NEWARK UNIFIED SCHOOL DISTRICT

Special Meeting of the Citizen’s Bond Oversight Committee
Schilling Elementary School - 36901 Spruce Street, Newark CA.
April 3, 2018 – 1 P.M.

AGENDA

I. Call to Order

II. Roll

III. Visitor/Public Comment

Members of the audience who wish to address the Citizens’ Bond Oversight Committee are asked to complete the yellow card available at the entrance and submit it to the Chair. Speakers who have completed the card will be called when the item is reached on the agenda, or for non-agenda items, during the Public Comments. Cards are to be turned in before the item is reached on the agenda. State law prohibits Committee members from taking any action on or discussing items that are not on the posted agenda.

IV. Facilities Tour -

- Schilling Elementary School, 36901 Spruce Street
- Graham Elementary School, 36270 Cherry Street
- Newark Junior High School, 6201 Lafayette Avenue
- Birch Grove Intermediate School, 37490 Birch Street
- Birch Grove Primary School, 6071 Smith Avenue
- Newark Memorial High School, 39375 Cedar Boulevard


V. Update on HVAC and Play Structures (Discussion/Action)

New HVAC and Playground Structure information will be shared.

VI. Bond Interest Correction – Mr. Richards (Discussion/Action)

VII. Adjourn
MEASURE G
APPENDIX A

Newark Quality Education & Safe Classrooms Measure
Language
FULL TEXT OF MEASURE G

APPENDIX A
Newark Quality Education and Safe Classrooms Measure
BALLOT MEASURE
FULL TEXT

Newark Quality Education and Safe Classrooms Measure

"To preserve quality education, provide safe and modern schools, and qualify for matching funds, shall Newark Unified School District update aging classrooms, libraries, and science labs to meet earthquake/fire/safety standards; improve access for students with disabilities; remove asbestos, lead and hazardous materials; and improve energy/operational efficiency to maximize funding for instructional programs; by issuing $63 million in bonds at legal rates, with independent oversight, no money for administrators’ salaries, and all funds staying in Newark?"

Bonds – Yes

Bonds – No

Purpose

Student achievement in Newark schools is on the rise. Test scores in Newark have consistently increased over the last five years.

However, most local schools are over 40 years old, some close to 50 years old. School buildings throughout Newark do not meet current earthquake and safety standards. Many classrooms are not accessible for students with disabilities. Some classrooms contain asbestos, lead and other hazardous materials. Roofs leak, heating and electrical systems are outdated and aging plumbing needs to be replaced. High school science labs are overcrowded and outdated. Schools are not energy efficient, which increases our utility costs and takes money away from instructional programs.

Upgraded classrooms, libraries and science labs are needed to provide a safe and modern learning environment for students.

If approved, the Newark Quality Education and Safe Classrooms Measure will provide local funding that cannot be taken away by the State to complete the highest priority projects that impact student safety, quality instruction and operational efficiency.

To protect student safety, Measure G will:
* Update classrooms to provide access for students with disabilities
* Upgrade school libraries to accommodate computers and book collections for students
* Modernize science labs, classroom computers teaching tools and technology to prepare students for 21st century jobs
* Replace outdated electrical systems and wiring to accommodate modern technology

To reduce costs, improve efficiency and maximize available funding for classroom teachers and instructional programs, Measure G will:
* Improve energy efficiency to reduce utility costs by an estimated half-million dollars per year
* Replace outdated heating, ventilation and other mechanical systems that often break and are expensive to repair

Measure G requires mandatory fiscal accountability, including:
* Every penny from this measure must stay in Newark to benefit local schools
* No funds can be taken away by Sacramento.
* No funds can be used for administrator salaries or administration
* An independent citizens’ oversight committee will review the use of funds to ensure they are spent properly
* Annual performance and financial audits are required

The Newark Quality Education and Safe Classrooms Measure is designed to provide the best possible education for Newark students and to benefit the entire Newark community. Good schools make our neighborhoods more desirable, which protects the value of our homes. This measure will create local construction jobs, boost economic activity in the area and protect jobs for local teachers and staff.

Project List

Every school within the Newark Unified School District will receive funding from Measure G, the Newark Quality Education and Safe Classrooms Measure. Bond funds, in conjunction with State matching funds as may become available, will be used to make necessary repairs and upgrades to existing school campuses, as well as replace old portable classrooms and buildings, and upgrade the technology infrastructure to support student learning. The campuses and support facilities listed below will receive the following repair, upgrade and construction projects as necessary:

- Bunker Elementary School
- Graham Elementary School
- Kennedy Elementary School
- Lincoln Elementary School
- Milani Elementary School
- Musick Elementary School
1. Complete health and safety improvements required to comply with current student safety standards and codes, including removing hazardous materials such as asbestos and lead, completing seismic safety upgrades to make facilities earthquake safe, improving electrical systems and fire safety, upgrading communication and security systems, providing lighting for safety, repairing cracked and uneven pavement and stairs, and improving safety in school parking areas
2. Provide access to classrooms, science labs, restrooms and other school facilities for students with disabilities
3. Improve student access to classroom computers and modern technology by upgrading electrical and technology infrastructure and distribution
4. Complete repairs, renovations and upgrades to school sites including replacing outdated electrical systems, sewer, water, gas, paving, walkways, fencing, landscaping and drainage systems
5. Complete major upgrades and renovations to building exteriors and interiors, such as walls, painting, lighting, roofing, floor coverings, doors, windows and hardware
6. Upgrade science labs to support instructional programs and provide advanced courses now required by colleges and universities for admission
7. Provide facilities and equipment necessary to effectively implement career and technical programs so students can compete for today’s in-demand jobs
8. Update and improve building systems including heating, ventilation and plumbing systems to reduce energy consumptions and school utility costs
9. Evaluate and implement energy generation, management and conservation systems to improve environmental sustainability and effectively reduce ongoing energy and utility costs incurred by the District
10. Construct, furnish and equip new classrooms to replace outdated/aging portable classrooms
11. Renovate, expand, and construct student support facilities throughout the District as needed
12. Acquire and install instructional, maintenance, and operational equipment including but not limited to: desks, computers, printers/reprographic equipment, computer stations, smart boards, whiteboards, tack boards; science, art, and instrumental program equipment; window coverings, cafeteria tables, and maintenance equipment to the extent permitted by law
13. Upgrade and replace as necessary outdoor play equipment, protective play surfaces, and fields as needed to meet new safety standards and keep our children healthy
14. Provide adequate shade structures and lunch shelters to protect students
15. Expand and upgrade multi-purpose rooms, cafeterias and kitchen areas as needed to efficiently prepare food and serve students in a safe and sanitary environment
16. Refinance or retire existing debts and leases in order to secure more favorable terms for taxpayers and/or free up funding for classroom instruction

