Nebinger Elementary is getting an electrical upgrade!

Nebinger is launching a 2-year project to upgrade its electrical system, bringing much-needed energy efficiency to the building and allowing for air conditioning units in each room! Below you will find an FAQ we developed to try to answer questions students, families, and faculty/staff might have.

Please join us on Jan 18, 5-6pm in the Nebinger auditorium for a Town Hall to hear more about the upgrade and get answers to any questions you have about the process!

Overall Facilities Background

Like most other schools in Philadelphia, Nebinger is an old building with various structural issues stemming from decades of underfunding in public education. The District is in the process of developing a facilities renovation plan to help prioritize renovation, remediation, and new building projects. Last year, each school participated in a walk-through by Parsons Environmental and Infrastructure Group to assess the conditions of the facilities and the suitability of the environment for learning. Nebinger scored at an "Unsatisfactory" level on the facilities conditions assessment and "Poor" with respect to the educational suitability assessment. One primary concern raised in the report is Nebinger's electrical system, which is beyond its service life and not up to code.

Recent Capital Investments at Nebinger

In recent years, Nebinger has had various small-scale upgrades, such as the installation of lockers in the middle school, relocating and updating the library, upgrading equipment for arts and PE programming, and the installation of smart boards in most classrooms. In addition, recent attention to lead and asbestos hazards across multiple schools in the District allowed for Nebinger to assess and improve environmental conditions. Prior to the pandemic, Nebinger received comprehensive lead stabilization after a community-led organizing effort in response to unsafe conditions following District contract work. Currently, Nebinger is in the middle of a 3-year asbestos abatement assessment, following emergency asbestos abatement and assessment in 2018-19. An interim report will be released in the next few weeks. *There is currently no known asbestos exposure risk.* Families can review the previous asbestos abatement and assessment report posted on the School District's website here, which documents where asbestos is present in the school.

The Next Step for Nebinger: An Electrical Upgrade

After years of advocating for our school, the School Board recently approved a $3.8 million dollar upgrade to our electrical system – which will be about a 2 year project – that will ultimately enable a better and more well functioning electrical system, including full air conditioning in the summer weeks and energy-efficient LED lighting in the entire school.

An electrical upgrade of this magnitude will require patience from everyone and we thank you in advance for that! Lex Electrical is the main contractor on this project. They have successfully completed similar upgrades in four other District schools (e.g., Gompers Elementary). Lead and asbestos abatement and remediation will be managed by Vertex Engineering.

Nebinger Electrical Upgrade FAQ

In late December 2022, contractors and representatives from the District's facilities office met with school leadership and our PTA and SAC leaders to field questions about the upgrade, including concerns about how the team will minimize environmental risks related to lead and asbestos. Here are the questions we asked and what we know so far.

Scope of the Project

What is getting an upgrade?
All electrical systems in the building will be included in the upgrade. At a high level, the contractor will replace the current, antiquated electrical system (two phase) with a modern system (three-phase). New wiring, conduit, panels, and accessories will be installed to support the new system. Interior and exterior lighting will be upgraded from HID, fluorescent, or incandescent lighting with new LED lighting fixtures and control system that complies with the Philadelphia energy code. Additionally, the project will include furnishing and installing window air conditioning units and will replace ceiling grid and ceiling panels.

Note: It is unlikely that airconditioning will be newly available in classrooms until fall 2024.

Why would the change from two-phase to three-phase be better?
Across the city, PECO is phasing out 2-phase distribution. Originating in the 1920s, the existing 2-phase is becoming an obsolete technology that is very expensive to repair and is significantly inefficient. Modern three-phase systems are more efficient for delivery of power and less costly to repair.

How are the new lighting and controls better than what we have now?
The lighting controls for the new system are very efficient. The controls automatically shut down lights in unoccupied areas. The system also dims the lights to accommodate varying brightness of natural light. The light fixtures are very low-maintenance as well.

What can we tell our kids?
You can tell your kids that Nebinger is going to have a new electrical system that will be AWESOME. It means we all have to have patience while they work on this and it might mean they have to move rooms at some time and there might be some noise. But if they are brave enough to ask the folks that are working on this, they will say they are building a pool on the roof!

Process Questions

What is the overall project schedule?
The notice to proceed was given to Lex Electric on November 3rd, 2022, and on-site work began on January 9, 2023. The project is scheduled through November 2024. Normal work hours are M-F from 7am to 330pm. (Note, workers prefer earlier starts, so we might see them to be in the building as early as 6am). Second shift abatement work will occur outside of school operation hours when

the building is not occupied. Start times for abatement work will account for afterschool programs and events.

