats, use of electronic data processing, supervisory and management control reports, and continual feedback of information between departments through the use of the Solar Winds Web Help Desk work order system.

1.02 Facilities Description. Note: Although this Building Maintenance Manual is being developed and will be applicable to all Town, School and Library facilities, this initial version will specifically address School buildings.

Belmont High School. This 257,120 square foot facility was opened in 1971. There are currently 1,243 ninth through twelfth grade students enrolled. There are 82 standard classrooms and 10 other teaching spaces. Classes are held from 7:10 a.m. to 1:50 p.m. with staff arriving as early as 6:30 a.m. and staff/students remain in portions of the building until as late as 10 p.m. The field house, upper gymnasium and indoor pool see evening and weekend use, and there are summer programs using these and other spaces.

This two-story steel framed school is typical of construction in the early 1970's. The boiler plant is original with three steam boilers that have dual fuel burners. There is cooling for the central core of the building, but none for classrooms.

Winthrop Louis Chenery Middle School. This 108,200 square foot facility was opened in 1972. There are currently 1,322 fifth through eighth grade students enrolled. There are 54 standard classrooms and 20 other teaching spaces. Classes are held from 7:40 a.m. to 2:20 p.m. with staff arriving as early as 6:30 a.m. Staff and students remain in the building as late as 9 p.m. There is weekend use of the gym and some summer programs.

There have not been any significant additions or renovations since the school opened, except for the installation of an Energy Management System (EMS) in 2016.

Mary Lee Burbank Elementary School. The Burbank School was built in 1931 and is 88,000 square feet. There are currently 346 Kindergarten through fourth grade students enrolled. There are 16 full sized classrooms. Classes are held from 8:40 a.m. to 2:30 p.m. with staff arriving earlier. There are after school programs that generally conclude by 6 p.m. The gymnasium is rented to the parks and recreation department for weekend and summer use.

Daniel Butler Elementary School. The Butler School was built in 1900 and has had three additions since. The total square footage now stands at 57,300. There are currently 371

Kindergarten through fourth grade students enrolled. There are 18 standard classrooms and 9 other teaching spaces. Classes are held from 8:30 a.m. to 2:30 p.m. with staff arriving earlier. There are after school programs that generally conclude by 6 p.m. The gym and cafeteria areas are used for special evening, weekend and summer programs.

Roger E. Wellington Elementary School. The 90,000 square foot Wellington School was constructed in 2013. There are currently 70 Pre-K students and 579 Kindergarten through fourth grade students. There are 31 standard classrooms and 19 other teaching spaces. Classes are held from 8:40 a.m. to 2:30 p.m. with staff arriving earlier.

Winn Brook Elementary School. The Winn Brook School was constructed in 1934 and has received two additions for a total square footage of 103,263. There are currently 457 Kindergarten through fourth grade students. There are 20 standard classrooms and 11 other teaching spaces. Classes are held from 8:50 a.m. to 2:40 p.m. with staff arriving earlier. There is minimal outside use of spaces.

1.03 Organizational Chart

See Appendix A

1.04 Facility Inventory

See Appendix B

## **SECTION TWO MAINTENANCE PROCEDURES**

This manual is written to include sufficient detail to instruct the maintenance personnel to complete all preventive maintenance work as assigned. However, this manual represents minimal requirements and is intended to cover average conditions only; therefore, personnel should use common sense and good judgment in dealing with conditions not mentioned. Specific instructions should be given by the Supervisor of Building Maintenance or the Director of Facilities when the maintenance personnel may not possess sufficient qualifications or information to determine the proper course of action or desired end result.

It is recognized that governmental codes, statutes, rules, and orders shall be considered, and where any conflict exists between the procedures outlined in this manual, those of governmental status shall prevail.

2.01 Personnel/Training Requirements

Every employee in the Facilities Department will become thoroughly familiar with the contents of this manual. A two-hour formal training session covering this material shall become a requirement in each employee's training schedule. Annual refresher training will be administered or required. See Appendix C for further detail.

## 2.02 Maintenance Frequency

The preventive maintenance tasks are performed as scheduled on the Facilities Department Preventive Maintenance Chart which is printed and posted annually. The Supervisor of Building Maintenance and each Head Custodian review the frequency of scheduled inspections before each year's printout. Changes may be necessary to provide maximum efficiency to units, pieces, or systems due to manufacturer's recommendations, age, or the characteristic nature associated with each. Changes to the chart are only performed by the Director of Facilities.

## 2.03 Location of Work

The information for scheduled preventive maintenance shall contain sufficient detail to lead the maintenance personnel to the exact location of the equipment, system, or activity to be serviced, set-up, or inspected. All data shall identify each facility by name, specific location and a building floor plan if necessary.

## 2.04 Due Date

The due date on the Preventive chart represents the month upon which the work shall be performed. As such, it allows flexibility in scheduling the inspections or tasks. Head Custodians are responsible to balance the workload for their junior custodians and or Department technicians and must schedule the work for the immediate future. It is important for all maintenance personnel to review the annual Preventive Maintenance Schedule and communicate to the Supervisor of Building Maintenance scheduled tasks and the need for materials. The Director of Facilities shall review all inventory of stock and materials so that ordering and delivering of repair items can be made to prevent delays in repair. Ordering and delivery times for materials should always be considered.

## 2.05 User Clearance and Contacts

Much of the preventive maintenance work is performed during working hours in the operational spaces of a facility. Since maintenance work is often obtrusive, noisy, and dirty, it may be necessary to obtain clearance from the facility users within the space before commencing work. For example, when electric power is turned off it will disrupt or stop facility use; therefore, the Supervisor of Building Maintenance or his designated personnel should schedule the preventive maintenance activity in advance. For any minor disruptions, the maintenance mechanic, craftsman, or custodian will be responsible for making proper notice or obtaining permission from facility users. Tests of fire alarms and the safety systems should also be announced in advance to prevent uninterrupted emergency procedures. User clearance contacts for a facility shall be a School Principal, Department Director, or the person designated to be responsible for the facility use and its condition.

## 2.06 Additional Maintenance

The character of a failure on *any* system or piece of equipment will be examined to determine if any preventive maintenance could have prevented the failure. Each problem presents its own set of unique circumstances. However, through a planned sequence of inspections and repairs, facility systems and equipment shall continue to be more reliable and show longer life and lower repairs costs.

## 2.07 Fine Tuning the Program

Our Preventive Maintenance Program and this manual should be routinely reviewed to determine its effectiveness. That effectiveness should be measured by the cost of executing the repairs, frequency of repairs, frequency of inspections, security activity, set-up planning, and man-hours necessary to complete the entire process. This review will be performed by the Director of Facilities, the Supervisor of Building Maintenance, Head Custodians and maintenance technicians annually, however, comments from all employees for information into this program is encouraged.

#### 2.08 Asset Management

Employees must be familiar with the system or equipment that he/she may be working on to prevent further damage or deterioration that may jeopardize a warranty or result in a costly replacement. All employees should use good judgment when using tools and equipment to perform their work to prevent unnecessary losses due to negligence.

#### 2.09 Employee Safety

Each employee shall use reasonable care in the performance of their duties and act in such a manner as to assure at all times maximum safety to themselves, their fellow employees, and the public.

Before beginning a task, employees shall satisfy themselves that they can perform the task without injury. If they are in doubt as to their ability to perform the work, they shall call this to the attention of their supervisor.

Before starting a task, employees shall thoroughly understand the work to be done, their part in the work, and the safety rules that apply. If an employee is called upon to perform work that could be considered hazardous and proper protection is not provided, the matter should be brought to the attention of his/her supervisor before starting the work. If questions arise, interpretation rests ultimately with the supervisor. See Appendix D for Facility Department Safety Guidelines.

### **SECTION THREE PREVENTIVE MAINTENANCE PROCEDURES**

#### 3.01 Define Preventive Maintenance

The definition of preventive maintenance is any work performed to an operational device or facility to continue operating at its proper efficiency without interruption. A skilled workforce performs preventive maintenance activities at regular intervals. As an individual category, preventive maintenances are significantly different from general maintenance. The interval between preventive maintenance actions on a particular component is established by the manufacturer's recommendations, factual measurements of degrading performance, or the impending failures that occur. For these reasons, a formal Preventive Maintenance Program shall be a high priority within the Town of Belmont Facilities Department.

#### 3.02 Preventive Maintenance Scheduled Systems and Equipment

This section lists the systems and or equipment that receives routine maintenance delineate on the Preventive Maintenance Schedule:

## SYSTEMS:

- Roofing
- Plumbing
- Emergency Lights
- Boiler Rooms
- Lighting System
- Door Hardware
- Fire Extinguishers
- HVAC
- Indoor Pool

## EQUIPMENT:

- Sump & Ejector Pumps
- Grease Traps
- Unit Ventilators
- Flag Poles
- Indoor Pool Filters and Pumps

### 3.03 Inspection Forms and Schedules

The building maintenance inspection forms and schedules have been carefully constructed to meet the needs of the department responsible for overseeing the day-to-day performance of all Town, School and Library owned facilities. If, however, a process can be improved or added, the Supervisor of Building Maintenance will work with the appropriate staff person to revise or create a new form or schedule.

All inspection forms and schedules in this manual will assist the Facilities Department in performing its responsibilities in a more cost effective and controllable manner. This in turn will result in minimizing the cost of building maintenance and increase the reliability and lifetime of the facilities. See Appendix E for Inspection Schedule.

### 3.04 Inspection Procedures

Once the need for preventive maintenance on a system, device, or piece of equipment has been determined, the actual procedure to be used in performance of that task will be established. Each process performed by the Department shall be designed to work effectively with the number of maintenance personnel available and the resources provided to and for them. With proper planning, scheduling, and communication the results shall provide the following information:

- A safety document
- A roadmap or layout of the facility or activity
- An inspection and follow through tool
- An assistant in ordering parts
- A record of performed maintenance
- A record of deferred maintenance

### **3.04.A Roofing Inspection Procedures**

This inspection procedure will help to prevent serious and costly damage such as, roof deterioration, insulation damage, deck problems, and interior water damage.

Note: Two inspection periods are recommended for this geographic region, the 1st inspection should always be scheduled in the spring, as it follows severe conditions and is the period best suited for roof work. The 2nd inspection, scheduled in the fall, will prepare the roof for subsequent severe winter conditions.

The Inspection Form will be included with a roof plan to assist in the identification of problem areas. The Roof Inspection Form, Attachment #1, contains the following:

- Building name
- Date of inspection
- Type of roof system
- Warranty information
- Inspector's name
- Check List
- Inspector's comments
- Foreman sign-off

Following the inspection, the Head Custodian will schedule a meeting with the Supervisor of Contracts Management and if necessary, the person who performed the inspection. The Supervisor of Contracts Management will review the inspection data and record all essential information and issue a Repair Punch List. The Head Custodian will schedule repairs through Facilities Department personnel, a qualified roofing contractor, or the manufacturer's warranty service.

Roof repairs will be prioritized in regard to severity of damage, location of the repair area, or included in the capital improvement schedule. The Supervisor of Contracts Management will make the final decision on scheduling repairs.

Repair data should include the following:

- Person who performed repairs, name of contractor, address, telephone number, etc.
- Date repair was completed
- What was repaired and action taken
- What building and location of repair

The roofing contractor, if scheduled, shall perform his/her own roof inspection for additional data or repairs that may have been overlooked. A roof contractor will provide important information for the facility roof history files.

Note: The Facilities Department employee performing the inspection shall clean debris from drains and roof surfaces.

To support proper record keeping for each inspection, the Inspection Form, the roof plan, and a signed-off Repair Punch List (including repair data) must be filed.

### **3.04.B Plumbing Inspection Procedure**

The first step in establishing a Plumbing Maintenance Program is the development of an inspection schedule to sustain the useful life of fixtures, fittings, valves, traps, piping, and other related items. Early discovery and repairs of minor problems will prevent costly repairs, unscheduled down time, and help conserve water. The person performing the inspection shall activate each plumbing fixture within the building to inspect for leaks, proper water flow, physical damage, and performance as recommended by the manufacturer, in addition to performing minor corrections such as adjust water flow, replace aerators, etc., to preclude return visits for minor repairs.

