



Pioneer High School Schreiber Auditorium

Capital Programs Annual Report – 2021/2022

Ann Arbor Public Schools
Ann Arbor, Michigan
December 21, 2022



TABLE OF CONTENTS

SECTION 1

[Executive Summary](#)

SECTION 2

[History of Bond / Sinking Fund](#)

SECTION 3

[The 4 Pillars of the Bond Program](#)

SECTION 4

[Capital Program Projects](#)

SECTION 5

[Individual Project Highlights](#)

- Clague Middle School
- Community High School
- Forsythe Middle School
- Scarlett Middle School
- Tappan Middle School
- New Mitchell Elementary School
- Pathways to Success Academic Campus

SECTION 6

[Sustainability Update for Capital Program](#)

SECTION 7

[Connectivity & IT Infrastructure Update for Capital Program](#)

TABLE OF CONTENTS

SECTION 8

Operations Update for Capital Program

- Transportation
- Food Service
- Facilities
- Utility Updates / Rebates

SECTION 9

Communications for Capital Program

- Community Engagements
- Email and Postal Communications
- Website
- Tradeshows / Conferences
- Professional Groups

SECTION 10

Financial Update for Capital Program

- Funding Sources Summary
- Summary Budget & Expenditures to Date
- Minimal Cash Flow Summary

SECTION 11

Capital Program Property Acquisition

SECTION 12

Planning for Major Projects Scheduled in 2023

Executive Summary

We are pleased to present the 2022 Capital Program Annual Report, which provides a summary of the work achieved to date in the improvement of the Ann Arbor Public School (AAPS) facilities. This team has been charged to **transform the student learning experience with the goal of providing for the health, safety, and well-being of all students in high quality equitable, and environmentally sustainable schools.** This is the vision of the Capital Program and the commitment made to the Ann Arbor community.

Since the passage of the 2019 Bond, the focus of the Capital Program has been on Phase 1 early work (years 1-6), which has **addressed immediate needs**, provided **stabilization of school building infrastructure**, and has **improved classroom environments**, concentrating on the needs outlined in the Facilities Condition Assessment (FCA). The FCA is a life-cycle engineering analysis of the condition of the AAPS facilities in terms of age, design, construction methods, and materials. It included calculations of useful life, identified needed infrastructure investments and risks associated with continued deferral of maintenance and replacement investments.

A significant part of this early work has been providing air conditioning to school buildings to provide more comfortable learning environments. Additionally, updating lighting systems with high performance solutions that reduce energy consumption, provide dimming capabilities and end user control, and installation of window treatments to reduce glare in classrooms.

Furthermore, AAPS has invested in other infrastructure needs identified in the FCA, including roof replacements and upgrades, rooftop solar arrays, paving and stormwater improvements, and two large scale geothermal systems to promote electrification and building decarbonization.

With each capital improvement project over the last year and since the passage of the Bond, AAPS continues to keep the promises and commitments made to our students, staff, and community. Thank you to the Ann Arbor community for their support of our students and families and this generational investment in Ann Arbor Public Schools

- Capital Program Team

2021 / 2022

FAST FACTS

67

average age of AAPS school buildings

5

number of schools 100 years old in 2023

35

number of projects in 2022

22

number of projects in 2021

35

school buildings that have received Improvements to date

\$94 Million

capital expenditures to date

History of Bond & Sinking Fund

The Ann Arbor Public Schools (AAPS) serves the city of Ann Arbor and parts of eight surrounding townships (Ann Arbor, Lodi, Northfield, Pittsfield, Salem, Scio, Superior and Webster townships) covering 125 square miles. AAPS is responsible for 35 buildings with more than 3.4 million square feet on 723 acres. AAPS buildings have an average age of over 67 years, with an average built year of 1956.

The Ann Arbor Public School community values a quality education for every child. AAPS students perform at academically high levels, are taught by high-performing teachers, enjoy quality programs, and are supported by engaged parents and the community.

As stewards of 35 buildings AAPS houses more than 18,000 children and 2,400 staff and is responsible to provide, restore and prepare schools for this and future generations.

On November 5, 2019, voters in the Ann Arbor Public Schools approved a bond to upgrade school facilities and sites, enhance existing building security, and provide upgraded and sustainable learning environments throughout our district. The bond program scope is based on a comprehensive facility assessment conducted by independent architects and engineers to assess the current and future building needs in our district.

The voters approved a \$1 Billion bond and these resources will transform the student learning experience with the goal of providing for the health, safety, and well-being of all students in high quality equitable, and environmentally sustainable schools.

2021 / 2022

FAST FACTS

1

Largest bond passed since 1994.
2nd largest in Michigan history

\$1 Billion

Bond passed by voters in 2019

125

Square miles covered by school District

35

Number of school buildings in the
AAPS District

18,000

of students in AAPS District

2,400

of staff in AAPS District

8

of townships served by
AAPS District

FAST FACTS

Bond vs Sinking Fund—What is the Difference?

Sinking Fund is a millage levied in Michigan dedicated to support the repair and construction of school buildings. The Sinking Fund is a pay-as-you-go method for building repairs and projects. The district does not pay interest on the money used.

Bonds are voted on and required to be approved by the taxpayers by simple majority at an election. The taxpayers approve an amount to be borrowed, not the millage. After the taxpayers approve the bond proposal the district can proceed to issue the bonds which are then sold. The district collects the funds from the sale of the bonds and uses these funds for all the capital improvements. The district will levy a debt millage to its taxpayers and collect the taxes to pay back the bondholders, plus interest.

On November 5, 2019, voters approved

ANN ARBOR PUBLIC SCHOOLS BONDING PROPOSAL

Shall the Public Schools of the City of Ann Arbor, County of Washtenaw, Michigan, borrow the principal sum of not to exceed One Billion Dollars (\$1,000,000,000) and issue its general obligation unlimited tax bonds for the purpose of defraying the cost of making the following improvements: constructing additions to and/or remodeling School District buildings, including safety and security improvements, classrooms, laboratories, kitchens, performing arts and pool facilities, and solar, geothermal and other renewable energy improvements; acquiring and/or constructing buildings in the School District, including elementary, middle and high schools; equipping, furnishing, reequipping and refurnishing buildings in the School District, including the acquisition of school buses and musical instruments; acquiring and installing instructional technology equipment in the School District; and acquiring, improving and developing sites, including athletic fields, facilities, structures, parking and playgrounds, in the School District?

The debt millage levy required to retire all bonds of the School District currently outstanding and proposed by this ballot proposal is estimated to be at or below 4.10 mills. The estimated millage to be levied in 2020 to service this issue of bonds is 1.99 mills (\$1.99 per \$1,000 of taxable value) and the estimated simple average annual millage rate required to retire the bonds of this issue is 3.49 mills (\$3.49 per \$1,000 of taxable value). The bonds will be issued in multiple series, payable in the case of each series in not to exceed 22 years from the date of issue of such series.

(Under State law, bond proceeds may not be used to pay teacher or administrator salaries, routine maintenance or repair costs or other School District operating expenses.)

On May 2, 2017, voters approved

PUBLIC SCHOOLS OF THE CITY OF ANN ARBOR

PROPOSAL TO REPLACE SINKING FUND MILLAGE

This proposal would replace and extend the authority last approved by voters in 2013 and which expires with the 2019 levy for the Public Schools of the City of Ann Arbor to levy a sinking fund millage. This proposal would allow the use of proceeds of the millage for all purposes previously permitted by law as well as newly authorized security improvements.

As a replacement of existing authority, shall the Public Schools of the City of Ann Arbor, County of Washtenaw, Michigan, be authorized to levy 2.50 mills (\$2.50 per \$1,000 of taxable valuation) to create a sinking fund for the purpose of the construction or repair of school buildings, including school security improvements, and the improvement and development of sites and, to the extent permitted by law, for other purposes, including, but not limited to, the acquisition and installation of furnishings and equipment, by increasing the limitation on the amount of taxes which may be imposed on taxable property in the School District for a period of ten (10) years, being the years 2017 to 2026, inclusive? It is estimated that 2.50 mills (\$2.50 per \$1,000 of taxable valuation) would raise approximately \$20,193,874 in the first year that it is levied.

(Under state law, sinking fund proceeds may not be used to pay teacher or administrator salaries.)

The 4 Pillars of the Bond Program

The bond proposal outlined the following AAPS goals:

1. **Teaching & Learning** – *Continue the Tradition of Academic Excellence*
2. **Safety, Health & Well-being** – *Focus on Development of the Whole Child*
3. **Sustainable and Environmentally Responsible Infrastructure** – *Create Resilient Schools for Climate Change*
4. **Efficient and Effective Support Systems and Services** – *Continue Technology & Transportation Replacement and Renewal*

The Bond is designed to replace the prior Technology Bond to ensure sustained technology, buses, equipment, furniture, and musical instruments.

2019 BOND PREPARING FOR THE FUTURE



The 4 Pillars of the Bond Program

GOAL	TEACHING & LEARNING <i>Continue the Tradition of Academic Excellence</i>
KEY THEMES	<ul style="list-style-type: none"> • Support flexible and engaging learning environments that promote collaboration, hands-on, inquiry-based learning, whole and small group instruction, and appropriate accommodations for all students • Expand opportunities for applied learning such as STEAM, CTE, coding, and robotics • Build upon long-standing environmental education program with new curricula and instructional models • Continue our work to create universally designed and inclusive learning environments • Support blended and online virtual learning • Enable co-teaching between core classroom teachers and support staff for a vibrant and effective multi-tiered system of support • Support multiple educational models including early learning, virtual learning, adult learning, and community college • Maintain smaller class sizes for an effective teaching and learning environment • Continue to enhance opportunities for music and art education • Update environments to include: natural light, air quality, sound • Ensure quality learning environments in every classroom
SUPPORTING INFRASTRUCTURE	<ul style="list-style-type: none"> • Upgrade all classrooms to update lighting, thermal, acoustical and air quality environments with more user/teacher control • Create STEAM/Makerspaces in all schools • Improve support spaces, amenities, and equipment for music and the arts • Continue flexible furniture purchases for art, music, science and other learning spaces • Address current and projected student enrollment by providing additional space in schools, particularly elementary schools at or near capacity • Improve and create spaces for one-on-one and small group activities including: project-based learning, counseling, tutoring, speech therapy, nurses and others • Provide spaces, equipment and furnishing for music and the arts, including improved performance spaces • Provide spaces that are customized to meet the identified social, emotional and physical needs of students • Provide additional storage for student personal items • Create updated Career & Technical Education (CTE) environments, including life management studios at all high schools • Upgrade classrooms and office space at Freeman Environmental Education Center to ensure accessibility for all AAPS students

