1500 Mississippi Avenue SE , Washington DC 20032 DCAM-23-CS-RFP-0005



U.S. Commission of Fine Arts - CONCEPT DESIGN SUBMISSION











INTRODUCTION

EXISTING CONDITION

CONCEPT DESIGN

MALCOLM X ELEMENTARY SCHOOL MODERNIZATION

CONCEPT DESIGN SUBMISSION

1500 Mississippi Avenue SE, Washington DC 20032

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#### Existing Malcolm X at Green Elementary School

The existing school located at 1500 Mississippi SE, Washington DC was originally named for Mildred Green a native Washingtonian who graduated from Central High School, Wilson Normal School (DC Teachers College now the University of the District of Columbia) and George Washington University. Green served as a teacher and principal at numerous DC public schools and died in 1956. She was considered a master teacher and builder of character. The Green Elementary School was closed in 2008 was reopened and named for Malcom X a prominent national civil rights activist in the 1960s. The existing school consisting of an approximately 63,400 gross square foot school building was constructed 1963 – 66, opening on January 31, 1966. The building was designed for the District of Columbia Department of Building and Grounds by McLane and Chewing Architects and Engineers. The building design aesthetic is mid-century modern which was popular in school design nationwide at the time. Several DCPS school buildings constructed at the time throughout the city are similar in plan and design. A third-floor addition the west wing was planned in 1966 and constructed shortly thereafter.

The school campus covers a small portion of a large primarily wooded sloping site currently jointly owned by the District of Columbia and the National Park Service. The school campus rests on a flat graded portion of the sloped site approximately ten feet up from Mississippi Avenue. Single and duplex residential structures are located to the east across 15<sup>th</sup> Street. Large- and small-scale apartment blocks are located to the north. Oxon Run Park and Oxon Run are directly across Mississippi Ave to the south. There are two small single-story structures to the west serving Metro's green line tunnel below.

The building is comprised of a two-story academic wing fronting 15th Street SE to the east and a three-story academic wing fronting Mississippi Street SE to the south. The two academic form a 'V 'shape with the nodal point between the two oriented to the southeast intersection of 15<sup>th</sup> Street and Mississippi Avenue. This node forms the main School entrance on the first floor with stair and ramp access from Mississippi Avenue. The building and entrance are raised up from Mississippi Avenue approximately ten feet. There is a large single story multi-use space with stage programmed for student dining, gymnasium, performances, and gatherings to the rear aligned with the main entrance. Administrative staff, teacher and visitor parking is located at the north side of the site behind the building accessed from 15<sup>th</sup> Street. Playgrounds and playfields are located west of the existing building. A small outdoor space and playground for toddlers and infants parallels the east wing on the 15<sup>th</sup> Street side of the building.

The existing building structure is formed concrete except for the third floor of the west wing addition which is steel framed. Due to poor soils conditions at the site, the entire structure rests on drilled cast concrete and driven steel piles and formed concrete pile caps and grade beams. The building exterior at the academic wings and multi-purpose structures are typically comprised of low masonry walls with continuous ribbon windows allowing for ample natural light into classrooms while offering views of the forested hillside to the north and the Oxon Run Park to the south. Long double loaded interior corridors extending out from the building entry hub connecting individual classrooms the length of the academic wings. Administrative areas, offices and the kitchen are collocated near the first-floor building entrance. The school library is located on the 2<sup>nd</sup> floor over the main entrance. The existing exterior windows and doors were replaced in the mid 2020s with modern high performing aluminum equivalents. Membrane roofing over the flat roofs of the academic wings has been replaced as required over time. The membrane sloped roofing on the multi-purpose space has also been replaced as required.

MALCOLM X ELEMENTARY SCHOOL MODERNIZATION

The building is in good overall condition but, has not received any major renovations or modernizations since it was constructed other than the third-floor addition to the academic west wing constructed in 1966. The building systems including mechanical electrical AV/IT, and fire annunciation systems were upgraded in the middle 2020s. There is no fire suppression system throughout the building. An elevator serving three floors was added in 2023. Building services are located throughout the building and in an existing lower level accessed from the exterior and from within the building interior.

#### Planned Modernization and Additions

The District of Columbia Public Schools program requirements for the modernization of Malcolm X anticipates an enrollment of 275 students with a proportional amount of faculty and staff. Given the proposed project program requirements for a 21st century school the existing building cannot support the program requirements within the existing building envelop necessitating the need for a new addition(s). The existing building is approximately 63,400GSF including the lower-level building service spaces with proposed additions of approximately 20.000GSF.

The planned additions envisioned support expanded administration spaces, classrooms, student dining, and gymnasium programs. The planned additions are located to the southeast of the existing east academic wing along 15<sup>th</sup> Street to support administrative functions, south and north of the west academic wing to support academic classroom functions and to the west of the existing building to support gymnasium and student dining functions in the available open space currently dedicated to outdoor play areas.

Based on the narrow width of the existing building and the increased program areas for modern classrooms modest bay additions are planned at the north and south facades of the existing west academic wing. New exterior building openings will be complimentary in size and rhythm of the windows in the existing building facade. A similar single-story addition to the east academic wing serving administration and expanded entrance program functions is planned at the southeast facade of the east wing. The location main school entrance is retained. A broad canopy over the entrance and adjoining pedestrian space is planned.

The existing multi-purpose space to the north cannot serve the program requirements of a fully modernized elementary school and bisects the site into two distinct areas compromising visual connectedness and security. Given its size and location the envisioned design plans for its demolition. The gymnasium addition visible along Mississippi Avenue is envisioned as a tall single-story volume designed to respectfully maintain the scale of the original school building. The addition is pulled away from the existing building to create relief between the structures and maintain the existing building envelope and to retain daylight and views into functional program spaces within the existing building and new additions. Clerestory windows into the gymnasium allow for natural light and limited views into and from the gymnasium. The glazed north wall of the gymnasium stage faces the outdoor play space between the proposed gymnasium and the student dining creating a double-sided stage for performance and play. The fully glazed south wall of the student dining faces the proposed open outdoor court intended for dining and play. Both spaces are planned to be available for independent community use after school hours.

By envisioning the additions as separate volumes independent of the existing building the size and scale does not overwhelm the existing building, allowing for alternate aesthetic expression and creates valuable open space on the site allowing for possible independent use. The impact on the existing building is minimized and construction activities may be simplified.

The proposed exterior building materials including brick and exterior high-performance paneling are intended to provide a contemporary interpretation of the original building materiality. Selected patterns and colors are intended to harmonize with the existing natural site setting. New fixed and operable aluminum framed windows, storefront and doors include projecting horizontal and vertical shading devices designed to further support net-zero energy goals.

The project plans to modify and reuse the existing metal screen walls surrounding new roof mounted high performance mechanical units supporting modern HVAC and emergency systems. The existing screen walls around units will be reduced in size to the minimum size required and will minimize views and sound migration into the surrounding neighborhood.

A high efficiency mechanical system is planned which will be supported by a geothermal well field consisting of approximately 130 wells located to the north and west of the existing building and planned additions. To achieve net-zero energy use requirements photovoltaic panel arrays are planned to be installed on the east wing roof and roofs of the new additions. The existing structure of the west wing has insufficient loading capacity to support the addition of any PV arrays. The existing hillside north of the building will support additional ground mount PV arrays the number of which is currently being determined dependent on the building envelope performance, planned occupancy the mechanical and electrical systems efficiency and projected costs. The PV arrays are to be provided and installed by a different entity contracted directly by the District of Columbia under a Power Purchase Agreement (PPA).





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### **PROJECT DESCRIPTION**

#### **Existing Building Facade Improvements**

The existing building façade is comprised of a four-inch brick course over a four-inch course of concrete block supported off the face of the existing concrete frame. There is no insulation. Deterioration to the northeast end of the east wing, the west end of the west wing and around the main building entrance has occurred necessitating the construction of new metal paneling overlay to cover deteriorated conditions and to prevent further deterioration. The existing aluminum frame windows while relatively new do not meet current energy requirements for either the frames or the glass. The District of Columbia's program for the modernized school requires that the completed project meet net-zero requirements for energy use and that the Energy Use Intensity (EUI) which refers to the amount of energy used per square foot annually meet an aggressive EUI 20 goal. The design build team has explored multiple options to improve the existing building envelop by adding insulation to the exterior and or interior sides of the walls and has determined that the most efficient approach is to remove the existing windows, doors and exterior walls and replace them with new walls and fenestration that combine high insulation thermal values and minimal air leakage. Refer to the included "Building Demolition Summary" which provides additional detail descriptions of the existing conditions and design approach.

#### **Recommended Building Design Objectives**

- Achieve Net-Zero energy use and achieve LEED Gold Certification.
- Maximize the efficient use of the existing building.
- Continue to utilize the east and west academic wings use given the current functional size of the existing structure and the considerable amount of windowing for natural light and view and to take advantage of the existing views to the forested site and Park. The increase in the size and number of classrooms necessitates reconfiguring the west wing by adding bay additions to the north and south sides.
- Remove the existing Multi -Purpose space to support outdoor spaces and access.
- Locate two new single-story connected additions for Student Dining and Gymnasium functions west of the existing academic wing along Mississippi Avenue Street in the area of the existing playgrounds. The new additions are separated from one another to create an outdoor activity and student dining space between the two and to allow views and access to the existing building and site to the east. The planned additions are sited and designed to allow of independent neighborhood use of the gymnasium and student dining spaces during non-school hours while maintaining the school security envelope.
- The main school entrance remains in its current location off Mississippi Avenue.
- Reduce parking for administration and staff is located to the rear north side of the building.
- Provide a secondary entrance off Mississippi Avenue to allow after school use of the student dining and gymnasium spaces.

#### Site Design and Improvements

A new broad terrace is planned at the front entrance including the addition of connecting walks to improve site access from 15<sup>th</sup> Street and Mississippi Avenue. The existing parking lot will be retained but substantially reduced in size to meet current zoning regulations. A loading dock for deliveries - accessed from 15th Street - and at grade enclosure for trash and recycling are both planed to be located adjacent to the new cafeteria. The proposed design seeks to improve the pathway and building entrance at the north side of the building for teachers and administrative staff parking in the parking lot. Outdoor space between the new additions and north of the existing building are envisioned offering opportunities for enhanced outdoor classrooms for instruction, gardening, and play. Refer to the included "Site Design Narrative" which provides additional detail descriptions of the existing conditions and design approach.

