**MASMS DAY ON THE HILL**

**Tuesday February 10, 2015**

- **8:30 AM** Meet at the Double Tree Hotel (Mpls Bvd Hotel), 2200 Freeway Blvd, Minneapolis MN
- **8:45 AM** Board a Bus to the State Capitol (Room 330 North, State Office Building)
- **9:30 AM** Update on 2015 Legislature (Randy Morris)
- **9:45 AM** Sen. Chuck Wiger, the House K-12 Finance Chair, Rep. Jennifer Loon, House K012 Finance Chair LeRoy Stumpf & Authors of Facilities Bill (IF the bill has been introduced.)
- **10:30 AM** Members meet with their Legislators
- **11:30 AM** Board Bus to go back to Double Tree Hotel; Lunch on the Bus

To Register for this event go to www.masms.org and select "Member Login" (Top of the window). Enter your username (first initial and last name; Enter password "masms" (unless you changed it). Select "Meeting Registration"; Select “Day on the Hill”; Enter your name and organization.

**MASMS serves as a resource to the Minnesota Legislature, providing expert, first-hand knowledge of educational facility issues and a state-wide communication network!**

**MASMS Response to the State’s Work on School Facilities Finance Reform**

The Minnesota State Constitution, Article XIII Section 1: *...it is the duty of the legislature to establish a general and uniform system of public schools.*

The Current System Needs a Systematic Overhaul: Excellence in education requires quality school environments that support student learning. The condition of school facilities varies widely among Minnesota school districts. Districts have different tax bases and vary in their efforts for facilities acquisition and long term maintenance. The State must be involved to ensure all students have access to quality learning environments.

The Legislature Begins Acting Upon Report: 2014 Session: Legislature acts upon Work Group Recommendation #7 of 8:

**Work Group Recommendation #1 of 8:**
1. Establish a new long-term facilities maintenance revenue program to replace the current alternative facilities, deferred maintenance and health and safety revenue programs, which provides adequate, equitable and sustainable long term maintenance funding for all school districts statewide.

2. Combine the Deferred Maintenance, Health & Safety and Alternative Facilities revenue programs in a new long-term facilities maintenance revenue program available to all districts.

3. Phase out state limits on long-term maintenance funding without voter approval over four years for districts not currently in the alternative facilities program.

**Work Group Recommendation #3 of 8:** Equalize the capital projects referendum levy:
1. Equalize the long-term maintenance levy at 125% of state average ANTC per pupil unit.
New MASMS Business Members
Karl Gtotzbach, Glass Today
Ann Young, Signational Graphics
Jacqui Coleman, InGensa Inc.
Justin Crandall, Midwest GroundCover
Express Blower Service
Todd McGonagle, Ickler Company

New MASMS Educational Members
Samuel Michelizzi, Duluth Schools
Steven Lundberg, Duluth Schools
Brad Berghuis, Wayzata Schools
Pat Lang, New Ulm Schools

Vendor Corner
Mike Remington, Inspec
MASMS Vendor Representative

MASMS Provides Opportunity for Vendor Educational Presentations
The MASMS Educational Committee recently issued a call for Educational Presentations for the 2015 MASMS Fall Conference, submittals are due February 15th. These educational presentations are a great opportunity for vendor members to further educate MASMS on various subjects and challenges the MASMS school members face. Not only are there opportunities to present at the Fall Conference, but also at the monthly chapter meetings and Custodial Maintenance Days as well. These presentations need to be educational and not a “sales pitch” or anything proprietary. Consider submitting a proposal for an educational session you could present. It is a great opportunity for all vendors!
Feel free to contact Mike Remington with any vendor issues you may have. He serves on the MASMS Board of Directors as the representative for MASMS Business Members.