Priority of Projects

The listed projects will be prioritized and completed as needed with the following projects being prioritized first: projects dealing with safety and security for students, teachers and school staff; items with immediate impact on classrooms and instruction; items which protect the structural integrity of our schools protect taxpayer investments in these community assets; projects that maximize additional funding resources or that generate ongoing funding or expense reduction.

Project Costs

Each project is assumed to include its share of furniture, equipment, architectural, engineering, and similar planning costs, program/project management, staff training expenses and a customary contingency for unforeseen design and construction costs. In addition to the listed projects stated above, the Project List also includes the acquisition of a variety of instructional, maintenance and operational equipment, including the reduction or retirement of outstanding lease obligations and interim funding incurred to advance fund projects from the Project List; installation of signage and fencing; payment of the costs of preparation of all facility planning, facility studies, assessment reviews, facility master plan preparation and updates, environmental studies (including environmental investigation, remediation and monitoring), design and construction documentation, and temporary housing of displaced District activities caused by construction projects. In addition to the projects listed above, the repair and renovation of each of the existing school facilities may include, but not be limited to, some or all of the following: renovation of student and staff restrooms; repair and replacement of heating and ventilation systems; upgrade of facilities for energy efficiencies; repair and replacement of worn-out and leaky roofs, windows, walls, doors and drinking fountains; installation of wiring and electrical systems to safely accommodate computers, technology and other electrical devices and needs; upgrades or construction of support facilities, including administrative, physical education and performing arts buildings and maintenance yards; repair and replacement of fire alarms, emergency communications and security systems, resurfacing or replacing of hard courts, turf and irrigation systems and campus landscaping; expand parking; install interior and exterior painting and floor covering; demolition; and construction of various forms of storage and support spaces, upgrade classrooms, repair, upgrade and install interior and exterior lighting systems; replace outdated security fences and security systems. The upgrading of technology infrastructure includes, but is not limited to, computers, LCD
projects, portable interface devices, servers, switches, routers, modules, sound projection systems, laser printers, digital white boards, document projectors, upgrade voice-over-IP, call manager and network security/firewall, wireless technology systems and other miscellaneous equipment and software.

The allocation of bond proceeds will be affected by the District’s receipt of State matching funds and the final costs of each project. In the absence of State matching funds, which the District will aggressively pursue to reduce the District’s share of the costs of the projects, the District will not be able to complete some of the projects listed above. The budget for each project is an estimate and may be affected by factors beyond the District’s control. Some projects throughout the District, such as gyms, fields and performing arts facilities, may be undertaken as joint use projects in cooperation with other public or non-profit agencies.

The final cost of each project will be determined as plans and construction documents are finalized, construction bids are received, construction contracts are awarded and projects are completed. Based on the final costs of each project, certain of the projects described above may be delayed or may not be completed. Demolition of existing facilities and reconstruction of facilities scheduled for repair and upgrade may occur, if the Board determines that such an approach would be more cost-effective in creating more enhanced and operationally efficient campuses. Necessary site preparation/restoration may occur in connection with new construction, renovation or remodeling, or elimination or removal of relocatable classrooms, including ingress and egress, removing, replacing, or installing irrigation, utility lines, trees and landscaping, relocating fire access roads, and acquiring any necessary easements, licenses, or rights of way to the property. Proceeds of the bonds may be used to pay or reimburse the District for the cost of District staff when performing work on or necessary and incidental to bond projects. Bond proceeds shall only be expended for the specific purposes identified herein. The District shall create an account into which proceeds of the bonds shall be deposited and comply with the reporting requirements of Government Code § 53410.

Accountability Requirements

The provisions in this section are specifically included in this measure in order that the voters and taxpayers in the District may be assured that their money will be spent wisely. Expenditures to address specific facilities needs of the District will be in compliance with the requirements of Article XIIIA, Section l(b)(3), of the State Constitution and the Strict Accountability in Local School Construction Bonds Act of 2000 (codified at Education Code Sections 15264 and following.)

Evaluation of Needs. The Board has identified detailed facilities needs of the District and has determined how projects to finance from a local bond at this time. The Board hereby certifies that it has evaluated safety, class size reduction, enrollment growth, and information technology needs in developing the Bond Project List.

Independent Citizens’ Oversight Committee. The Board shall establish an Independent Citizens’ Oversight Committee under Education Code Section 15278 and following to ensure bond proceeds are expended only on the school facilities projects listed below. The committee will be established within 60 days of the date when the results of the election appear in the minutes of the Board.

Performance Audits. The Board shall conduct an annual, independent performance audit to ensure that the bond proceeds have been expended only on the school facilities projects listed below.

Financial Audits. The Board shall conduct an annual, independent financial audit of the bond proceeds until all of those proceeds have been spent for the school facilities projects listed below.

Special Bond Proceeds Account: Annual Report to Board. Upon approval of this measure and the sale of any bonds approved, the Board shall take actions necessary to establish an account in which proceeds of the sale of bonds will be deposited. As long as any proceeds of the bonds remain unexpended, the Superintendent of the District shall cause a report to be filed with the Board annually, stating (1) the amount of bond proceeds received and expended in that year, and (2) the status of any project funded or to be funded from bond proceeds. The report may relate to the calendar year, fiscal year, or other appropriate annual period as the Superintendent shall determine and may be incorporated in the annual budget, audit, or another appropriate routine report to the Board.

