

# Hull School Building Maintenance

A Recent History of Protecting the Town's  
Capital Investment in Public Education

# Presentation Topics

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- **Brief History of Operations & Maintenance Spending**
- **Recommended Preventative Maintenance & Repairs from Commissioning Reports**
- **Samples of Recent Maintenance Projects**
- **Next Steps**

# School Maintenance & Operations Spending History

DESE	Function	FY13	FY14	FY15	FY16 Budget	FY17 Proposed
4110	Custodial	\$ 527,685	\$ 510,091	\$ 495,459	\$ 559,401	\$ 558,653
4120	Heat	\$ 131,174	\$ 155,207	\$ 180,714	\$ 191,728	\$ 183,119
4130	Utilities	\$ 366,980	\$ 366,295	\$ 361,082	\$ 396,632	\$ 400,382
4210	Grounds Maint	\$ 4,252	\$ 618	\$ 7,246	\$ 5,530	\$ 5,000
4220	Building Maint	\$ 120,037	\$ 208,384	\$ 212,184	\$ 159,412	\$ 222,190
4230	Equipment Maint.	\$ 302,594	\$ 285,359	\$ 284,184	\$ 211,122	\$ 227,705
<b>GF Budget Total</b>		<b>\$ 1,452,722</b>	<b>\$ 1,525,954</b>	<b>\$ 1,541,295</b>	<b>\$ 1,523,4824</b>	<b>\$ 1,597,049</b>
<b>Rental Revolving</b>	<b>Custodial and Maint.</b>	\$ 9,996	\$ 10,742	\$ 37,881	\$ 75,735	\$ 75,735
<b>Total All Funds</b>	<b>Maint &amp; Ops</b>	<b>\$ 1,462,718</b>	<b>\$ 1,536,696</b>	<b>\$ 1,578,750</b>	<b>\$ 1,599,559</b>	<b>\$ 1,672,784</b>

# EMG Physical Plant and Assessment Report for Jacobs Elementary School

## ■ Jacobs Elementary School (2008):

- Report produced December 2008
- 26 page report and 42 pages of appendices
- Report supplied commissioning results, capital planning suggestions and some general preventative maintenance (PM)
- Largely complied with PM and capital recommendations
  - Did not see reason to replace carpet or paint to the extent recommended in the 20-year EMG Capital Schedule
  - We did reapply water proofing to exterior brick slightly ahead of the schedule
  - We did not need to repair cracks in the sidewalks or parking lot and seal coat the parking lot in 2012, but we did restripe parking lot summer 2015

# Samples of Recent Maintenance Projects

## ■ Jacobs Elementary School (2008):

- Applied a waterproofing sealant to exterior brick on ocean side of building
- Installed demand control ventilation CO2 sensors to reduce heating and cooling costs
- Replaced defective sidewalks shortly after construction completion and repointed front stairs and leveled paving stones and again 9/2015
- Replaced 22 of 30 gym lights LED bulbs 62.5% more efficient than original bulbs
- Replaced most elevator electrical and mechanical controls, including the master drive in elevators # 1 and # 2, and the main entrance lift

# Samples of Recent Maintenance Projects

## ■ **Memorial Middle School (2001):**

- Mechanical, Electrical, Plumbing and Envelope Commissioning Reports 2015
- Installed a tank-less water heater system improving energy efficiency
- Installed new energy efficient lights with motion sensors in the gymnasium
- Installed new interior doors to the gymnasium and auditorium
- Installed 6 new operable windows in the auditorium
- Installed waterproofing sealants on exterior brick and block
- Installed new wheelchair lift by gymnasium stairs

# Samples of Recent Maintenance Projects

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## ■ **Memorial Middle School (2001):**

- Cumulative Significant Repairs to Sprinkler and Fire Alarm Systems (2013-2016)
- Commissioning Repairs Completed
  - Masonry Repairs to 3 of 4 Sets of Exterior Stairs
  - Repairs to Roof and Gutter Systems
  - Repairs to Boiler and Hot Water System
  - Repairs to Rooftop Units and Air Handling Units
  - Increased Preventative Maintenance for HVAC Equipment

# Samples of Recent Maintenance Projects

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## ■ Hull High School (2006):

- Mechanical, Electrical, Plumbing and Envelope Commissioning Reports 2015
- Installed new HVAC master controls for the school
- Installed new energy efficient lights with motion sensors in the gymnasium
- Installed new caulking/weather stripping on windows of bay side of the building & the north side of gymnasium
- Installed new scoreboard for game field (with many thanks to booster efforts and donations)



# Samples of Recent Maintenance Projects

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## ■ Hull High School (2015 & 2016):

- Replaced A/C Systems for 2 Computer Classrooms
- Replaced Unit Ventilator
- Masonry Repairs to Entrance
- Replace & Upgrade Auditorium Lighting to LED
  
- Sample Commissioning Repairs Completed
  - Boiler Repairs, Hot Water Pump Repairs
  - Roof Top Unit Repairs & Preventative Maintenance
  - Library, Office Area, Exhibition Room and Auditorium RTU (Significant Repairs)
  - Preventative Maintenance & Repairs to Classroom Unit Ventilators
  - Repairs to Exterior of Greenhouse

# Samples of Recent Maintenance Projects

## ■ System Wide Improvements

- Contracted with part-time HVAC Technician who has made modifications to our systems that have reduced our energy consumption and maintained equipment extending its useful life
- School Dude software used for scheduling space, HVAC, and work orders
- Heat temperature is set to minimum OSHA guidelines
- Collaborative procurement of natural gas
- Buildings are kept clean, orderly, and maintained in a timely manner
- Changed bathroom fixtures to reduce water and sewer consumption

# Projected Upcoming Maintenance Projects

## **Anticipated Maintenance Projects**

- Replace Heat Exchanger in Jacobs 2<sup>nd</sup> Hot Water Storage Tank
- Overhaul 5 Hot Water Pumps at HHS and Then Add Glycol (Antifreeze) to Building Heating System
- Repairs Needed to MMS Auditorium Rooftop Unit AC
- Replace Six Auditorium Inoperable Windows at MMS
- Restripe Parking Areas at HHS and MMS
- Replace 2003 Pickup Truck and Plow

# Next Steps

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## ■ Capital Projects

- Update Multi Year Capital Budget
- Explore MSBA Funding for Major Repairs to HHS and MMS
- Explore Other Capital Funding Grant Programs