TRAINING OPPORTUNITY
Certified Plant Supervisor (CPS) Training
MASMS, in partnership with the Association for Facilities Engineering (AFE), will be offering the Certified Plant Supervisor (CPS) training and examination in March 2015. The cost of this training and examination is $500 (this is the fee that goes to AFE). MASMS will be covering the cost of hotel (if you are more than 1.5 hour drive away), breakfast and lunch both days!
You will be sent study materials 6 weeks prior to the class. This class is a review of the study materials, and is not meant to be complete instruction. You must plan to spend the necessary time studying the materials prior to the class. This class is LIMITED to 20. There will be no exceptions to this limit.
Date: March 18 – 19, 2015
Time: 8:00 AM – 4:00 PM Both Days
Location: St. Cloud Holiday Inn and Suites, St. Cloud, MN
Steps you must take to register for this class:
1.) Email the MASMS office that you will be applying for this class (ruth@masms.org).
2.) Fill out the application.
3.) Send application and $500 check to MASMS office before March 5th, 2015.
4.) If you are more than 1.5 hours away MASMS will cover the cost for lodging for the nights of March 17th & 18th.
5.) The MASMS office will send out your study materials as soon as your application is received.
6.) Study Study Study - Contact the MASMS office to register!
MEMORANDUM FROM STATE FIRE SAFETY SUPERVISOR

TO: All Minnesota Public and Charter Schools
FROM: Forrest Williams – Fire Safety Supervisor
SUBJECT: Cold/Severe Weather Evacuation Procedures

The State Fire Marshal Division would like to remind all school districts about an updated cold/severe weather evacuation guideline that schools can implement effective immediately. Proper evacuation procedures for when the fire alarm activates during severe cold or inclement weather has been a concern for school district officials and parents across the state. This guideline provides school districts with a safe evacuation alternative when exposure to severe weather conditions may prove hazardous.

Please contact the Deputy State Fire Marshal assigned to your district if you have any questions or if your district wishes to implement this evacuation procedure.

EVACUATION PROCEDURES DURING DANGEROUS WEATHER CONDITIONS

The State Fire Marshal Division will allow school building occupants to evacuate up to the point of the exterior exit discharge doorways without having to leave the building in the event of dangerous weather conditions, such as extreme cold or severe thunderstorms. In order to receive approval for this method of evacuation the school must meet all the following requirements:

Upon activation of the fire alarm during dangerous weather conditions, occupants will immediately travel to their normally designated exit discharge doorways and stage at these locations without having to exit the building until a fire condition has been confirmed or an evacuation order given.

Assigned staff will immediately investigate the source of the fire alarm signal and shall have an effective means of communication such as two-way portable radios or a two-way public address system.

If a hazardous fire condition is confirmed the building shall be immediately evacuated. Thus, the plan must include procedures for temporarily silencing the alarm signal so that an evacuation order can be communicated to the building occupants via the public address system or other approved method.

The State Fire Marshal Division reserves the right to rescind or revoke approval of this strategy if the school no longer meets the criteria above or it has been shown that the procedures have not been followed.

OSHA Fact Sheet—Updates to OSHA’s Recordkeeping Rule: Reporting Facilities and Severe Injuries

For information about the updated reporting requirements visit OSHA’s webpage on the revised recordkeeping rule at: www.osha.gov/recordkeeping2014
Improving Safety at Bus and Student Drop Off Areas
Submitted by: Greg Buchal, Larson Engineering

Many School Districts have made recent changes to their building entrances and have implemented new security systems to improve the safety of students and staff at schools, but often, how students get safely to the school building is often overlooked or can be challenging to improve.

At many schools there has been an increase in the number of parents dropping off and picking up students instead of the students riding the bus to get to and from school. Our busy lifestyles, filled with numerous activities and commitments, along with concerns for our children’s safety and well being before and after school, contribute to more parents driving to school with their children.

One approach to improve the safety of students in these situations has been to separate the car traffic for the parents drop off and pick up areas from the bus traffic at the school. This separation of traffic is often much easier said than done. The original design and layout of the parking lots and drive areas of many schools was completed 20 or more years ago when this type of traffic problem did not exist, or was even considered. To make matters worse, many schools have had numerous building additions to accommodate a growing population of students over the years further disrupting or impacting the parking and drive areas at the school.