The Plumbing Inspection Form, Attachment #2, contains the following:

- Building name
- Date of inspection
- Inspector's name
- Type of fixture or part
- Building location, floor, room, etc.
- Inspector's comments
- Supervisor of Building Maintenance sign-off

Following the inspection, the Head Custodian will schedule a meeting with the Supervisor of Building Maintenance and if necessary, the person who performed the inspection. The Director of Facilities will review the inspection data and record all essential information resulting in a Repair Punch List. The punch list will then be issued to the Head Custodian so that repairs can be scheduled through maintenance personnel or a plumbing contractor,

Plumbing repairs may require prioritization due to contractor availability; parts needed, severity of problem, budgeting, or included in the Capital Improvement Schedule, The Supervisor of Building Maintenance will make the final decision on scheduling repairs that may need a licensed plumbing contractor.

Repair data should include the following:

- Person who performed the repair
- Item repaired and action taken
- Building and location of repair
- Date repair was completed

Note: The Head Custodian will review the plumbing repair parts inventory to effectively accomplish immediate work and order stock for future repairs.

To support proper record keeping for each inspection, the Inspection Form and a signed-off Repair Punch List (including repair data) must be filed.



### **3.04.C Emergency Lights Inspection Procedure**

Emergency lights are vital to the safety and security of a facility. Although they may be considered an illuminating device, they are not considered part of the normal lighting system and will be treated as an individual safety component. Careful observation by all maintenance personnel is needed to observe and report any evidence of defects to the emergency lighting system. Repairs must be made promptly to prevent a safety hazard or progressive deterioration of the system.

Emergency lights shall be inspected and cleaned on a monthly basis. A custodian shall replace lamps that need replacement, however, if the emergency light needs additional maintenance he or she must schedule any repairs immediately through the Head Custodian in conjunction with the maintenance electrician.

The Emergency Light Inspection Form, Attachment #3, contains the following:

- Inspector's name
- Building Name
- Date of inspection
- Check list
- Inspector's comments
- Supervisor of Building Maintenance sign-off

Following the inspection the Head Custodian will schedule a meeting with the person who performed the inspection. The Head Custodian shall review the inspection data and then submit an Emergency Repair Punch List to the maintenance electrician, or an electrical contractor immediately. Therefore, all necessary repairs or replacements will be accomplished as soon as possible. The Head Custodian will then report inspection and repair data to the Supervisor of Building Maintenance.

#### **Repair data shall include the following:**

- Person who performed repairs
- Date repair was completed
- What was repaired
- What building and location of fixture

It is a state requirement to recycle all fluorescent lamps, ballasts, and batteries as ordered by the Department of Environment Protection. Improper disposal of these items has serious consequences for the environment; therefore, all employees shall adhere to all recycling requirements of the Town of Belmont Department of Public Works.

Note: the Head Custodian will review the emergency lighting repair parts inventory to effectively accomplish immediate work and order stock for future repairs. Emergency Lighting must be repaired immediately.

To support proper record keeping for each inspection, the Inspection Form and a signed-off Repair Punch List (including repair data) must be filed.

### **3.04.D Boiler Room Inspection Procedures**

The boiler room is a vital component of each facility performing an important role required by the occupants within its confines. The focus of this inspection is to continue to provide the most pleasant and safe environment possible for those who must work in the boiler room in addition to observing that valves and mechanical components are working as designed. All suspect defective valves will be marked with a tag or similar device, recognized by the plumber contractor.

Note: The heating maintenance contractor is responsible for the total operation and maintenance requirements of the boilers and related heating equipment (refer to the HVAC maintenance contract for specific information).

Careful observation by all maintenance personnel, including mechanics and custodians, is needed to discover and report any evidence of defects within the boiler room each day, especially during the heating season.

The Boiler Room Inspection Form, Attachment #4, contains the following:

- Building name
- Date of inspection
- Name of person performing the inspection
- Check List
- Confirmation that valves were exercised
- Inspector's comments
- Supervisor of Building Maintenance sign-off

During the inspection the person performing the inspection shall make sure water treatment and boiler maintenance log books are in place, remove debris, and clean-up any water from floor.

Following the inspection, the Head Custodian will review the inspection form and report to the Supervisor of Building Maintenance the results of the inspection. The Supervisor of Building Maintenance will review the inspection data and record all essential information resulting in a Repair Punch List. The Supervisor of Building Maintenance will make the final decision on scheduling repairs that may require work performed by an outside contractor.

Repair data shall include the following:

- Person or contractor who performed the repair
- Date repair was completed
- What was repaired and action taken
- What building

To support proper record keeping for each inspection, the Inspection Form and a signed-off Repair Punch List (including repair data) must be filed.

### **3.04.E Lighting Systems Inspection Procedure**

Each lighting system is designed to produce a specific level of illumination in accordance with industry standards for those working in the area. Illumination should be maintained to improve moral, increase safety, improve housekeeping, decrease fatigue, reduce headaches, avoid eye strain, and increase production, all of which are directly reflected in lower operating costs.

Careful observation by all maintenance personnel, including custodians and technicians, is needed to discover and report any evidence of defects in lighting systems. Deficiencies must be repaired promptly to prevent progressive deterioration of the system and preclude aforementioned conditions. To maintain the required illumination intensity, custodians must keep lamps, fixtures, and reflective areas clean and in good repair.

Lamps shall be replaced on an as needed basis and cleaned according to the standard cleaning requirements. Replace blackened or discolored lamps even though they are still burning and replace fluorescent lamps as soon as they begin to flicker.

Replace any lamp with the same type wattage and voltage as labeled on the fixture or recommended by the manufacturer. If frequent burnouts occur, voltage rating of the lamp may be too low. Because of fire hazards, lamps of higher wattage than called for in the light design should not be used.

The Lighting Inspection Form, Attachment # 5, contains the following:

- Building name
- Date of inspection
- Name of person who performed the inspection
- Type of lamp or fixture
- Building location, floor, room, etc.
- Inspector's comment
- Foreman sign-off

Refer to the Preventive Maintenance Chart for buildings requiring an inspection.

During the inspection, the person performing the inspection shall replace lamps as needed; therefore, an adequate supply of replacement lamps should be available.

The inspection results should include data on damaged fixtures, ballast replacement, damaged lens, switches, etc., all of which require repairs performed by a licensed electrician.

It is a state requirement to recycle all fluorescent lamps, ballasts, and batteries as ordered by the Department of Environment Protection, Improper disposal of these

items has serious consequences for the environment; therefore, all employees shall adhere to all recycling requirements of the Town of Belmont Department of Public Works.

Note: All suspect damaged ballasts shall be marked with a tag or similar device so as to be recognized by the Town Electrician. To prevent unnecessary lamp replacement new lamps will be put in place so that the Town Electrician will only have to deal with the ballast replacement.

Following the inspection, the Head Custodian will schedule a meeting with the Director of Facilities and if necessary, the person who performed the inspection. The Director of Facilities will review the inspection data and record all essential information resulting in a Repair Punch List. The punch list will then be forwarded to the Town Electrician to plan and accomplish the repairs.

Electrical repairs may require prioritizing due to electrician or contractor's availability, parts needed, severity of problem, or budgeting. The Supervisor of Building Maintenance will make the final decision on scheduling repairs that may require work performed by an outside contractor.

Repair data shall include the following:

- Person or contractor who performed the repair
- Date repair was completed
- What was repaired and action taken
- What building and location of repair

To support proper record keeping for each inspection, the Inspection Form and a signed-off Repair Punch List (including repair data) must be filed.

### **3.04.F Door Hardware Inspection Procedure**

This inspection procedure shall continue to provide security to buildings by sustaining the useful life of door hardware components. It is helpful if Custodians or technicians, while opening or locking down a building, take notice of mechanisms for early detection of problems.

**Door hardware inspections shall focus on the following:**

- Emergency egress doors
- Primary entrance doors
- Corridor smoke activated and fire door closers
- Any door to interior space that requires added security.

The person performing the inspections shall perform minor maintenance such as adjust sticker plates, tighten screws, oil, or grease moving parts, clean and remove foreign objects.

The Door Hardware Inspection Form, Attachment # 6, contains the following:

- Building name
- Date of inspection
- Inspector's name
- Type of fixture or part
- Door location and use
- Inspector's comments
- Supervisor of Building Maintenance sign-off

Following the inspection, the Head Custodian will schedule a meeting with the person who performed the inspection. The Head Custodian will review the inspection data and record all essential information resulting in a Repair Punch List. The Head Custodian shall submit an Emergency Repair Punch List to Supervisor of Building Maintenance or a contractor.

**Note: Due to the high importance of hardware, all non- functioning door hardware shall be repaired as soon as possible. Repairs shall be reported to the Supervisor of Building Maintenance as required by all inspection data.**

To support proper record keeping for each inspection, the Inspection Form and a signed-off Repair Punch List (including repair data) must be filed.

### **3.04.F Fire Extinguisher Inspection Procedure**

A fire extinguisher can be a lifesaver, therefore, vital to the safety of a facility. It can put out a small fire before the fire fighters arrive, or at least suppress the flames while people escape. Fire extinguishers are rated for the particular material on fire and should only be used as labeled. It should be noted when attempting to extinguish a fire; use **P.A.S.S.; Pull, Aim, Squeeze, and Sweep**. Life safety is paramount, therefore, before a fire becomes unmanageable, pull fire alarm, call 911 and leave immediately and let the experts fight the fire.

Careful observation by all Facilities Department personnel is needed to observe and report any evidence of defects to a fire extinguisher. To maximize the efficiency of all fire extinguishers, an inspection shall be performed annually as scheduled on the Preventive Maintenance Chart.

The Fire Extinguisher Inspection Form, Attachment #7, contains the following:

- Inspector's name
- Building name
- Date of inspection
- Type of extinguisher
- Number of units in building
- Inspector's comments
- Supervisor of Building Maintenance sign-off

The annual fire extinguisher inspection shall be a (3) three-step inspection process:

Step one - Maintenance Personnel shall collect and consolidate all fire extinguishers in a pre-determined location for inspection by a certified fire extinguisher inspection contractor.

Step two — The contractor shall inspect, service, if necessary, and attach an inspection certificate tag to each fire extinguisher. The contractor may remove an extinguisher for service, (replacement with a temporary extinguisher must be made while an extinguisher is being serviced). Following the certification of each fire extinguisher, the Head Custodian shall submit the contractor's service report to the Supervisor of Building Maintenance.

Step three — Maintenance Personnel shall return each certified fire extinguisher to its proper location using the Fire Extinguisher Inventory List. When all extinguishers have been returned for service an inspection shall be accomplished using the Fire Extinguisher Inspection Form.

The Supervisor of Building Maintenance will issue a Fire Extinguisher Inventory List to each Head Custodian or technician prior to the Fire Extinguisher Inspection. Following the inspection, if there are any changes needed on the Inventory List, such as a new location or change in Extinguisher type, record the changes on the existing list and attach it to the inspection sheet. The Supervisor of Building Maintenance will up-date the list for the files.

The Fire Extinguisher Inventory List provides the following data:

- Fire extinguisher number
- Building number
- Check List
- Type of extinguisher
- Designated extinguisher location

Custodians must inspect fire extinguishers in their assigned building on a monthly basis to make sure the certificate of inspection tag is current, the mounting device is secure, and all signs and labels are in place.

The Head Custodian will schedule a meeting with the person who performed the inspection. The Head Custodian will review the inspection data and record all essential information resulting in a Repair Punch List. The Head Custodian shall schedule repairs through his maintenance personnel or a contractor. The Head Custodian will then report inspection and repair data to the Supervisor of Building Maintenance.

Repair data shall include the following:

- Contractor who performed service for certificate
- Person who performed repairs
- Building and number of extinguishers repaired
- Date repair was completed

To support proper record keeping for each inspection, the Inspection Form, Inventory Report, and a signed-off Repair Punch List (including repair data) must be filed.