GOAL	SAFETY, HEALTH & WELL-BEING <i>Focus on Development of the Whole Child</i>
KEY THEMES	<ul style="list-style-type: none"> • Ensure safe and secure schools as centers of the community • Ensure safe drinking water and quality air • Provide healthy local food in the cafeterias • Provide opportunities for students to engage in on-site gardening and food production • Enhance food security for vulnerable populations • Provide opportunities for all students to enjoy physical activity in formal and informal settings • Repair and modernize playgrounds and athletic facilities, renovating and expanding where needed
SUPPORTING INFRASTRUCTURE	<ul style="list-style-type: none"> • Create secure school entrances that provide for access control and secure entry • Install monitoring devices on all exterior doors • Update and modernize security camera systems, adding cameras as needed • Improve school grounds to provide separation of pedestrian, bicycle, car and bus traffic • Continue updating water systems and air distribution systems for maximum air and water quality • Replace or improve fire protection/sprinkler systems in all schools • Designate and/or construct gender neutral restrooms • Expand and renovate elementary and middle school kitchens to allow healthy “scratch” cooking and more variety • Provide improved lighting, updated equipment for enhanced line flow, and other improvements for dining environments (multi-purpose rooms and cafeterias) • Support construction and maintenance of school gardens that include a dedicated water source and outdoor shaded classrooms • Provide space for emergency food programs • Replace or improve elementary “black top” spaces and basketball hoops • Continue improvement of sports fields including baseball, softball, soccer and others • Continue improvement of playgrounds; including age appropriate equipment, ADA/universal design equipment, and spaces for unstructured, creative play

The 4 Pillars of the Bond Program

GOAL	Sustainable & Environmentally Responsible INFRASTRUCTURE <i>Create Resilient Schools for Climate Change</i>
KEY THEMES	<ul style="list-style-type: none"> • Create optimized learning environments based on best practice and research to utilize natural and artificial light, ensure fresh air free from pollutants, maintain classroom temperature, and optimize acoustics for maximum cognitive function and productivity. • Prepare our schools to adapt to climate change and act as centers of neighborhood resiliency and to maintain critical life-support conditions in the event of extended power loss, heating fuel or water • Chart a course for carbon neutrality • Create a culture that supports recycling and composting • Promote bio-diversity and healthysites • Utilize interior and exterior finishes that are long-lasting and require minimal maintenance and replacement • Utilize the Freeman Environmental Education Center for demonstration of sustainable grounds practices that tie to Environmental Education programming
SUPPORTING INFRASTRUCTURE	<ul style="list-style-type: none"> • Renovate all classrooms with modern systems that provide human-centric lighting, thermal, and acoustic environments with user/teacher control • Design building systems for disaster resilience and passive survivability including provisions for backup power • Install solar energy systems • Utilize more efficient electric heating and cooling systems including geothermal/ground-source heat pumps and variable refrigerant flow • Install dimmable LED lighting • Upgrade bus fleet with more fuel-efficient vehicles as new technology advancements allow • Create spaces in schools for the collection of recyclables and compost materials and exterior collection points for service providers • Create bio-diverse ecologies on school grounds that support local ecosystems and manage storm water • Specify durable long life-cycle materials, equipment and finishes with low to no toxicity • Install water management systems, gardens, and other grounds projects at the Freeman Environmental Education Center

GOAL	Efficient and Effective SUPPORT SYSTEMS & SERVICES <i>Continue Technology and Transportation Replacement & Renewal</i>
KEY THEMES	<ul style="list-style-type: none"> • Provide appropriate technology for our students to develop the skills and attributes they need to meet their individual goals • Ensure our teachers are supported with appropriate classroom technology • Transform media centers to support digital learning and collaborative pedagogy • Provide needed spaces for custodial and other building support services
SUPPORTING INFRASTRUCTURE	<ul style="list-style-type: none"> • Continue regularly scheduled laptop replacement program • Add new state-of-the-art classroom devices / equipment to support curriculum goals • Renovate media centers to support digital learning and collaboration • Continue bus fleet replacement schedule to reduce repair costs and promote bus fleet safety • Provide improved custodial, information technology, public address, and audio/visual support spaces

The 4 Pillars of the Bond Program

- Upgrade classrooms and labs
- Improve natural light, air quality, sound
- Enhance performing arts spaces
- Replace musical instruments
- Add social / emotional support areas for counselors, nurses, tutors and speech therapists
- Create STEAM / Makerspace labs
- Address projected growth in student enrollment and overcrowding while maintaining class size
- Collaborative, project-based spaces in all schools
- Build upon long-standing environmental education program with new curricula and instructional models



- Add secure entry vestibules
- Upgrade surveillance cameras and access systems
- Ensure safe drinking water and air quality
- Cook healthy local food in the cafeterias
- Install school gardens
- Enhance playgrounds and athletic facilities



- Prepare schools to adapt to climate change
- Chart a course for carbon neutrality
- Utilize interior and exterior finishes that are long-lasting and require minimal maintenance and replacement
- Install dimmable LED lighting
- Install renewable solar & geothermal energy sources
- Increase recycling and composting



- Add new classroom devices / equipment to support curriculum goals
- Refresh devices and equipment to stay current over next 15-20 years
- Renovate media centers to support digital learning and collaboration
- Continue bus fleet replacement schedule reduce repair costs, stay up to date on efficiency improvements, and promote bus fleet safety
- Provide improved custodial, information technology, public address, and audio/visual support spaces



Capital Improvement Projects

Phase 1 – Early work was the beginning of a plan, stemming from the Facilities Condition Assessment (FCA), to maintain the AAPS’s facilities in good condition, which will be ongoing through all phases. The following is a list of projects completed or in the process of work.

Air Conditioning and LED Lighting – Completed:

- Angell Elementary School
- Burns Park Elementary School
- Carpenter Elementary School
- Dicken Elementary School
- Lakewood Elementary School
- Mitchell Elementary School
- Pioneer HS Selective LED Lighting School

Air Conditioning and LED Lighting - In Progress:

- Bach Elementary School (*Complete Spring 2023*)
- Clague Middle School (*Complete Summer 2023*)
- Community High School (*Complete Spring 2023*)
- Eberwhite Elementary School (*Complete Spring 2023*)
- Forsythe Middle School (*Complete Summer 2023*)
- Pioneer Theater Lighting Upgrade (Continue in Summer 2023)
- Pittsfield Elementary School (*Complete Summer 2023*)
- Scarlett Middle School (*Complete Spring 2023*)
- Tappan Middle School (*Complete Spring 2023*)
- Wines Elementary (*Complete Summer 2023*)

Air Conditioning and LED Lighting –Start Summer 2023:

- Ann Arbor Open
- Ann Arbor STEAM
- Lawton Elementary School
- Transportation Building

Air Conditioning and LED Lighting – Design Stage:

- Abbot Elementary School (Summer 2024)
- Haisley Elementary School (Summer 2024)
- Huron High School LED Lighting (Summer 2024)
- King Elementary School LED Lighting (Summer 2024)

2021-2022

FAST FACTS

35

projects completed at 20 schools over 79 days (June 11 – Aug 28)

147,426

square feet of roof replacements

84,433

square feet of roof coating improvements

311,893

square feet of ceiling tile replacement

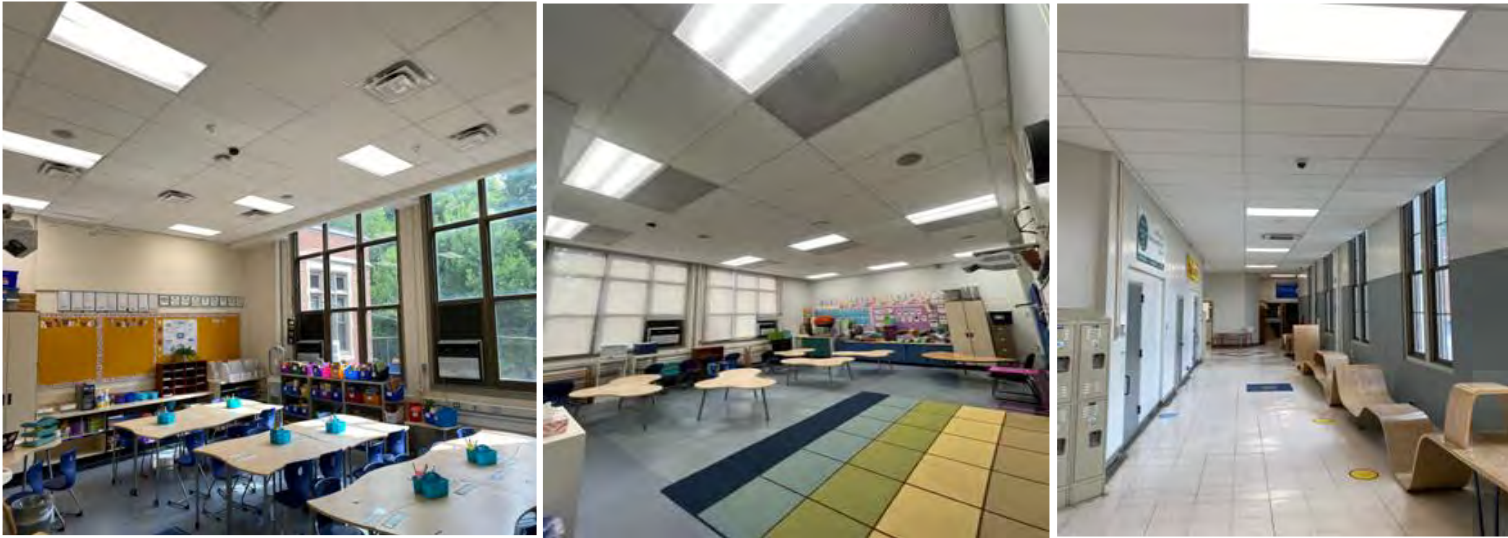
29,221

lineal feet of fire suppression piping installed

2,464,615 SF

of A/C provided at 24 schools

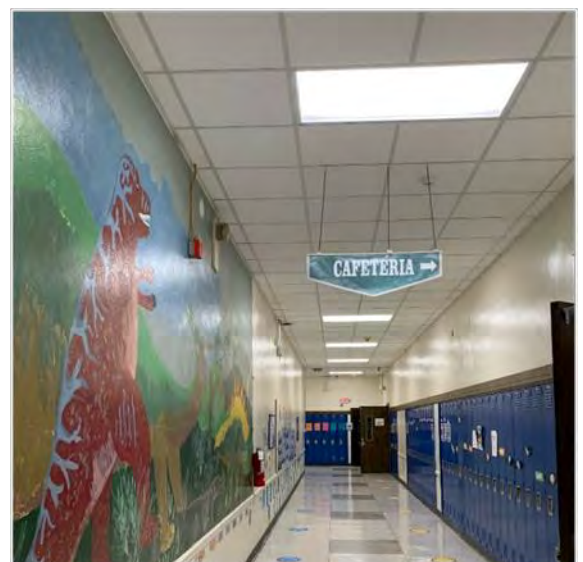
Capital Improvement Projects



Angell Elementary School – Air Conditioning, LED Lighting, and Ceiling Replacement



Bach Elementary School – Air Conditioning, LED Lighting, and Ceiling Replacement



Burns Park Elementary School – Air Conditioning, LED Lighting, and Ceiling Replacement

