



**Buildings & Grounds
Committee:** Facilities
Improvement
Recommendations

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March 13, 2014

Agenda

- Tonight's Objective
- Process Overview – 5 minutes
- Project Summary – 5 minutes
- Project Detail – 45 minutes
- B&G Committee Recommendations – 10 minutes
- Discussion – 15 minutes

Objective

- Provide entire Board and community with a detailed understanding of the recommended projects, costs, rationale and proposed prioritization.
- Get direction from Board as to which projects should be included in final proposal for bond referendum.

Process Overview

- B&G Committee (BGC)
 - Maria Kashkin – BOE Member
 - Philip Whitney – BOE Member
 - Kris Harrison – Superintendent of Schools
 - Beverly Miller – Asst Superintendent for Business and Operations
 - Gary Knowles – Director of Facilities
- BGC meets every two weeks
 - Nov/Dec – Ms. Miller presented list of “needs” including estimated costs
 - Jan – BGC discussed details of each project. Defined high level need. Requested more accurate projections
 - Feb – BGC prioritized list; received projected costs from LAN, the district’s engineering firm.

B&G Committee Process



Expense estimates prepared by LAN Associates. Include sub contractor materials, hours, LAN project management and contingency. Generally LAN fee is 5-7% of total job cost

What Defines a Capital Project

- Fundamental improvement to District's assets, capital base or infrastructure
- An improvement that has a lifespan of more than 15 years. (e.g. Painting is not a capital improvement)
- However, school districts have some flexibility in defining their projects
- Most capital projects require SED approval
- All projects that need to be funded through borrowing must be approved by voters in a bond referendum

Types of Projects Considered

- Energy Saving - 8
- Pre-emptive - 2
- Quality of Life - 4
- Safety - 2

The BGC did not attempt to prioritize the projects in rank order. Rather, the BGC separated the projects into Tier 1 "Recommended" and Tier 2 "Not Recommended at This Time"

Proposed Facilities Projects Summary

*B&G Committee separated the projects into Tier 1 and Tier 2.
Tier 1 projects are recommended.*

Tier	Project	Type	School	3/12/2013
1	Re-wire Campus Lights to allow shutoff	Energy Savings	HS/MS	\$ 227.6
1	Convert MSS Gym Lights to LED	Energy Savings	MSS	75.6
1	Convert Dows Lane Gym Lights to LED	Energy Savings	DOWS	103.7
1	Replace Univents & Upgrade HVAC	Energy Savings	DOWS	439.9
1	Upgrade Boiler Controls at Campus/MSS	Energy Savings	HS/MS/MSS	78.0
1	Convert MSS boilers from oil to gas	Energy Savings	MSS	135.8
1	Move District Office to Dows Lane	Pre-emptive	DOWS	325.3
1	Add Vestibules to IMS entrances	Energy Savings	MS	97.5
1	Replace MSS Gym roofs	Pre-emptive	MSS	350.3
1	Renovate dust bowl between MS and gym building	Quality of Life	MS	141.0
2	Create upper lot to a parking lot with gravel, lights	Quality of Life	HS/MS	177.0
2	Renovate HS Boys bathroom	Quality of Life	HS	80.2
2	Renovate HS Girls bathroom	Quality of Life	HS	80.2
2	Install Speed Humps on hill	Safety	HS/MS	16.5
2	Install radiator covers at MSS	Safety	MSS	101.4
2	Convert HS Gym Lights to LED	Energy Savings	HS	132.4
Subtotal - Tier 1				\$ 1,974.7
Subtotal - Tier 2				587.7
Total				\$ 2,562.4

Project Details

**TIER
1**

Project #1: Re-wire Campus Lights

Project summary

To rewire the Middle School and High School buildings so that the lights may be turned off manually. This is a large project that requires new wiring and dozens of man hours to complete.

Project Rationale

The benefit is energy savings. The estimated annual cost savings is \$6,325 or 45% of the total lighting cost. This figure does not include reduced usage. This will also reduce the carbon footprint of the District.