### **3.04.F Pumps (Sump & Ejector) Inspection Procedure**

Pump maintenance procedures vary according to the type of pump that is being inspected. It is important to perform a periodic check as scheduled per the Preventive Maintenance Chart.

Pump inspections require that automatic operations are satisfactory, that screens are not clogged, bearings and motors are lubricated, and that there are no floating objects. It is also important to inspect pump casings for corrosion, physical damage, or leaking. All pumps shall be inspected using the Pump Inspection Form.

The person performing the inspection should listen to the pump as it is running to determine if the pump is operating properly without any unusual noise.

The Pump Inspection Form, Attachment # 8, contains the following:

- Location of building
- Date of inspection
- Inspector's name & comments
- Pump type
- Check List
- Material required for repairs
- Date completed

Following the inspection the Head Custodian will schedule a meeting with the person who performed the inspection. The Head Custodian will review the inspection data and record all essential information resulting in a Repair Punch List. The Head Custodian shall schedule repairs through the appropriate technician or a contractor.

Note: Due to the high importance of sump and ejector pumps, all necessary repairs shall be completed as soon as possible. Repairs shall be reported to the Supervisor of Building Maintenance as required by all inspection data.

To support proper record keeping for each inspection, the Inspection Form and a signed-off Repair Punch List (including repair data) must be filed.

### **3.04.G Grease Trap Inspection Procedure**

Grease traps are designed to prevent harmful grease deposits from entering the waste water pipe system. Grease traps shall be maintained according to the Preventive

Maintenance Chart. The person performing the inspection shall remove the grease trap cover and seal; remove grease build-up and clean interior sections of trap. When the trap is clean, inspect inside trap components before treating with a treatment product specified by the Head Custodian and Director of Facilities. All grease traps shall be inspected using the Grease Trap Inspection Form.

Note: Not all grease trap treatments are safe for waste water systems, therefore, treatment products must be carefully considered.

The Grease Trap Inspection Form, Attachment # 9, contains the following:

- Location of building
- Date of inspection
- Inspector's name & comments
- Check List
- Material required for repairs
- Date completed

Following the inspection, the Head Custodian will schedule a meeting with the person who performed the inspection. The Head Custodian will review the inspection data with the Supervisor of Building Maintenance and record all essential information resulting in a Repair Punch List, the Supervisor of Building Maintenance shall schedule repairs through his maintenance personnel or a contractor.

To support proper record keeping for each inspection, the Inspection Form and a signed-off Repair Punch List (including repair data) must be filed.

### **3.04.H Unit Ventilator Inspection Procedure**

A Preventive Maintenance Program for unit ventilators will help to continue to provide a pleasant environment within our buildings. Unit ventilators shall be maintained according to the Preventive Maintenance Chart. The Head Custodian shall order filters for all unit ventilators and have them on site prior to the inspection. All unit ventilators shall be inspected using the Unit Ventilator Inspection Form.

Note: (The person performing the inspection shall inspect the area around the unit and remove objects that may prevent the proper flow of air).

Proceed by opening the unit to inspect and perform the following as listed on the checklist:

- Vacuum interior
- Oil and grease all moving parts
- Check for missing parts or loose connections
- Check for leaks or corrosion caused by leaks
- Check for birds, insects, or rodents
- Replace filters



Following the inspection, the Head Custodian will schedule a meeting with the person who performed the inspection. The Head Custodian will review the inspection data and record all essential information resulting in a Repair Punch List. The Head Custodian shall schedule repairs through his maintenance personnel or a contractor. The Head Custodian will then report inspection and repair data to the Supervisor of Building Maintenance.

The Unit Ventilator Inspection Form, Attachment # 10, contains the following:

- Location of building
- Date of inspection
- Inspector's name & comments
- Check List
- Material required for repairs
- Date completed

Before unit is closed, run unit to listen for any loose connections, which may cause vibration and noisy operation.

To support proper record keeping for each inspection, the Inspection Form and a signed-off Repair Punch List (including repair data) must be filed.

### **3.04.I Flag Pole Inspection Procedure**

A program has been developed to inspect all flagpoles that fall under the responsibility of the Town of Belmont Facilities Department. This inspection process will ensure that all flagpoles are clean and provided with the proper hardware and equipment to proudly display flags as required. The person performing the inspection shall refer to the Flagpole Inventory and Inspection Sheet.

The Flagpole Inventory and Inspection Form, Attachment #11 contains the following:

- Location
- Type of flag pole
- Height
- Rope condition
- Paint, if needed
- Cleat condition
- Clips condition
- Comments

Following the inspection, the Head Custodian will schedule a meeting with the person who performed the inspection. The Head Custodian will review the inspection data and record all essential information resulting in a Repair Punch List. The Head Custodian shall schedule repairs through his maintenance personnel and report all inspection information to the Supervisor of Building Maintenance.

To support proper record keeping for each inspection, the Inspection Form and a signed-off Repair Punch List (including repair data) must be filed.

### **3.04.J Fire Suppression System Inspection Procedure**

Fire suppression systems must be inspected annually to provide satisfactory operation in a fire situation. Failure can be prevented in most cases with a good documented inspection, testing and maintenance program, which will result in achieving maximum reliability of the fire suppression equipment.

Careful observation by all maintenance personnel is needed to observe and report any evidence of defects to the fire suppression system equipment and location.

This inspection will verify the annual inspection and certification performed by a qualified fire suppression system contractor performing code required testing methods.

The annual fire suppression system inspection procedure shall be in (2) two steps:

Step One — The contractor shall inspect and service system and attach an inspection certificate tag.

Step Two — Following the certification of each fire suppression system, the Head Custodian shall schedule an inspection using the fire suppression inspection form.

The fire suppression system inspection form, attachment #12, contains the following:

- Inspectors Name
- Building Name
- Date of Inspection
- Certified Inspection Contractors Name
- Check List

Following the inspection the Head Custodian will schedule a meeting with the person who performed the inspection. The Head Custodian will review the inspection data and record all essential information resulting in a repair punch list. The Head Custodian will report inspection and repair data to the Supervisor of Building Maintenance. The Head Custodian will then schedule repairs through his maintenance personnel or a contractor.

Repair data shall include the following:

- Contractor Who Performed Service For Certificate

- Person or Contractor Who Performed Repairs
- Building Name
- Date Repairs Were Completed

Note: The Supervisor of Contracts Management shall review the contractor inspection report data and recommendations.

To support proper record keeping for each inspection, the inspection form and a sign-off repair punch list (including repair data) must be filed.

### **3.04.K HVAC System Inspection Procedure**

All School HVAC systems are maintained and repaired by outside vendors. Contract specifications call for quarterly preventive maintenance efforts, including inspections with reports to the Supervisor of Contracts Management. Each quarterly report will also include a list of recommended repairs and upgrades. Finally, a year-end closeout report is also required for each school's system. The format of the inspections and reports is per the vendor.

### **3.04.L INDOOR POOL INSPECTION PROCEDURE**

In an effort to provide a safe and healthy swimming and aquatics experience for students, staff and other pool users, an Indoor Pool Maintenance Program is essential. The Program includes the development of an inspection schedule to sustain the useful life of fixtures, the pool deck and surface, ventilation equipment, filters and pool equipment such as the diving board and starting blocks. Early discovery and repairs of minor problems will prevent costly repairs, unscheduled down time, and help conserve energy and water. The person performing the inspection shall review all items on the checklist.

The Indoor Pool Inspection Form, Attachment #13, contains the following:

- Date of inspection
- Inspector's name
- Pool components checklist
- Inspector's comments
- Supervisor of Building Maintenance sign-off

Following the inspection, the Head Custodian will schedule a meeting with the Supervisor of Building Maintenance and if necessary, the person who performed the inspection. The Director of Facilities will review the inspection data and record all essential information resulting in a Repair Punch List. The punch list will then be issued to the Head Custodian so that repairs can be scheduled through maintenance personnel or a pool maintenance contractor.

Any combined chlorine readings over 0.4 ppm sustained over a period of two days will be reported to the Supervisor of Building Maintenance.

Pool repairs may require prioritization due to contractor availability; parts needed, severity of problem, budgeting, or included in the Capital Improvement Schedule, The Supervisor of Building Maintenance will make the final decision on scheduling repairs that may need a certified pool maintenance contractor.

Repair data should include the following:

- Person/vendor who performed the repair
- Item repaired and action taken
- System and location of repair
- Date repair was completed

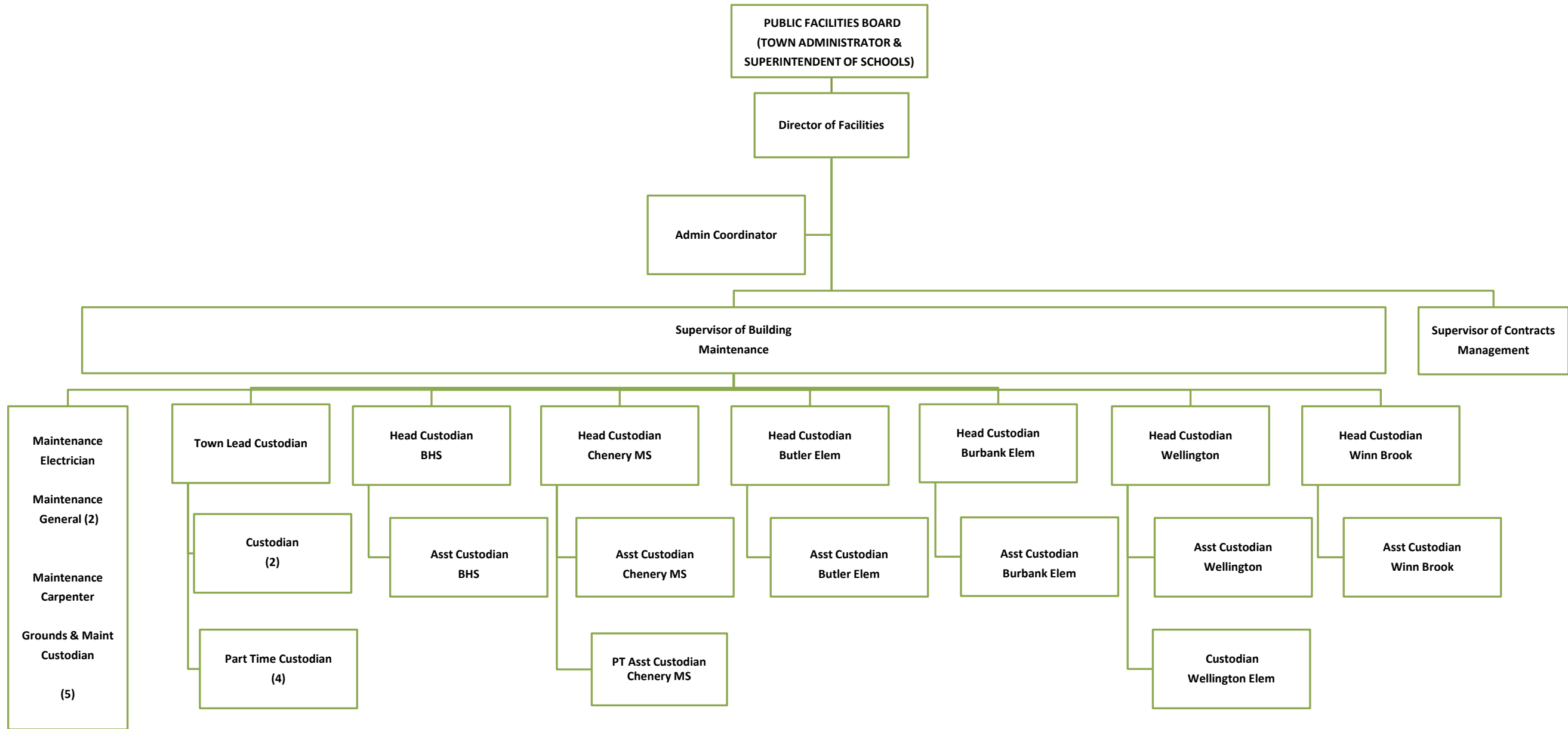
Note: The Head Custodian will review the pool repair parts inventory to effectively accomplish immediate work and order stock for future repairs. Inventory shall also include an adequate supply of pool chemicals.