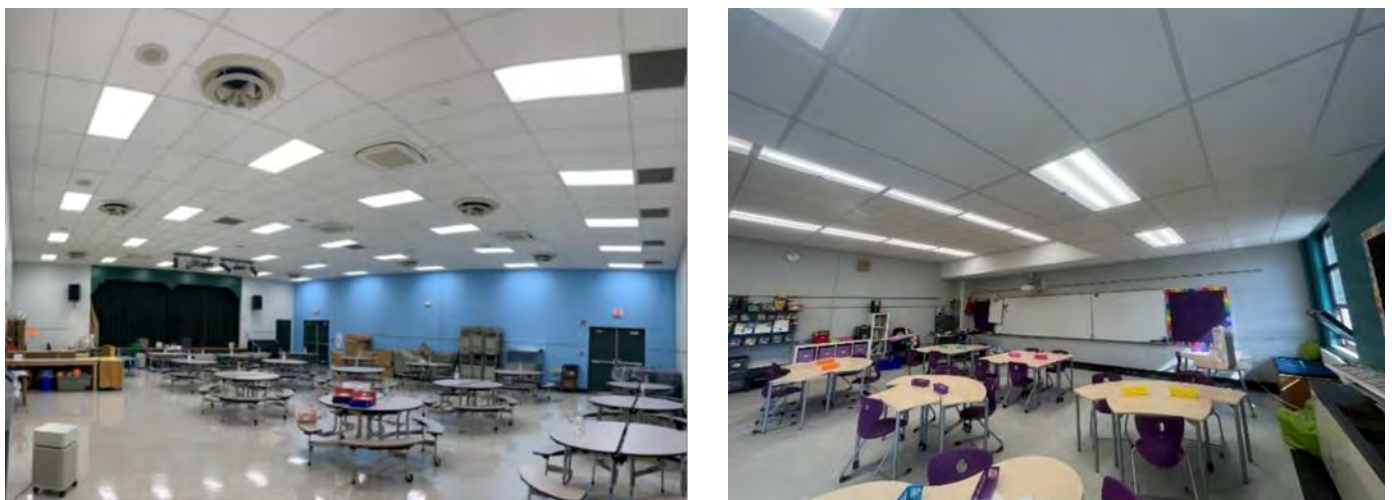
Capital Improvement Projects



Lakewood Elementary School – Air Conditioning, LED Lighting, and Ceiling Replacement

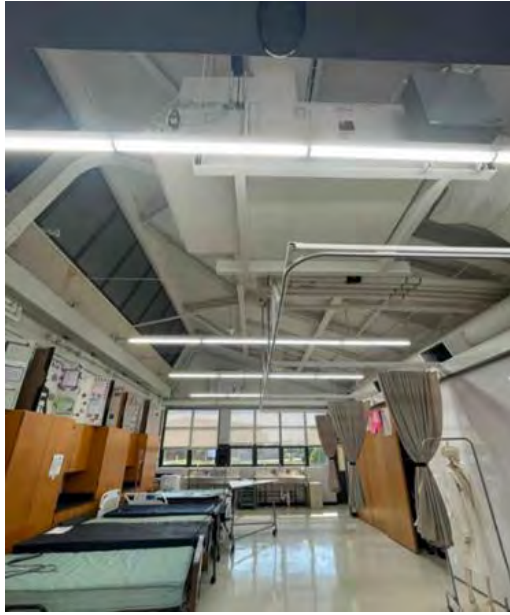


Mitchell Elementary School – Air Conditioning, LED Lighting, and Ceiling Replacement



Pittsfield Elementary School – Air Conditioning, LED Lighting, and Ceiling Replacement

Capital Improvement Projects



Pioneer High School – LED Lighting Improvements



Wines Elementary School – Air Conditioning, LED Lighting, and Ceiling Replacement



Wines Elementary School – Air Conditioning, LED Lighting, and Ceiling Replacement

Capital Improvement Projects

Theater Rigging Improvements - Completed:

Clague Middle School
Pioneer High School Schreiber and Little Theaters
Slauson Middle School
Scarlett Middle School

Theater Rigging Improvements - Start Summer 2023:

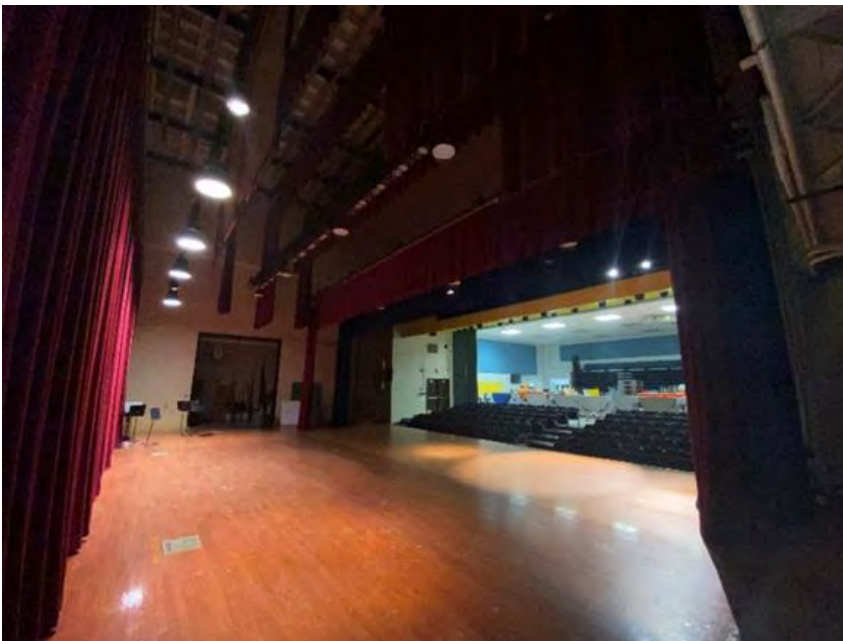
Forsythe Middle School
Huron High School



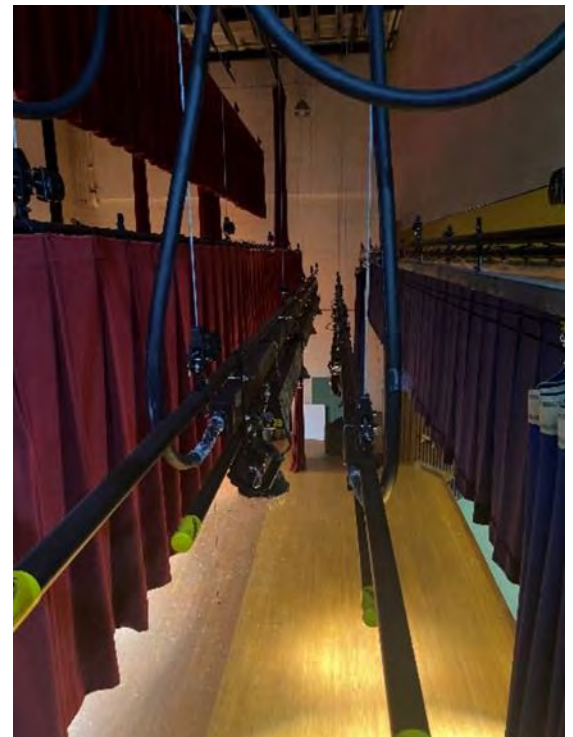
Pioneer Little Theater – Theater Rigging Replacement



Pioneer Schreiber Auditorium -Theater Rigging Replacement



Clague Middle School – Theater Rigging Replacement

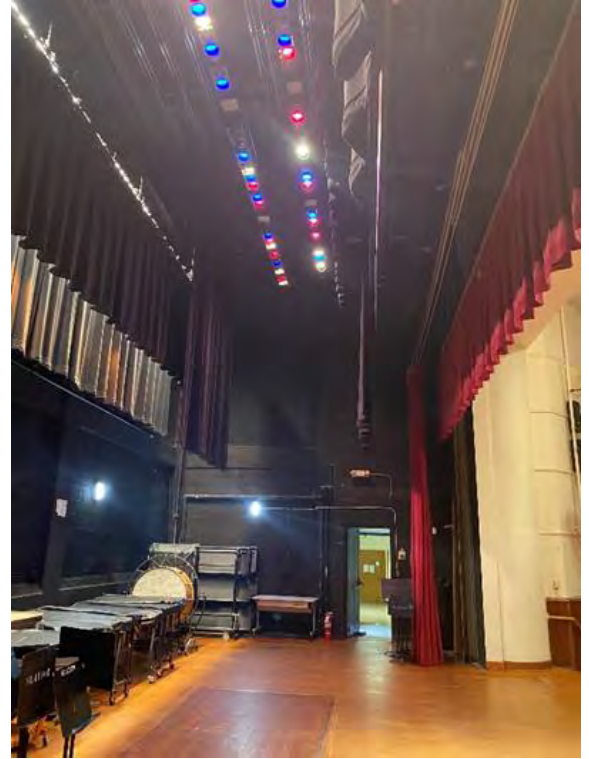


Clague Middle School – Theater Rigging Replacement

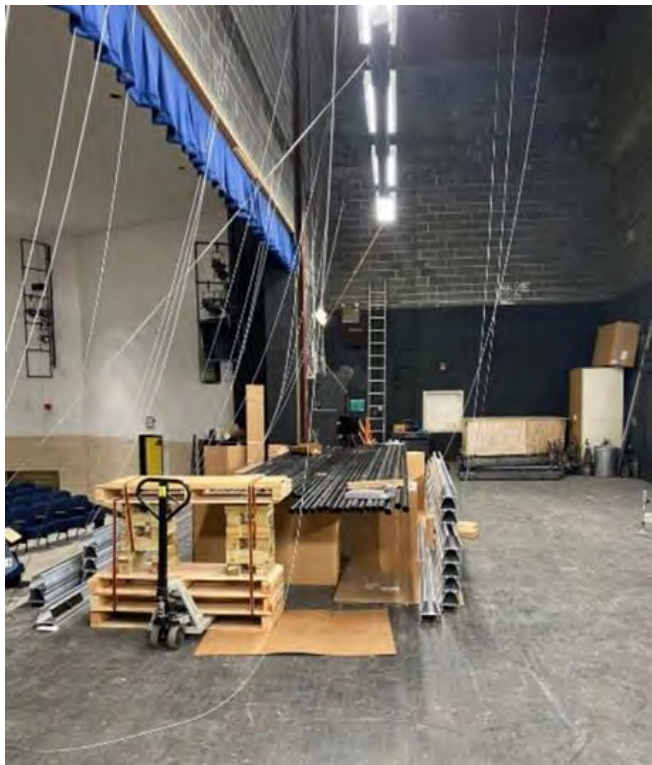
Capital Improvement Projects



Slauson Middle School – Theater Rigging Replacement



Slauson Middle School – Theater Rigging Replacement



Tappan Middle School – Theater Rigging Replacement



Capital Improvement Projects

Paving - Completed:

- Allen Elementary School
- Dicken Elementary School
- Logan (Patch/Repair)
- Pattengill (Patch/Repair)
- Pittsfield (Patch/Repair)
- Wines (Patch/Repair)