Costs:
\$227,575

**TIER
1**

Project #2: Convert MSS Gym Lighting to LED

Project summary

The Main St School Gym lighting - sodium halide - dates from 1993. The lighting is very poor, expensive and cannot be quickly turned on or off. This proposed project converts the light fixtures to LED.

Project Rationale

The primary benefit is energy savings as well as quality of life. The estimated annual cost savings is \$3,435 or 69% of the total annual lighting cost. The quality of life improvement is an intangible benefit. This will also reduce the carbon footprint of the District.

Costs:
\$75,568

**TIER
1**

Project #3: Convert Dows Lane Gym Lighting to LED

Project summary

Dows Lane Gym lighting fixtures also use Sodium Halide lights that, like the MSS Gym, consume significant amount of electricity and emit an unpleasant green color. Replacing the lights involves replacing all fixtures and changing the controls. The fixtures at Dows are recessed which will require some minor demolition making this project more expensive than the MSS Gym conversion.

Project Rationale

The benefit is energy savings. The estimated annual cost savings is \$1,269 or 54% of the total lighting cost. This will also reduce the carbon footprint of the District.

Costs:
\$103,655

**TIER
1**

Project #4: Replacement of Univents; Upgrade to HVAC controls at Dows Lane

Project summary

Replacement of Univent systems in 20 classrooms, originally installed in 1955. HVAC controls control the heating and airflow within Dows Lane and are currently very limited in their thermostatic controls.

Project Rationale

The thermostats and Univents are not functioning properly, causing some rooms to overheat, some to be unheated. They cannot be repaired due to their age and complexity. Current HVAC controls are non-functional, relying on custodians to manually control the system. The estimated annual energy savings is \$5,135, or 10% of the cost base.

Costs:
\$439,890

**TIER
1**

Project #5: Upgrade Boiler Controls at Campus and MSS

Project summary

The current boiler controls date from 1993 (MSS) and 2003 (Campus) and have not been working properly for many years. Custodians must manually control the boilers. Because of their age, they cannot be repaired.

Project Rationale

The benefit is energy savings. The savings derives from the fact that the custodial staff would be able to set programmable schedules to shut down air handlers to unoccupied spaces; cool and heat areas on an as needed basis and also set up weekend and holiday schedules. The expected annual energy savings is \$18,614, or about 10%.

Costs:
\$78,100

**TIER
1**

Project #6: Conversion of Main St Boilers from Oil to Gas

Project summary

By converting our current boilers from oil to gas we will save money and be more environmentally sensitive in our energy management.

Project Rationale

The benefit is energy savings. The estimated annual cost savings is \$25,000 or 42% of the total energy cost. Natural gas is acknowledged to be a “cleaner” fossil fuel than oil which is an ancillary benefit.

Costs:
\$135,771

**TIER
1**

Project #7: Move District Office into Dows Lane and Renovate Nurse's and Principal's Offices

Project summary

The District Offices will be moved into the space currently housing the Dows administrative team which will be moved into a renovated, centrally located space. The new nurse's office would be ADA compliant and centrally located, allowing for easier access for students. The renovation will also ensure that Dows Lane doors will be compliant with fire code.

Project Rationale

This project is pre-emptive in nature. The units housing the District Offices are beyond their expected lifespan. The modular units were installed in 1997 with an expectation that they were temporary. Seventeen years later, the units are beginning to leak, rot and smell. Repairs to modular units are cost-prohibitive and replacement costs have been estimated to be \$1 million or more. The BGC also explored renting space for the District offices but according to local agents there is no affordable space to meet our needs.

Costs:
\$325,275

**TIER
1**

Project #8: Add Vestibules to IMS Entrances

Project summary

The vestibules will add another set of doors on either end of the lobby to keep out cold and dirt. The planned vestibule on the East side will extend into the lobby by 8 feet whereas the vestibule on the west side will be built out to the existing pillars.