Further Specifications

No Administrator Salaries. Proceeds from the sale of bonds authorized by this measure shall be used only for the construction, reconstruction and/or rehabilitation of school facilities including the furnishing and equipping of school facilities or acquisition or lease of real property for school facilities and not for any other purpose, including administrator salaries.
ROOFTOP HVAC MEP
ASSESSMENT

DEFINITION & INSTALLATION DATA
PER SCHOOL
Rooftop HVAC MEP Assessment

For

Newark Unified School District

FINAL REPORT

SOBE No. 130412

7/24/2013
EXECUTIVE SUMMARY – ROOFTOP MEP ASSESSMENT

The following schools rooftop HVAC systems were assessed: Bunker, Graham, Kennedy, Lincoln, MacGregor, Milani, Musick, Newark Jr. High, Newark Memorial High, Schilling, Snow, and Whiteford. We also conducted interviews with NUSD maintenance staff regarding their experiences and their recommendations for HVAC replacement at each school location.

Majority of the HVAC systems serving the schools are rooftop package units. At Lincoln and Musick the buildings are served by split systems; indoor furnaces and exterior condensers. All were installed in the last modernization back in 2002, 11 years ago. Based on our experience, that of the local HVAC sales representative, and a local school district facilities director, the expected useful life of these rooftop package units is 20 years. This is achieved thru a continuous and thorough maintenance program. Having enough maintenance staff to properly maintain this existing equipment or any further new HVAC equipment is important to the longevity of the units.

All the schools except for MacGreggor and Whiteford, have an Energy Management System (EMS) - Alerton IBEX system. The EMS controls the operations of the school buildings HVAC systems and some schools exhaust fans and some schools Modular/Portable buildings HVAC units. Alerton no longer supports the IBEX system and so the main electronic panels that control the units are no longer manufactured and so to replace failed panels, the panels need to be refurbished or a newly refurbish replacement purchased. The current EMS needs to be replaced. It can be upgraded to Alerton’s current control system BacTalk or a new EMS company’s system can be installed too. Both options will allow the end devices (temperature sensors, actuators) along with the communication cable to remain and only the control panels would need to be replaced along with installing the new computer software.

The multi-purpose buildings for all the school sites are similar to one another, including the condition of the HVAC systems. The rooftop HVAC units, exhaust fans, and swamp cooler are recommended to be replaced.

When the roofs are replaced, there are typical rooftop electrical and plumbing equipment upgrades recommended (new supports, flex connections, hose bibs, labeling, demo of abandon systems).

Priority for HVAC replacement:

1) Replacing/upgrading/commissioning the existing EMS system.
2) Replacing HVAC systems at Whiteford and MacGreggor.
3) Replacing the HVAC on the multi-use buildings district wide.
4) Replacing Musick split systems.
5) Relocating the HVAC units over classrooms at Milani.
6) Replacing specific H&V and HVAC units at Newark Jr High.
7) Replacing specific H&V and HVAC units at Newark Memorial High.
8) Replacing exhaust fans district wide.

The following pages is a list of items identified during our rooftop MEP assessment.
BUNKER ELEMENTARY SCHOOL - ROOFTOP MEP ASSESSMENT

Mechanical

1. HVAC Controls shall be replaced. The existing system is Alerton IBEX and is no longer being supported by the manufacturer. The EMS system shall be upgraded to the current web-based Alerton BacTalk or another EMS manufacturer. There are several units where the controls are malfunctioning. The control setpoints for the units shall be adjusted to improve comfort. The outside air sensor shall be replaced for it is not reading actual temperatures.
2. Existing rooftop HVAC units were installed 2002, so 11 years old. With proper maintenance, the units can last another 9 years. Typical rooftop HVAC unit useful life expectancy is 20 years.
3. If rooftop HVAC units are to remain, recommend replacing the economizer actuators and lubricate the dampers and linkages.
4. Replace the rooftop units serving the multi-use building. Replace the rusty exterior ductwork. Units have fixed outside air dampers. Recommend installing units with modulating economizers.
5. Split system unit serving the IDF room in the multi-use building has exterior refrigeration piping insulation that is coming apart and needs to be replaced. Recommend installing new insulation and aluminum jacket.
6. Exhaust fans appear to be at the end of their useful life and recommend replacing them.

Electrical

1. Replace electrical power flex conduit going to all mechanical units.
2. Replace low voltage flex conduit at expansion joints.
3. Add and replace conduit sleepers for power and low voltage conduits on roof.
4. Replace receptacle covers on roof with weatherproof while-in-use covers.
5. Add GFI receptacle within 25' of all mechanical equipment (approximately (1) is needed per building).
6. Existing exposed pullboxes are rusted and need to be repainted.
7. Replace non-working GFI receptacles on roof.
8. Perform preventative maintenance on all electrical panels and switchboards including cleaning, re-torquing, and testing.

Plumbing

1. Install new gas isolation valve, drip leg and flexible gas pipe to each unit.
2. Install flexible gas pipe where there is an expansion joint between buildings/structures.
3. Replace the rigid gas pipe with a gas flex connection on all the Multi-Use units.
4. Install a hose bibb per building near the mechanical equipment to clean the unit coils.
5. Install new gas pipe supports where missing or where the pipe has shifted off supports.
6. Install gas pipe markers on pipe. There are sections of the gas pipe that are not labeled.
7. Replace flexible hose coupling on condensate piping with soldered joints for each unit. The existing couplers are failing and piping is coming off supports and not maintaining proper slope.
8. Replace PVC condensate piping with galvanized steel. The original copper piping was stolen from site.
**BUNKER**

AC—AIR CONDITIONING  
EF—EXISTING FAN  
DH—DUCT HEATER  
F—FAN  
HV—HEAT & VENT  
UH—UNIT HEATER  
CU—COOLING UNIT  
DIS—DISPOSABLE  
H.P.—HEAT PUMP

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AC Replaced: 4  
AC Existing: 25  
EC Replaced: 1
Mechanical