Allen Elementary School – Paving



Dicken Elementary School – Paving



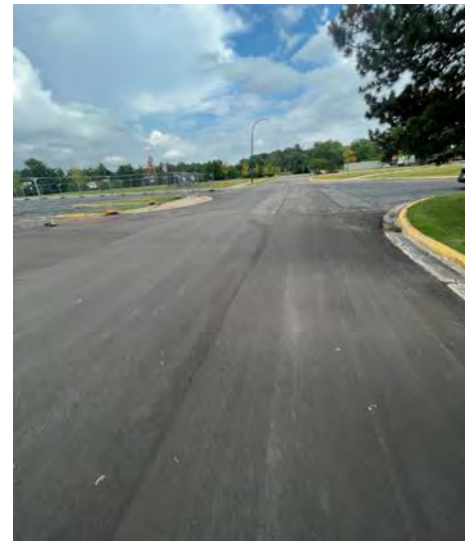
Capital Improvement Projects



Logan Elementary School – Paving



Pittsfield Elementary School – Paving



Wines Elementary School – Paving

Capital Improvement Projects

Roofing – Completed:

Bryant Elementary
Huron High School
King Elementary
Mitchell Elementary
Pattengill Elementary
Pioneer High School
Westerman Preschool

Roofing - Start Summer 2023

Abbot Elementary School
Scarlett Middle School
Tappan Middle School
Wines Middle School



Huron High School – Roofing Improvements



Bryant Elementary School – Roofing Improvements



Westerman Preschool – Roofing Improvements



Capital Improvement Projects



Mitchell Elementary – Roofing Improvements



Pattengill Elementary – Roofing Improvements



Pioneer High School – Roofing Improvements

Capital Improvement Projects

Solar Projects - Completed:

Bryant Elementary

A2 STEAM

Forsythe Middle School

Haisley Elementary

Huron High School

Pattengill Elementary

Pioneer High School

Westerman Preschool

Solar Projects – Start Summer 2023:

Scarlett Middle School

Tappan Middle School



Pioneer High School – Solar Array



Ann Arbor STEAM—Solar Array



Bryant Elementary School—Solar Array

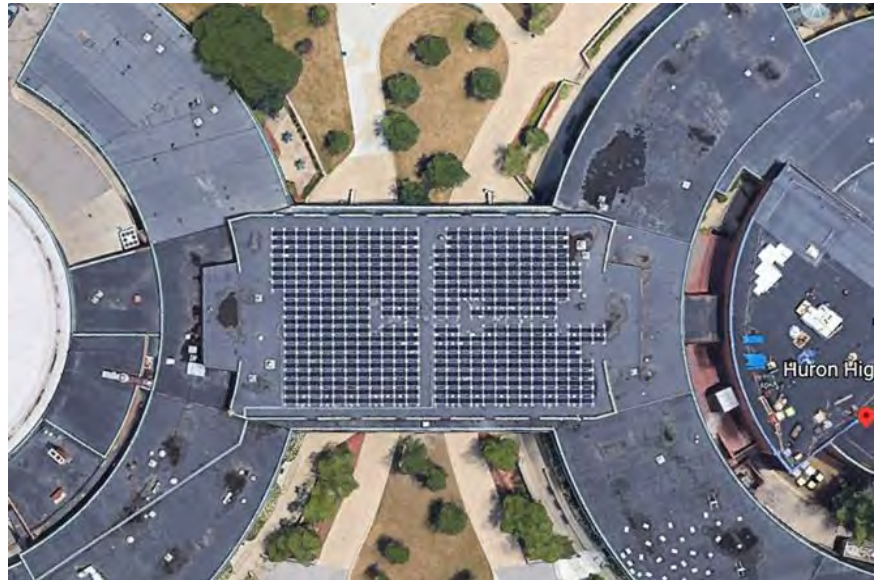
Capital Improvement Projects



Forsythe Middle School —Solar Array



Haisley Elementary School —Solar Array



Huron High School—Solar Array

Capital Improvement Projects



Pioneer High School —Solar Array



Westerman Preschool —Solar Array

Capital Improvement Projects

Playground Projects - Completed:

Eberwhite Elementary School
Bryant Elementary
Westerman Preschool Natural Play Area



Eberwhite Elementary School – New Playground



Eberwhite Elementary School – New Playground

Capital Improvement Projects



Westerman Preschool - New Natural Play Area



Bryant Elementary School – New Playground

Capital Improvement Projects

Other Improvement Projects:

- Art, Music, & Science Furnishings & Equipment
- Athletic Field Improvements
- Boiler and heating system improvements
- Carpenter Stormwater Repair
- Ceiling Tile Replacement
- Converted underutilized spaces into classrooms
- Collaboration spaces at Scarlett Middle School
- Entry improvements at Clague Middle School
- Nixon Road Demolition
- Pioneer High School Theater Improvements
- Scarlett Exterior Column Repair
- Skyline Stormwater & Irrigation
- Skyline Envelope Improvements
- Tappan Masonry Parapet Restoration
- Thurston Nature Center Storm Water Repair
- 3 New Classrooms & Student Service Center at Scarlett
- New window shades
- Safe Drinking Water
- New storage rooms at Community High School
- New access for HVAC maintenance at Community High School
- Cross corridor doors at Tappan Middle School
- Music room acoustical improvements at Clague, Forsythe and Scarlett Middle Schools
- Social/Emotional spaces at Scarlett Middle School



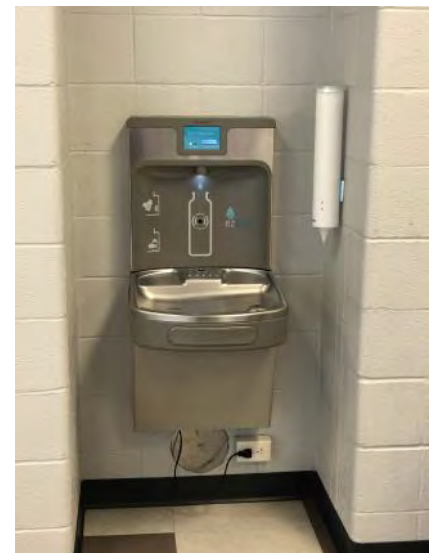
Carpenter Elementary School
Storm Water Repair



Carpenter Elementary School
Storm Water Repair



Nixon Road Structure Demolition



Filtered Hydration Stations

Capital Improvement Projects



Huron High School Athletic Track Improvements



Scarlett Middle School Walk In Cooler Replacement



Skyline High School - Storm Water and Irrigation Improvements

Capital Improvement Projects



Scarlett Middle School—Concrete Column Repair



Thurston Nature Center—Storm Water Repair

Capital Improvement Projects

Other Upcoming Improvement Projects in 2023:

Entry improvements at Tappan Middle School (*Winter 2023*)

Huron High School Pool Filtration Improvement (*Summer 2023*)

Community, Early Childhood, & Staff Campus (*Starts 2023*)

Add Band Room at Ann Arbor Open (*Summer 2023*)

Hollway Bleacher Stabilization (*Summer 2023*)

Elevator Improvements at Burns Park & Scarlett

Elevator Improvements at Tappan & Community (*Summer 2023*)

Elevator Improvements at Clague and Slauson (*Summer 2023—2024*)

Individual Project Highlights

Clague Middle School



Clague Middle School, originally constructed in 1972, is a two-story masonry structure with exterior brick veneer.

The school facility is situated on 23.5 acres in the northeast sector of Ann Arbor. The original structure has not experienced any major additions over the years, and currently supports Grades 6-8.

FAST FACTS

Built In: 1972

Building Size: 156,000 sq ft

Land Area: 23.5 acres

Building Age: 50 years

Grades: 6th – 8th

Mascot: Cougars



Air Conditioning, LED Lighting, and Ceiling Replacement

Individual Project Highlights

Clague Middle School

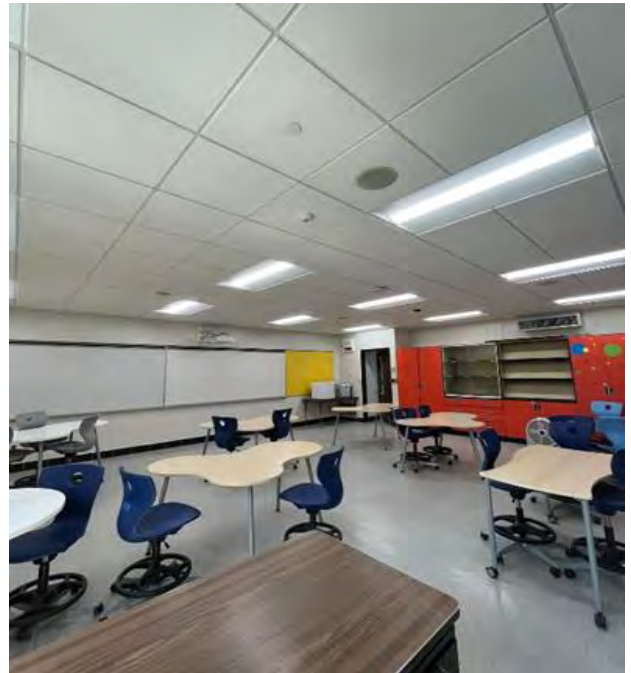
Scope of Work

- Add air conditioning, replace lighting with LED fixtures, and add fire suppression.
- Ceiling replacement and related above-ceiling mechanical, electrical, low voltage, data, fire alarm, and plumbing.
- Geothermal Field construction at north side of building.
- Fire Protection water service, electrical, and gas underground utilities installation.
- Restoration of paving and lawn areas from Bluett Road to school after utilities install.
- Entry canopy construction, sidewalk replacement, landscaping, and storefront replacement at south main entry.
- New Window Treatments.
- Painting in select areas.
- Theater rigging improvements

Time frame of Work:

Work Currently in Progress

Phased work started June 2022 with scheduled completion December 2023



Air Conditioning, LED Lighting, and Ceiling Replacement

Individual Project Highlights

Clague Middle School



New Exterior Entrance Plaza



Drilling for Geothermal Pipe Installation

Individual Project Highlights

Community High School



Community High School was originally constructed in 1922 as the Jones Elementary School. In 1972, the building was changed to Community High School.

The original building is a three-story masonry structure with exterior brick veneer. The school facility is situated on 3.2 acres in the center of downtown Ann Arbor. The original structure has experienced 2 additions over the years, and currently supports Grades 9-12.