#### **Recommended Site Design Objectives**

- Maximize the amount of outdoor space available for school, playground, and open space. Minimize surface parking to the extent possible.
- Preserve the existing site and playground features that are compatible with the new school construction and replicate those site and playground features that are disturbed by new school construction.
- Allow controlled access to gymnasium addition for after -hours neighborhood use while maintaining school security envelope.
- Organize new addition(s) to create a campus like environment with outdoor rooms for instruction and play.
- Provide perimeter security at the site while allowing convenient community access.
- Provide for safe and efficient arrival and departure elements, including additional onsite accessible pedestrian walkways connected to public walks and provide for curbside vehicular drop-off / pick up zones if possible.
- Create a more pedestrian friendly entrance(s) to school for arriving students and visitors from Mississippi Avenue and 15th Street and from the parking lot for teachers and administrative staff.
- Relocate and reuse existing serviceable play structures that may be displaced by new construction
- Locate Pre-K kindergarten and CDC playgrounds immediately adjacent to planned classrooms
- Create demonstration rain garden, storm water facilities, vegetable, herb, flower, and butterfly gardens. All areas are to be used for school environmental stewardship program with the possibility of controlled neighborhood access.
- Provide for efficient site lighting that allows for necessary evening access and security while minimizing night lighting migration into the adjacent residential neighborhood and importantly the forested and Park areas. Allow programmable site lighting operation to respond to seasonal and special operations conditions.
- Provide state of the art site environmental program, including preservation of existing open space to the extent possible; minimization of storm water runoff through use of permeable pavements, green roofs, school gardens and bio-retention facilities. Allow environmental facilities to be functionally visible so they can be incorporated into a site stewardship program for the school.

Milesto	ones	364	08/14/23A	03/15/27
M1000	Notice of Award	0	08/14/23A	
M1002	Letter Contract Issuance	0	09/26/23A	
M1005	Kickoff Meeting and NTP w/ Design & Preconstruction	0	10/03/23A	
M1009	Construction Management Plan Submission	0		10/23/23A
M1039	ESA 1 Submission	0	12/18/23A	
M1120	QAQC Plan Submission	0		12/22/23A
M1008	Building Systems Assessment Submission	0		01/22/24A
M1011	Concept Design & Budget Submission	0		01/22/24A
M1012	DGS Selection & Approval of Concept Submission	0	02/16/24A	
M1040	ESA 1-DGS Approval & NTP	0		04/12/24A
M1013	(35%) Schematic Design & Budget Submission	0		04/29/24A
M1014	DGS Review & Approval of Schematic Design	0	05/20/24A	
M1041	ESA 2 Submission	0	06/24/24	
M1015	(60%) Design Development Design & Budget Submission	0		08/05/24
M1016	DGS Review & Approval of DD Submission	0	09/05/24	
M1017	GMP Submission to DGS	0	10/11/24	
M1042	ESA 2 DGS Approval & NTP	0	10/16/24	
M1018	GMP APPROVED BY DGS	0	10/25/24	
M1029	Full Building Permit Submission	0	10/30/24	
M1030	(95%) Construction Document Submission	0		01/10/25
M1019	GMP APPROVED BY COUNCIL	0		01/17/25
M1050	Full GMP Construction Start	0	01/20/25	
M1031	BUILDING PERMIT ISSUED	0		01/21/25
M1060	Foundation Complete	0		05/28/25
M1070	Addition Top Out	0		08/05/25
M1080	Addition Dry-In	0		01/06/26
M1090	Substantial Completion & C of O	0		07/15/26
M1100	Final Completion	0		01/15/27
M1110	Administrative Completion	0		03/15/27



### MALCOLM X ELEMENTARY SCHOOL MODERNIZATION

1500 Mississippi Avenue SE, Washington DC 20032

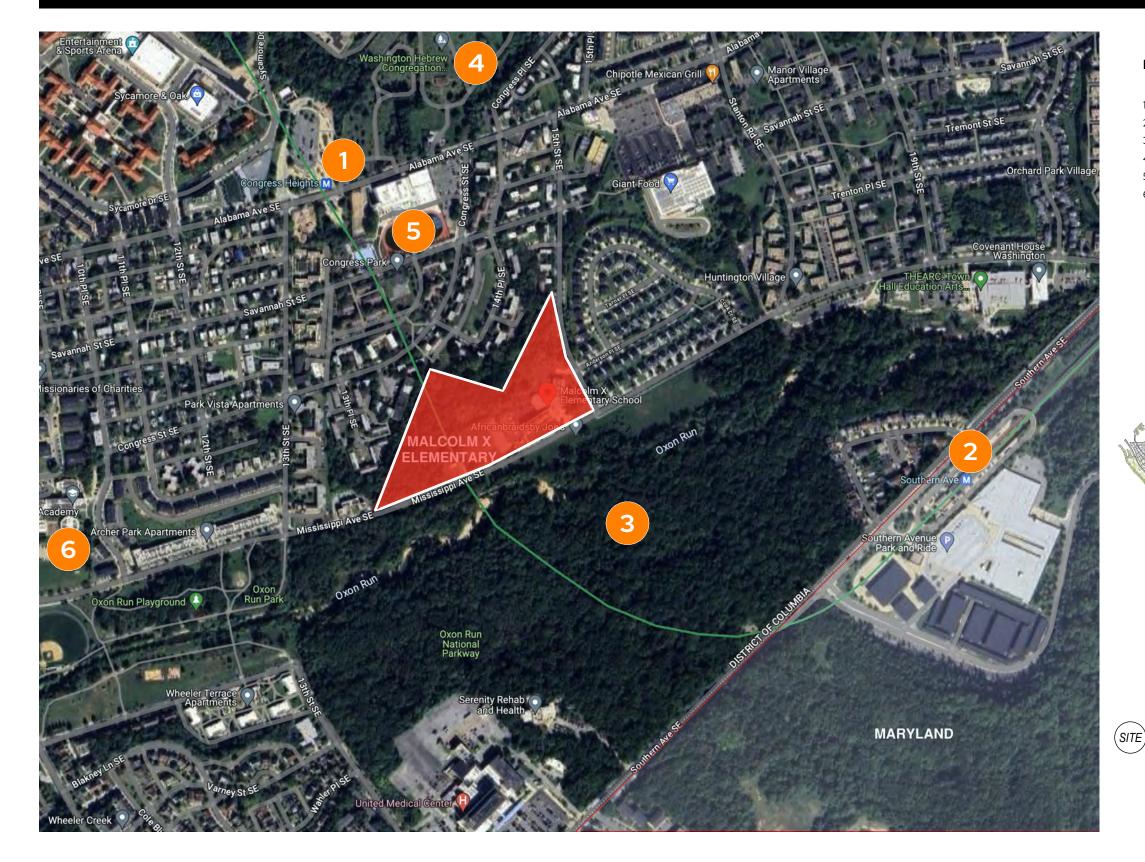
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### **PROJECT DESCRIPTION**

### **US Commission of Fine Arts** July 03, 2024







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## VICINITY SITE PLAN

05

#### **KEYED NOTES:**

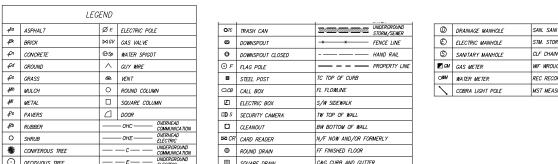
- 1 CONGRESS HEIGHTS METRO STATION
- SOUTHERN AVENUE METRO STATION 2
- OXON RUN NATIONAL PARKWAY 3
- WASHINGTON HEBREW CONGREGATION 4
- BARD HIGH SCHOOL EARLY COLLEGE 5
- 6 EAGLE ACADEMY



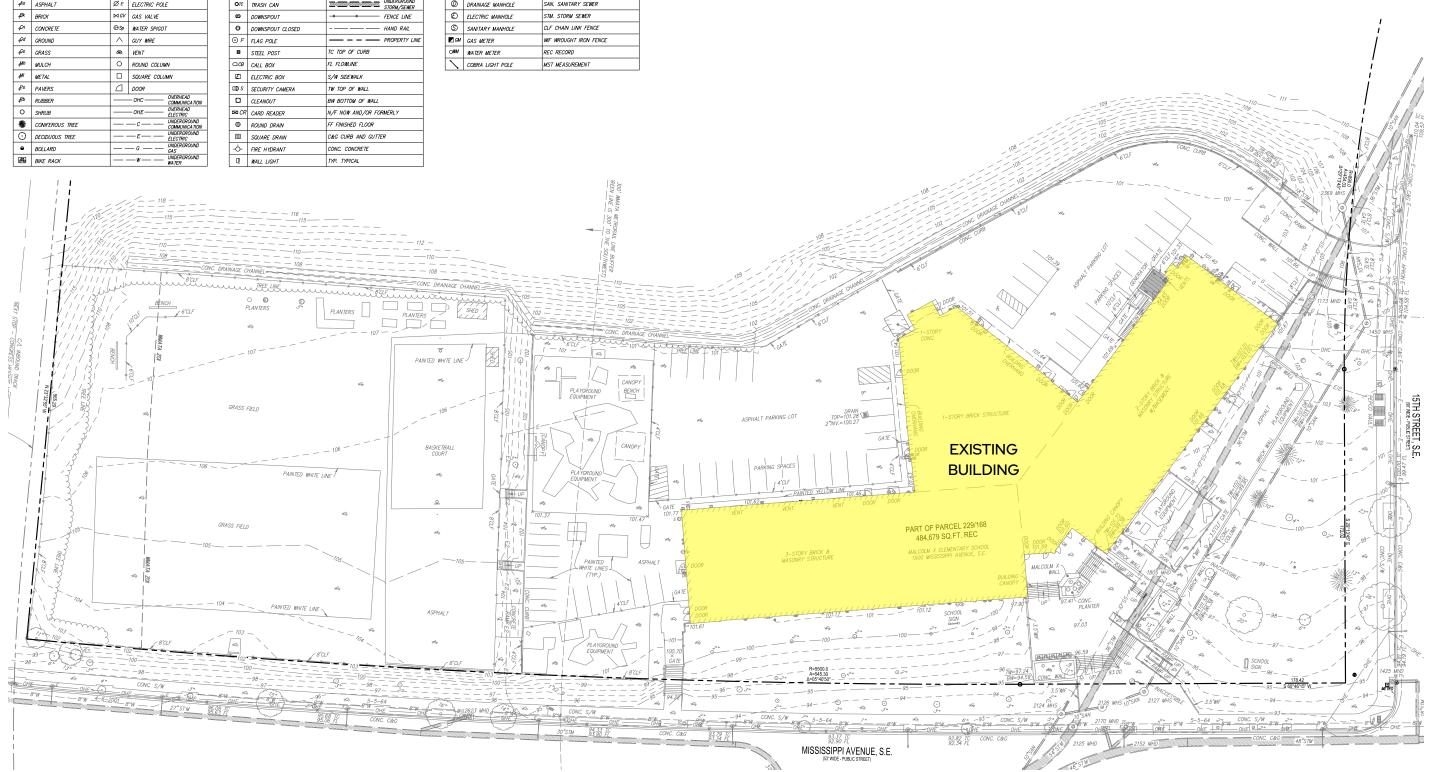
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Ø	DRAINAGE MANHOLE	SAN SANITARY SEWER
-	DRAINAGE MANHOLE	SAN. SANITART SEWER
Ð	ELECTRIC MANHOLE	STM. STORM SEWER
S	SANITARY MANHOLE	CLF CHAIN LINK FENCE
🗾 GM	GAS METER	WF WROUGHT IRON FENCE
OWM	WATER METER	REC RECORD
	COBRA LIGHT POLE	MST MEASUREMENT