To support proper record keeping for each inspection, the Inspection Form and a signed-off Repair Punch List (including repair data) must be filed.

#### INSPECTION FORMS

- ROOF INSPECTION FORM (ATTACHMENT #1)
- PLUMBING INSPECTION FORM (ATTACHMENT #2)
- EMERGENCY LIGHTING INSPECTION FORM (ATTACHMENT #3)
- BOILER ROOM INSPECTION FORM (ATTACHMENT #4)
- LIGHTING INSPECTION FORM (ATTACHMENT #5)
- DOOR HARDWARE INSPECTION FORM (ATTACHMENT #6)
- FIRE EXTINGUISHER INSPECTION FORM (ATTACHMENT #7)
- PUMP INSPECTION SHEET (ATTACHMENT #8)
- GREASE TRAP INSPECTION SHEET (ATTACHMENT #9)
- UNIT VENTILATOR INSPECTION SHEET (ATTACHMENT #10)
- FLAG POLE CHART AND INSPECTION FORM (ATTACHMENT #11)
- FIRE SUPPRESSION SYSTEM FORM (ATTACHMENT #12)
- INDOOR POOL INSPECTION FORM (ATTACHMENT 13)

**APPENDIX A  
TOWN OF BELMONT – FACILITIES DEPARTMENT**



# Belmont School Facility Inventory

	Belmont High	Chenery Middle	Burbank ES	Butler ES	Wellington ES	Winn Brook ES
	221 Concord Avenue	95 Washington Street	266 School Street	90 White Street	121 Orchard Street	97 Waterhouse St.
Constructed	1971	1997	2003	1900	2013	1934
Size (sf)	257,120	182,000	88,000	57,300	90,350	103,263
Type	CMU, steel frame	CMU, steel frame	Masonry	Masonry	CMU, steel frame	Masonry
Use	Grades 9-12	Grades 5-8	Grades K-4	Grades K-4	Grades Pre K - 4	Grades K-4
No. of floors	2	3	3	4	3	2
Roof type	EPDM	EPDM	EPDM, slate	EPDM, slate	EPDM	EPDM
Warranty	N/A	Unknown	Unknown	Unknown	20 year through 2032	Unknown
Heating	Three dual fuel boilers	Thirty (30) gas fired boilers	Two dual fuel boilers	Two dual fuel boilers	Combination gas-fired and geothermal	Two dual fuel boilers
	Classroom univents	Classroom univents	Classroom univents	Classroom univents	Fin tube radiation	Classroom univents
Cooling	RTU's cool interior space, no cooling in classrooms	RTU's cool interior space, no cooling in classrooms	RTU's serving Admin only	RTU's serving Admin only	RTU's serving multiple spaces excluding classrooms	RTU's serving Admin only
Ventilation	Rooftop RTU's for interior spaces, classroom univents for exterior spaces and operable windows	Rooftop AHU's for interior spaces, classroom univents for exterior spaces and operable windows	RTU's with central air handler with operable windows	RTU's with central air handler with operable windows	RTU's serving multiple spaces excluding classrooms	RTU's with central air handler with operable windows
Domestic Hot Water	Boiler steam conversion system	Two Gas fired hot water heaters	One Gas fired hot water heater	One Gas fired hot water heater	One Gas fired hot water heater	One Gas fired hot water heater
Windows	Single pane in metal casements	Double thermal pane, single hung	Double thermal pane, double hung	Double thermal pane, double hung	Double thermal pane, awning style	Double thermal pane, single hung
Lighting	T-8 fluorescents	T-8 fluorescents	T8/CFL	T8/CFL	T8/CFL	T8/CFL
Elevator	Passenger	Passenger, wheelchair lift	Passenger, wheelchair lift	Passenger	Passenger	Passenger, wheelchair lift
No. of stops	2	3	3	4	3	2

Security	Hallway motion detectors	Hallway motion detectors and exterior cameras	Hallway motion detectors and exterior cameras	Hallway motion detectors and exterior cameras	Hallway motion detectors and exterior cameras	Hallway motion detectors and exterior cameras
Sprinklered	No	Yes	Yes	Yes	Yes	Yes
Emergency Generator	Diesel	Gas-fired	None	Diesel	Gas-fired	None

## APPENDIX C

### Belmont Maintenance Plan Training Protocol

#### Head Custodian.

Newly hired Head Custodians will begin their employment with a 2-hour orientation of their assigned school with the Principal and the Supervisor of Building Maintenance. This initial orientation is designed to introduce the Head Custodian to the facility itself and the school staff. The remainder of the 1<sup>st</sup> day will be spent with the Supervisor of Building Maintenance to become familiar with the building's systems, procurement procedures, safety procedures, management of assistant custodians and communication and administrative practices.

A new Head Custodian will spend the next four full daytime shifts with the assistant custodian, who may have been acting in the capacity of Acting Head Custodian. The purpose of this orientation is to provide more in-depth training on the building itself, its systems, proper use and storage of all janitorial supplies and equipment, familiarization of any outstanding maintenance issues and distribution of necessary keys.

#### Assistant Custodian

Newly hired Assistant Custodians will begin their employment with a 2-hour orientation of their assigned school with the Principal, Head Custodian, and the Supervisor of Building Maintenance. Following this initial orientation, the Assistant Custodian will complete the remainder of the day shift with the Head Custodian. If necessary, a second day of orientation may be assigned.

When the Assistant Custodian begins a regular second shift with the 2<sup>nd</sup> active Assistant Custodian, both employees shall work in tandem for a period of one week. During this period, the more senior of the two Assistant Custodians can provide more in-depth training on janitorial procedures, including safety procedures. At the conclusion of the week, or at whatever time the Head Custodian deems appropriate, the newly hired Assistant Custodian may begin individually specified tasks each shift on their own.

#### Building Maintenance Staff

A newly hired Building Maintenance Staff person will begin the first day as a full shift of orientation with the first four hours spent with the Supervisor of Building Maintenance, the remaining hours of the shift will be spent with the Town's Custodial Foreperson. The orientation with the Supervisor of Building Maintenance shall include a tour of all Town and School facilities, along with introduction to the appropriate staff in each building. The Supervisor of Building Maintenance will also instruct the new Building Maintenance Technician in personnel and administrative practices, review current materials, equipment and tools' stock and provide instruction on safety procedures.

The Building Maintenance Technician will complete the first day and the subsequent four shifts working in tandem with the Town's Custodial Foreperson to become familiar in more detail regarding the specifics of the janitorial responsibilities of that position. The Building Maintenance Technician will accompany the Supervisor of Building Maintenance to weekly Head Custodians meetings in each school to begin the process of becoming acclimated to each School building as well as updated on outstanding maintenance issues.

#### Asbestos Training

The Department will endeavor to maintain at least two staff persons who have completed the 16-hour Asbestos Maintenance Training. The Department will provide the training and all the necessary tools and equipment for certified personnel to perform asbestos maintenance tasks.



The Department will also provide 2-hour Asbestos Awareness training to all staff. Newly hired staff will receive this training within 30 days of their hire.

#### Hoisting Engineer License

The Department will endeavor to have at least two staff with a Hoisting Engineer License to operate the Department's skid steer as needed.

## **APPENDIX D**

### **BELMONT FACILITIES DEPARTMENT**

### **BUILDING SAFETY MAINTENANCE GUIDELINES**

#### **INTRODUCTION/OVERVIEW**

On the job accident prevention is the responsibility of all the district's employees. It is the further responsibility of each employee to correct or report any unsafe condition or practice that he or she may observe. It is also the expectation of the Facilities Department that all vendors performing work in Belmont's public facilities also be appraised of these safety guidelines.

The following are some important general building maintenance personnel safety rules that each employee is required to follow.

- Chapter 1 ELECTRICAL EQUIPMENT
- Chapter 2 ELECTRICAL POWER CORDS
- Chapter 3 COMPRESSED GAS CYLINDERS
- Chapter 4 STEPLADDER SAFETY
- Chapter 5 EXTENSION LADDER & SCAFFOLD SAFETY
- Chapter 6 POWER TOOLS
- Chapter 7 PAINTING
- Chapter 8 PLUMBING
- Chapter 9 GROUNDS MAINTENANCE
- Chapter 10 PHYSICAL SCIENCE LABS
- Chapter 11 PROFESSIONAL AND ADMINISTRATIVE STAFF
- Chapter 12 GENERAL CUSTODIAL SAFETY REGULATIONS
- Chapter 13 CUSTODIAL MATERIALS SAFETY
- Chapter 14 CUSTODIAL EQUIPMENT SAFETY
- Chapter 15 CUSTODIAL FLOOR SAFETY
- Chapter 16 CUSTODIAL FIRE SAFETY

## **Chapter 1 ELECTRICAL EQUIPMENT**

1. Office machines should be grounded if they are equipped with a ground wire or three prong plug. New equipment should have grounded connections.
2. Electrical cords and plugs should be in safe repair. Check for loose plugs, worn insulation, and defective outlets.
3. If an adapter must be used to insert a grounded plug into an ungrounded receptacle, attach the pigtail to a grounded object.
4. Electrical extension cords should be 3-wire grounded type. They should be arranged so as not to cross walkways.
5. Wall outlets should not be overloaded by connecting additional appliances with adapters or extension cords.
6. Only electricians from the maintenance department should attempt any electrical repairs.

## **Chapter 2 ELECTRICAL POWER CORDS**

Worn cords can cause short circuits, shocks and fires. Always be sure you are using the right type of cord for the right job. Use heavy-duty cords for tools, moisture resistant for outdoors, and always use the 8-wire type of cords.

1. Extension cords must never be affixed to a wall with metal staples.
2. Never place cords under rugs or across a driveway because damage can occur to the insulation.
3. Never wrap cords around steam pipes, metal, or warm appliances. Protect them from heat and water.
4. Never use extension cords that are defective. Check the continuity and use no cords that are frayed. Check to see that the strain relief is proper.
5. Pull the plug – not the cord – to disconnect from a wall outlet and check the cord often for wear at often for wear at the plugs and connections.

## **Chapter 3 COMPRESSED GAS CYLINDERS**

Compressed gas cylinders can become extremely dangerous if mishandled or if the valve is broken off the top. They must be stored away from direct sunlight, out of extreme heat, and in an area that is properly ventilated. The cylinders should be kept in racks or stands or set in an upright position. They should also be leashed or chained to prevent them from falling over. Protective caps must be installed on all cylinders, whether empty or full, when they are not being used. Never drop a gas cylinder.

## **Chapter 4 STEPLADDER SAFETY**

1. Completely inspect all ladders before using and set up the ladder properly. The inspection should include the hardware and fittings. Defective ropes/cables should be replaced. Comply with the weight limits and specific uses for a ladder by referring to its label. When a ladder is detected to have defects it should be tagged or marked as “Dangerous, Do Not Use” and repaired or discarded.
2. Ladders should not be painted: defects may be covered by paint. Clean off any paint spilled on the ladder during use.
3. Secure ladders before climbing. If necessary, a second person should be present to hold the bottom from slipping. The ladder should be equipped with safety shoes to prevent the bottom from slipping. When on a ladder, the climber’s body must be centered at all times.
4. Never stand on the top two steps of a ladder or on the bucket shelf.
5. All stepladders should be open wide enough that the spreaders lock in the fully open position. Set the ladder base firmly on the ground.
6. Portable metal ladders should not be used for electrical work or where they may contact electrical conductors. Use a wood or fiberglass ladder instead and shut off power first if ladders must be used in such locations.
7. Do not place ladders in front of a door unless the door is locked or adequately guarded.
8. Never lean a ladder against unsecured or unsafe objects, surfaces, or piping that could be damaged.  
Stepladders should not be substituted for scaffolds or work stands.
9. Select a ladder tall enough to reach the work. No attempts should be made to reach beyond a normal arm’s length while standing on the ladder, especially to the side. Move the ladder instead.