FAST FACTS

Built In: 1922

Building Size: 58,200 sq ft

Land Area: 3.2 acres

Building Age: 100 years

Grades: 9th – 12th

Informal Mascot: Rainbow Colored Anti-Zebra



Air Conditioning, LED Lighting, and Ceiling Replacement

Individual Project Highlights

Community High School

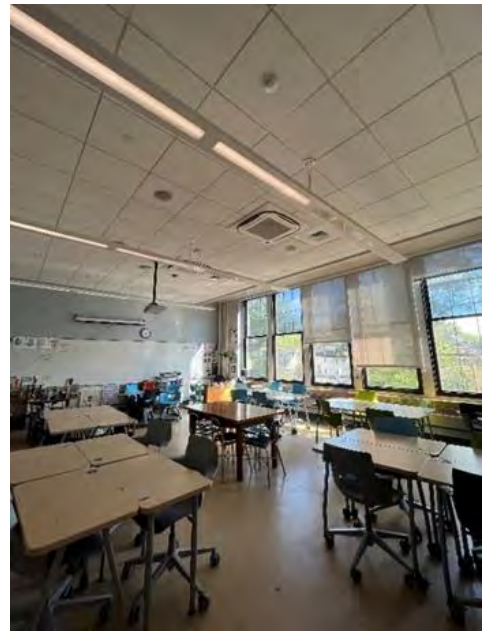
Scope of Work

- Add air conditioning, replace lighting with LED fixtures, and add fire suppression.
- Ceiling replacement and related above-ceiling mechanical, electrical, low voltage, data, fire alarm, and plumbing.
- New classroom doors and door hardware.
- Painting in select areas.
- New Window Treatments.
- New fire water service, gas service, and electrical service up grade to building.
- New service access to mechanical room.
- Elevator upgrade & elevator compartment replacement (Summer 2023)

Time frame of Work:

Work Currently in Progress

Phased work started April 2021 with scheduled completion January 2023.



Air Conditioning, LED Lighting, and Ceiling Replacement

Community High School



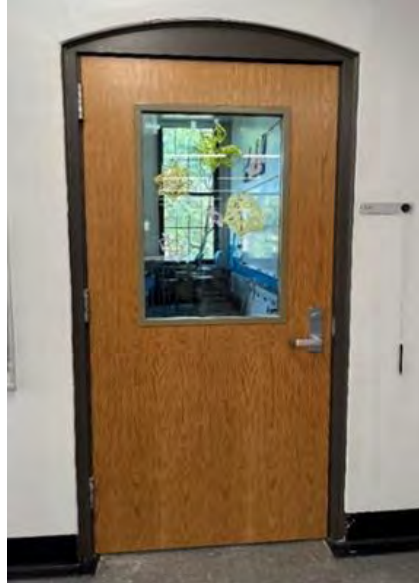
Air Conditioning, LED Lighting, and Ceiling Replacement



Chimney Reconstruction



Before



After

Classroom Door Replacement



New Mechanical Room Entrance

Individual Project Highlights

Forsythe Middle School



Forsythe Middle School, originally constructed in 1960, is a one-story masonry structure with exterior brick veneer. The school facility is situated on 26 acres in the northwest sector of Ann Arbor. The original structure has experienced at least 2 additions over the years, and currently supports Grades 6-8.

The Forsythe Middle School site is adjacent to Wines Elementary, and the buildings share a large, connected campus.

FAST FACTS

Built In: 1960

Building Size: 185,156 sq ft

Land Area: 26 acres

Building Age: 62 years

Grades: 6th – 8th

Mascot: Vikings



Air Conditioning, LED Lighting, and Ceiling Replacement

Individual Project Highlights

Forsythe Middle School

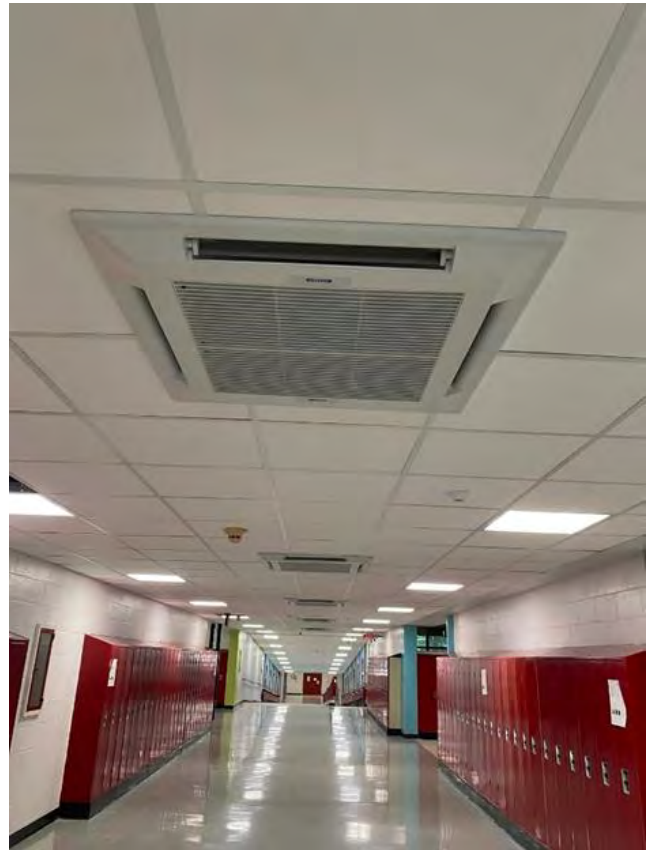
Scope of Work

- Add air conditioning, replace lighting with LED, and ceiling replacement.
- Ceiling replacement and related above-ceiling mechanical, electrical, low voltage, data, fire alarm, and plumbing.
- Create two new classrooms in the Tech/Ed area.
- New Window treatments.
- Painting in select areas.
- Construction of new IT / Data Rooms.
- Geothermal field construction in and adjacent to south parking lot. Restoration of south parking lot after geothermal work.
- New building and grade mounted signage.

Time frame of Work:

Work Currently in Progress

Phased work started June 2022 with scheduled completion August 2023.



Air Conditioning, LED Lighting, and Ceiling Replacement

Forsythe Middle School



Geothermal piping installation



Drilling and installation of Geothermal Piping



Parking Lot Replacement at Geothermal

Individual Project Highlights

Scarlett Middle School



Scarlett Middle School, originally constructed in 1968, is a two-story masonry structure with exterior brick veneer. The school facility is situated on 30.5 acres in the southeast sector of Ann Arbor.

The original structure has experienced at least 1 addition over the years, and currently supports Grades 6-8. The Scarlett Middle School site is adjacent to Mitchell Elementary School and the buildings share a parking lot.

FAST FACTS

Built In: 1968

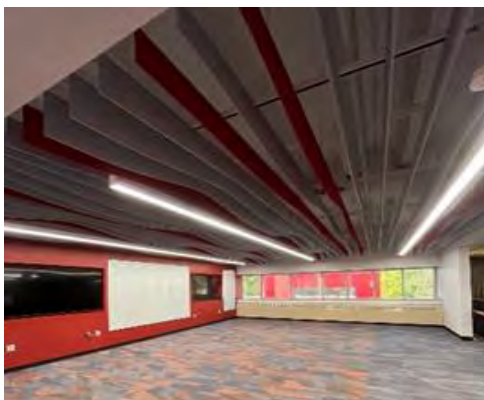
Building Size: 162,758 sq ft

Land Area: 30.5 acres

Building Age: 54 years

Grades: 6th – 8th

Mascot: Roadrunners



New Student
Collaboration Space



Individual Project Highlights

Scarlett Middle School

Scope of Work

- Add air conditioning, replace lighting with LED fixtures, and add fire suppression.
- Ceiling replacement and related above-ceiling mechanical, electrical, low voltage, data, fire alarm, and plumbing.
- Fire Protection water service, electrical, and gas underground utilities installation.
- New Window Treatments.
- Painting in select areas.
- Theater rigging improvements
- Exterior concrete column repair.
- Added 3 new classrooms.
- Social and emotional space improvements.
- Created student collaboration space on 2nd floor.

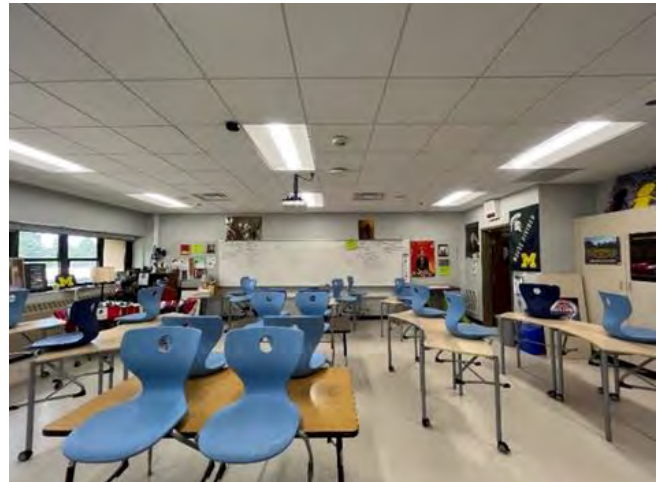
Time frame of Work:

Work Currently in Progress.

Phased work started April 2021 with scheduled completion January 2023.



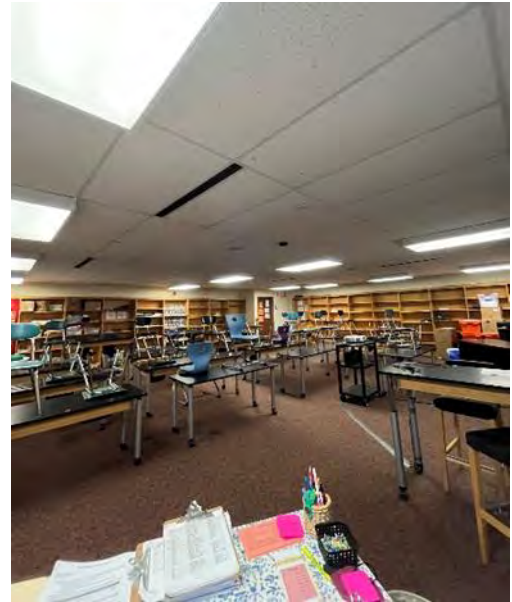
Air Conditioning, LED Lighting, and Ceiling Replacement