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### PARTIAL EXISTING SITE PLAN

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### EXISTING BUILDING PHOTOGRAPHS - EXTERIOR



West Wing from MIssissippi Avenue

Main Building Entrance from Missisippi Avenue





**East Wing Rear Elevation** 



Cafetria Northeast Elevation



West Wing Rear Elevation

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East Wing Elevation from MIssissippi Avenue Entrance

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### EXISTING BUILDING PHOTOGRAPHS - EXTERIOR



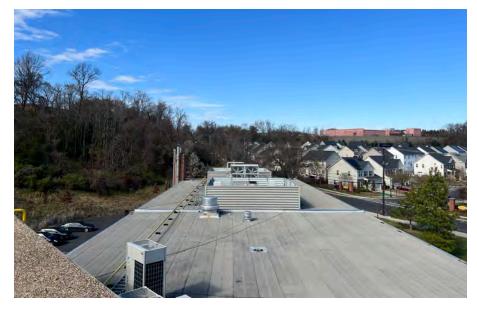




East Wing From 15th Street

Cafeteria North Elevation

East Wing North Elevation



East Wing Roof



Partial West Wing Roof



Partial West Wing Roof

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### **EXISTING BUILDING PHOTOGRAPHS - SITE**





West Playfields



North Hillside and Site Gutter



Parking and Site to Northwest from Roof

Site to North from Roof



Parking and Site to Northeast from Roof

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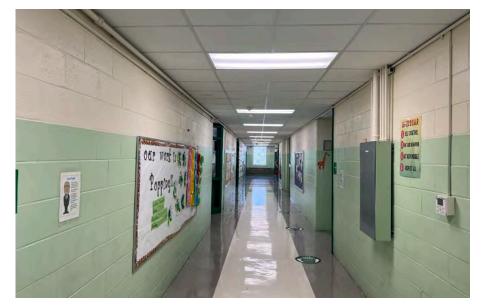






### EXISTING BUILDING PHOTOGRAHS - INTERIOR





**Typical Corridor** 



East Wing From 15th Street

Typical Classroom



Elevator and Classroom Entrance



Cafeteria



Kitchen

### MALCOLM X ELEMENTARY SCHOOL MODERNIZATION

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- 1. Main Entrance / Lobby
- 2. Academic Classrooms
- З. Cafeteria
- 4. Principal's Office
- 5. Administration
- 6. CDC program
- 7. Library
- 8. Break Room
- 9. Storage
- 10. Utilities
- 11. Elevator



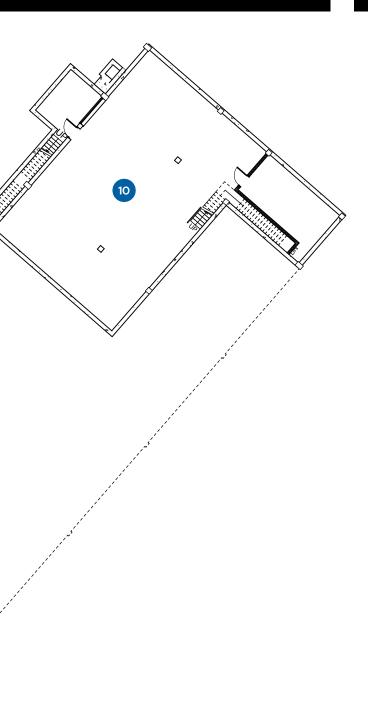
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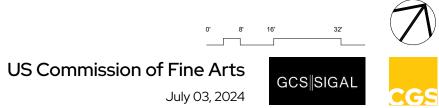
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### EXISTING LOWER LEVEL FLOOR PLAN





- 2.
- З.
- 5.

- 10. Utilities
- 11. Elevator



MALCOLM X ELEMENTARY SCHOOL MODERNIZATION

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### EXISTING FIRST FLOOR PLAN



- 1. Main Entrance / Lobby
- 2. Academic Classrooms
- Cafeteria З.
- 4. Principal's Office
- 5. Administration
- 6. CDC program
- 7. Library
- 8. Break Room
- 9. Storage
- 10. Utilities
- 11. Elevator

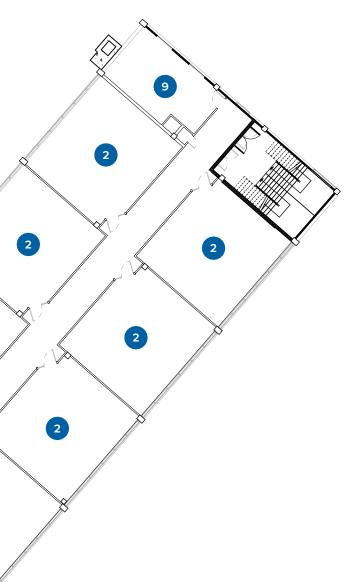


MALCOLM X ELEMENTARY SCHOOL MODERNIZATION

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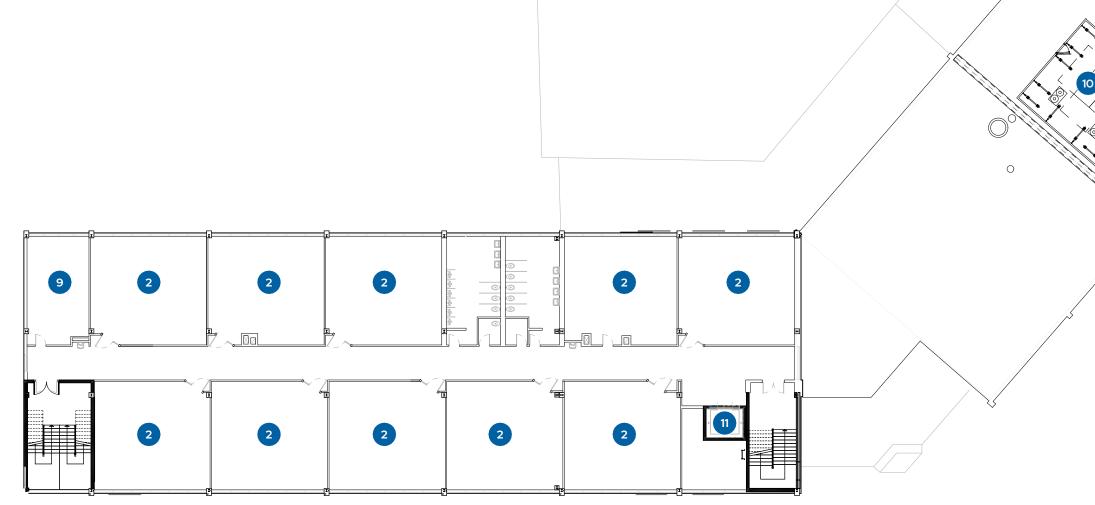
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## EXISTING SECOND FLOOR PLAN





- 1. Main Entrance / Lobby
- 2. Academic Classrooms
- Cafeteria З.
- 4. Principal's Office
- 5. Administration
- 6. CDC program
- 7. Library
- 8. Break Room
- 9. Storage
- 10. Utilities
- 11. Elevator



MALCOLM X ELEMENTARY SCHOOL MODERNIZATION

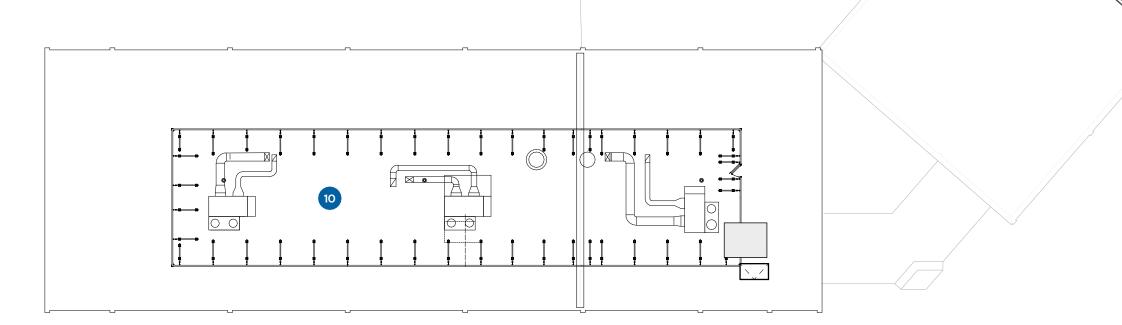
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## EXISTING THIRD FLOOR PLAN





- 1. Main Entrance / Lobby
- 2. Academic Classrooms
- 3. Cafeteria
- 4. Principal's Office
- 5. Administration
- 6. CDC program
- 7. Library
- 8. Break Room
- 9. Storage
- 10. Utilities
- 11. Elevator

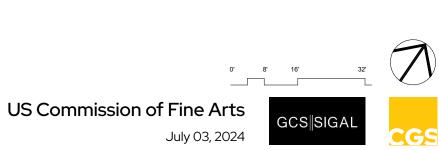


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# EXISTING ROOF PLAN





1. West Wing - Northwest Elevation



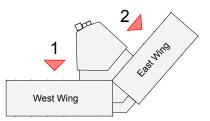
2. East Wing - West Elevation

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### EXISTING EXTERIOR ELEVATIONS



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3. West Wing - Southwest Elevation



4. East Wing - North Elevation

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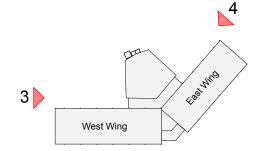
## EXISTING EXTERIOR ELEVATIONS

17

\_\_\_\_<u>\_</u>\_\_3rd Floor\_\_\_

↓ 2nd Floor

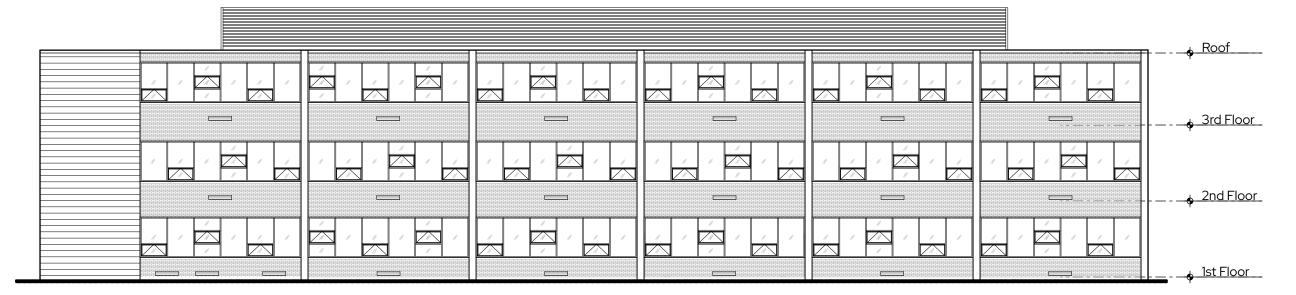
💧 1st Floor



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5. West Wing - Southeast Elevation