## **Chapter 5 EXTENSION LADDER & SCAFFOLD SAFETY**

### **EXTENSION LADDER SAFETY**

1. Completely inspect the ladder before using. The inspection should include the hardware and fittings. If a defect is discovered tag or mark the ladder as “Dangerous, Do Not Use” and repair or discard the ladder.
2. Ladders should not be painted: defects may be covered by paint. Clean off any paint spilled on ladder during use
3. Never use a metal ladder near electrical wires or electrical equipment. Use a wood or fiberglass ladder instead and shut off power first if ladders must be used in such locations.
4. Secure ladders before climbing. If necessary, a second person should be present to hold the bottom from slipping. The ladder should be equipped with safety shoes to prevent the bottom from slipping.
5. Set the ladder squarely on the ground.
6. Shoes and ladder rungs should be free of dirt, mud, grease or ice.
7. Always face the ladder and have both hands free when climbing or descending.
8. Secure the ladder to prevent it from slipping or falling by tying it off to a fixed object at the top of both side rails or to a proper sized single support attachment.
9. Use ladders or ladder sections right side up. The extension ladder should always be erected so that the upper section is resting on the bottom.

10. Position straight ladders so that the base of the ladder is a distance equal to one-fourth the vertical height away from the wall. If the ladder is too close, it can tip backwards. If it is too far away, the ladder may break or slide downwards.
11. When working from a position on the ladder, knees should be braced against the side rails near the end of the ladder rungs to increase stability.
12. Never lean out from a ladder to work. Get down and move the ladder.
13. Never carry heavy or bulky tools and materials up or down a ladder. Raise or lower them by a hand line, bucket or crane. Small tools should be carried in a tool pouch to leave both hands free.

## **SCAFFOLDS**

1. The span-scaffold platform is designed to carry a maximum distributed load of 500 pounds with a safety factor of four. Do not exceed this 500 pound load. The maximum static load is 25 pounds per square foot on any platform and 3000 pounds total on any base section of 1600 pounds with legs extended.
2. The horizontal brace of the span scaffold should never be installed at the same level as the intersection of the diagonal braces. Always install it either higher or lower than this intersection point.
3. Never climb a span scaffold that does not have at least two diagonal braces and one horizontal brace properly installed in the bottom section. Double width spans require double bracing.
4. Lock all caster brakes before climbing the scaffold.
5. Never move a scaffold with someone or something on it.
6. If in doubt as to the ability of a scaffold to handle a job, write or telephone the manufacturer for instruction use.
7. Never use a scaffold that is damaged or improperly erected. Do not force parts that does not fit freely.
8. Be sure the scaffold is level at all times. When the leg is adjusted, be sure to push the locking collar completely over the expanding nut and below the safety locks. Never make leg adjustments when anyone is on the scaffold.
9. Never lean a ladder against a scaffold. Never place a ladder on the platform of a scaffold. Never push or pull or lean against a wall or ceiling when standing or sitting on a scaffold, unless it is securely tied to the building.
10. Make sure all locking hooks are firmly in position and that the spring-loaded locking pins have functioned properly. These hooks appear at each end of the separate horizontal and diagonal braces and at the upper end of the stairways.
11. Never try to stretch the platform height with the adjustable legs. When additional height is required, add more scaffold sections. Save the leg adjustment for leveling the scaffold.
12. Before using a scaffold with folding braces, be sure that the latches of all locking hinges are locked.
13. Metal scaffold must never be used while working near electricity, electrical wires or electrical equipment, even for changing light bulbs. Shut off power first if the scaffold must be used in such locations. Electricity is conducted by metal. Look up and look out for power lines.

## **Chapter 6 PORTABLE POWER TOOLS**

All portable power tools should be electrically grounded when they are in use. On some machines this is done by the use of a three-wire cord and plug, which fits a three-hole receptacle. The receptacle is grounded to the circuit ground. On others there is a three-wire cord with a small tail, which should be screwed to the junction box, thus grounding it to the conduit.

Electrical accidents are not frequent but can be fatal. **USE THE GROUNDS PROVIDED ON YOUR MACHINES.** Do not cut ground prongs off plugs.

Be sure all portable machines are pointed in a safe direction with the switch off when the plug is put into the electrical circuit.

### **ELECTRIC HAND DRILLS**

1. Use only sharp, straight bits of the size intended for the machine.
2. Keep eyes away from electrical hand tool cooling air vents; wear an eye shield or goggles to keep dust from being blown into the eyes.
3. Severe injury may result if a live or coasting bit gets hold of a piece of clothing.
4. When using attachments, follow the instructions.
5. Do not try to hold small pieces of material with the fingers.
6. Always use the screwdriver attachment in such a way that it cannot injure the operator if it slips off the work.

### **PORTABLE BELT SANDERS**

1. Always hold the handle of the sander when plugging it into the electrical circuit.
2. Never set a coasting machine down on the bench.
3. The user should inspect the tracking of the belt whenever a new belt is put on.

4. Wear eye protection when using the portable belt sander. The fan vents may blow dust into the eyes.
5. Keep both hands on the handles provided on the belt sander.
6. Arrange the electric cord so that the belt cannot catch it.

### **POWER HAND SAW**

1. Be sure the switch is off and the saw lying or held in a safe position when the plug is inserted.
2. Unplug the power when changing the blade or handling the blade.
3. Care should be taken to prevent the electric cord from getting into the blade.
4. In a diagonal cut the guard may catch. Do not try to release it with your fingers, unless it has a handle for this purpose.
5. Do not stand directly in the saw line of this or any other saw. If the blade binds, it has a tendency to kick the saw back out of the cut, and severe injuries have occurred as a result.
6. These machines are provided with two handles. Keep both hands on these handles when operating this saw. Holding work with one hand and cutting with the other is dangerous.
7. Sawing through loose knots may cause the saw to kick. Defective material may break under the weight of the saw when cut, thus causing the saw to strike the leg of the operator.

### **HAND ROUTER**

1. Wear hand protection when using this tool.
2. Be sure the fence or pilot is securely locked.
3. Feed the machine so that the leading edge of the knife is biting in as the router is pushed along.
4. Keep both hands on the handles when using this machine.
5. Lay the machine down with the cutter pointing away, and beware of the coasting machine.

### **GRINDER**

1. Wear clean goggles that shield the eyes from all directions when grinding.
2. Keep the tool rest as close to the wheel as possible. Under no conditions should the distance between the tool rest and the wheel exceed one-eighth inch.
3. Apply work gradually to a cold wheel.
4. Do not grind on the side of a light wheel. Side grinding must be done only on a wheel that is designed and built for side grinding.
5. Keep the fingers clear of the stone.
6. Keep the path of the wheel travel clear of any obstructions.

7. Do not rub the face or eyes with hands that are soiled with emery dust.
8. Do not stand in line with the wheel when starting the grinder. Faulty grinding wheels usually break on START.
9. Hold small pieces securely in a proper holder. Do not hold small pieces with the hand.
10. Ensure side guards are installed on all table grinders.

### **AIR COMPRESSORS**

1. Air compressors must have their flywheel and drive pulley fully enclosed.

### **COMPRESSED AIR**

1. Beware of compressed air, because it can be dangerous. Alternate methods of cleaning surfaces should be sought.
2. Compressed air should never be used to blow debris from a person.
3. The downstream pressure of compressed air must remain at a pressure level below 30 PSI whenever the nozzle is dead-ended and then only when effective chip guarding and personal protective equipment are used.

### **PLANER**

1. Make certain that the stocks has no large cracks, loose knots, nails, screws, dirt, paint, or varnish on any of the surfaces.
2. Turn the shaving exhaust on before starting the machine.
3. Never run stock through the planer if it is less than 18" long.
4. Limit the depth of cut to one-eighth inch for narrow stock and one-sixteenth inch for stock of full planer width.
5. Never plane stock less than one-fourth inch thick unless it is placed on a thick board for support.
6. Keep hands away from the feed rolls and keep "hands off" boards that are gripped by the feed rolls.
7. Never attempt to shift a board after the feed rolls have gripped it.
8. Never change the depth of cut while a board is going through.
9. Never plane two boards side by side. One board may be thinner than the other and a serious kickback may result.
10. Never plane the edge of a board in the planer.
11. Never attempt to look into the planer while it is in operation.
12. Never allow the planer to run unattended.
13. Never stand directly in line with the rotation of the planer head or directly behind the board that is being fed.
14. Anchor the planer to a solid foundation to reduce vibration.
15. Wear ear protection and eye protection.



16. Enclose the cutter heads completely.
17. Keep feed roll guards on and properly adjusted.

## **Chapter 7 PAINTING**

1. Have the spray booth ventilation system in operation during every spraying operation.
2. Use the proper type of respirator at all times when spray painting using toxic paints.
3. Regulate the air and paint pressure on the spray gun before starting work.  
Exercise caution in the handling of compressed air and power paint equipment.
4. Clean the spray gun and other equipment thoroughly after each use.
5. Never put your hand in front of an airless paint spray nozzle.
6. Follow all rules governing safe handling of combustible materials. Read and follow the manufacturer's directions carefully when using finishing materials. This is especially important when using lacquer, enamel or paint in pressurized cans. Spray 20 feet away from possible source of ignition.
7. Store flammable paints and thinners, etc., in approved storerooms with explosion-proof wiring or a metal storage cabinet.
8. Never have more than a one-day supply of flammable paint outside an approved storage area.
9. Clean up all spills promptly.
10. Store thinners in UL approved safety cans with spring-loaded and vented lids.
11. Dispose of oily paint or solvent rags in metal containers with tight fitting lids.
12. Bond metal containers when transferring flammable liquids, especially those that are known as Class I Flammable liquids.

## **Chapter 8 PLUMBING**

1. Eye protection of an approved type should be worn when any type of eye hazard exists. This would include welding or cutting operations, grinding, chipping, or working on steam or chemical lines.
2. All persons working in areas where tools, materials, or objects may fall should wear hard hats.
3. Safety belts and life lines should be used when it is necessary to work at elevations where scaffolding or staging is not practical, such as running pipes or ducts along members of open roof trusses, and when working on unguarded catwalks.
4. Gloves should be worn when handling pipe, sheet metal, or other material having rough edges.
5. Wear adequate clothing, which includes long sleeves, and keep the cuffs buttoned when welding, cutting, or working on chemical or steam lines.
6. Care should be exercised when handling pipes, ducts, or other materials to avoid catching fingers and hands between the materials and the floor or other objects.
7. Use only tools and equipment that are in first-class condition. Examine the tool periodically to make sure they are in good working order.

8. Be considerate at all times of the safety of your fellow workers and the general public, including the students.
9. All electricity-driven powers tools and machinery should be properly grounded.
10. Check the torches to determine that no leaks exist and that they are in good operating condition. Do not place them where surrounding material could be ignited. Never leave any torches unattended when lighted.
11. Never leave tools on ledges, beams, or any other elevated places.
12. Store all material in a safe and orderly manner.
13. Material should not be stored in such quantity as to exceed the safe carrying capacity of the floor or platform.
14. Pipes or ducts should be securely tied and latched to prevent movement of shifting when being transported on elevators or material hoists.
15. When using a rope to hoist pipe or ducts, secure them with a well-spaced double hitch to prevent shifting.
16. Hoists or block and tackle should be of sufficient size and strength to safely raise or lower the load for which it is intended.
17. The sides of trenches should be shored or braced to prevent cave-ins or collapse when excavated to a depth of four (4) feet or more where soil is likely to crumble or where hydrostatic pressure exists and the sides are not sloped to the angle of repose.
18. Substantial barricades should be erected around pits and trenches to protect employees, the public, and students.
19. Do not force powered sewer augers especially if there is too much distance between the auger and the drain.
20. All attempts should be made to avoid the use of caustic drain cleaners but if necessary, always use goggles and gloves and follow product instructions.