New 2nd Floor Classrooms

Individual Project Highlights

Scarlett Middle School



Air Conditioning, LED Lighting, and Ceiling Replacement



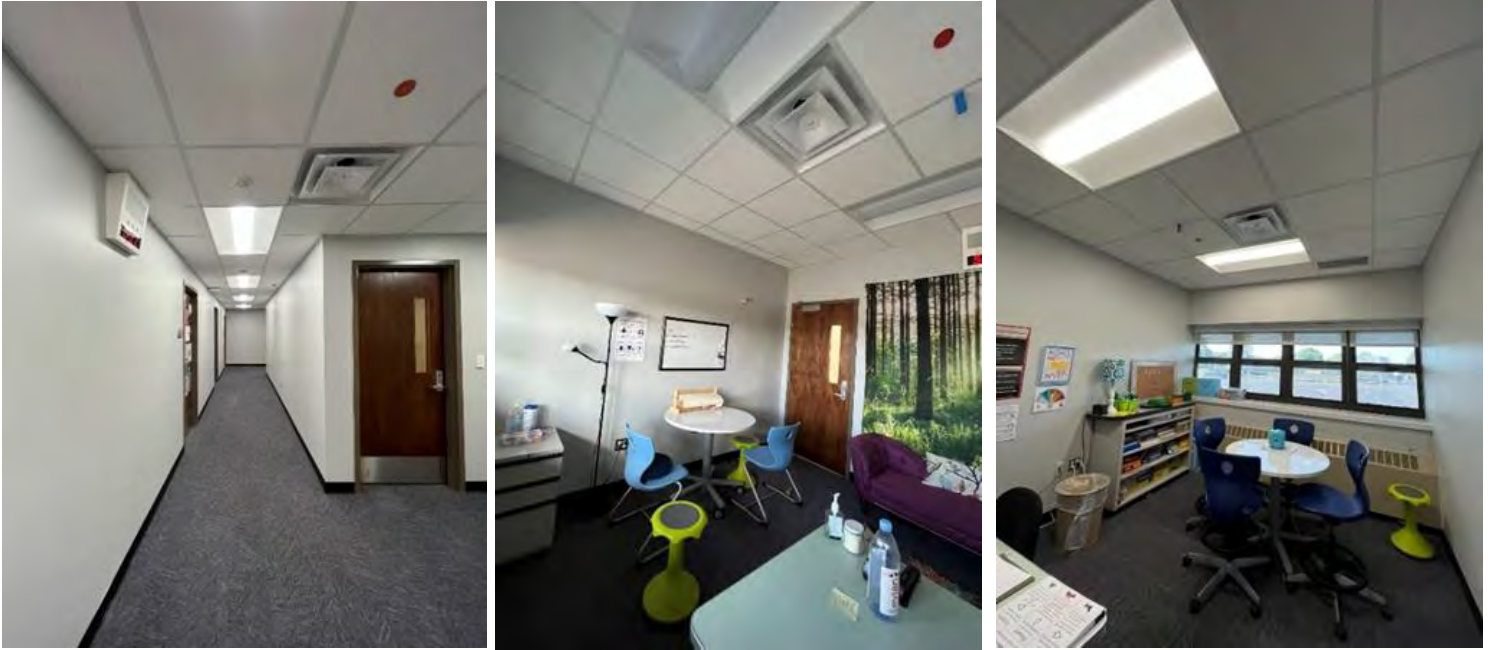
Concrete Column Repair

Scarlett Middle School

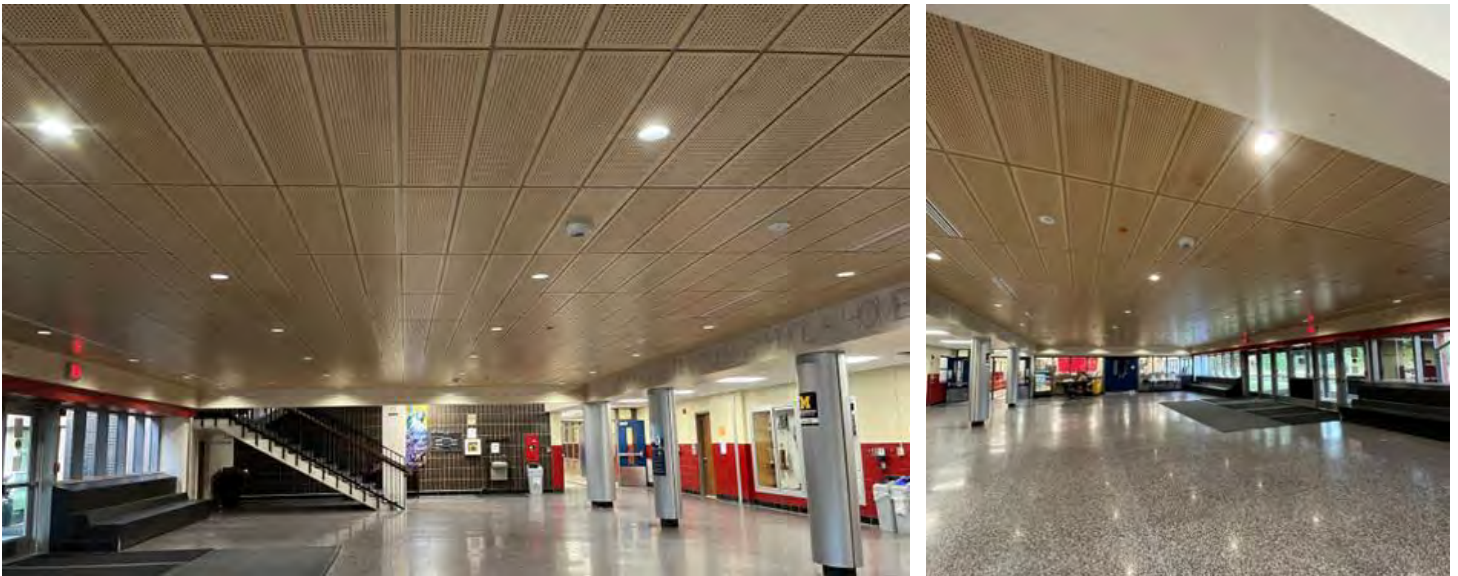


New HVAC Mechanical Equipment

Scarlett Middle School



New Counseling and Student Support Services Area



New Front Entrance Ceiling and LED Lighting Improvements

Individual Project Highlights

Tappan Middle School



Scarlett Middle School, originally constructed in 1968, is a two-story masonry structure with exterior brick veneer. The school facility is situated on 30.5 acres in the southeast sector of Ann Arbor.

The original structure has experienced at least 1 addition over the years, and currently supports Grades 6-8. The Scarlett Middle School site is adjacent to Mitchell Elementary School and the buildings share a parking lot.

FAST FACTS

Built In: 1950

Building Size: 215,942 sq ft

Land Area: 20 acres

Building Age: 72 years

Grades: 6th – 8th

Mascot: Trojans



Air Conditioning, LED Lighting, and Ceiling Tile Replacement

Individual Project Highlights

Tappan Middle School

Scope of Work

- Add air conditioning, replace lighting with LED fixtures, and add fire suppression.
- Ceiling replacement and related above-ceiling mechanical, electrical, low voltage, data, fire alarm, and plumbing.
- Fire Protection water service, electrical, and gas underground utilities installation.
- New Window Treatments.
- Painting in select areas.
- Theater rigging improvements.
- Added 2 new classrooms.
- Cross corridor door improvements.
- Front entry vestibule improvements.
- Student collaboration space improvements.
- Exterior masonry restoration at roof line.
- Replaced classroom and wayfinding signage.
- Elevator upgrade & elevator compartment replacement. (Summer 2024)

Time frame of Work:

Phased work started April 2021 with scheduled completion December 2022.



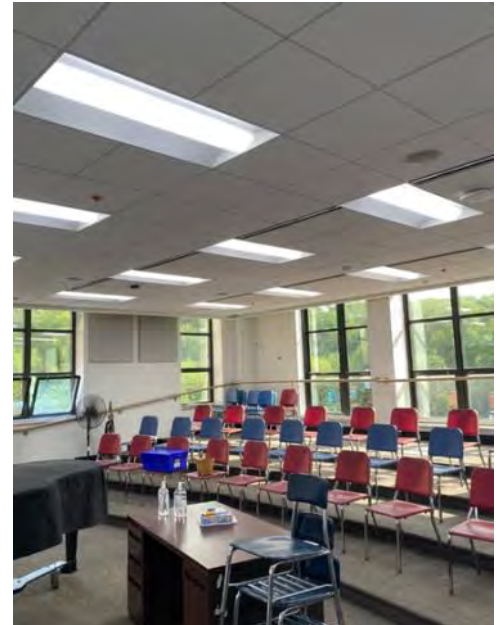
Air Conditioning, LED Lighting, and Ceiling Tile Replacement

Individual Project Highlights

Tappan Middle School



Air Conditioning, LED Lighting, and Ceiling Tile Replacement



Air Conditioning, LED Lighting, and Ceiling Tile Replacement



New HVA Mechanical Equipment



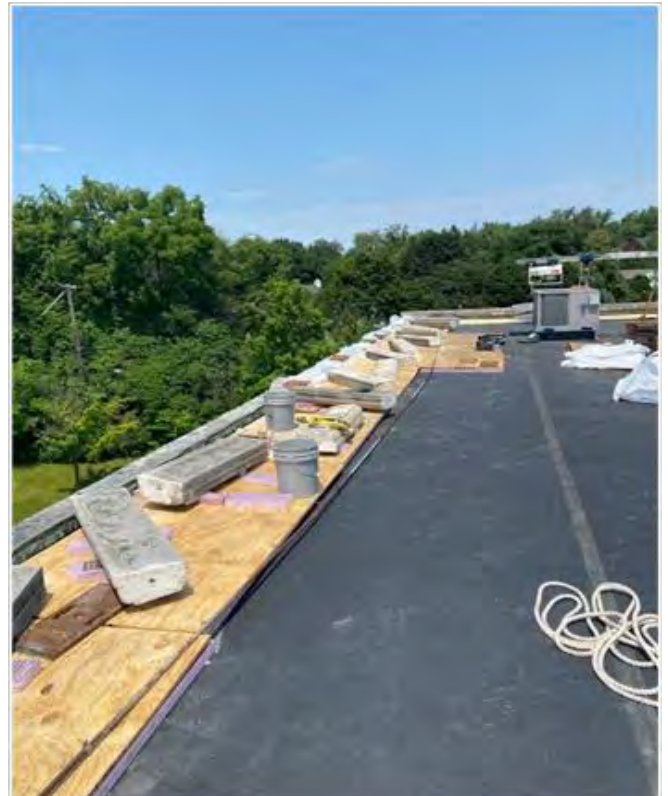
Tappan Middle School



Air Conditioning, LED Lighting, and Ceiling Tile Replacement



Masonry Restoration at Parapet & Stone Roof Coping



Masonry Restoration at Parapet & Stone Roof Coping

Individual Project Highlights

W. Scott Westerman Jr. Preschool and Family Center



W. Scott Westerman Jr. Preschool and Family Center, originally constructed in 1990, is a one-story masonry structure with exterior brick veneer.

The school facility is situated on 3.63 acres in the south sector of Ann Arbor. The original structure has experienced at least 1 addition over the years, and currently supports the education of Preschoolers.

FAST FACTS

Built In: 1990

Building Size: 22,995 sq ft

Land Area: xxx

Building Age: 72 years

Grades: Preschool



W. Scott Westerman Jr. Preschool and Family Center

Scope of Work

- New natural play area located north of the school.
- New fencing, benches, play areas, and walking path.

Time frame of Work:

Summer 2022 – Completed



New Natural Play Area



Individual Project Highlights

New Mitchell Elementary School



Scope of Work

New Mitchell will be a new two-story, 4-section, K-5, IB School, located adjacent to existing Mitchell, which will remain in use as a Staging Location after New Mitchell is occupied in late, 2026.

The Architectural Team for this project is Neumann / Smith with Fielding International.

This project is half-way through a Community Engagement process. This process will result in a Schematic Design being brought to the Board of Education for approval in April 2023. Engagements will have included group discussions with Building Leadership, District Leadership, Teachers, Other Staff, Students, Parents, Community Partners, as well as the broader Community.