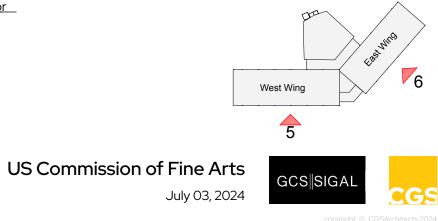
6. East Wing - East Elevation

MALCOLM X ELEMENTARY SCHOOL MODERNIZATION

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1500 Mississippi Avenue SE, Washington DC 20032

### EXISTING EXTERIOR ELEVATIONS



#### **BUILDING DEMOLITION SUMMARY**

#### **Building Structure**

The support structure of the existing east and west wings is comprised of concrete columns supporting concrete beams, joists floor and roof slabs. Due to poor soils conditions surveyed at the time the columns are supported on deep foundations comprised of concrete piles, pile caps and perimeter grade beams. The first floor is concrete slab on grade. The third floor of the west wing was added shortly after the original construction. The addition structure is concrete columns supporting steel roof beams, bar joists and insulated concrete on metal deck roof slab. Refer to the structural assessment and design narrative assessment narrative for more detailed description and evaluation of the existing structure.

Our proposed design schemes intend to remove the existing original one-story cafeteria/ auditorium/gymnasium located at the north side to the existing School. Portions of the existing concrete structure will be removed to allow for a proposed two-story lobby at the main entrance and for new mechanical, electrical and plumbing systems as required. The existing concrete Stair A at the west end of the west wing will be removed to allow for added program floor area.

#### **Exterior Walls**

A review of the original construction documents followed by confirming field observations the existing exterior masonry walls are comprised of exterior face brick with concrete block backup. Typically, low walls found in classrooms are 4" brick with an air space and 4" concrete block back up. At the ends of the east and west wings and at stairs the concrete block backup is 8". There is no insulation shown in the existing drawings. The original design included decorative precast concrete panels in lieu of brick at the ends of the east and west wings and framing the main building entrance. Over time the precast panels deteriorated and were removed and recently replaced with metal siding or cement panels both of which are present at the site.

Our team reviewed several options to insulate the existing exterior masonry walls including adding insulation at the interior or exterior faces of walls or adding insulation to both interior and exterior faces. Based on our analysis we have determined that none of the options considered meet the requirements for a Net-Zero project. Further, our team conducted a structural analysis of the existing low masonry walls in the typical classrooms which revealed that the existing walls do not have sufficient bearing capacity to support the existing windows per current building codes. If the existing walls remain and are modified, additional structural support will be required to meet current codes complicating design considerations.

Based on these factors we have determined that the existing masonry walls will be removed and replaced with new construction meeting building codes and Net -Zero requirements.

#### Fenestration and Doors

The existing windows and doors are recent replacements and are comprised of thermally broken aluminum frames with higher performance insulated glass.

#### Based on limited field observations the frames and glass do not appear to meet anticipated Net -Zero performance requirements. Further evaluation will be conducted as the design progresses but, for the concept design our intention is to remove and replace both windows and doors with higher performance alternates. Additionally, existing first floor window openings are protected with metal screening for intrusion protection. The concept design anticipates that new first floor glazing at windows and doors will be intrusion resistant type meeting DC requirements

#### Roof

The existing roofing at the existing east and west wings will be removed to allow for new roofing with high insulation values as required to meet current new construction building codes and Net -Zero requirements. Our team conducted a structural analysis of the existing roof structures of the east and west wings and determined that the east wing has sufficient capacity to support additional loading, but the west wing does not have capacity to support additional loads and is currently overloaded. Refer to the structural assessment and design narrative assessment for further information.

#### **Building Interior**

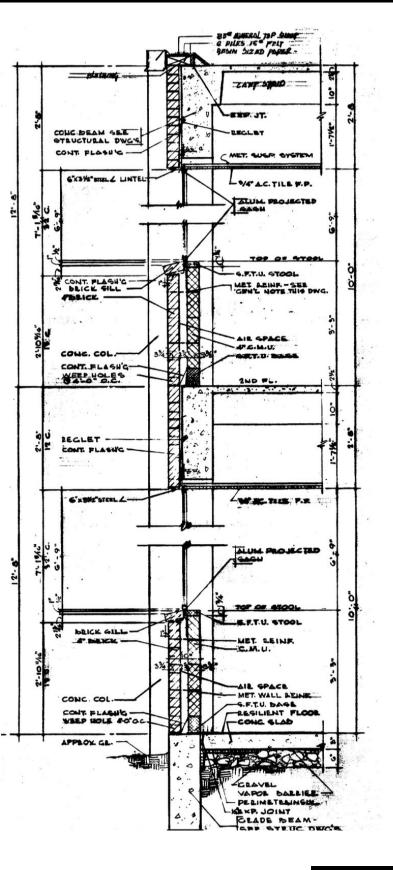
The existing interior partitions between rooms and corridors are primarily original painted concrete block with some added metal stud and gypsum board finishes. Flooring is comprised of VCT, LVT and ceramic tile at rest rooms and the kitchen. Ceilings are primarily recently replaced lay-in acoustic tile. Interior doors are primarily hollow metal with hollow metal frames. Based on the extents of the proposed modernization including added program, expanded program areas, acoustic requirements, new mechanical electrical, plumbing and the addition of new fire suppression and annunciation systems along with others our team has determined that all interior walls, ceilings, flooring, and support structures with be removed and replaced.

#### Mechanical, Electrical, Plumbing Systems

The existing MPE systems are comprised of some original components with recent upgrades including energy efficient HVAC and lighting systems. Based on Net-Zero energy use requirements the existing HVAC system will be replaced in its entirely. New electrical systems lighting and plumbing systems will also replace the existing systems. Some existing system components may be reused based on evaluations as the design process progresses. Refer to the mechanical, electrical plumbing assessment and design narrative assessment for further information.

#### Site

Existing site construction including concrete stairs, ramps, walks, asphalt drive and parking area will be remove as required based on all proposed concept design alternates. The existing recently installed playground equipment of all grades will be removed, stored, and reinstalled based on the accepted concept deign. Added playground equipment will be included as required per the accepted program or other considerations. Refer to the landscape assessment and design narrative assessment for further information



#### CONCEPT DESIGN SUBMISSION

### **BUILDING DEMOLITION SUMMARY**

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July 03, 2024





### **EXISTING CONDITIONS SITE NARRATIVE**

#### CONTEXT

Malcolm X Elementary School is situated along Mississippi Avenue, SE and 15th Street SE in Ward 8. The school is adjacent to Oxon Run and Oxon Run Park to the south and residential neighborhoods to the north, east and west. The property includes a large sloped wooded area along the west and north sides providing a thick vegetated buffer to the adjacent residential neighborhoods. 15th Street SE includes several large street trees while Mississippi Avenue, SE has smaller (younger) shade trees. Both streets have overhead power lines along the Malcolm X School side.

#### SITE

The existing site layout includes a concrete entry plaza with an ADA ramp. The plaza provides access from Mississippi Avenue. There is a +/- 5ft grade difference from the entrance elevation of the school's main entrance to that of Mississippi Avenue. A concrete ADA ramp was constructed in the past few years to provide required ADA access from Mississippi Avenue to the front entrance of the school. The CDC exterior playground is also located along the front of the school. This area is divided from the rest of the site by a short brick wall.

#### VEGETATION

The site includes a large sloped vegetated area along the north and west sides. While this area is not suitable for construction, this sloped area provides a natural buffer to the adjacent residential neighborhoods. At the base of the slope, there is a wide concrete swale which was full of water during the site visit, even though there had not been any rain for some time. This leads us to believe that there is groundwater in this area that needs to be taken into account should any construction happen along the base of the slope.

The site includes a few mature shade trees along the Mississippi Avenue and 15th Street corner. Only one of these trees is large enough to fall into the District's "special tree" category. Efforts to preserve this tree should be undertaken.

#### SITE AMENITIES

The school includes a 5-12 year and 2-4 year old playground along the east side of the school. While the playground equipment seems to have been installed recently and is in excellent condition, the rubberized surfacing is old and in need of replacement. The school grounds also include a small community garden area with a greenhouse and a natural grass field with a backstop. Along the rear (north of the school), there is an asphalt parking lot with access to 15th Street, SE. A 6ft tall chain link fence surrounds the field and rear of the school.

#### **PROPOSED DESIGN SITE NARRATIVE**

The three (3) proposed concept designs all focus on implementing a new and exciting site layout that works in unison with the proposed building design to enhance the everyday learning experience of the students and the work environment for the faculty. To this end, the proposed site design includes the following elements:

#### 1. ENTRY PLAZA

The concept plans include two (2) new entry plaza options. While different in appearance, the entry plaza options share the following common design intent:

- a. Incorporate a variety of seating options
- b. Saves the existing Special canopy tree at the front of the site
- c. Provides universal access
- d. Includes a proposed vehicular drop off along Mississippi Avenue

#### 2, PLAYGROUND AREAS

The concept for the playgrounds includes introducing three (3) new separate playground areas based on age groups (CDC, 2-4 and 5-12 years, respectively). Each of these play areas will include themed structures that match each other and a continuous resilient rubber surfacing for safe play. While a concept has not been selected at this point, it is contemplated that the playgrounds share a 'nature' theme. In addition to the play structures themselves, a traffic garden will be included to help students learn how to safely ride their bicycles within an urban environment.

#### 3. OUTDOOR CLASSROOM(s)

Along with the playgrounds, the students are encouraged to participate in outdoor learning. To this end, the site includes opportunities for more formal outdoor classrooms with the introduction of terraced seating and shaded areas with movable seating to provide a comfortable and dedicated area for both small and larger groups.

#### 4. FIELD and GARDEN

All three concept themes propose to keep the field as is since it is in relatively good shape. In addition, all three concepts incorporate a new garden area within the design, continuing this important outdoor activity for students.

#### 4. SUSTAINABILITY

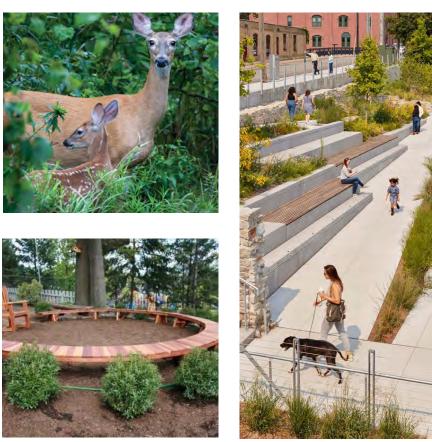
Incorporated within each of the above-referenced site elements, are the principles of sustainable site design which include: bio-retention areas with native planting, shade trees to reduce heat island effect and high SRI (solar reflective index) value paving materials. When combined with the sustainable practices being incorporated into the building, the site and building together perform at a high level of sustainability.