## **Chapter 9    GROUNDS MAINTENANCE**

1. Do not operate any equipment unless you have been properly trained and are familiar with the specific equipment.
2. Use equipment for jobs it was designed, etc; do not trim hedges with mowers.
3. Keep hands and body parts from under machines.
4. Do not leave mowers running unattended.
5. Prior to mowing, pick up rocks, wire, bottles and any item that may damage a mower or become an airborne missile.
6. Prior to mowing, locate and mark all obstacles.
7. Always wear eye and ear protection when mowing (dust masks, optional).
8. Use drop chains on tractor-towed mowers; but sure the chains are within ½ inch of the ground. Watch for slopes and go slow.
9. Disengage PTO prior to leaving tractor seat.
10. Use proper “KILL” switches to stop engine.
11. Use extreme caution when attempting to field repair any mower. Ensure all ignition sources are deactivated.
12. Report all mechanical defects to your supervisor.
13. Do not refuel mowers indoors.

14. Keep all flammable liquids in an approved Flammable Liquid Storage Cabinet.
15. Use eye goggles and gloves when handling chemicals.
16. Know your chemicals; review chemical data sheets regularly.
17. When in doubt of any grounds procedures, contact your supervisor.

## **Chapter 10 PHYSICAL SCIENCE LAB**

1. Know the location of the fire extinguisher and first aid kit and how to use each in case of an emergency.
2. In the event that clothing should catch fire DO NOT RUN. Drop to the floor and roll. Observers should help extinguish the flames with a blanket or wet towel.
3. Always wear proper protective equipment when working with chemicals.
4. Contact lenses should NOT be worn when using any type of chemicals.
5. Flammable liquids should not be stored near an open flame.
6. When diluting acids always pour the acid into the water. Never pour water into acid.
7. Jewelry, neckties, and loose clothing should not be worn when working in the laboratory. Long hair should also be worn back.
8. All water, gas, and electrical outlets should be turned off when not in use.
9. Safe laboratory practices should be followed during all experiments.
10. All protective equipment should be checked and maintained on a regular basis.
11. A physical inspection of each chemical should be done to ensure against defective containers and improper labeling.
12. Storage and disposal of excess chemical and empty containers must be in accordance with the label.
13. A list of hazardous chemicals found in the laboratory and classroom must be compiled and maintained.
14. Maintain the most current Material Safety Data Sheet for each hazardous chemical. These sheets should be readily available to students and employees
15. Report the purchase of all chemicals to the proper authorities so that an MSDS can be obtained.
16. Chemical containers should not be used to store anything other than the original contents.

## **Chapter 11 PROFESSIONAL AND ADMINISTRATIVE STAFF**

1. Furniture, desks, chairs, file cabinets, etc., should be kept in safe condition and positioned so drawers do not open into walkways or halls.
2. Desk and file cabinet drawers should not be left open.
3. File cabinet drawers should be opened one at a time, and lower drawers should hold the heaviest load.
4. Furniture should not be used as stools or ladders.
5. Walkways, aisles, halls, and stairways should be kept clear of obstructions.
6. Do not attempt to move heavy objects; get help from maintenance or custodial personnel.
7. Office machines should be double insulated or grounded with ground wires or three-prong plugs.
8. Do not attempt to make any electrical repairs on equipment or electrical cords.

9. Electrical extension cords should be three-wire, ground type. Ensure they are not placed where they may cause a tripping hazard.
10. Store supplies in an orderly fashion. Heavier items should be stored waist high. Light items can be stored in approved Flammable Liquid Storage Cabinets
11. Room doors that open into hallways should be opened slowly.
12. Duplicating machines that use ammonia, methanol, or other toxic liquids should be ventilated.
13. Personnel operating office equipment should be trained before operating equipment.
14. Employees should be trained in how to use portable fire extinguishers and should be familiar with building evacuation procedures. (See fire controls and emergency preparedness and evacuation plan.)

## **Chapter 12 GENERAL CUSTODIAL SAFETY REGULATIONS**

1. In wet weather, rubber mats or runners should be placed near entrance areas. This will help eliminate dangerous falls and also help prevent the tracking of mud and water onto clean floors.
2. Report poor vision areas. Burned out light bulbs in critical areas such as stair landings, near doors, at aisle intersections, etc.
3. Watch out for vehicles.
4. Smoke in designated areas only.
5. Be sure to report any accident (EVEN A SMALL ACCIDENT SUCH AS A CUT FINGER).
6. Be sure you know the proper way to lift heavy objects. Keep your knees bent and your back straight. Get help when necessary.
7. HORSEPLAY CAN RESULT IN A SERIOUS INJURY.
8. Report safety hazards and any recommendations for improvement to your supervisor. I. Be sure to pay attention to all safety signs and notices. They are for your protection.
9. On stairs, watch your step and use the handrail.
10. When emptying waste receptacles, dump the contents out rather than reaching in.
11. Disconnect fans and other electrical equipment before cleaning them. Pull on the plug
  - a. NOT THE WIRE.
12. Don't take chances with safety. In any uncertain situation check with your supervisor.

## **Chapter 13 CUSTODIAL MATERIALS SAFETY**

### **A. Management and Supervisory Steps:**

1. Poisonous materials shall be marked and controlled. Only designated personnel should use poisonous materials.
2. Materials in plastic containers should be bought wherever possible to avoid the hazards of broken glass.
3. Only specially designated, trained, and equipped personnel should use hazardous chemicals.

4. Conditions should be provided to permit safe storage. It should not be necessary to lift heavy loads.
5. Wherever possible, caustic or acidic products should be replaced by neutral or milder products.

**B. Employee Steps:**

1. Pour and use solvents in well-ventilated areas. Replace the cap on all solvent containers after each use.
2. If any liquid gets in your eyes, even just dirty water, flood the eyes with plenty of water, IMMEDIATELY.
3. Keep any safety equipment that you have been provided in good condition and wear it whenever necessary.
4. Flammable liquids shall be stored in a flammable storage cabinet or designated area.
5. Where strong chemicals are used, the skin should be covered to protect against chemical irritation.
6. Do not put hands around the face or mouth after handling chemicals. Wash and dry hands carefully after handling chemicals.
7. If it is necessary to dilute an acid, be sure to **POUR THE ACID INTO THE WATER**. This will help prevent the acid from splashing onto you.

## **Chapter 14 CUSTODIAL EQUIPMENT SAFETY**

These regulations pertain to the use of housekeeping equipment and the general use and cleaning of other types of equipment.

1. Watch how you carry your equipment, mops, brooms etc. so that no one is injured by handles sticking out, etc.
2. In areas with low ceilings, take special care to avoid hitting sprinkler heads to avoid severe water damage.
3. When cleaning stairs, place buckets and equipment so as not to cause someone to fall. Maintenance areas should be kept neat and in good order.
4. Keep equipment in good working order.
5. Be sure the wiring on electrical equipment is in good repair and power cords are not frayed, cut or knotted. Damaged power cords can cause a fatal shock.
6. Ladders should be kept in good repair and properly used.
7. Be sure that switches on electrical equipment are in the off position **BEFORE** plugging in the appliance.
8. Greasy or oily cloths and dust mops shall be kept in **APPROVED METAL CONTAINERS**.
9. Floor machine handles should be in the lowered position before starting them.
10. Floor machine brushes and attachment plates should be manually secured to the machine before the motor is turned on.
11. Keep equipment out of aisles and traffic lanes to prevent a tripping hazard. Pull only the length of electrical cord needed.
12. Loose clothing should never be worn around moving parts of machinery.
13. Use the right tools for the job.

## **Chapter 15 CUSTODIAL FLOOR SAFETY**

Most rules concerning floor safety are directed to preventing falls that are normally considered the most serious type of accident exposure.

### **A. Management and Supervisory Steps:**

1. Floors and stairways should be designed to have an anti-slip surface insofar as possible.
2. Existing slippery surfaces should be corrected.
3. Worn floors should be repaired quickly. This includes loose or curled tiles, holes, cracks, etc.
4. Carpets should be kept in good repair. A non-slip pad should be used under small rugs.
5. Personnel causing a spillage should be responsible for either cleaning it or obtaining help for a serious problem.
6. Arrangements for ice removal should be carefully setup and checked on.
7. Floor finishes, waxes, and coatings should be purchased that have adequate slips- resistant qualities.

### **B. Employee Steps:**

1. "Wet Floor" caution signs should be used whenever floors are being wet, cleaned, waxed, sealed or stripped. Signs should be placed so that they will be visible from all ways of approach.
2. Rain, snow or other liquids should be mopped up immediately to dry the floor.
3. Floors should be dry and cleaned regularly to remove slipping hazards.
4. Natural soaps should be avoided in floor cleaning as the remaining film may become slippery.
5. When working on a wet floor, walk carefully and take shorter steps than usual.
6. Mats and runners should lay flat. Wrinkles or turned-up corners cause tripping accidents.
7. Defective flooring, loose handrails, bad stair treads, etc. should be reported to your supervisor.

## **Chapter 16 CUSTODIAL FIRE SAFETY**

Fires can be considered as a special class of accident. An examination of fire reports indicates that improper handling of combustible materials and ignition sources causes a large number of fires.

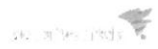
1. Storage of any USELESS materials, from rags, rubbish, waste paper, and wood to obsolete flammable materials should be discouraged.
2. Proper and regular disposal of waste products is essential for good fire prevention.
3. Many cleaning compounds, polishes, etc. contains flammable solvents. Such materials should be handled carefully.
4. Smoking SHALL NOT be permitted when handling materials especially those containing flammable solvents.

5. Before any product is used the properties of the product should be identified so that proper precautions may be taken in handling.

**Appendix E**  
**Town of Belmont**  
**Annual Maintenance Inspection Schedule**

	July	August	September	October	November	December	January	February	March	April	May	June
High School	Grease Traps, HVAC, Pool	All fire systems, Pool	Plumbing, Boiler room, sump pumps, Pool	Roofing, univents, HVAC, Pool	Lighting, Emergency Lights, Pool	Door Hardware, Pool	Plumbing, sump pumps, HVAC, Pool	Boiler Room, Pool	Lighting, Flag Poles, Pool	Roofing, HVAC, Pool	Plumbing, Pool	Emergency Lights, Pool
Chenery Middle School	Grease Traps, HVAC	All fire systems	Plumbing, Boiler room, sump pumps	Roofing, univents, HVAC	Lighting, Emergency Lights	Door Hardware	Plumbing, sump pumps, HVAC	Boiler Room	Lighting, Flag Poles	Roofing, HVAC	Plumbing	Emergency Lights
Burbank	Grease Traps, HVAC	All fire systems	Plumbing, Boiler room, sump pumps	Roofing, HVAC	Lighting, Emergency Lights	Door Hardware	Plumbing, sump pumps, HVAC	Boiler Room	Lighting, Flag Poles	Roofing, HVAC	Plumbing	Emergency Lights
Butler	Grease Traps, HVAC	All fire systems	Plumbing, Boiler room, sump pumps	Roofing, HVAC	Lighting, Emergency Lights	Door Hardware	Plumbing, sump pumps, HVAC	Boiler Room	Lighting, Flag Poles	Roofing, HVAC	Plumbing	Emergency Lights
Wellington	Grease Traps, HVAC	All fire systems	Plumbing, Boiler room, sump pumps	Roofing, HVAC	Lighting, Emergency Lights	Door Hardware	Plumbing, sump pumps, HVAC	Boiler Room	Lighting, Flag Poles	Roofing, HVAC	Plumbing	Emergency Lights
Winn Brook	Grease Traps, HVAC	All fire systems	Plumbing, Boiler room, sump pumps	Roofing, HVAC	Lighting, Emergency Lights	Door Hardware	Plumbing, sump pumps, HVAC	Boiler Room	Lighting, Flag Poles	Roofing, HVAC	Plumbing	Emergency Lights