1. HVAC Controls shall be replaced. The existing system is Alerton IBEX and is no longer being supported by the manufacturer. The EMS system shall be upgraded to the current web-based Alerton BacTalk or another EMS manufacturer. There are several units where the controls are malfunctioning. The control setpoints for the units shall be adjusted to improve comfort.
2. Replace the rooftop units serving the multi-use building. Units have fixed outside air dampers. Recommend installing units with modulating economizers.
3. Existing rooftop HVAC units were installed 2002, so 11 years old. With proper maintenance, the units can last another 9 years. Typical rooftop HVAC unit useful life expectancy is 20 years.
4. Exhaust fans appear to be at the end of their useful life and recommend replacing them.
5. There are rooms being used as janitor closets, offices or have data racks in them. Recommend removing the relief hoods and installing exhaust fans in the rooms to help with ventilation and comfort control.
6. If rooftop HVAC units are to remain, recommend replacing the economizer actuators and lubricate the dampers and linkages.
7. Remove existing rooftop exhaust fans, ductwork and grilles that are abandoned and were originally installed to be used to ventilate the classrooms.
8. Split system unit serving the IDF room in the multi-use building has exterior refrigeration piping insulation that is coming apart and needs to be replaced. Recommend installing new insulation and aluminum jacket.

Electrical

1. Replace electrical power flex conduit going to all mechanical units.
2. Replace low voltage flex conduit at expansion joints.
3. Add and replace conduit sleepers for power and low voltage conduits on roof.
4. Replace receptacle covers on roof with weatherproof while-in-use covers.
5. Add GFI receptacle within 25’ of all mechanical equipment (approximately (1) is needed per building).
6. Existing exposed pullboxes are rusted and need to be repainted.
7. Perform preventative maintenance on all electrical panels and switchboards including cleaning, re-torquing, and testing.

Plumbing

1. Install new gas isolation valve, drip leg and flexible gas pipe to each unit.
2. Install flexible gas pipe where there is an expansion joint between buildings/structures.
3. Replace the rigid gas pipe with a gas flex connection on all the Multi-Use units.
4. Install a hose bibb per building near the mechanical equipment to clean the unit coils.
5. Install new gas pipe supports where missing or where the pipe has shifted off supports.
6. Install gas pipe markers on pipe. There are sections of the gas pipe that are not labeled.
7. Replace flexible hose coupling on condensate piping with soldered joints for each unit. The existing couplers are failing and piping is coming off supports and not maintaining proper slope.
## GRAHAM SCHOOL

**AC** -- AIR CONDITIONING  
**EF** -- EXISTING FAN  
**DH** -- DUCT HEATER  
**F** -- FAN  
**HV** -- HEAT & VENT  
**UH** -- UNIT HEATER  
**CU** -- COOLING UNIT  
**DIS** -- DISPOSABLE  
**H.P.** -- HEAT PUMP

### HVAC I.D. TYPE  MFG  MODEL  Date Replaced

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AC Replaced: 4  
AC Existing: 28  
EC Replaced: 1
KENNEDY ELEMENTARY SCHOOL - ROOFTOP MEP ASSESSMENT

Mechanical

1. HVAC Controls shall be replaced. The existing system is Alerton IBEX and is no longer being supported by the manufacturer. The EMS system shall be upgraded to the current web-based Alerton BacTalk or another EMS manufacturer. There are several units where the controls are malfunctioning. The control setpoints for the units shall be adjusted to improve comfort.

2. Replace the rooftop units serving the multi-use building. Units have fixed outside air dampers. Recommend installing units with modulating economizers.

3. Existing rooftop HVAC units were installed 2002, so 11 years old. With proper maintenance, the units can last another 9 years. Typical rooftop HVAC unit useful life expectancy is 20 years.

4. Exhaust fans appear to be at the end of their useful life and recommend replacing them.

5. If rooftop HVAC units are to remain, recommend:
   a. Replacing the economizer actuators and lubricate the dampers and linkages.
   b. Replacing the 8 damaged outside air hoods.
   c. Combing out 5 bent condenser fins.

6. Split system unit serving the IDF room in the multi-use building has exterior refrigeration piping insulation that is coming apart and needs to be replaced. Recommend installing new insulation and aluminum jacket.

7. Remove abandon heating hot water piping and supports from covered walkways.

8. There are 12 units that have been tagged with graffiti. There were 4 units where graffiti was found on the condenser coils. Recommend cleaning the condenser coils.

Electrical

1. Replace electrical power flex conduit going to all mechanical units.
2. Replace low voltage flex conduit at expansion joints.
3. Add and replace conduit sleepers for power and low voltage conduits on roof.
4. Replace receptacle covers on roof with weatherproof while-in-use covers.
5. Add GFI receptacle within 25’ of all mechanical equipment (approximately (1) is needed per building).
6. Existing exposed pullboxes are rusted and need to be repainted.
7. Perform preventative maintenance on all electrical panels and switchboards including cleaning, re-torquing, and testing.

Plumbing

1. Install new gas isolation valve, drip leg and flexible gas pipe to each unit.
2. There are existing flexible gas pipe where there is an expansion joint between buildings/structures.
3. Replace the rigid gas pipe with a gas flex connection on all the Multi-Use units.
4. Install a hose bibb per building near the mechanical equipment to clean the unit’s condenser coils.
5. Install new gas pipe supports. Supports are black foam blocks and are deteriorating.
6. Install gas pipe markers on pipe. There are sections of the gas pipe that are not labeled.
7. Replace flexible hose coupling on condensate piping with soldered joints for each unit. The existing couplers are failing and piping is coming off supports and not maintaining proper slope.
KENNEDY

AC--AIR CONDITIONING
EF--EXIST FAN
DH--DUCT HEATER
F---FAN
HV--HEAT & VENT
UH--UNIT HEATER
CU--COOLING UNIT
DIS--DISPOSABLE
EVAP--EVAPORATIVE COOLER

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AC Replaced: 4
AC Existing: 23
EC Replaced: 1
LINCOLN ELEMENTARY SCHOOL - ROOFTOP MEP ASSESSMENT

Mechanical

1. HVAC Controls shall be replaced. The existing system is Alerton IBEX and is no longer being supported by the manufacturer. The EMS system shall be upgraded to the current web-based Alerton BacTalk or another EMS manufacturer. There are several units where the controls are malfunctioning. The control setpoints for the units shall be adjusted to improve comfort.