To improve these situations, the first step typically begins with evaluating the current situation. The evaluation process begins with looking at how the current traffic situation functions (or does not), along with the concerns associated with the current operation. The primary concerns often include safety of students, congestion, parent parking, etc. Then options are identified and evaluated to accomplish those needs. Often input from the stakeholders (parents, staff, bus drivers, etc.) is desired to help identify the concerns, along with the potential solutions. Available space must also be considered, and of course the cost of any infrastructure changes that are made. This process may include a traffic study that consists of monitoring and counting vehicles during the school arrival and dismissal times, reviewing county or city traffic count data for adjacent streets, along with looking at where the identified traffic and safety issues occur. The process then looks at developing options to address the traffic and safety concerns that are identified, and the consequences and impacts of implementing those changes to ultimately come up with a plan of action. This plan of action may include multiple phases of implementation.

An example of a junior high school where the student safety and traffic congestion was evaluated and improved involved more than 300 vehicles per day as parents were dropping off students in the morning, along with more than 20 school buses. The drop off location was a shared drive at the front of the school near the main building entrance. The drop off process often backed up traffic onto the adjacent city streets for great distances causing significant congestion not only at the school but on the adjacent streets. This often lead to frustrated parents trying to circumvent the process by dropping of students in a nearby parking lot which resulted in students having to walk between cars and buses to get to the school with a high potential for injury.

After evaluating the existing conditions and process, the solution in this case was to separate the bus traffic from the car traffic by moving the bus traffic to a new drive along the side of the school building and providing a longer staging area for both waiting cars and those dropping off students by extending the drop off area sidewalks at the front of the school. With the buses now in a separate area, they did not hold up car traffic while students unloaded from the buses. This improved the traffic flow of the cars so that the process flowed more smoothly and required less waiting. This overall improvement leads to less frustration by parents and eliminated students walking across traffic to get to get to the school. In addition, the bus traffic now exited on to a different street improving traffic flow and congestion in all of the adjacent streets.

By employing a process of collecting and analyzing data about traffic and safety concerns, options for improving the situation can be developed and ultimately implemented to make the journey to school safer.

The Midwest Energy Efficiency Alliance (MEEA) Building Operator Certification (BOC) Program

MEEA is hosting a BOC Level I training series at Itasca Community College, in Grand Rapids, beginning in April 2015. A large portion of BOC graduates are facility managers for school districts and the training focuses on low-to-no-cost operational efficiency improvements. Tuition rebates are available to customers of Minnesota Power and Minnesota Energy Resources who complete the BOC training. Click on this link for the specifics of the upcoming BOC training in Grand Rapids: http://www.boccentral.org/training-minnesota
WINTER MAINTENANCE CHANGES PROTECT THE ENVIRONMENT
WHILE MAINTAINING PUBLIC SAFETY

Salt is an essential tool for keeping school grounds safe in the winter. Like any tool, it has its correct uses and the potential for misuse. The chloride in salt, whether it is sodium chloride, magnesium chloride, calcium chloride or a blend, is a toxic pollutant to our lakes and streams. As salt works to melt snow and ice, it dissolves, but it doesn’t disappear. As the melted snow and ice drains to local water bodies, the dissolved salt moves with it. Once the salt gets into our lakes and creeks, there is no cost effective way to remove it. A growing number of lakes and streams in the metro area have unhealthy levels of chloride in them. Since many of us enjoy living in Minnesota for the recreational opportunities that the over 10,000 lakes and close to 70,000 miles of natural rivers and streams provide, it is worth taking a moment to understand the problems associated with winter maintenance and the solutions that one Twin Cities school district has employed.

The Bloomington Public School District is located, in part, in the Nine Mile Creek Watershed District (NMCWD). Nine Mile Creek is impaired for chloride. In order for Nine Mile Creek to be considered healthy, there needs to be a 62% reduction in chloride application across the drainage basin to the creek. This includes chloride applications to roadways, parking lots and sidewalks. Bloomington Public Schools has 17 sites, with approximately 300 total acres of land and 247,140 square yards of pavement. With this amount of impervious surface, there can be significant impact on local water and natural resources due to winter maintenance activities. Up through the winter of 2010-11, Bloomington Public Schools (BPS) used a sand/salt mix purchased from the City of Bloomington on its parking lots. The sand/salt mix was stored on the ground and covered only with a tarp. In 2010, two staff members attended a Winter Parking Lot and Sidewalk Maintenance training sponsored by NMCWD. Based on the information presented at the training, the school district decided to make changes in its winter maintenance program. After learning how the City implemented their winter maintenance program, BPS decided to implement a similar program.