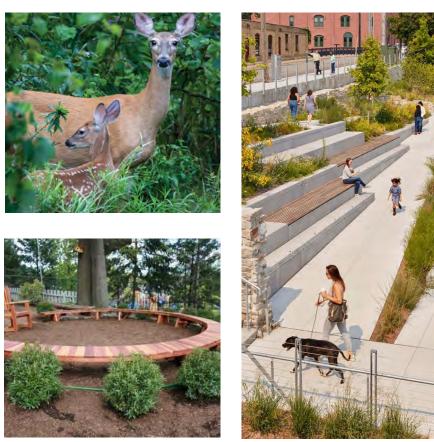
#### **BIOPHILLIC DESIGN**

Biophilla, or "the love of life or living things" explains our desire to connect with nature; that is, humans have an innate emotional bond to other living organisms and connections to nature are necessary for our survival due to its relationship to health. Extensive research finds in support of the health benefits include

- Decreased stress Enhanced learning
- Sensory Regulation
- Attention / focus / creativity

Biophillic design is largely focused on bringing nature elements inside buildings, yet it must be sensitively applied to outdoor spaces. Equally important as features of the physical interior, research also shows the positive impact that exteriors such as landscaping, gardens and courtyards can have on physical and mental health. As Malcolm X is sited between lush forested areas to the north west and south we envision a design which enhances the existing experience.





### MALCOLM X ELEMENTARY SCHOOL MODERNIZATION

Reduced blood pressure and heart rate

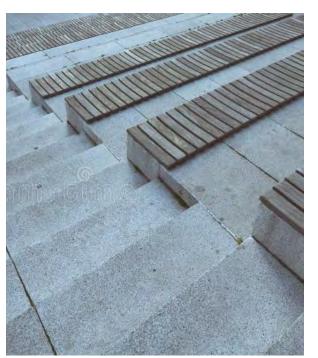
Increase social interaction and user comfort

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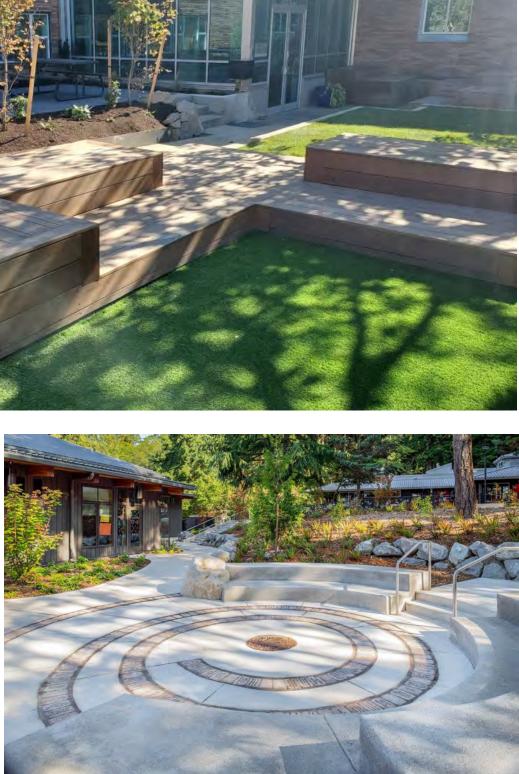












LANDSCAPE PRECEDENT IMAGES

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### PRECEDENT IMAGES

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LANDSCAPE PRECEDENT IMAGES

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### PRECEDENT IMAGES

















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LANDSCAPE PRECEDENT IMAGES

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### PRECEDENT IMAGES



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# Shrubs



Dwarf White Pine



Dwarf Southern Magnolia





Arrowwood Viburnum



Bee Bal





loe P

Inkberry



Black eyed Susan



Wild Bergamot

New England Aster



Pink Muhly Grass



Pennsylvania Sedge



Mexican Feather Grass



Weeping Love Grass

Tupelo





Trees

Dogwood

American Holly

Sweetgum

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MALCOLM X ELEMENTARY SCHOOL MODERNIZATION

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### **PRECEDENT IMAGES - PLANTING**



Winterberry





Bluestem Grass



Little Bluestem Grass

Blad Cypress

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### LANDSCAPE SITE PLAN

ECD PLAYGROUND AND OUTDOOR LEARNING AREA 1 -

ECD SECURE ENTRY

7FT PERIMTER FENCE AND GATED ENTRY AREA

1

GREENROOF

EXISTING SITE AND STREET TREES TO **REMAIN (TYPICAL)** 

ENTRY PLAZA ENTRY STAIRS AND SEATING TERRRACE

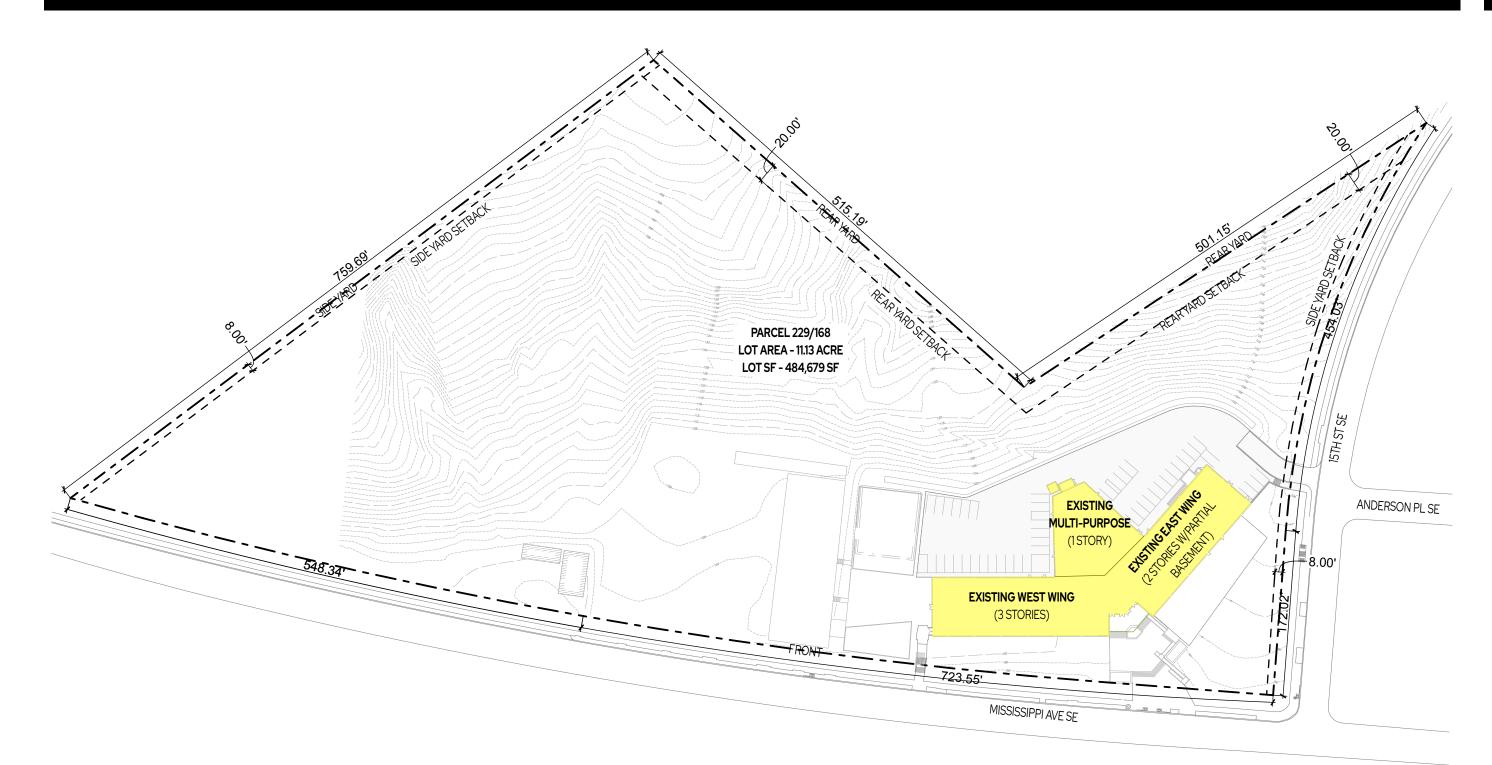
ADA RAMP TO MAIN ENTRANCE

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ZONING PLAN

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# SITE ANALYSIS

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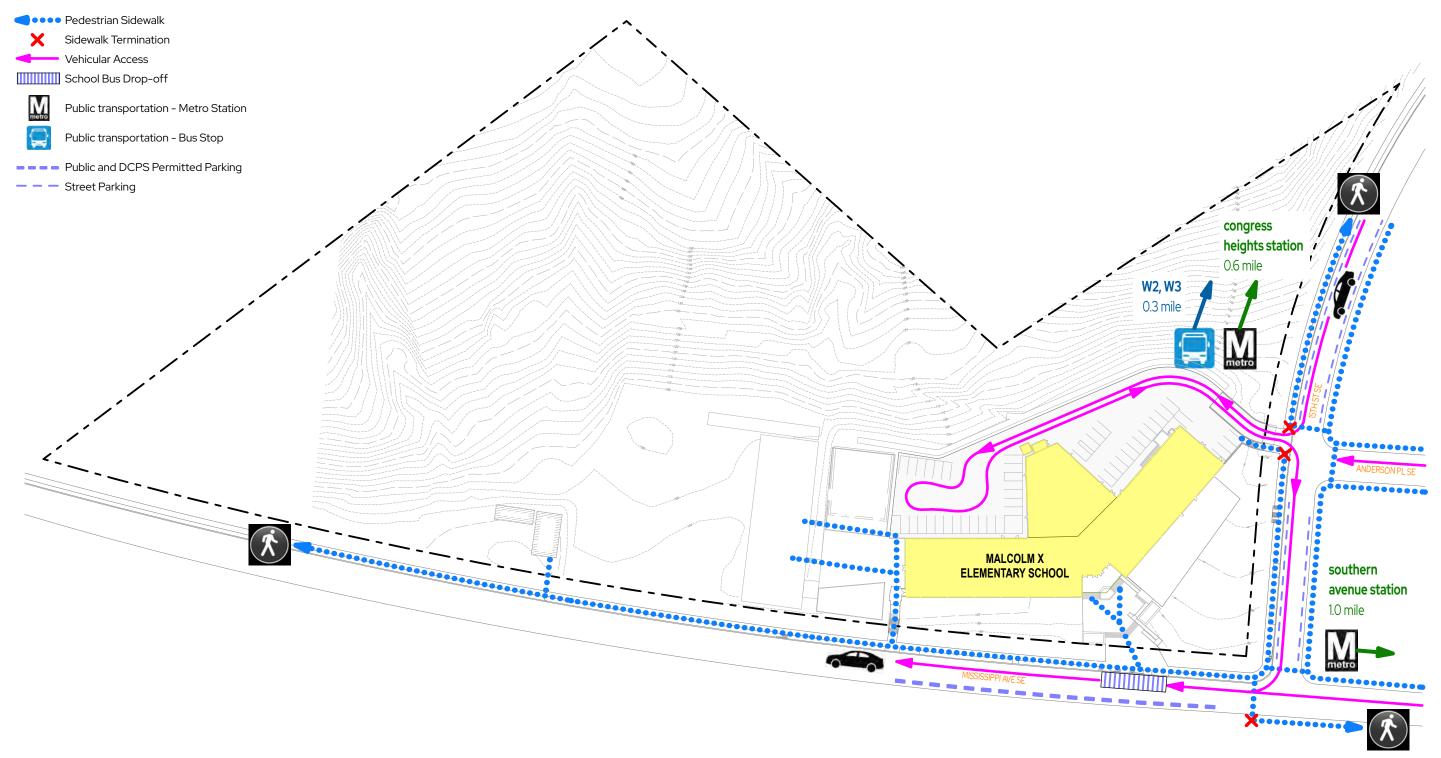
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#### LEGEND