2. Replace the rooftop units serving the multi-use building. Units have fixed outside air dampers. Recommend installing units with modulating economizers.

3. Existing split system HVAC units were installed 2002, so 11 years old. With proper maintenance, the furnaces and condenser units can last another 9 years. The horizontal furnaces in the ceiling space typically will last longer than the rooftop package units.

4. If split system units are to remain, recommend replacing the fixed outside air economizers with modulating economizers and extending a dedicated outside air duct to the exterior. The units will operate for efficiently taking advantage of “free cooling” periods.

5. Split system unit serving the IDF room in the multi-use building has exterior refrigeration piping insulation that is coming apart and needs to be replaced. Recommend installing new insulation and aluminum jacket.

Electrical

1. Replace electrical power flex conduit going to all outdoor condenser units.

2. Replace low voltage flex conduit at expansion joints on covered walkways.

3. Add and replace conduit sleepers for power and low voltage conduits on covered walkways.

4. Replace receptacle covers in condenser enclosure with weatherproof while-in-use covers.

5. Install lighting in the ceiling space adjacent to furnaces. Switch to be located adjacent to access point/T-Bar panel.

6. Perform preventative maintenance on all electrical panels and switchboards including cleaning, re-torquing, and testing.

Plumbing

1. There are existing flexible gas pipe where there is an expansion joint between buildings/structures.

2. Replace the rigid gas pipe with a gas flex connection on all the Multi-Use units.

3. Install a hose bibb near each condenser enclosure to clean the condenser coils.

4. Install new gas pipe supports.

5. Install earthquake shut-off valve at gas meter set.

6. Install gas pipe markers on pipe. There are sections of the gas pipe that are not labeled.

7. Replace condenser refrigerant lines insulation. Install aluminum jacket over insulation.

8. Recommend rerouting the condensate piping to allow the condensate drain by gravity rather than by condensate pump. Typically, the condensate pumps, if clogged or not operational, prevent the unit from running and/or cooling.
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### AC Replaced: 4
### AC Existing: 0
### EC Replaced: 1
MILANI ELEMENTARY SCHOOL - ROOF TOP MEP ASSESSMENT

Mechanical

1. HVAC Controls shall be replaced. The existing system is Alerton IBEX and is no longer being supported by the manufacturer. The EMS system shall be upgraded to the current web-based Alerton BacTalk or another EMS manufacturer. There are several units where the controls are malfunctioning. The control setpoints for the units shall be adjusted to improve comfort. The outside air sensor shall be replaced for it is not reading actual temperatures.

2. Existing rooftop HVAC units were installed 2002, so 11 years old. With proper maintenance, the units can last another 9 years. Typical rooftop HVAC unit useful life expectancy is 20 years. The rooftop units supply and return ductwork is routed long distances on the roof. Recommend relocating the rooftop HVAC units on the roof over the rooms being served, eliminating rooftop ductwork.

3. If rooftop HVAC units are to remain, recommend replacing the economizer actuators and lubricate the dampers and linkages.

4. Replace the rooftop units serving the multi-use building. Replace the rusty exterior ductwork. Units have fixed outside air dampers. Recommend installing units with modulating economizers.

5. Split system unit serving the IDF room in the multi-use building has exterior refrigeration piping insulation that is coming apart and needs to be replaced. Recommend installing new insulation and aluminum jacket.

6. Exhaust fans appear to be at the end of their useful life and recommend replacing them.

Electrical

1. Replace electrical power flex conduit going to all mechanical units.

2. Replace low voltage flex conduit at expansion joints.

3. Add and replace conduit sleepers for power and low voltage conduits on roof.

4. Replace receptacle covers on roof with weatherproof while-in-use covers.

5. Add GFI receptacle within 25' of all mechanical equipment (approximately (1) is needed per building).

6. Existing exposed pullboxes are rusted and need to be repainted.

7. Replace non-working GFI receptacles on roof.

8. Perform preventative maintenance on all electrical panels and switchboards including cleaning, re-torquing, and testing.

Plumbing

1. Install new gas isolation valve, drip leg and flexible gas pipe to each unit.

2. Install flexible gas pipe where there is an expansion joint between buildings/structures.

3. Replace the rigid gas pipe with a gas flex connection on all the Multi-Use units.

4. Install a hose bibb per building near the mechanical equipment to clean the unit coils.

5. Install new gas pipe supports where missing or where the pipe has shifted off supports.

6. Install gas pipe markers on pipe. There are sections of the gas pipe that are not labeled.

7. Replace flexible hose coupling on condensate piping with soldered joints for each unit. The existing couplers are failing and piping is coming off supports and not maintaining proper slope.

8. Replace PVC condensate piping with galvanized steel. The original copper piping was stolen from site.
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AC Replaced: 8
AC Existing: 19
EC Replaced: 1
MUSICK ELEMENTARY SCHOOL - ROOFTOP MEP ASSESSMENT

Mechanical

1. HVAC Controls shall be replaced. The existing system is Alerton IBEX and is no longer being supported by the manufacturer. The EMS system shall be upgraded to the current web-based Alerton BacTalk or another EMS manufacturer. There are several units where the controls are malfunctioning. The control setpoints for the units shall be adjusted to improve comfort.

2. Replace the rooftop units serving the library building. They are approximately 22 years old. Units have fixed outside air dampers. Recommend installing units with modulating economizers.

3. Existing split system HVAC units serve the classroom buildings. The furnace is approximately 20 years old and the condenser units and dx coils were installed in 2002, so 11 years old. The teachers continue to complain about how noisy the indoor furnaces are and how the units do not cool the rooms. Recommend replacing the classroom units with rooftop package units.

4. If split system units are to remain, recommend replacing the furnaces, insulating the refrigerant piping, and installing modulating economizers. The units will operate more efficiently taking advantage of “free cooling” periods. Another option is package units by Airedale that are specifically designed for indoor classroom installations or installing rooftop package units.