Construction is expected to begin in the Summer of 2024. Old Mitchell will become a staging location after construction of New Mitchell is completed.

FAST FACTS

Grades: PK—5th

Project Status: Planning / Community Engagement



Individual Project Highlights

New Mitchell Elementary School

Below are examples of the Mitchell Engagement Process, from Fall 2022 Engagements:

Engagement Workshop | Design Patterns Feedback

Community Priorities

- To the right, the number represents how many stakeholders voted for a specific pattern. Clear priorities rose to the top of importance for moving forward with the design:

Community

- Space for community/ family to connect to the school

Outdoor connections

- Indoor / outdoor connected learning
- Natural light and color to greater engage students

Calming / flexible space

- Agile and variable environments for calming, tactile, and small group spaces



EMERGING QUESTIONS (Examples)

1. What might informal and formal outdoor learning experiences look like? What type of resources and space allocations could be helpful to associate with outdoor learning?

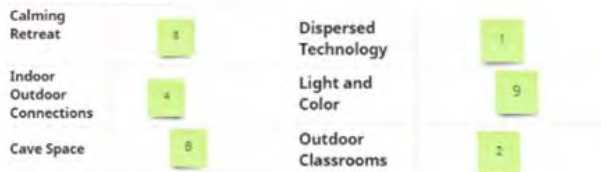


Engagement Workshop | Student Feedback

Student Priorities

- Below are tallied results from students based on their desire for new spaces in a new school. Clear priorities rose to the top of importance for moving forward with the design.

Results from Student Drawings



Two clear patterns emerged from student drawings:

- Cozy independent nooks next to friends
- Space for Movement

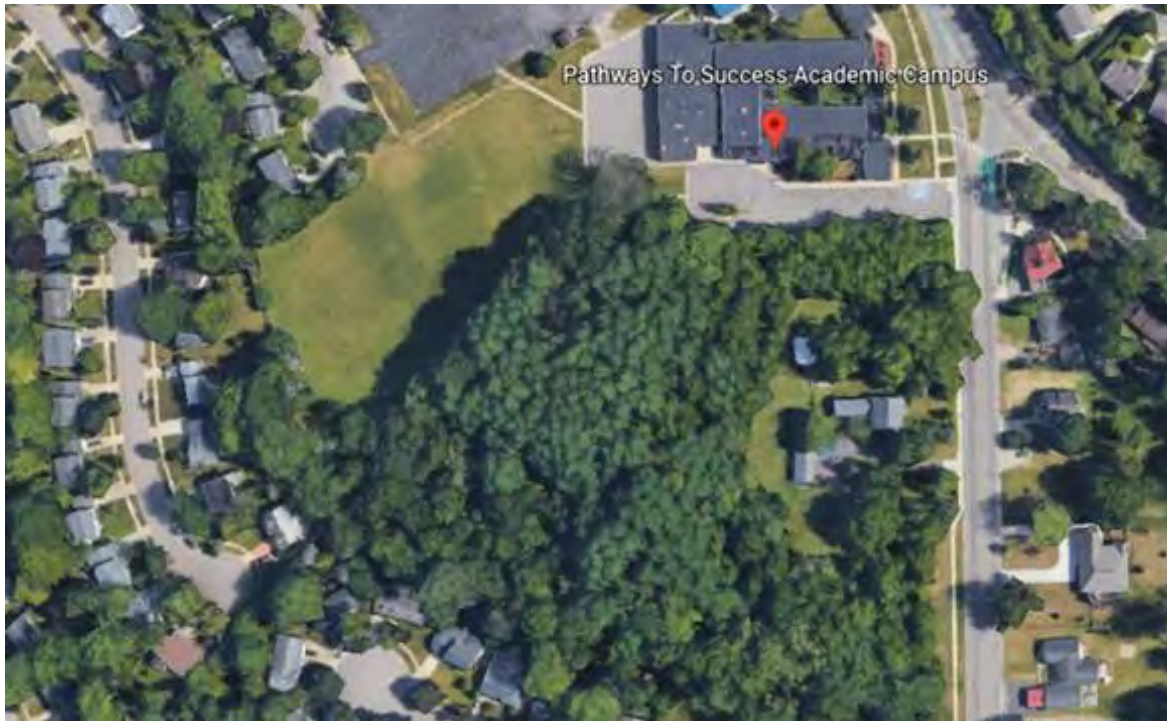
EMERGING QUESTIONS (Examples)

1. As the design develops, how might the design team incorporate small nooks and spaces for movement in the new Mitchell elementary?



Individual Project Highlights

New Pathways to Success Academic Campus



Scope of Work

New Pathways will be a new two-story school, retaining existing Child Care and a RAHS Clinic functions, located adjacent to existing Pathways, which will be demolished after New Pathways is occupied at the start of the 2026 School Year.

The Architectural Team for this project is Neumann / Smith with Fielding International.

This project is half-way through a Community Engagement process. This process will result in a Schematic Design being brought to the Board of Education for approval in April 2023. Engagements will have included group discussions with Building Leadership, District Leadership, Teachers, Other Staff, Students, Parents, Community Partners, as well as the broader Community.

Construction is expected to begin in the Spring of 2024.

FAST FACTS

Grades: 9th—12th

Project Status: Planning / Community Engagement



Individual Project Highlights

New Pathways to Success Academic Campus

Below are examples of the Mitchell Engagement Process, from Fall 2022 Engagements:

Engagement Workshop | Design Patterns Feedback

Community Priorities

To the right, the number represents how many stakeholders voted for a specific pattern. Clear priorities rose to the top of importance for moving forward with the design:

Calming / flexible space

- Agile and variable environments for calming, tactile, and small group spaces

Community

- Space for community/ family to connect to the school

Outdoor connections

- Indoor / outdoor connected learning
- Natural light and color to greater engage students

EMERGING QUESTIONS (Examples)

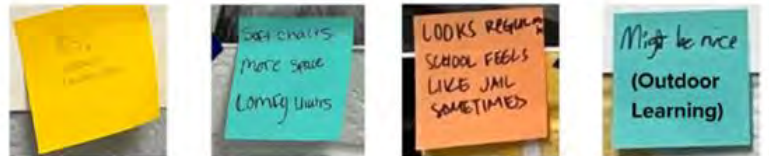
1. How might honor student need for calming, quiet areas by embedding them into the design of Pathways?
2. What might it look like to have outdoor learning experiences for high school students? In what other ways might we connect students with the outdoors?



Flexible & Collaborative Learning



Calming Spaces & Outdoor Connections



Engagement Workshop | Student Feedback

Student Priorities

- Below are the most common results from students based on their desire for new spaces in a new school. Clear priorities rose to the top of importance for moving forward with the design.

Top Preferences in Space

Quality	Type
Bright Lighting / Strong Daylighting	Art / Performance / Creative Spaces
Larger/open spaces	More bathrooms; gender neutral
Soft furniture in classrooms	Small group rooms
	Hangout spots

Beyond Space:

- Students have expression, equality, respect.



EMERGING QUESTIONS (Examples)

1. How might we design the building so that the outdoors are closer to the indoors? "Natural light, natural beauty"
2. The performing arts are a focus for many students. What might be the specific needs of a PA Hub at Pathways?



Capital Program Sustainability Update

Rooftop Solar Arrays

Completed

- Pattengill Elementary (110 kW) – 2020
- Haisley Elementary (112 kW) – 2021
- A2 STEAM at Northside (150 kW) – 2021
- Forsythe Middle School (150 kW) - 2021
- Huron High School (133 kW) – 2021
- Bryant Elementary (150 kW) – 2022
- Pioneer High School (150 kW) – 2022
- Westerman Preschool (150 kW) - 2022

Upcoming Solar Array Projects in 2023

- Tappan Middle School
- Scarlett Middle School

1.12 MW (AC output) of rooftop solar
In 2022 will be equivalent to offsetting carbon of:

- 2,900,000 miles driven by cars; or
- 1,280,000 pounds of coal burned; or
- 212 homes annual electricity usage

Geothermal Electrical Heating and Cooling

Currently In Construction Progress:

- Forsythe Middle School
- Clague Middle School

FAST FACTS

1,105

kilowatts of rooftop solar have been installed to date

8,254

light fixtures replaced with high efficiency LED fixtures

25%

average annual electrical reduction per building from installation of LED lighting

\$180,000

anticipated annual savings per year from solar

6%

anticipated AAPS annual electric consumption saving from solar

237

of geothermal vertical bores drilled to support high performance mechanical HVAC systems

240

lineal feet of vertical bore piping installed

=

45.5 miles of piping!

Connectivity & IT Infrastructure Update for Capital Program

ITD Infrastructure and connectivity is critical to transforming the student learning experience and providing for the health, safety, and well-being of all students in high quality equitable, and environmentally sustainable schools

Key ITD Interactions with the Capital Program Team and the Ongoing Construction Process:

- Meets weekly with the Capital Program team and connects regularly in the field with the construction teams to provide technical support as needed.
- Procures and provides all the networking and classroom AV equipment for the construction projects to ensure device consistency, and for maintenance and warranty purposes.
- Works side-by-side with the building construction teams at key project milestones for all phased construction work.
- Is on-call to handle any technical construction issues that arise after hours, on weekends and over school calendar breaks.

Specific ITD-Construction Areas – Technical Upgrades/Installations:

Network

- ◆ Improvements made to MDF/IDF networking closets at building under construction.
- ◆ Set-up 3 new IDF networking closets (2 at Tappan & 1 at Scarlett)
- ◆ Over 500+ new CAT 6A cabling drops have been installed to improve networking capabilities and end-user speed.
- ◆ Upgrades to the district networking core equipment to support modern working, teaching, and learning needs.
- ◆ Upgraded 1200 wireless access points district-wide.

Servers

- ◆ Upgraded Storage system to support video security, backups, and other large data needs.

Safety & Security

- ◆ Perform regular camera audits and repair cameras or cabling as needed.
- ◆ Assist Physical Properties with updating HVAC and Fire Alarm systems.
- ◆ Upgrades to PA systems providing the ability to use for security messaging

Cybersecurity Improvements

- ◆ Provide remote access for key district systems.
- ◆ Continued layering and tightening of network system security.
- ◆ Moved to multi-factor authentication for both staff and critical network services.
- ◆ Upgraded firewalls to accommodate increased internet bandwidth and increased network services.

Classroom/AV Services

- ◆ Procured and refreshing 800 laser-based classroom projectors.
- ◆ Procured new sound & lighting consoles for Skyline and Huron auditoriums.
- ◆ Continued maintenance and replacement of district-wide classroom AV equipment to support teaching & learning

Operations Update

Transportation

Electric Bus Charging Station Infrastructure

Food Service

Scarlett Walk-In Refrigeration
Community HS Café Improvements
Carpenter Server Line Improvements
King Server Line Improvements
Mitchell Server Line Improvements
Pioneer HS Café & Cafeteria Improvements
Equipment Purchasing
Ovens
Cook and hold
Freezers coolers
Serving line

Facilities

Building Controls Management System
Enhanced Ventilation & Filtration System
Hydration Stations
Touchless Fixtures
Athletic Field & Track Improvements
Playground Improvements
Shade Tree Program
Clock and PA System Improvements

The DTE rebate incentives are a result of energy efficiency reduction efforts related to building HVAC controls management system upgrades and the installation of more efficient LED lights in our Phase 1 early work.