### **CIRCULATION & ACCESS**

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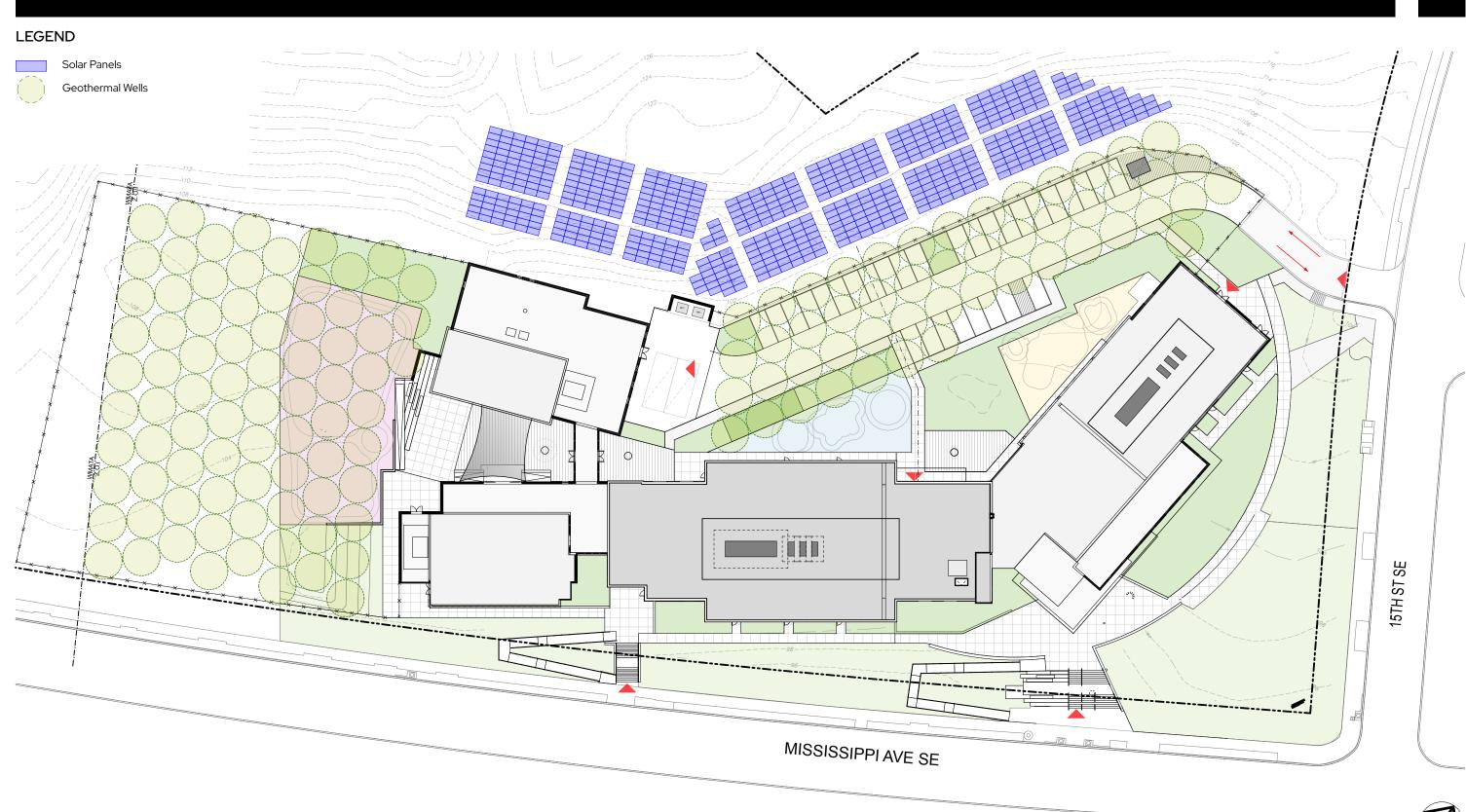
## CIRCULATION AND ACCESS

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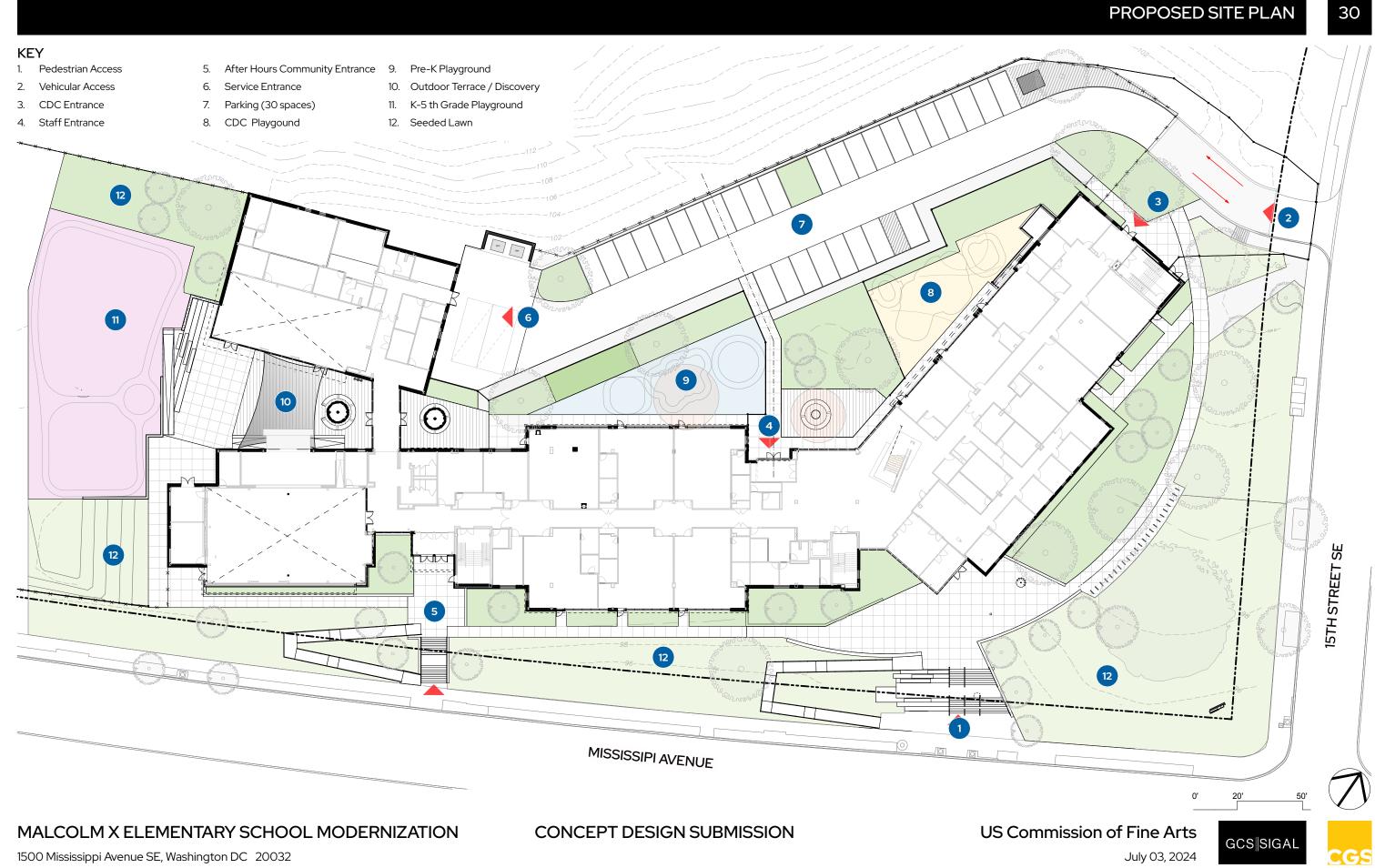
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### ENERGY INFRASTRUCTURE PLAN