- Tickets
  - Calendar
  - Clients
  - Parts
  - FAQs
  - Reports
  - Messages
  - Setup
  - Help
- Dashboard    My Tickets (9)    Group Tickets (708)    Flagged Tickets (0)    Recent Tickets    Search Tickets

Cindy Papa

Client Info    Ticket Details    Parts & Billing

🔄 📄 17386 ?
Requests

Dates	
Open Date	6/16/16 8:18 am
1st-Response Date	7/15/16 11:59 am
Last Updated	7/15/16 11:59 am
Close Date	7/15/16 11:59 am

Details	
Client	Carolyn Bell  617-993-5571 <small>[10.4.2.178]</small>
Created By	Carolyn Bell
Location	Wellington Elementary School <input type="text"/>
Room	236 <input type="text"/>
Assigned Tech	Domenici, Fred <input type="text"/>
Ticket Type	Service Request Incident Problem
Tech Group	Maintenance: Level 1  Escalate    De-escalate
Request Type	General Maintenance <input type="text"/>
Subject	cubby bookcase <input type="text"/>
Request Detail	The shelves on one of my cubby bookcases are falling and won't stay up without tissues holding them in place. <input type="text"/>
Attachments	<input type="button" value="Add File"/>

Notes			
Date	Name	Note	Time
<input type="button" value="New"/>			

History		
Date	Name	Action
7/15/16 11:59 am	Eric Joyce	Updated-Ticket E-Mail sent to Fred Domenici and Carolyn Bell
7/15/16 11:59 am	Eric Joyce	Status changed from Open to Closed
7/15/16 11:59 am	System	Set 1st-Response Date to 7/15/16 11:59 am
6/16/16 8:20 am	Carolyn Bell	New-Ticket E-Mail sent to Fred Domenici and Carolyn Bell
6/16/16 8:20 am	Carolyn Bell	Ticket 17386 created by Carolyn Bell
1 more...		

Status & Schedule	
Status	Closed <input type="text"/>
Priority	Medium (24 hrs) <input type="text"/>
Due Date	<input checked="" type="radio"/> Medium Priority : 6/20/16 3:18 pm <input type="radio"/> <input type="text"/> : <input type="text"/> : <input type="text"/> <input checked="" type="radio"/> am <input type="radio"/> pm
Scheduled Date	From <input type="text"/> : <input type="text"/> : <input type="text"/> <input checked="" type="radio"/> am <input type="radio"/> pm To <input type="text"/> : <input type="text"/> : <input type="text"/> <input checked="" type="radio"/> am <input type="radio"/> pm

Recipients	
<input checked="" type="checkbox"/> Client <input checked="" type="checkbox"/> Tech <input type="checkbox"/> Level 1 Techs <input type="checkbox"/> Group Manager	Public
<input type="checkbox"/> Cc: <input type="text"/>	<input type="checkbox"/> Bcc: <input type="text"/>

Bulk Action   
Delete
Cancel
Save
Save & E-Mail

# RENOVATION BELMONT HIGH SCHOOL

## BUILDING TRADE COST - Renovation

General Construction	10,365,061
Casework	490,995
Food Service Equipment	250,000
Fire Protection Systems	768,312
Plumbing Systems	700,975
HVAC Systems	4,182,052
Electrical Systems	2,325,798
Voice/Data/Video Infrastructure	369,731
Hazaradous Materials Abatement	3,600,000
10% Design Contingency	2,305,292
<b>TOTAL BUILDING TRADE COST</b>	<b>25,358,216</b>

## SITework TRADE COST

Earthwork/Site Improvements	1,571,653
Site Utilities	564,500
15% Design Contingency	320,423
<b>TOTAL SITEWORK TRADE COST</b>	<b>2,456,576</b>

## TOTAL TRADE COST

<b>TOTAL TRADE COST</b>	<b>27,814,792</b>
GC Expenses in Occupied Building @ 1%	278,148
GC General Conditions @ 7.5%	2,086,109
GC Overhead & Profit @6.2%	1,724,517
<b>SUBTOTAL GC COST (2004)</b>	<b>31,903,567</b>
Escalation to March '07 @ 18.6%	5,934,063
Escalation to March '09 @ 14.0%	5,297,268
<b>TOTAL GENERAL CONTRACTOR CC</b>	<b>43,134,898</b>
Bidding Contingency @ 5%	2,156,745

## GRAND TOTAL

Cost Estimate Date	2009	
Adjusted for inflation @ 2.5% per year		53,837,531
Building Replacement Value		31,586,000
Facilities Condition Index		1.70

**RENOVATION CHENERY MS**

GFA

BUILDING SYSTEM

182000

SUB-TOTAL

TOTAL

\$/SF

**A10 FOUNDATIONS**

A1010	Standard Foundations	\$0		
A1020	Special Foundations	\$0		
A1030	Lowest Floor Construction	\$0	<b>\$0</b>	\$0.00

**B10 SUPERSTRUCTURE**

B1010	Upper Floor Construction	\$0		
B1020	Roof Construction		<b>\$0</b>	\$0.00

**B20 EXTERIOR CLOSURE**

B2010	Exterior Walls	\$147,345		
B2020	Windows/Curtainwall	\$55,440		
B2030	Exterior Doors	\$0	<b>\$202,785</b>	\$1.11

**B30 ROOFING**

B3010	Roof Coverings	\$25,000		
B3020	Roof Openings	\$0	<b>\$25,000</b>	\$0.14

**C10 INTERIOR CONSTRUCTION**

C1010	Partitions	\$32,000		
C1020	Interior Doors	\$15,000		
C1030	Specialties/Millwork	\$45,500	<b>\$92,500</b>	\$0.51

**C20 STAIRCASES**

C2010	Stair Construction	\$0		
C2020	Stair Finishes	\$0	<b>\$0</b>	\$0.00

**C30 INTERIOR FINISHES**

C3010	Wall Finishes	\$273,000		
C3020	Floor Finishes	\$23,660		
C3030	Ceiling Finishes	\$118,300	<b>\$414,960</b>	\$2.28

**D10 CONVEYING SYSTEMS**

D1010	Elevator	\$0	<b>\$0</b>	\$0.00
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**D20 PLUMBING**

D20	Plumbing	\$10,500	<b>\$10,500</b>	\$0.06
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**D30 HVAC**

D30	HVAC	\$566,000	<b>\$566,000</b>	\$3.11
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**D40 FIRE PROTECTION**

D40	Fire Protection	\$2,000	<b>\$2,000</b>	\$0.01
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**D50 ELECTRICAL**

D5010	Electrical Systems	\$553,800	<b>\$553,800</b>	\$3.04
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**E10 EQUIPMENT**

E10	Equipment	\$5,000	<b>\$5,000</b>	\$0.03
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**E20 FURNISHINGS**

E2010	Fixed Furnishings	\$8,000		
E2020	Movable Furnishings	\$0	<b>\$8,000</b>	\$0.04

**F10 SPECIAL CONSTRUCTION**

F10	Special Construction	\$0	<b>\$0</b>	\$0.00
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**F20 SELECTIVE BUILDING DEMOLITION**

F2010	Building Elements Demolition	\$227,500		
F2020	Hazardous Components Abatement		<b>\$227,500</b>	\$1.25

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<b>TOTAL DIRECT COST (Trade Costs)</b>			<b>\$2,108,045</b>	\$11.58
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Cost Estimate D 2014

Adjusted for inflation @ 2.5% per year 2,214,765

Building Replacement Value 14,250,000

Facilities Condition Index 0.16

**RENOVATION BURBANK ES**

GFA

BUILDING SYSTEM

50300

SUB-TOTAL

TOTAL

\$/SF

**A10 FOUNDATIONS**

A1010	Standard Foundations	\$0		
A1020	Special Foundations	\$0		
A1030	Lowest Floor Construction	\$15,000	<b>\$15,000</b>	\$0.30

**B10 SUPERSTRUCTURE**

B1010	Upper Floor Construction	\$0		
B1020	Roof Construction	\$0	<b>\$0</b>	\$0.00

**B20 EXTERIOR CLOSURE**

B2010	Exterior Walls	\$240,974		
B2020	Windows/Curtainwall	\$72,792		
B2030	Exterior Doors	\$3,480	<b>\$317,246</b>	\$6.31

**B30 ROOFING**

B3010	Roof Coverings	\$235,630		
B3020	Roof Openings	\$0	<b>\$235,630</b>	\$4.68

**C10 INTERIOR CONSTRUCTION**

C1010	Partitions	\$35,000		
C1020	Interior Doors	\$51,600		
C1030	Specialties/Millwork	\$162,735	<b>\$249,335</b>	\$4.96

**C20 STAIRCASES**

C2010	Stair Construction	\$39,210		
C2020	Stair Finishes	\$23,700	<b>\$62,910</b>	\$1.25

**C30 INTERIOR FINISHES**

C3010	Wall Finishes	\$75,450		
C3020	Floor Finishes	\$174,494		
C3030	Ceiling Finishes	\$6,000	<b>\$255,944</b>	\$5.09

**D10 CONVEYING SYSTEMS**

D1010	Elevator	\$0	<b>\$0</b>	\$0.00
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**D20 PLUMBING**

D20	Plumbing	\$68,800	<b>\$68,800</b>	\$1.37
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**D30 HVAC**

D30	HVAC	\$291,200	<b>\$291,200</b>	\$5.79
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**D40 FIRE PROTECTION**

D40	Fire Protection	\$0	<b>\$0</b>	\$0.00
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**D50 ELECTRICAL**

D5010	Electrical Systems	\$360,295	<b>\$360,295</b>	\$7.16
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**E10 EQUIPMENT**

E10	Equipment	\$60,000	<b>\$60,000</b>	\$1.19
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**E20 FURNISHINGS**

E2010	Fixed Furnishings	\$42,560		
E2020	Movable Furnishings	\$0	<b>\$42,560</b>	\$0.85

**F10 SPECIAL CONSTRUCTION**

F10	Special Construction	\$0	<b>\$0</b>	\$0.00
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**F20 SELECTIVE BUILDING DEMOLITION**

F2010	Building Elements Demolition	\$90,747		
F2020	Hazardous Components Abatement		<b>\$90,747</b>	\$1.80

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<b>TOTAL DIRECT COST (Trade Costs)</b>			<b>\$2,049,667</b>	\$40.75
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Cost Estimate D 2014

Adjusted for inflation @ 2.5% per year 2,153,431

Building Replacement Value 18,318,000

Facilities Condition Index 0.12

**RENOVATION DANIEL BUTLER ES**

GFA

BUILDING SYSTEM

57000

SUB-TOTAL

TOTAL

\$/SF

**A10 FOUNDATIONS**

A1010	Standard Foundations	\$0		
A1020	Special Foundations	\$0		
A1030	Lowest Floor Construction	\$25,000	<b>\$25,000</b>	\$0.44

**B10 SUPERSTRUCTURE**

B1010	Upper Floor Construction	\$25,000		
B1020	Roof Construction		<b>\$25,000</b>	\$0.44

**B20 EXTERIOR CLOSURE**

B2010	Exterior Walls	\$371,310		
B2020	Windows/Curtainwall	\$261,807		
B2030	Exterior Doors	\$5,200	<b>\$638,317</b>	\$11.20

**B30 ROOFING**

B3010	Roof Coverings	\$66,180		
B3020	Roof Openings	\$1,280	<b>\$67,460</b>	\$1.18

**C10 INTERIOR CONSTRUCTION**

C1010	Partitions	\$89,000		
C1020	Interior Doors	\$108,700		
C1030	Specialties/Millwork	\$141,045	<b>\$338,745</b>	\$5.94

**C20 STAIRCASES**

C2010	Stair Construction	\$83,230		
C2020	Stair Finishes	\$0	<b>\$83,230</b>	\$1.46

**C30 INTERIOR FINISHES**

C3010	Wall Finishes	\$85,950		
C3020	Floor Finishes	\$321,308		
C3030	Ceiling Finishes	\$14,000	<b>\$421,258</b>	\$7.39