Project Rationale

The benefit is energy savings and pre-emptive. The current design allows cold air and dirt to blow into the lobby of the IMS resulting in heat loss, the spread of dirt and debris and hazards to the air filtration system. An estimate of energy savings is undetermined because the current heat loss is unknown.

Costs:
\$97,544

**TIER
1**

Project #9: Replace Roofs on MSS Gym

Project summary

The lower and upper roofs on the Main St gym are nearing the end of their expected 20-25 year lifespan. There are persistent leaks that cannot be repaired due to difficulty in identifying the source of the problem. The roofs will be replaced with an EPDM rubber surface that is more durable and requires less maintenance.

Project Rationale

This project is pre-emptive in nature. The District will have to replace the roof at some point soon. The current leaky situation, while not being dire, is indicative of the fact that roofs are beginning to fail. In addition, new roofing technology will mean that the replaced roof will be less likely to leak in the future.

Costs:
\$350,344

**TIER
1**

Project #10: Renovate “Dust Bowl” Area at IMS

Project summary

The current space between the IMS and Campus Gym was designed to be a play space for students but has since deteriorated into a dusty eyesore. The proposal is to make this a functional play space by paving it with asphalt while delineating the areas that may be safety hazards due to their proximity to the windows. The layout specifies a buffer around these windows which currently does not exist. Asphalt was chosen because of the cost and its durability through four seasons. Other surfaces were rejected because of cost or impracticality reasons.

Project Rationale

The dust bowl is a potential safety hazard and its repair is also pre-emptive in nature because the dust enters the IMS building, impacting the HVAC filtration system. For students, this project is also an improvement in quality of life because the new space will be more functional than the current space.

Costs:
\$141,000

**TIER
2**

Project #11: Convert Upper Lot to Parking Lot

Project summary

The current parking situation at the Campus is challenging because the usage exceeds the available space. The current upper lot, adjacent to East Field, is not usable space. The project would convert the lot into usable parking spaces. Lighting would be minimal, for safety purposes. The surface would be gravel, not asphalt.

Project Rationale

The benefit is pre-emptive. Additional daily parking spaces are needed at the Campus. This project is in Tier 2 because the East Field project will impact this lot significantly, to such an extent that it would be very difficult to draw up accurate plans for the required work. As such, the BGC recommends that the job spec on this project be delayed until after work on East Field is complete.

Costs:
\$177,000

**TIER
2**

Project #12/13: Renovate HS Girls & Boys Bathrooms

Project summary

The renovation of the original 1964 boys and girls bathrooms in the HS will include a complete demolition of the bathrooms, replacement of all fixtures, replacement of plumbing and new tile.

Project Rationale

The benefit is quality of life and pre-emptive. Renovation is not for aesthetic value. The bathrooms have drainage and ventilation issues. There is a possibility that a more significant plumbing problem in the future could make the bathrooms unusable. The BGC assigned this to "Tier 2" status because there is the potential of this work being incorporated into future general funds budgets.

Costs:
\$160,310

**TIER
2**

Project #14: Install Speed Bumps on the Campus

Project summary

Add speed bumps at intervals along the road in front of the Campus Theater.

Project Rationale

This is a safety issue. Cars using excessive speed have been observed on the Campus roads posing a hazard for pedestrians. Speed bumps are anticipated to slow traffic. After the Fields construction is complete, this project will be addressed via the general fund.

Costs:
\$16,500

**TIER
2**

Project #15: Install Radiator Covers at MSS

Project summary

Install radiator covers on all of the exposed radiators in MSS as a preventative measure.

Project Rationale

The benefit is improved safety and is preventive in nature.

Costs:
\$101,383

**TIER
2**

Project #16: Convert High School Gym Lights to LED

Project summary

Like the other lighting conversion projects, this project aims to convert the sodium halide lighting fixtures and controls to LED. These lights were installed in 2003 during the Campus project.