BPS identified the equipment needed and applied to and received a $20,000 grant from the NMCWD in 2011 to purchase equipment that would allow BPS to reduce salt applications and properly cover and store their salt pile. The new equipment allowed for roadway brining, salt scatter or wetted salt scatter. The equipment purchased was: two truck mounted SnowEx VMaxx 8550 salt spreaders with PWS225 spray units, a 6500 gallon brine storage tank with a pumping station, a three-sided concrete salt bunker with roof, and walk behind Salt Dogg salt spreaders. In addition to purchasing the equipment, the district grounds personnel were trained on the new equipment, and all equipment was bracketed for proper application rates. The City provided experience and data on road conditions and supplied the anti-icing and deicing material.

For the 2012-13 season, BPS added a trailer mounted SnowEx VSS3000 tank and pump brining system (for anti-icing) with another grant from NMCWD to expand brining capability and improve curb and sidewalk coverage. Anti-icing is a proactive approach to winter maintenance where a liquid or a pre-wet deicer is put down to prevent snow from bonding to the pavement. This makes plowing and shoveling easier and uses less material.

The switch from a sand/salt mix to straight salt and a focus on anti-icing allowed the school district to make significant reductions in the amount of chloride they were applying. From 2009 to 2012, the school district was able to reduce chloride applications by over 50%.

- 2009-10 212.5 tons of sand/salt mix
- 2010-11 187.5 tons of sand/salt mix
- 2011-12 87.5 tons of salt and 1,363.5 gallons of brine (equivalent to 1.7 tons of salt)

The school district has been able to provide a safer parking lot and drive aisle environment, moved away from mixing sand and salt together, significantly reduced the use of salt, and have helped protect local water resources through the changes made in the winter maintenance program. These changes have been made possible through strong partnerships and have allowed the school to lead the way in winter maintenance on school grounds.

As the Bloomington Public School District has shown, schools, businesses, cities, the state and other organizations can all take steps to protect Minnesota’s waters. Knowledge, technology, and equipment allow reductions in chloride applications to occur without impacts to public safety. We can change how we do winter maintenance to protect Minnesota’s many important water resources. For more information on Winter Maintenance Trainings, visit: http://www.pca.state.mn.us/r0pgb86.

February—Health & Safety Check List

- Prepare OSHA 300 Log to Post
- OSHA Log (Refer to January) Posted between February 1- April 30
- Schedule Repairs For Damage Noted in 6 Month Asbestos Surveillance
- Program Review (Ensure Information is Accurate and Current)
  - Hearing Conservation Program
  - Lockout/Tagout Program
MEMBER NOTE!
MASMS Member, Lori Bauer, president of Climate Makers, Inc., has been installed as the president of MMCA (Minnesota Mechanical Contractors Association) for the year 2015.

Duties of the seat include labor negotiations with trade unions and maintaining the standards of the industry.

Recommended Levels of Service for Basic Grounds Care


**Recommended Levels for Basic Grounds Care:**

- **Acceptable:** 1 staff/20 acres
- **Standard:** 1 staff/18 acres
- **High:** 1 staff/15 acres

**Grounds Staffing Formula**

Total Acres of school facility Divided by 40  Plus (+) 1 FTE Groundskeeper Plus (+) 1 FTE Groundskeeper per 500,000 square feet of Athletic Fields Equals (=) Total number of Grounds personnel

**EXAMPLE:**

Determine the number of grounds staff required for a high school that is situated on 25 acres of land (including all building footprints) and has approximately 850,000 square feet of athletic fields.

\[
\text{25 acres} \div 40 = .63 \text{ groundskeepers}
\]

\[
\frac{850,000 \text{ S.F. of Athletic Fields}}{500,000 \text{ S.F. (groundskeeper ratio)}} = 1.7 \text{ groundskeepers}
\]

\[
.63 + 1.7 + 1 \text{ (from formula)} = 3.33 \text{ Total groundskeepers}
\]
The Flu & Your School

By: Ben Klawitter, Filtration Systems Inc.