FAST FACTS

\$421,745

received in Rebates from electrical utility to date

10

number of elementary Schools that have received playground Improvements in last 2 years

180

number of Hydration Stations installed in the District

500

number of shade trees planted throughout the District

Capital Program Communications

COMMUNITY ENGAGEMENT

Past Engagements

- 7/14/22 – Transportation & Food Service Pre-Engagement
- 7/14/22 – Safety & Security Pre-Engagement
- 7/15/22 – Physical Plant Pre-Engagement
- 7/15/22 – Physical Properties Pre-Engagement
- 7/15/22 – Building Services Pre-Engagement
- 7/18/22 – Teaching & Learning Pre-Engagement
- 7/18/22 – ITD Pre-Engagement
- 8/4/22 – Pathways & Mitchell Safety & Security Engagement
- 8/8/22 – Pathways & Mitchell Teaching & Learning Engagement
- 8/10/22 – Pathways & Mitchell Technology Department Engagement
- 8/10/22 – Pathways & Mitchell Food Service Department Engagement
- 8/17/22 – Pathways & Mitchell Programming Review Engagement
- 8/22/22 – Pathways School Leadership Engagement
- 9/20/22 – Mitchell & Pathways Teaching & Learning / Safety & Security Departmental Engagements
- 9/28/22 – Mitchell & Pathways Food Service & Technology
- 10/10/22 & 10/11/22 – Mitchell 1st External Stakeholder Meeting
- 10/17/22 – Pathways 1st External Stakeholder Meeting
- 10/18/22 – Mitchell & Pathways Teaching & Learning / Safety & Security Departmental Engagements
- 10/25/22 – Mitchell & Pathways Food Service & Technology

Upcoming Engagements

- 1/17/23 & 1/18/23 – New Mitchell Community Engagement
- 1/19/23 & 1/20/23 – New Pathways Community Engagement

Capital Program Communications

Professional Associations Engagements

American Institute of Architects
NABWIC – National Association of Black Women in Construction
Washtenaw Contractors Association
Associated General Contractors of Michigan
Michigan Supplier Development Council

Professional Conferences Engagements

MSBO – Michigan Schools Business Officials – April & October Events
AGC of Michigan Committee Events

Local, State & National Plan Rooms Engagements

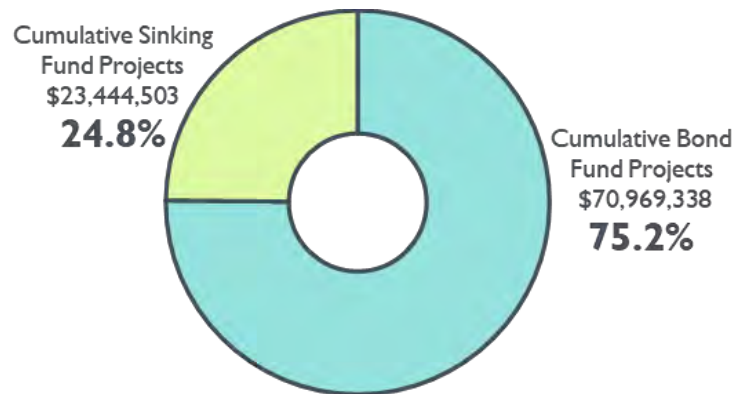
BidNet
Construction Association of Michigan
Builders Exchange of Michigan
Building Connected
Demand Star

Websites

www.a2schoolbond.org
www.a2schools.org

Capital Program Financial Update

TOTAL CAPITAL PROGRAM EXPENDITURES
\$94,413,841



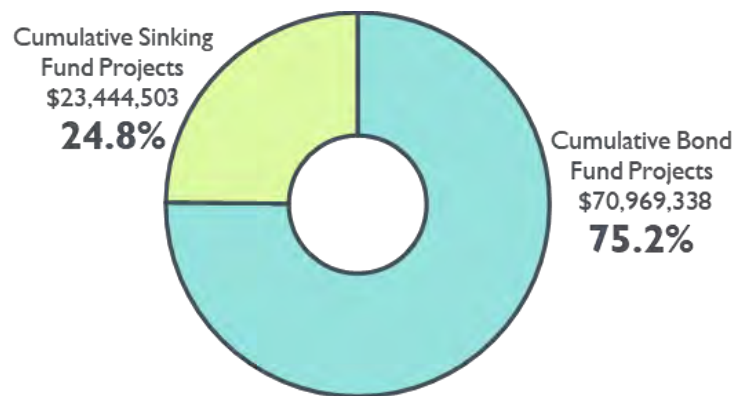
Capital Program Investments by Fund - Cumulative

Capital Program Funding Source	Expenditures FY21/22	Expenditures FY20/21	Total Cumulative Expenditures	% Total
Bond Fund	\$54,035,972	\$16,933,366	\$70,969,338	75.2%
Sinking Fund	\$8,828,868	\$14,615,635	\$23,444,503	24.8%
Total All Capital Program	\$62,864,840	\$31,549,001	\$94,413,841	100%

Bond Fund Projects	FY21/22	FY20/21	Total	% Total
Construction	\$37,305,914	\$10,783,633	\$48,089,547	67.8%
Professional Fees	\$10,115,640	\$3,144,516	\$13,260,155	18.7%
IT Infrastructure	\$3,508,670	\$0	\$3,508,670	4.9%
Land	\$1,008,096	\$0	\$1,008,096	1.4%
Legal, Permits, Other Fees	\$1,385,063	\$129,170	\$1,514,233	2.1%
Site Improvements	\$460,461	\$0	\$460,461	0.6%
Solar Installations	\$129,177	\$0	\$129,177	0.2%
Roofing	\$42,707	\$0	\$42,707	0.1%
Furniture, Fixtures & Equipment	\$80,245	\$0	\$80,245	0.1%
Buses	\$0	\$2,876,048	\$2,876,048	4.1%
Total Bond Fund Projects	\$54,035,972	\$16,933,366	\$70,969,338	100.0%
Sinking Fund Projects	FY21/22	FY20/21	Total	% Total
Construction	\$2,748,952	\$4,397,222	\$7,146,174	30.5%
Theater Improvements	\$2,382,473	\$0	\$2,382,473	10.2%
Roofing	\$1,748,459	\$1,897,263	\$3,645,722	15.6%
Site Improvements	\$1,215,248	\$5,781,285	\$6,996,532	29.8%
Solar Installations	\$374,456	\$840,227	\$1,214,683	5.2%
Professional Fees	\$359,280	\$1,032,034	\$1,391,314	5.9%
Land	\$0	\$636,183	\$636,183	2.7%
Legal, Permits, Other Fees	\$0	\$31,422	\$31,422	0.1%
Total Sinking Fund Projects	\$8,828,868	\$14,615,635	\$23,444,503	100%

Capital Program Financial Update

TOTAL CAPITAL PROGRAM EXPENDITURES
\$94,413,841



Capital Program Investments by Category – Cumulative

Capital Program Expenditures: FY21 & FY22				
Expense Category	Bond Fund	Sinking Fund	Total	% Total
Construction	\$48,089,547	\$7,146,174	\$55,235,721	58.5%
Professional Fees	\$13,260,155	\$1,391,314	\$14,651,469	15.5%
IT Infrastructure	\$3,508,670	Not Allowed	\$3,508,670	3.7%
Theater Improvements	\$0	\$2,382,473	\$2,382,473	2.5%
Land	\$1,008,096	\$636,183	\$1,644,279	1.7%
Legal, Permits, Other Fees	\$1,514,233	\$31,422	\$1,545,655	1.6%
Site Improvements	\$460,461	\$6,996,532	\$7,456,994	7.9%
Solar Installations	\$129,177	\$1,214,683	\$1,343,860	1.4%
Roofing	\$42,707	\$3,645,722	\$3,688,428	3.9%
Furniture, Fixtures and Equipment	\$80,245	Not Allowed	\$80,245	0.1%
Buses	\$2,876,048	Not Allowed	\$2,876,048	3.0%
Totals By Fund	\$70,969,338	\$23,444,503	\$94,413,841	100%

Capital Improvement Program	
Two Year Cumulative Total Investments 7/1/2020 – 6/30/2022	
Bond Funds	\$70,969,338
Sinking Funds	\$23,444,503
Subtotal Capital Investment	\$94,413,841
Ongoing Repairs from Sinking Funds	\$32,378,733
Cumulative Total Investments	\$126,792,574

Capital Program Property Acquisition Update

Property acquisition play an important role in meeting the commitments of the capital program. During the course of due diligence to date, the following property acquisitions were deemed to provide the most value to the District.

3700 Earhart Road Property This acquisition fulfills a critical District need for additional space in the northeast sector for District and Community functions dedicated to Children, Families and Community. Functions will include Early Childhood and Family Programs, Rec / Ed Early Childhood Programs, Parenting and Family Classes, Adult Enrichment Classes, a Parent Welcome Center, dedicated Professional Development space, Meeting and Training space for Staff and the Community, and Office Space.

Total Acres: 16.64

Purchase Amount: \$17,000,000

Closing Date: 12/5/2022



2862 Stone School Road Property is located adjacent to the existing Pathways to Success Academic Campus. This strategic property acquisition will be utilized for the new building, scheduled for a construction start in 2024.

Total Acres: 2.65

Purchase Amount: \$965,000

Closing Date: 12/2/2021



Capital Program Property Acquisition Update

Previous Acquisitions

2600 Nixon Road is located adjacent to the existing Clague Middle School campus. This strategic property acquisition will be utilized for a new elementary school building, schedule for construction start in 2025.

Total Acres: 1.760
Purchase Amount: \$850,000
Closing Date: 2/22/2019



2700 Nixon Road is located adjacent to the existing Clague Middle School campus. This strategic property acquisition will be utilized for a new elementary school building, schedule for construction start in 2025.

Total Acres: 1.285
Purchase Amount: \$707,472
Closing Date: 2/18/2020



2081 Ellsworth Road is located adjacent to Bryant Elementary School. This strategic property acquisition will be utilized to support future capital improvements.

Total Acres: 3.454
Purchase Amount: \$637,500
Closing Date: 9/15/2020



Upcoming Major Project Planning

School	Phase 1				Phase 2						Phase 3
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031/2040
Dicken Elementary (3)				Planning	New Construction (Staging Not Required)						
New Logan Elementary				Planning	New Construction (Staging Not Required)						
Thurston Elementary (18)				Planning	New Construction (Staging Not Required)						
Slauson Middle School (16)				Prep	Major Modernization (Staging Not Required)						

2025 Construction Starts

Thank you to the Ann Arbor Community for
the support of this work.



For more information on the
AAPS Capital Program
please visit:
www.a2schoolsbond.org