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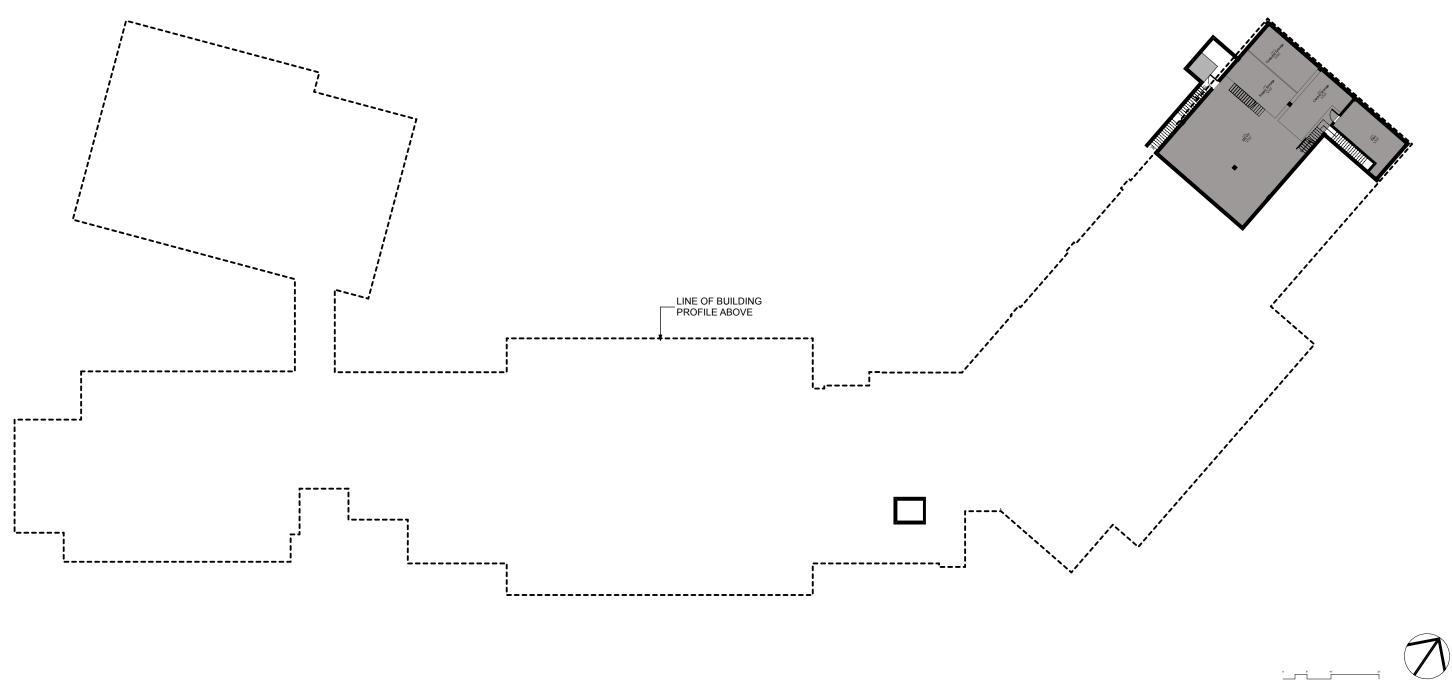




### PROPOSED SITE PLAN

#### LEGEND





### MALCOLM X ELEMENTARY SCHOOL MODERNIZATION

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### PROPOSED LOWER LEVEL FLOOR PLAN

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### PROPOSED FIRST FLOOR PLAN

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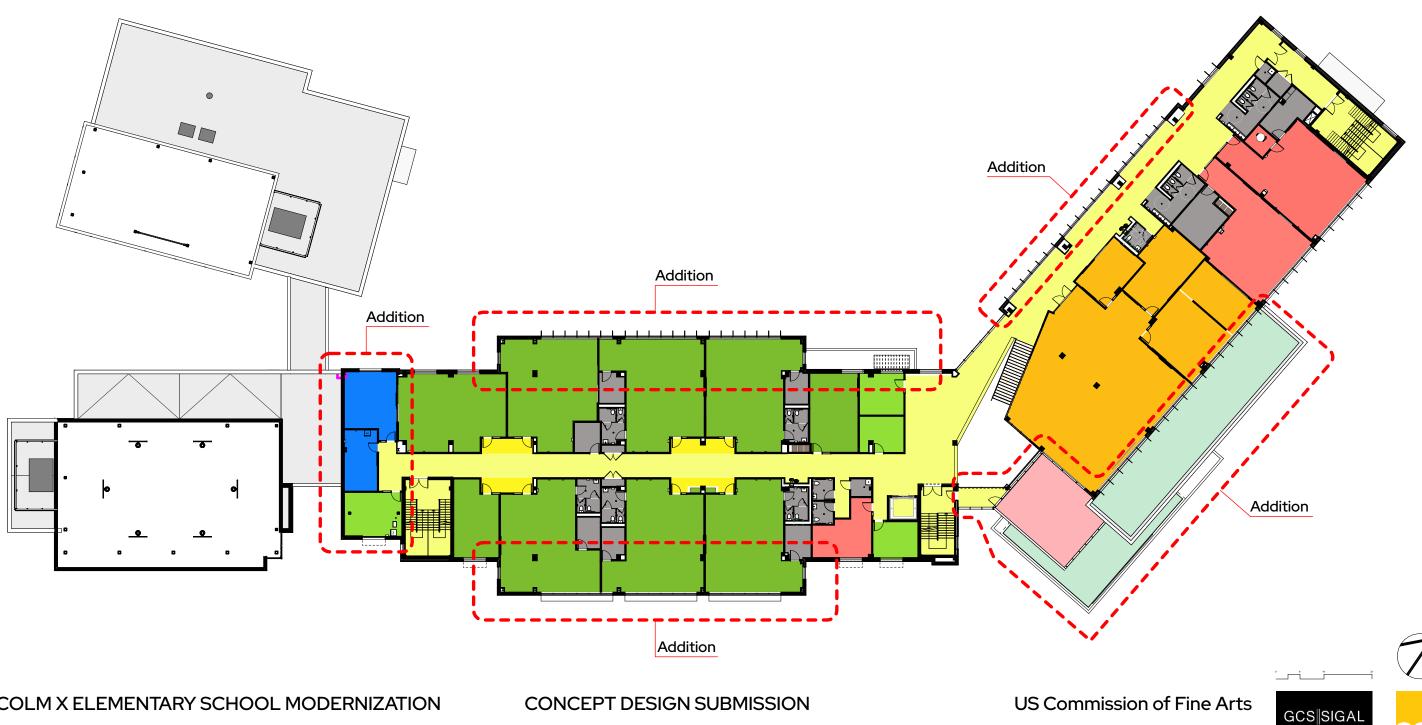
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### LEGEND





### MALCOLM X ELEMENTARY SCHOOL MODERNIZATION

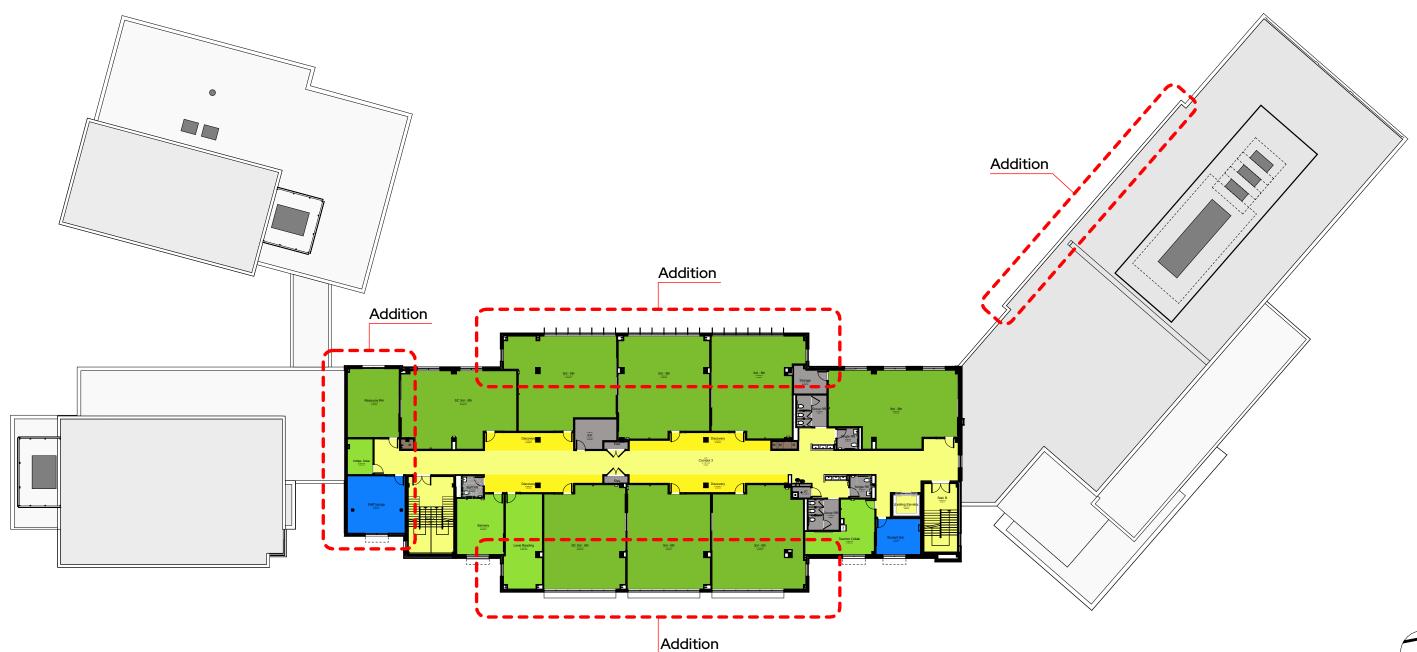
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# PROPOSED SECOND FLOOR PLAN

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### PROPOSED THIRD FLOOR PLAN