With colder temperatures settling in flu season has gone into full swing. Throughout the year the American Journal of Infection Control publishes articles on influenza and had a couple that were directly related to k-12 school buildings.

Shortly after the 2013 flu season ended an 8 building suburban Cincinnati Ohio school district was selected by the Center for Disease Control for an anonymous survey of district employees to determine how many worked with flu-like symptoms. Of those that had either flu-like symptoms or confirmed flu illness 77% reported that they worked while ill. The main reasons were that they felt an obligation to the students to go to work and they did not think that they were contagious.

Influenza is a particularly difficult pathogen to manage, especially since it occurs more in the December-February time period when buildings are being heated and the use of outdoor air is commonly reduced in order to save energy. This means buildings are recirculating more air and potentially spreading the virus throughout the building. With a diameter of just 0.1 micron influenza is a very small particle that MERV-8 filters won’t capture, they are only rated down to 3 microns and even MERV-13 filters are only 60% efficient at removing particles that small. If synthetic media filters are used the capture efficiency is even lower due to their documented drop in efficiency during use.

A different study at the University of Minnesota (also published in the AJIC) looked at whether HVAC filters were capable of catching these small virus particles. There were ten AHUs that had filters pulled for testing, each AHU was equipped with high-efficiency filters (MERV-11 or MERV-13) with anti-microbial media and there was a mix of AHUs that operated with 100% outside air and AHUs that recirculated air. None of the filters that used 100% outside air were contaminated, while 75% of the AHUs that re-circulate air contained active influenza virus.

So what does this mean for facility maintenance professionals? Because district employees are going to come to work ill and modern HVAC systems recirculate air to save energy, the task of trying to prevent a flu outbreak is difficult. With the virus being so small high-efficiency filters can help but do not offer complete protection, and using anti-microbial filter media was shown to have no impact.

From a ventilation side, as the UofM study showed, bringing in as much outside air as possible and exhausting the indoor air is the best way to limit the distribution of the flu around your building.
MASMS Scholarship Applications are due.
There are two types of scholarships.
For Children of Members: Tom Robinson Memorial Scholarship Program
For MASMS Members: Jim Fredricks Leadership Scholarship Award

MASMS Tom Robinson Scholarship Program for Children of MASMS Members
The MASMS Scholarship Committee is accepting essays from sons and daughters of all MASMS dues paying members and life members who are graduating seniors and any eligible post-secondary student accepted into any post secondary school in the United States.

How to Apply:
Complete the application form and your essay by March 1, 2015. All information will be reviewed by the MASMS Scholarship Selection Committee. Awards will be announced in early May 2015. Go to www.masms.org - select “Resources” and then select “Scholarships” to download the form.

Awards
Scholarships awarded can range from $500-$2000, based on available funds. These are awarded once a year in May. As of 2008, MASMS has awarded over $80,000 in educational scholarships to many deserving students. Applicants can continue to apply each year until they reach a maximum scholarship total of $2000.

Jim Fredricks Leadership Scholarship Award - For MASMS Members
In 2008, the MASMS Executive Board created a unique scholarship honoring the exemplary leadership of Jim Fredricks, the former Director of Facilities at the College of St. Benedict. Jim was instrumental in the formation of the MASMS Chapter Structure, and served as Chapter President, State President, Treasurer, and NSPMA (National) President.

During his professional career, Jim worked hard to improve not only his skills, but also those of members throughout the organization. He believed strongly in education and professional growth of all MASMS members, creating the first educational and certification committee. He led this committee since its inception, committed to raising the bar of each individual as well as the organization.

This annual $1000 scholarship will be awarded to a MASMS member that emulates the same commitment to professional growth and leadership, and are looking to advance themselves in their profession. The applicants will be reviewed by the scholarship committee to determine those best suited for this award.

Go to www.masms.org - select “Resources” and then select “Scholarships” to download the form.

**MASMS CALENDAR**

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The MASMS Memo Board

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