Maintenance Strategy – Security Systems

This category covers a broad range of a buildings security systems and sub systems. The information contained in this document are general recommendations and guidelines designed to bring attention to the importance and benefits of preventive maintenance strategies supporting quality educational environments. It is important for facility managers and maintenance staff to be aware of the specific systems asset types and maintenance required to effectively maintain the systems functionality and reliability through preventive maintenance requirements. Qualified in-house maintenance combined with certified vendor staff may be necessary to manage systems safely and effectively. Consult manufacturer recommendations on building security system requirements.

A vast amount of capital funding has been allocated to New Mexico Public School security systems improving the safety for all occupants. From automatically locking doors, site fencing, signage and entry vestibule upgrades to advanced access control systems and video surveillance. Armed security staff are also investments being made towards providing safe school environments. Security systems need regular maintenance to make sure it functions optimally. This involves inspecting the individual components, changing the batteries when needed and ensuring that all the individual parts communicate effectively with one another. Many schools have also installed main control systems and a monitoring services to keep track of system performance. Districts should establish maintenance processes to ensure these installed systems continue to work as designed supporting a safe school environment.

In addition to advancing formal security planning efforts, many if not all, schools have implemented different types of security systems to improve school environments. Many of these systems require routine review and preventive maintenance to ensure they work effectively and may include: Vehicular gate systems, site fencing, site access checkpoints, entry vestibules, access control systems, digital keypads, proximity readers, magnetic door and gate locks, key fobs, badge readers, motion sensors, CCTV/camera systems, security/safety glazing, alarm systems, gunshot detection devices to name just a few. Several of these systems require advanced preventive maintenance requirements and/or software updates to maintain the warranties, and provide for reliable working systems.

Facility and Security Managers and staff are tasked with protecting the assets. That means maintaining the entire building which includes security systems that occupants rely on every day.

Perimeter checks are critical in identifying potential problems. Perform routine (weekly) perimeter inspections.

- Check the locks on all doors and windows
- Inspect the frame around each door and window to ensure there is no rotting, warping or any other condition that makes the entry easier to breach
- Check the sensors on doors and windows. Adhesive usually holds them in place, so the sensors need re-fastening occasionally
- Check the batteries on wireless sensors that require testing and the occasional replacement
- Encourage district staff to report any system not working through the work order process

Interior door systems: Establish a routine inspection of interior doors systems including:

- Classroom door and lock systems

- Mechanical/electrical and other rooms requiring authorized access
- Check the integrity of installed vestibule systems on a routine basis to ensure sub systems such as cameras, communication devices, door locks and other automated systems work as designed

Test schools primary security control panels - The control panel is the brain of the system. Every sensor's signal passes through it, and it interprets those signals to know when to activate. The panel has a "test" mode which runs a self-diagnostic to ensure everything works properly. Notify the monitoring service, before running the test mode unless the system doesn't require it. This prevents the monitoring service from treating it as an emergency if an alarm activates while on a test. Visually inspect the panel as well to look for loose wires or any signs of damage. Notify the alarm company immediately if the panel starts malfunctioning or shows signs of wear.

Keys and Security Badge Systems: Routinely audit access control system protocols to ensure accessibility is removed from outdated badges or temporary access privileges including policies to manage lost or stolen access devices and system settings. Coordinate with Human resources to determine access levels based on job descriptions and work assignments. To ensure appropriate access and security, routinely review key distribution lists ensuring proper control and authorized distribution to approved staff. Develop processes for the control, use, possession of keys/access cards and who the policy applies to.

Building Lighting - Check all exterior lighting monthly to ensure systems work properly. Readjust the lights as needed to maximize their effectiveness and coordinate work orders to repair identified broken systems.

Gate systems and perimeter fencing: check all gates and perimeter fencing to ensure they are working as designed and the integrity of the gate system in intact. Report any damage needing repair through the districts work order process.

Camera Systems- examine cameras daily to ensure they have power, are aimed properly and have not been vandalized. Check monitoring and recording devices to verify each camera is getting an image and is recording appropriately.

Other Considerations– ensure the general practice of propping open both interior and exterior doors is avoided. Staff sometimes props doors open with unapproved devices, rocks, or door wedges for convenience.

Annual Inspections - District driven inspections help prevent major malfunctions in security systems, but an annual inspection from a qualified technician helps ensure everything stays running optimally in the long-term. An inspector may perform more thorough system checks on all the components, wiring, power supplies and sensors in the system and replaces or repairs anything that is not performing at 100 percent. Most companies offer annual inspections at relatively low costs, and many include it as a part of the initial installation agreement. This helps prevent more expensive repairs down the road and can also reduce the risk of the system failing when you need it most.

Vendors may also update any software that needs it. Inquire about the software while the inspector is there to make sure you have the most updated firmware. This eliminates bugs and reduces the risk of malfunction.

Perform Additional Safety Checks - Security systems help automate the process of keeping buildings secure and safe, but it does not do all the work. A districts diligence is essential in keeping the system working and ensuring it is used and working properly. Communicate with your maintenance and security teams and or approved vendors anytime there is any concern about the system or the proper use of it.

Consult your districts specific safety/security plan for additional details and specific system manufacturer recommendations for any maintenance and cleaning processes necessary to keep assets in good working and reliable condition.