5. Three flues on the roof of the cafeteria shall be demo’d.

Electrical

1. Replace electrical power flex conduit going to all outdoor condenser units.

2. Replace low voltage flex conduit at expansion joints on covered walkways.

3. Add and replace conduit sleepers for power and low voltage conduits on covered walkways.

4. Replace receptacle covers in condenser enclosure with weatherproof while-in-use covers.

5. Add GFI receptacle within 25' of all mechanical equipment (approximately (1) is needed per building).

6. Existing exposed pullboxes are rusted and need to be repainted.

7. Replace existing non-working GFI receptacles on roof with new.

8. Perform preventative maintenance on all electrical panels and switchboards including cleaning, re-torquing, and testing.

Plumbing

1. There are existing flexible gas pipe where there is an expansion joint between buildings/structures.

2. Install a hose bibb near each condenser enclosure to clean the condenser coils.

3. Install new gas pipe supports.

4. Install earthquake shut-off valve at gas meter set.

5. Install gas pipe markers on pipe. There are sections of the gas pipe that are not labeled.

6. Replace condenser refrigerant lines insulation. Install aluminum jacket over insulation.
AC--AIR CONDITIONING
EF--EXIST FAN
DH--DUCT HEATER
F---FAN
HV--HEAT & VENT
UH--UNIT HEATER
CU--COOLING UNIT
DIS--DISPOSABLE
EVAP--EVAPORATIVE COOLER

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AC Replaced | 25 | Complete rework from Split-system to roof-tops
AC Existing | 3 |
SCHILLING ELEMENTARY SCHOOL - ROOFTOP MEP ASSESSMENT

Mechanical

1. HVAC Controls shall be replaced. The existing system is Alerton IBEX and is no longer being supported by the manufacturer. The EMS system shall be upgraded to the current web-based Alerton BacTalk or another EMS manufacturer. There are several units where the controls are malfunctioning. The control setpoints for the units shall be adjusted to improve comfort.

2. Replace the rooftop units serving the multi-use building. Units have fixed outside air dampers. Recommend installing units with modulating economizers.

3. Split system unit serving the IDF room in the multi-use building has exterior refrigeration piping insulation that is coming apart and needs to be replaced. Recommend installing new insulation and aluminum jacket.

4. Existing rooftop HVAC units were installed 2002, so 11 years old. With proper maintenance, the units can last another 9 years. Typical rooftop HVAC unit useful life expectancy is 20 years.

5. If rooftop HVAC units are to remain, recommend replacing the economizer actuators and lubricate the dampers and linkages.

6. Exhaust fans appear to be at the end of their useful life and recommend replacing them.

7. Remove existing abandon boiler, flue, piping, and associated equipment within room.

Electrical

1. Replace electrical power flex conduit going to all mechanical units.

2. Replace low voltage flex conduit at expansion joints.

3. Add and replace conduit sleepers for power and low voltage conduits on roof.

4. Replace receptacle covers on roof with weatherproof while-in-use covers.

5. Add GFI receptacle within 25’ of all mechanical equipment (approximately (1) is needed per building).

6. Replace existing not working GFI receptacles on the roof.

7. Existing exposed pullboxes are rusted and need to be repainted.

8. Perform preventative maintenance on all electrical panels and switchboards including cleaning, re-torquing, and testing.

Plumbing

1. Install new gas isolation valve, drip leg and flexible gas pipe to each unit.

2. Install flexible gas pipe where there is an expansion joint between buildings/structures.

3. Replace the rigid gas pipe with a gas flex connection on all the Multi-Use units.

4. Install a hose bibb per building near the mechanical equipment to clean the unit coils.

5. Install new gas pipe supports where missing or where the pipe has shifted off supports.

6. Install gas pipe markers on pipe. There are sections of the gas pipe that are not labeled.

7. Replace flexible hose coupling on condensate piping with soldered joints for each unit. The existing couplers are failing and piping is coming off supports and not maintaining proper slope.
# SCHILLING

AC—AIR CONDITIONING  
EF—EXIST FAN  
DH—DUCT HEATER  
F—FAN  
HV—HEAT & VENT  
UH—UNIT HEATER  
CU—COOLING UNIT  
DIS—DISPOSABLE  
EVAP—EVAPORATIVE COOLER

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AC Replaced: 4  
AC Existing: 15  
EC Replaced: 1
SNOW ELEMENTARY SCHOOL - ROOF TOP MEP ASSESSMENT

Mechanical

1. HVAC Controls shall be replaced. The existing system is Alerton IBEX and is no longer being supported by the manufacturer. The EMS system shall be upgraded to the current web-based Alerton BacTalk or another EMS manufacturer. There are several units where the controls are malfunctioning. The control setpoints for the units shall be adjusted to improve comfort.

2. Replace the rooftop units serving the multi-use building. Units have fixed outside air dampers. Recommend installing units with modulating economizers.

3. Split system unit serving the IDF room in the multi-use building has exterior refrigeration piping insulation that is coming apart and needs to be replaced. Recommend installing new insulation and aluminum jacket.

4. Existing rooftop HVAC units were installed 2002, so 11 years old. With proper maintenance, the units can last another 9 years. Typical rooftop HVAC unit useful life expectancy is 20 years.

5. If rooftop HVAC units are to remain, recommend replacing the economizer actuators and lubricate the dampers and linkages.

6. Remove existing rooftop exhaust fans, ductwork and grilles that are abandoned and were originally installed to be used to ventilate the classrooms.

7. Exhaust fans appear to be at the end of their useful life and recommend replacing them.

8. AC unit serving Room 5 leaks water during heavy rains thru unit and enters ductwork. Recommend resetting the unit on the curb and making connections to curb and ductwork water tight.

Electrical

1. Replace electrical power flex conduit going to all mechanical units.

2. Replace low voltage flex conduit at expansion joints.

3. Add and replace conduit sleepers for power and low voltage conduits on roof.

4. Replace receptacle covers on roof with weatherproof while-in-use covers.

5. Add GFI receptacle within 25' of all mechanical equipment (approximately (1) is needed per building).

6. Replace existing not working GFI receptacles on the roof.

7. Existing exposed pullboxes are rusted and need to be repainted.

8. Perform preventative maintenance on all electrical panels and switchboards including cleaning, re-torquing, and testing.