Can we expect delays in a project like this?
YES! It's a major capital investment project. Due to delays in the global supply chain, the District has experienced delays in procurement of electrical equipment, in general. However, the contractor noted that they have not yet experienced significant procurement delays. Nonetheless, we can expect a project this size and scope to experience some delays.

How will the work be managed to reduce impact on student learning?
The work of the project is generally divided into two parts:

- CLASSROOM WORK: Starting in early January, the team will be in the building to do assessment work as well as work that needs to happen in the basement. They will then work on up to two classrooms at a time for environmental remediation and construction. The Nebinger admin has put together a plan to have two rooms available at all times; but this does mean teachers and students will have to rotate as appropriate. The gym/cafeteria and auditorium will be treated as "classrooms" for the purposes of this project.

- CORRIDOR WORK: Environmental remediation and construction in the corridors/hallways is restricted to the summer recess periods (approx June 15-August 7). Unless the contractor can complete this work on all four floors in a single summer period, the work shall be limited to two floors each summer. In either case, all work in a corridor shall be complete for the start of school, including reinstallation or replacement of the drop ceilings.

When the project is taking place in the classrooms, how long will the classrooms be occupied?
The electrical system upgrades in classrooms require the use of two adjacent classrooms at a time. In order to facilitate progress, Nebinger has freed up two classroom spaces as designated "swing spaces" for displaced classrooms. The work in each set of classrooms is expected to take about 2 weeks to complete. Once the work is completed in the first couple sets of classrooms, the contractors will have a better estimate as to how long the next set of classrooms will be displaced.

What work will be done before the summer of 2023?
During this school year, the contractor will start working in the basement areas, back of house areas, boiler and electrical rooms, and the mechanical rooms. Pending progress, work will shift to classroom spaces, as described above.

Environmental Concerns

What does the asbestos abatement process entail? Is monitoring completed daily?
Abatement is the removal of asbestos containing materials whether known or assumed in the building and overseen by the environmental project managers, Vertex Engineering. The work is completed by a professional abatement contractor that will utilize containment and negative air pressure machines, which are fitted with HEPA filters, to ensure there is no contamination outside the contained area. All abated material will then be bagged, sealed, and properly disposed of.,

Vertex will have air monitoring systems set up both inside and outside the containment area to continuously monitor all airborne asbestos fibers in and around the work area. Results for the tests are provided and will be posted on-site. In addition, a baseline air-monitoring test is done prior to the work, during the abatement, and then following completion of the work. A Phase contrast microscopy test (PCM) is done on-site. A transmission electron microscopy test (TEM) is then done in a lab.

Note: Asbestos abatement during the school year is restricted to off-hours when the school is not occupied.

What does the lead-paint stabilization process entail?
It is assumed that all the paint throughout the building contains lead (buildings built before 1978 are assumed to contain lead-based paint). Therefore, all work that involves disturbing paint surfaces (e.g., drilling or coring), will be done under the EPA's Lead Renovation Repair and Painting guidelines (RRP), under supervision of a certified Lead RRP professional. This process will also be monitored by a Vertex Lead technician. Vertex will have a technician on-site for the lead stabilization work in addition to the asbestos abatement project inspector (API) for the abatement work. In addition to controlling dust created by disturbing painted surfaces, the Lead RRP procedures provide for remediation of any loose or damaged painted surfaces.

Is the abatement work done before the electrical work?
The intent of the phasing will be for the school to provide the contractors two classrooms at a time, and move the students to swing spaces. Prior to the contractors starting their electrical work in these rooms, the abatement subcontractor will be on-site during the second shift (night shift) to abate all designated asbestos containing materials in the classrooms that will be impacted by construction activities.

Additional Questions

Due to this large capital investment, will Nebinger be de-prioritized for additional capital investments?
No! We will still be fully considered in the District's facilities renovation plan. Priorities for improvements will be based on need.

What do I do if I have any questions or concerns?
We have tried to provide answers to anticipated questions here. If you have additional questions not covered in this document or concerns as the project is underway, please direct them to Principal Townsend (rather than directly to the SDP inspector, project manager, or the District facilities office). The SDP inspector and/or project manager will be on-site daily and will meet with the principal bi-weekly to track progress and address issues that students, families, and faculty/staff may have.

Want to follow along SAC and PTA on the nitty gritty?
The project will include periodic stakeholder meetings, with Meeting Minutes posted here!