**D10 CONVEYING SYSTEMS**

D1010	Elevator	\$120,000	<b>\$120,000</b>	\$2.11
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**D20 PLUMBING**

D20	Plumbing	\$94,800	<b>\$94,800</b>	\$1.66
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**D30 HVAC**

D30	HVAC	\$345,200	<b>\$345,200</b>	\$6.06
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**D40 FIRE PROTECTION**

D40	Fire Protection	\$32,400	<b>\$32,400</b>	\$0.57
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**D50 ELECTRICAL**

D5010	Electrical Systems	\$518,825	<b>\$518,825</b>	\$9.10
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**E10 EQUIPMENT**

E10	Equipment	\$20,000	<b>\$20,000</b>	\$0.35
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**E20 FURNISHINGS**

E2010	Fixed Furnishings	\$81,700		
E2020	Movable Furnishings	\$0	<b>\$81,700</b>	\$1.43

**F10 SPECIAL CONSTRUCTION**

F10	Special Construction	\$0	<b>\$0</b>	\$0.00
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**F20 SELECTIVE BUILDING DEMOLITION**

F2010	Building Elements Demolition	\$121,343		
F2020	Hazardous Components Abatement		<b>\$121,343</b>	\$2.13

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<b>TOTAL DIRECT COST (Trade Costs)</b>			<b>\$2,933,278</b>	\$51.46
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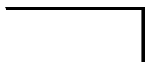
Cost Estimate D 2014

Adjusted for inflation @ 2.5% per year 3,081,775

Building Replacement Value 8,325,000

Facilities Condition Index 0.37





**RENOVATION WELLINGTON ES**

GFA

BUILDING SYSTEM

90350

SUB-TOTAL

TOTAL

\$/SF

**A10 FOUNDATIONS**

A1010	Standard Foundations	\$0		
A1020	Special Foundations	\$0		
A1030	Lowest Floor Construction	\$0	<b>\$0</b>	\$0.00

**B10 SUPERSTRUCTURE**

B1010	Upper Floor Construction	\$0		
B1020	Roof Construction		<b>\$0</b>	\$0.00

**B20 EXTERIOR CLOSURE**

B2010	Exterior Walls	\$0		
B2020	Windows/Curtainwall	\$0		
B2030	Exterior Doors	\$0	<b>\$0</b>	\$0.00

**B30 ROOFING**

B3010	Roof Coverings	\$0		
B3020	Roof Openings	\$0	<b>\$0</b>	\$0.00

**C10 INTERIOR CONSTRUCTION**

C1010	Partitions	\$0		
C1020	Interior Doors	\$0		
C1030	Specialties/Millwork	\$250,000	<b>\$250,000</b>	\$2.77

**C20 STAIRCASES**

C2010	Stair Construction	\$0		
C2020	Stair Finishes	\$0	<b>\$0</b>	\$0.00

**C30 INTERIOR FINISHES**

C3010	Wall Finishes	\$0		
C3020	Floor Finishes	\$0		
C3030	Ceiling Finishes	\$0	<b>\$0</b>	\$0.00

**D10 CONVEYING SYSTEMS**

D1010	Elevator	\$0	<b>\$0</b>	\$0.00
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**D20 PLUMBING**

D20	Plumbing	\$0	<b>\$0</b>	\$0.00
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**D30 HVAC**

D30	HVAC	\$0	<b>\$0</b>	\$0.00
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**D40 FIRE PROTECTION**

D40	Fire Protection	\$0	<b>\$0</b>	\$0.00
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**D50 ELECTRICAL**

D5010	Electrical Systems	\$0	<b>\$0</b>	\$0.00
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**E10 EQUIPMENT**

E10	Equipment	\$0	<b>\$0</b>	\$0.00
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**E20 FURNISHINGS**

E2010	Fixed Furnishings	\$0		
E2020	Movable Furnishings	\$0	<b>\$0</b>	\$0.00

**F10 SPECIAL CONSTRUCTION**

F10	Special Construction	\$0	<b>\$0</b>	\$0.00
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**F20 SELECTIVE BUILDING DEMOLITION**

F2010	Building Elements Demolition	\$0		
F2020	Hazardous Components Abatement		<b>\$0</b>	\$0.00

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<b>TOTAL DIRECT COST (Trade Costs)</b>			<b>\$250,000</b>	<b>\$2.77</b>
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Cost Estimate D 2016

Adjusted for inflation @ 2.5% per year	250,000
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Building Replacement Value	9,920,000
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Facilities Condition Index	0.03
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**RENOVATION WINN BROOK ES**

GFA

BUILDING SYSTEM

63,643

SUB-TOTAL

TOTAL

\$/SF

**A10 FOUNDATIONS**

A1010	Standard Foundations	\$1,000		
A1020	Special Foundations	\$0		
A1030	Lowest Floor Construction	\$5,000	<b>\$6,000</b>	\$0.09

**B10 SUPERSTRUCTURE**

B1010	Upper Floor Construction	\$0		
B1020	Roof Construction	\$0	<b>\$0</b>	\$0.00

**B20 EXTERIOR CLOSURE**

B2010	Exterior Walls	\$55,160		
B2020	Windows/Curtainwall	\$40,600		
B2030	Exterior Doors	\$0	<b>\$95,760</b>	\$1.50

**B30 ROOFING**

B3010	Roof Coverings	\$1,500		
B3020	Roof Openings	\$0	<b>\$1,500</b>	\$0.02

**C10 INTERIOR CONSTRUCTION**

C1010	Partitions	\$4,500		
C1020	Interior Doors	\$47,500		
C1030	Specialties/Millwork	\$162,876	<b>\$214,876</b>	\$3.38

**C20 STAIRCASES**

C2010	Stair Construction	\$8,000		
C2020	Stair Finishes	\$0	<b>\$8,000</b>	\$0.13

**C30 INTERIOR FINISHES**

C3010	Wall Finishes	\$95,195		
C3020	Floor Finishes	\$170,608		
C3030	Ceiling Finishes	\$51,630	<b>\$317,433</b>	\$4.99

**D10 CONVEYING SYSTEMS**

D1010	Elevator	\$30,000	<b>\$30,000</b>	\$0.47
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**D20 PLUMBING**

D20	Plumbing	\$58,000	<b>\$58,000</b>	\$0.91
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**D30 HVAC**

D30	HVAC	\$397,852	<b>\$397,852</b>	\$6.25
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**D40 FIRE PROTECTION**

D40	Fire Protection	\$0	<b>\$0</b>	\$0.00
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**D50 ELECTRICAL**

D5010	Electrical Systems	\$325,741	<b>\$325,741</b>	\$5.12
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**E10 EQUIPMENT**

E10	Equipment	\$5,000	<b>\$5,000</b>	\$0.08
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**E20 FURNISHINGS**

E2010	Fixed Furnishings	\$48,600		
E2020	Movable Furnishings	\$0	<b>\$48,600</b>	\$0.76

**F10 SPECIAL CONSTRUCTION**

F10	Special Construction	\$0	<b>\$0</b>	\$0.00
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**F20 SELECTIVE BUILDING DEMOLITION**

F2010	Building Elements Demolition	\$96,840		
F2020	Hazardous Components Abatement		<b>\$96,840</b>	\$1.52

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<b>TOTAL DIRECT COST (Trade Costs)</b>			<b>\$1,605,602</b>	\$25.23
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Cost Estimate D 2014

Adjusted for inflation @ 2.5% per year 1,686,886

Building Replacement Value 29,348,000

Facilities Condition Index 0.06

	BHS	CMS	BUR	BUT	WEL	WB
2007						
2008						
2009	45,291,643					
2010	46,423,935					
2011	47,584,533					
2012	48,774,146					
2013	49,993,500					
2014	51,243,337	2,108,045	2,049,667	2,933,278		1,605,602
2015	52,524,421	2,160,746	2,100,909	3,006,610		1,645,742
2016	53,837,531	2,214,765	2,153,431	3,081,775	250,000	1,686,886

	FCI
RENOVATION BELMONT HIGH SCHOOL	1.70
RENOVATION CHENERY MS	0.16
RENOVATION BURBANK ES	0.12
RENOVATION DANIEL BUTLER ES	0.37
RENOVATION WELLINGTON ES	0.03
RENOVATION WINN BROOK ES	0.06

<b>FACILITIES DEPARTMENT</b>	<b>LOCATION</b>	<b>FY13</b>	<b>FY14</b>	<b>FY15</b>	<b>FY16</b>	<b>FY17</b>	<b>TOTAL</b>
Replace athletic fields fencing	High School	40,000					40,000
System-wide security upgrades	District-wide		100,000				100,000
System Wide Building Envelope	Butler		105,841	133,070	150,505		389,416
Install destratification fans at Higginbottom Pool	High School		25,000				25,000
Town/School Security Upgrades Design (Years 1 - 6)	District-wide			50,000	100,000	67,449	217,449
Higginbottom Pool Upgrade - UV System	High School			40,000			40,000
Higginbottom Pool Upgrade - Ceiling	High School			40,000			40,000
Univent Replacement	High School			50,000			50,000
Fire Alarm System Replacement	High School				120,000		120,000
Fire Alarm System Replacement	High School				1,055,000		1,055,000
Basketball Court Floor Replacement	High School				100,000		100,000
Boiler Replacement (Year 1 of 2)	Butler				62,500		62,500
Fire Alarm System Replacement	Butler				143,250		143,250
Boiler Replacement (Year 1 of 2)	Burbank				150,310		150,310
Replace Boiler (Offset with one-time ESCO Funds)	Winn Brook					55,000	55,000
Modular Classrooms*	Chenery					1,450,000	1,450,000
		<b>\$ 40,000</b>	<b>\$ 230,841</b>	<b>\$ 313,070</b>	<b>\$ 1,881,565</b>	<b>\$ 1,572,449</b>	<b>\$ 4,037,925</b>

All Capital Projects are funded as "Pay as You Go" bonding, except "\*" which was from Free Cash



FACILITIES DEPARTMENT	LOCATION	FY18	FY19	FY20	FY21	FY22	TOTAL	
Town/School Security Upgrades Design (Years 3 - 6)	District-wide	200,000	200,000	200,000		-	600,000	
System Wide Building Envelope (multiple years)**	FY17-FY21	Capital Budget Request + Capital Discretionary					0,000	500,000
Replace boilers (Year 2 of 2)	Butler		50,000				50,000	
Replace emergency generator**	Butler	37,500					37,500	
Replace boilers (Year 2 of 2)	Burbank		60,000				60,000	
Replace master clock system	Winn Brook	47,598					47,598	
Systemwide univent rebuild/replacement (multiple years)**	Chenery	50,000	50,000	50,000			150,000	
One Ton dump truck to replace Silverado	District-wide	48,709						
Higginbottom Pool Resurfacing	High School	50,000					50,000	
Resurface Auditorium Stage	Chenery	30,000					30,000	
Stage Equipment Risk Assessment	Chenery	15,000					15,000	
School parking lot pavement management (Year 1 of 5)**	District-wide	100,000	100,000	100,000	100,000	100,000	500,000	
Replace fire alarm system	Winn Brook	158,658					158,658	
Site redevelopment study	Burbank	50,000					50,000	
Refinish Gym Floor	Chenery	60,000					60,000	
Upgrade Auditorium Lighting Control System	Chenery	25,000					25,000	
Replace 2003 Astro Van	District-wide	23,000					23,000	
Replace cafeteria Flooring - Asbestos & moisture mitigation	Butler	60,000					60,000	
One 6 Wheel (1 ton) Dump Truck to replace current Silverado	District-wide	48,709					48,709	
One Ride-On Floor Scrubber for Wenner Field House new BB court	High School	13,000					13,000	
Pool Upgrade with Pool Pak Unit	High School	50,000					50,000	
		<b>\$1,217,174</b>	<b>\$ 610,000</b>	<b>\$ 450,000</b>	<b>\$ 200,000</b>	<b>\$ 100,000</b>	<b>\$2,528,465</b>	