Project Rationale

This project will result in energy savings. This is a Tier 2 project because the potential energy savings is believed to be lower than the other gyms. The other gyms have lower use; as a result, turning off the LED lights will result in higher energy savings. Also these fixtures are newer.

Est. Costs:
\$132,392

Projects considered for funding out of '14-15 operating fund (to be Budgeted in March 2014)

- The HS Girls and Boys Bathrooms Renovation project could be funded out of the operating budget due its modest cost (\$80k per bathroom).
- Practically we must perform this work over the Summer due the expected work duration.
- Unfortunately, this work requires SED approval which would make it difficult to start work this summer.
- However, we can encumber the expense in the '14-15 Budget to begin work over the Summer of 2015.

Summary by School

Tier	Project	Type	School	3/12/2013
1	Convert Dows Lane Gym Lights to LED	Energy Savings	DOWS	\$ 103.7
1	Replace Univents & Upgrade HVAC	Energy Savings	DOWS	439.9
1	Move District Office to Dows Lane	Pre-emptive	DOWS	325.3
1	Re-wire Campus Lights to allow shutoff	Energy Savings	HS/MS	227.6
1	Upgrade Boiler Controls at Campus/MSS	Energy Savings	HS/MS/MSS	78.0
1	Add Vestibules to IMS entrances	Energy Savings	IMS	97.5
1	Convert MSS Gym Lights to LED	Energy Savings	MSS	75.6
1	Convert MSS boilers from oil to gas	Energy Savings	MSS	135.8
1	Replace MSS Gym roofs	Pre-emptive	MSS	350.3
1	Renovate dust bowl between MS and gym building	Quality of Life	IMS	141.0
Subtotal - Tier 1				\$ 1,974.7

Dows - \$868.9
 Campus - \$505.1
 Main St - \$600.7
 Total \$1,974.7

Context: Projected Costs Relative to \$5M Bond Target

Tier	Project	Type	School	3/12/2013
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1	Renovate dust bowl between MS and gym building	Quality of Life	MS	141.0
2	Create upper lot to a parking lot with gravel, lights	Quality of Life	HS/MS	177.0
2	Renovate HS Boys bathroom	Quality of Life	HS	80.2
2	Renovate HS Girls bathroom	Quality of Life	HS	80.2
2	Install Speed Humps on hill	Safety	HS/MS	16.5
2	Install radiator covers at MSS	Safety	MSS	101.4
2	Convert HS Gym Lights to LED	Energy Savings	HS	132.4
Subtotal - Tier 1				\$ 1,974.7
Subtotal - Tier 2				587.7
Total				\$ 2,562.4
<u>Estimated Fields Renovations</u>				
East Field Grass - 1' Cap Solution				1,211.0
Meszaros Artificial Turf + Track				1,797.0
Subtotal - Fields				3,008.0
Grand Total - Estimated Bond (Fields + Tier 1)				\$ 4,982.7
Target				\$ 5,000.0

Contribution of Annual Energy Savings Offsetting Debt Service Costs

Costs

- Total Bond: \$5,000.0 (000s omitted)
- Est. Bond (P+I): \$6,657.1
- Total Bond P+I attributable to
 - Fields: 60%, \$4,018.9
 - Facilities (non-energy): 17%, \$1091.0
 - Facilities (energy): 23% \$1,547.2

Estimated Energy Savings

- Year one: \$59.8
- 15 Years: \$1,111.8 (assuming 3% energy inflation, compounded)

Net cost after 15 years: \$435.4

Next Steps

- Consider moving HS Lighting Conversion to “Tier 1”
- Consider the addition of a “Project Manager” temp position to oversee the project in its entirety.

- BOE Meeting March 20:
 - Review and continue debate on the recommended facilities projects.
 - Review Bond package in its entirety.
 - Final decision on East Field recommendation.

- BOE Meeting April 1:
 - Decision on scope of entire bond (fields and facilities)

- Possible additional meeting: March 25 or 27