



Facilities Overview

July 15, 2019



Facilities Overview

- Maintenance
- Custodial
- Grounds



What is in the Maintenance Budget?

Salaries

- Facilities director, Custodial and Maintenance Supervisors
- Maintenance/Custodial/Grounds Staff

Required Maintenance for School Facilities (11-000-261-xxx-xx-xx)

- Expenditures that keep the buildings open, comfortable, and safe for use or in its original condition.
 - System maintenance and repair
 - Professional Consultants/Services
 - Environmental
 - Design Professionals

Custodial Services (11-000-262-xxx-xx-xx)

- Daily upkeep of facilities not required to maintain original condition
 - Utilities
 - Property insurance
 - Custodial operations

Care and Upkeep of Grounds (11-000-263-xxx-xx-xx)

- Snow removal, landscaping, playgrounds, athletic fields



Facilities Highlights

- Short & long term planning
- Energy management
- General building repairs
- Preventative maintenance
- Systems maintenance
- Compliance
 - Safety
 - Environmental issues
 - Inspections
- Training



General Maintenance

- 3,000 work orders completed annually
- Skilled maintenance workers complete tasks in the following categories
 - Plumbing
 - Electrical
 - HVAC
 - Welding
 - Carpentry
 - Painting
 - Locksmithing
 - Concrete/paving repair
 - Floor repair
 - Door repair
 - Local delivery / distribution
 - Other special project



Maintenance Highlights

- Plumbing - over 500 toilets and 1,000 sinks. Also deal with sewers, pump stations, well management
- HVAC - Heat pumps, air conditioners, ERU's, HRU's, Boilers, Steam, Chillers, Multi zones, fan coils, unit vents, gas, electric, geothermal, refrigeration, we cover it all. Since the referendum we added 127 pieces of equipment at CHS
- Electrical - Ballast, breakers, outlet replacement and add ons



Maintenance Initiatives

Grounds

- Last year we bought 4 mowers to maintain cut grass at the elementary schools and Admin. These had previously been done by an outside contractor. We saved over \$25,000 last year by doing so

HVAC

- Our in-house HVAC techs saved us over \$56,000 in the last few months by installing 8 split system units in Hopewell Elementary and Toll Gate and a new HVAC in the transportation building in comparison to quotes we had for a contractor to install
- Our HVACR techs have saved thousands making refrigeration repairs.



Custodial Highlights

- Open/secure buildings
- Creating a safe, clean, healthy environment
- Preparation of instructional space
- Daily cleaning (“green cleaning”)
- Detailed cleaning
- Monitor outside use groups
- Safety Inspections
- Carpet Shampooing (Saving over \$24,000 annually)
- Snow Removal
- Custodians responsible for 32K sq ft (State min 17.5K)



Grounds Highlights

- Turf management
- Field set-ups
- Snow removal
- Playground maintenance
- Landscaping
- Equipment repair
- Parking lot repairs
- Catch basin repairs
- Fence repairs and replacements

Energy / Utilities

- Monitoring electric, gas, and water usage
- Use of energy efficient technology equipment
- Use of more efficient plumbing fixtures





Energy Measures

- Heating, Ventilation, Air Conditioning (HVAC)
 - Stony Brook & TMS Addition
 - Geothermal HVAC
 - Reduced energy use
 - Heat recovery units on exhausted air
 - Energy management system (EMS)
 - Has allowed for remote maintenance of HVAC since 1994-95
 - Long overdue software upgrade completed
- Lighting
 - CHS converted to all LED lighting (Expand as funds become available)
 - Motion Sensors
 - Reduced hours of bulb operation
- Solar
 - TMS/Bear Tavern on-line in 2008-09 - (\$14K in SRECs)
 - CHS on-line in 2015 - (Approx \$50K/year)
- Continued use of energy efficient equipment
 - Technology, plumbing, HVAC, electrical



Benefits of CMMS

Our various computerized maintenance management systems help the Facilities Office to work more efficiently, while avoiding the cost of another secretary.

- CM-3 / Invensys – Energy Management System
 - Remote oversight / scheduling / control of all district HVAC systems

- School Dude
 - Maintenance Direct
 - Tracks all regular work order requests
 - Preventative Maintenance Direct
 - Creates re-occurring tasks & schedules
 - Inventory Direct
 - Implemented in 2015 using min-max inventory control for supplies. Eliminating waste and maintaining appropriate supplies.
 - Facilities Direct
 - Electronic coordination & approvals for all Outside Use of Buildings



Ongoing Initiatives & GREEN Programs

- NJ Smart Starts Rebates / Custom Measures Incentives / Direct Install / ROD Grants
 - Demand Response C-Power Program
 - Universal Waste recycling @ no cost to the district
 - NJ Smart Start - Pay for Performance engineering evaluations & incentives
- GREEN Cleaning for Health & Healthy Buildings
- District Liaison to the Hopewell Valley Green Team
- Smart Start - TEACH Grant – NJ Green Schools Program
- Boy Scout EAGLE Projects – Facility Mentor
- Photovoltaic Systems
- Very Small Water Systems @ BT & TMS
- Filtered Water Fountains @ all locations. All fountains in district will be bottle fill stations by the end of this year. Total of 70
- School Gardens
- Composting



Indoor Air Quality (IAQ)

- HVAC
 - Regular filter changes
 - Regular vacuuming univent coils
- HEPA Rated Vacuums
 - Captures very fine types of particles
 - Dust, pollen, mold spores
- Green Cleaning Policy
 - “Green” chemicals used as they are as effective as conventional
 - “Green” cleaning equipment being used District-wide
- Carpeting
 - Using IAQ friendly brands of carpet where appropriate
 - Liquid cannot penetrate subsurface
 - Replacing VAT flooring and broadloom carpeting with tile floors and area rugs
- Entry system walk-off mats



Environmental

- Water Quality
 - Bear Tavern & TMS have site wells
 - Licensed per Very Small Water System (VSWS) requirements
 - Testing per DEP
 - 2-3 tests per day for residual chlorine
 - Bear Tavern has waste water pumping system
 - Stony Brook and TMS have waste water lifting pump station
 - TMS and CHS have grease trap interceptors from kitchens
 - Monitoring wells on AFT site
 - CHS Storm Ceptor
 - Lead in Water Testing
- PEOSHA & OSHA
- Comply with standards and record keeping guidelines
- Right to Know (RTK)
- Integrated Pest Management (IPM)
- Blood Borne Pathogens
- Chemical Hygiene
- Testing – Lead/Radon
- Asbestos Management Plan (AHERA)
- Air Permits
- Generator Compliance



Safety Inspections

- Insurance
 - Quarterly inspections
- Playgrounds
 - Significant periodic inspections by custodian
 - Annually by a Certified Playground Safety Inspector (Mr. Quinn)
 - Preventive maintenance on all structures seasonally
 - 50% of play equipment has been replaced over the last two years
 - Rubberized surfacing available at all elementary schools
- Fire
 - Extinguishers
 - Sprinklers
 - Alarm Systems
 - Kitchen Hoods
 - Annual Code Compliance
 - Flame Proofing Certificates
- Boilers
- Elevators
- Emergency Generator
- Eye Wash Stations
- Lifts