Plumbing

1. Install new gas isolation valve, drip leg and flexible gas pipe to each unit.

2. Install flexible gas pipe where there is an expansion joint between buildings/structures.

3. Replace the rigid gas pipe with a gas flex connection on all the Multi-Use units.

4. Install a hose bibb per building near the mechanical equipment to clean the unit coils.

5. Install new gas pipe supports where missing or where the pipe has shifted off supports.

6. Install gas pipe markers on pipe. There are sections of the gas pipe that are not labeled.

7. Replace flexible hose coupling on condensate piping with soldered joints for each unit. The existing couplers are failing and piping is coming off supports and not maintaining proper slope.

8. Install earthquake shut off valve for gas main set.

9. Replace PVC condensate piping with galvanized steel. The original copper piping was stolen from site.
SNOW
AC--AIR COND    EF-- EXIST FAN    DH--DUCT HEATER    F--FAN    HV--HEAT & VENT

UH--UNIT HEATER    CU--COOLING UNIT    DIS-DISPOSABLE    EVAP-EVAPORATIVE COOLER

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AC Replaced: 4
AC Existing: 22
EC Replaced: 1
NEWARK JUNIOR HIGH SCHOOL - ROOFTOP MEP ASSESSMENT

Mechanical

1. HVAC Controls shall be replaced. The existing system is Alerton IBEX and is no longer being supported by the manufacturer. The EMS system shall be upgraded to the current web-based Alerton BacTalk or another EMS manufacturer. There are several units where the controls are malfunctioning. The control setpoints for the units shall be adjusted to improve comfort.
2. Replace the existing rooftop Heating and Ventilation Units serving the boys and girls locker room.
3. Replace the package unit over gym.
4. Remove Heating and Ventilation Unit over gym.
5. Replace Heating and Ventilation Unit with remote DX cooling unit serving the kitchen.
6. Existing rooftop HVAC units were installed 2002, so 11 years old. With proper maintenance, the units can last another 9 years. Typical rooftop HVAC unit useful life expectancy is 20 years.
7. If rooftop HVAC units are to remain, recommend replacing the economizer actuators and lubricate the dampers and linkages.
8. Exhaust fans appear to be at the end of their useful life and recommend replacing them.
9. Demo the abandon rooftop heating hot water piping.

Electrical

1. Replace electrical power flex conduit going to all mechanical units.
2. Replace low voltage flex conduit at expansion joints.
3. Add and replace conduit sleepers for power and low voltage conduits on roof.
4. Replace receptacle covers on roof with weatherproof while-in-use covers.
5. Add GFI receptacle within 25' of all mechanical equipment (approximately (1) is needed per building).
6. Replace existing non-working GFI receptacles on roof with new.
7. Existing exposed pullboxes are rusted and need to be repainted.
8. Existing flex conduit needs to be replaced with rigid in certain locations.
9. Perform preventative maintenance on all electrical panels and switchboards including cleaning, re-torquing, and testing.

Plumbing

1. Install new gas isolation valve, drip leg and flexible gas pipe to each unit.
2. Install flexible gas pipe where there is an expansion joint between buildings/structures.
3. Replace the rigid gas pipe with a gas flex connection on all the Multi-Use units.
4. Install a hose bibb per building near the mechanical equipment to clean the unit coils.
5. Install new gas pipe supports where missing or where the pipe has shifted off supports.
6. Install gas pipe markers on pipe. There are sections of the gas pipe that are not labeled.
7. Replace flexible hose coupling on condensate piping with soldered joints for each unit. The existing couplers are failing and piping is coming off supports and not maintaining proper slope.
# Newark Jr. HS

**AC**—Air Cond  
**EF**—Exist Fan  
**DH**—Duct Heater  
**F**—Fan  
**HV**—Heat and Vent

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<th>MFG.</th>
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**AC Replaced:** 2  
**AC Existing:** 66  
**HV Replaced:** 7  
**HV Existing:** 0  

See Assessment for details
NEWARK MEMORIAL HIGH SCHOOL - ROOFTOP MEP ASSESSMENT

Mechanical

1. HVAC Controls shall be replaced. The existing system is Alerton IBEX and is no longer being supported by the manufacturer. The EMS system shall be upgraded to the current web-based Alerton BacTalk or another EMS manufacturer. There are several units where the controls are malfunctioning. The control setpoints for the units shall be adjusted to improve comfort.
2. Replace the existing rooftop Heating and Ventilation Units serving buildings 400, 500 and 600.
3. Existing rooftop HVAC units were installed 2002, so 11 years old. With proper maintenance, the units can last another 9 years. Typical rooftop HVAC unit useful life expectancy is 20 years.
4. If rooftop HVAC units are to remain, recommend replacing the economizer actuators and lubricate the dampers and linkages.
5. Replace the two rooftop package AC units on the library building, three on building 700, two on building 600, and one on building 900. They were turned off at the disconnect switch due to mechanical issues.
6. Rooftop exhaust fans appear to be at the end of their useful life and recommend replacing them.

Electrical

1. Replace electrical power flex conduit going to all mechanical units.
2. Replace low voltage flex conduit at expansion joints.
3. Add and replace conduit sleepers for power and low voltage conduits on roof.
4. Replace receptacle covers on roof with weatherproof while-in-use covers.
5. Add GFI receptacle within 25' of all mechanical equipment (approximately (1) is needed per building).
6. Replace existing non-working GFI receptacles on roof with new.
7. Existing exposed pullboxes are rusted and need to be repainted.
8. Existing flex conduit needs to be replaced with rigid in certain locations.
9. Remove conduit running over head across from building 400 to snack bar building. Fire departments will not allow overhead utilities. Utilities will need to be installed below grade.

Plumbing

1. Install new gas isolation valve, drip leg and flexible gas pipe to each unit.
2. Install a hose bibb per building near the mechanical equipment to clean the unit coils.
3. Install new gas pipe supports.
4. Install gas pipe markers on pipe. There are sections of the gas pipe that are not labeled.
5. Replace flexible hose coupling on condensate piping with soldered joints for each unit. The existing couplers are failing and piping is coming off supports and not maintaining proper slope.
6. Demo abandon water piping on the roof of building 700.
7. Install earthquake shutoff valve on main gas meter set.
MEMORIAL

AC=AIR COND.
EF=EXISTING FAN
DH=DUCT HEATER
F=FAN
HV=HEAT & VENT
UH=UNIT HEAT
CU=COOLING UNIT
DIS=DISPOSABLE
EVAP=EVAPORATIVE COOLER

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AC Replaced: 5
AC Existing: 150
HV Replaced: 9
HV Existing: 9
MACGREGOR INTERMEDIATE SCHOOL - ROOFTOP MEP ASSESSMENT

Mechanical

1. HVAC Controls shall be replaced with the District standard EMS. The original system is controlled by pneumatic controls. HVAC units installed afterwards were installed with stand-alone controls.

2. There are no existing rooftop HVAC units. The existing Heating and Ventilation fan coils serving the rooms are mounted in the ceiling space. Ductwork is routed above the T-bar ceiling. Recommend installing rooftop package units to serve rooms.

3. Buildings 1, 2, 4, 5 have wall mounted AC units to provide cooling to certain rooms. These were installed when Ohlone College was using the facilities. They look like they were less than 10 years old. These types of units are noisy and typically are not operating during occupied hours, we recommend removing them when rooftop package units are installed.

4. Rooftop exhaust fans appear to be at the end of their useful life and recommend replacing them.

5. The boilers in building 3, 7 and 10 are approximately over 30 years old and beyond their useful life time. The boiler in building 10 is not functioning. The heating hot water is not being properly treated which will speed up the degradation of the system (coils, pipes, boiler).

6. The heating hot water piping insulation may contain asbestos and should be tested and if found positive, shall be removed.

7. Heating hot water piping is routed below grade between buildings or on covered walkways/buildings. Insulation is coming off pipe. Piping to be removed if rooftop package units are installed.

8. The HVAC package unit serving the building 8 cafeteria is no longer reliable and we recommend replacing it.

9. Since the ductwork was designed for H&V only, ductwork shall be replaced to meet AC airflow requirements.

Electrical

1. Provide additional electrical infrastructure for new HVAC equipment.

2. Replace low voltage flex conduit at expansion joints.

3. Add and replace conduit sleepers for power and low voltage conduits on roof.

4. Perform preventative maintenance on all electrical panels and switchboards including cleaning, re-torquing, and testing.

Plumbing

1. Install flexible gas pipe where there is an expansion joint between buildings/structures.

2. Install a hose bibb per building near the mechanical equipment to clean the unit coils.

3. Install new gas pipe supports where missing or where the pipe has shifted off supports.

4. Install gas pipe markers on pipe. There are sections of the gas pipe that are not labeled.

5. Install earthquake shutoff valve on gas meter set.
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Existing wall mount AC Units - removed and replaced with roof tops
Heat Ventilators in ceiling were removed
Mechanical

1. The existing stand-alone HVAC controls shall be replaced. Units have to be turned on manually. Recommend installing the district standard EMS system.
2. Replace the existing 30 year old rooftop multi-zone package units. The units are heating and ventilation only. The cooling is not operational and hasn’t been for some time. Recommend installing single zone rooftop HVAC units.
3. Exhaust fans appear to be at the end of their useful life and recommend replacing them.

Electrical

1. Replace electrical power flex conduit going to all mechanical units.
2. Add GFI receptacle within 25’ of all mechanical equipment (approximately (1) is needed per building).
3. Perform preventative maintenance on all electrical panels and switchboards including cleaning, re-torquing, and testing.

Plumbing

1. Install new gas isolation valve, drip leg and flexible gas pipe to each unit.
2. Install a hose bibb per building near the mechanical equipment to clean the unit coils.
3. Install an automatic earthquake shutoff valve at the gas main. Install protective cage over meter set.
Whiteford

AC--AIR CONDITIONING
EF--EXIST FAN
DH--DUCT HEATER
F--FAN
HV--HEAT & VENT
UH--UNIT HEATER
CU--COOLING UNIT
DIS--DISPOSABLE

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**DEFINITION:**
AC-- AIR CONDITIONING (PACKAGE UNIT)
HV-- HEAT VENT UNIT
EC - EVAPORATIVE COOLER

**NOTES:**
NMHS - Three more AC (package units) need replacement under Measure G. (New Café: 2 units: AC - 1-12 & A - 1-13/ Theater: AC - 7 -20)
Three AC units are also in replacement due to loss of compressors.

3/23/2018
NEWARK USD PLAYGROUND PROJECTS

STRUCTURE INSTALLATION DATA PER SCHOOL
Kennedy Elementary School - Area 1
Model # Harris (CW-0002)
Graham Elementary School - Area 2
5" Single Post Swing Frame (8') - 3 Bay
ADAPTIVE SWING SEAT

- ADA Compliant
- Supports children up to 125 pounds
Musick Elementary School - Area 6
5" Single Post Swing Frame (8') - 2 Bay
Birch Grove Primary Elementary School - Area 2
"Single Post Swing Frame (8') - 4 Bay
Creative Recreation Systems, Inc.

Schilling Elementary School - Area 3
Model # PS5-3464-1
Chilling Elementary School - Area 5
Model # PS5-0091
Lincoln Elementary School - Area 1
"Single Post Swing Frame - 2 Bay"
Lincoln Elementary School - Area 3
5" Single Post Swing Frame - 1 Bay
incoln Elementary School - Area 4
Model # PS3-33519
incoln Elementary School - Area 5
Model # PS3-33520
Lincoln Elementary School - Area 5
Model # PA5-33541
Snow Elementary School - Area 1
Model # PA5-33541
Snow Elementary School - Area 1
5" Single Post Swing Frame - 1 Bay
Snow Elementary School - Area 3
Model # Pompeii (PS3-31190)
History of Interest in Fund 210 since Measure G sold

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Three quarters posted to wrong resource
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- Q2 1617: 29,708.95
- Q3 1617: 27,947.83

Total: \( 86,879.14 \) 86,879.14

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Corr Total: 4,288.31 122,871.70