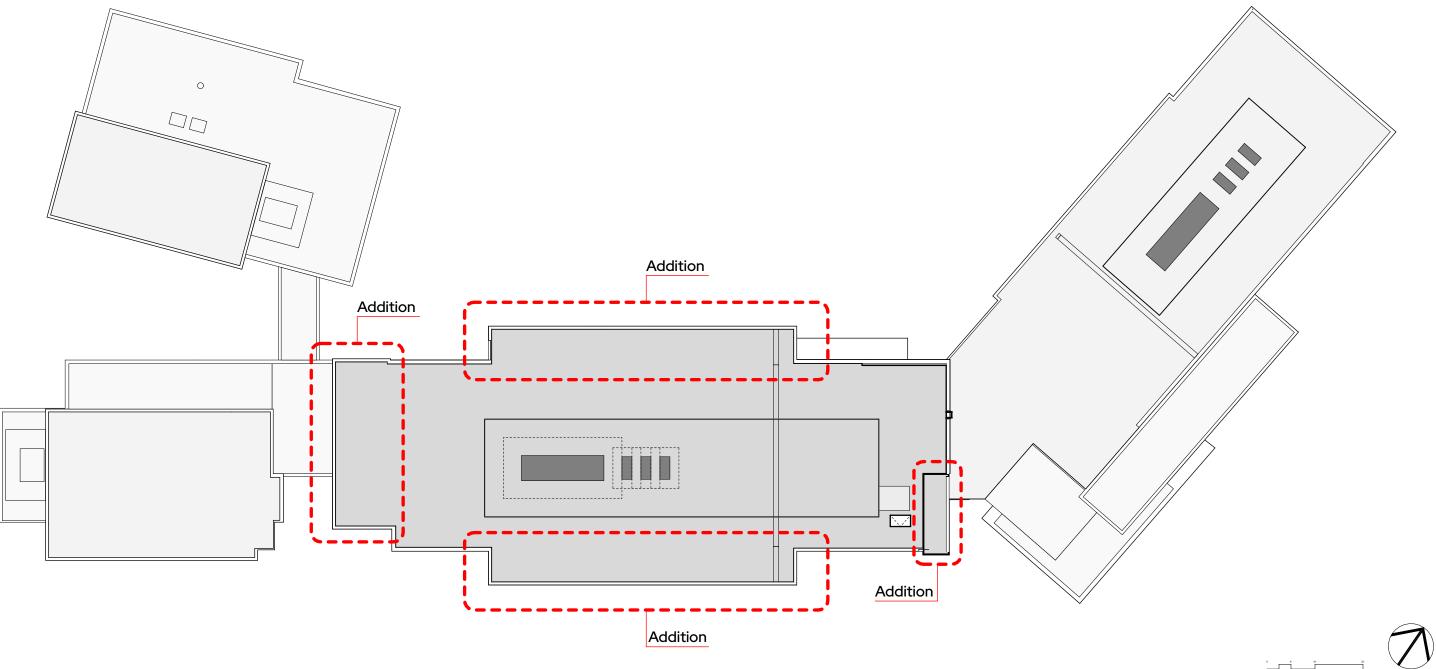


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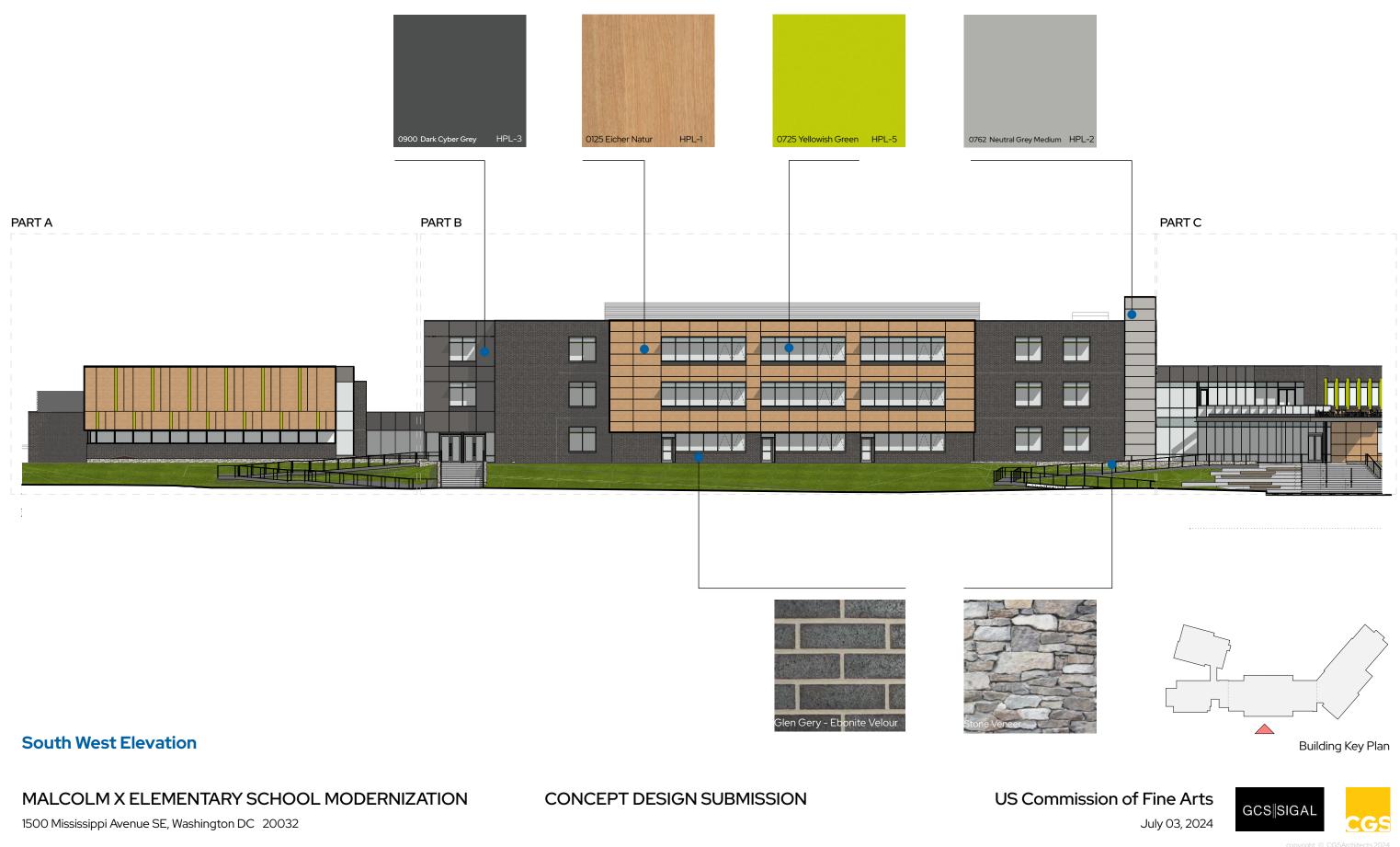
# PROPOSED ROOF PLAN

35

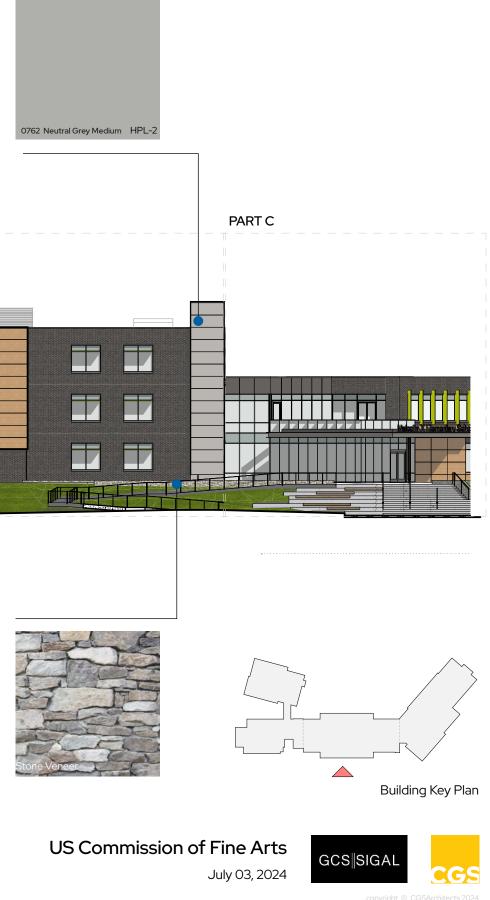












### PROPOSED PARTIAL ELEVATION







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## PROPOSED PARTIAL ELEVATION

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## PROPOSED PARTIAL ELEVATION

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# PROPOSED 3D MASSING

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#### Building Key Plan





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Stone Veneer

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**South East Elevation** 

Brick

## PROPOSED PARTIAL ELEVATION

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**Building Key Plan** 





CONCEPT DESIGN SUBMISSION

# PROPOSED 3D MASSING

Building Key Plan









Brick

#### **East Elevation**

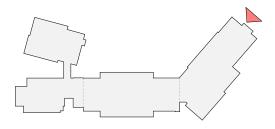
MALCOLM X ELEMENTARY SCHOOL MODERNIZATION

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# PROPOSED PARTIAL ELEVATION

42

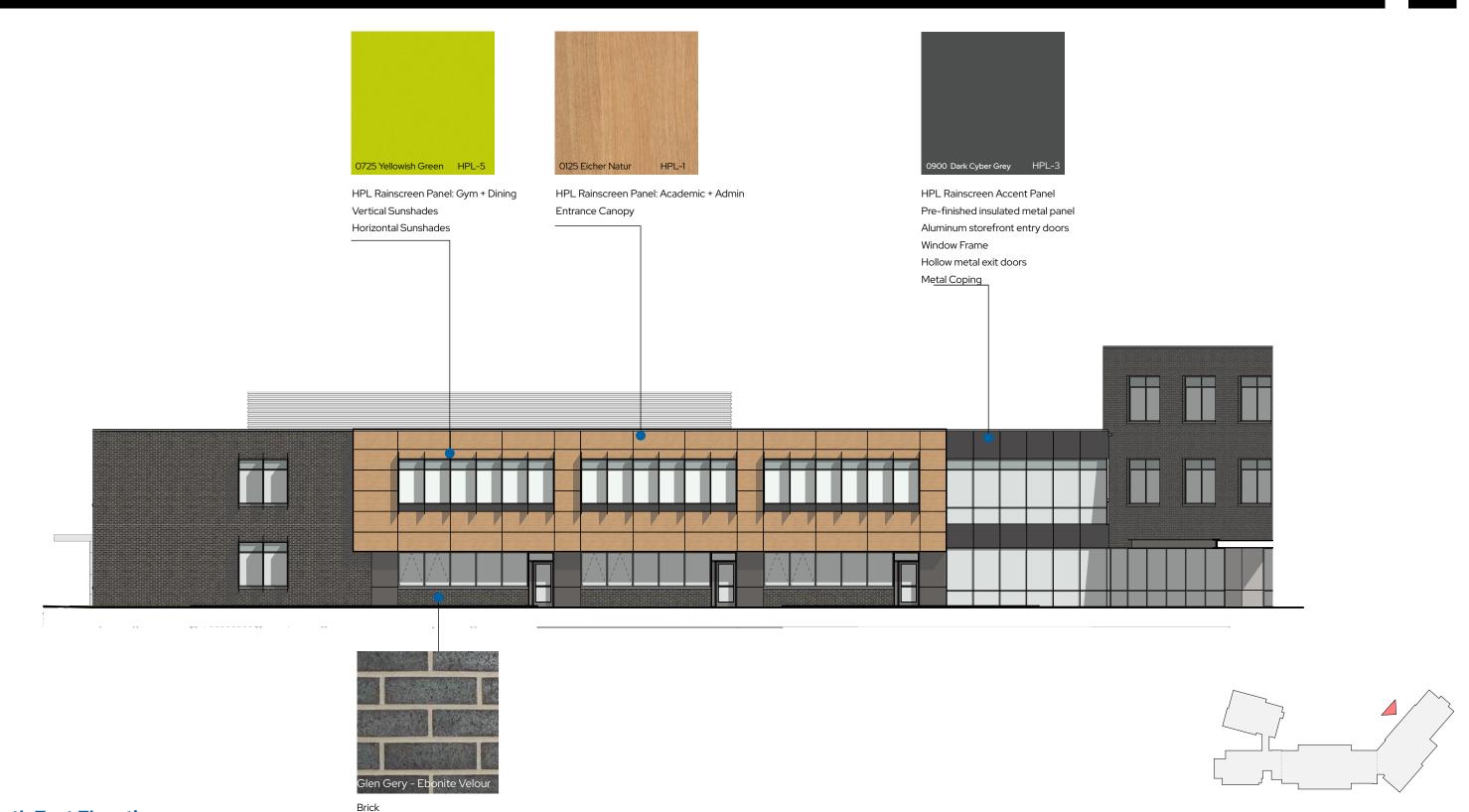


#### Building Key Plan





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**North East Elevation** 

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## PROPOSED PARTIAL ELEVATION

#### **Building Key Plan**





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#### West Elevation

#### MALCOLM X ELEMENTARY SCHOOL MODERNIZATION

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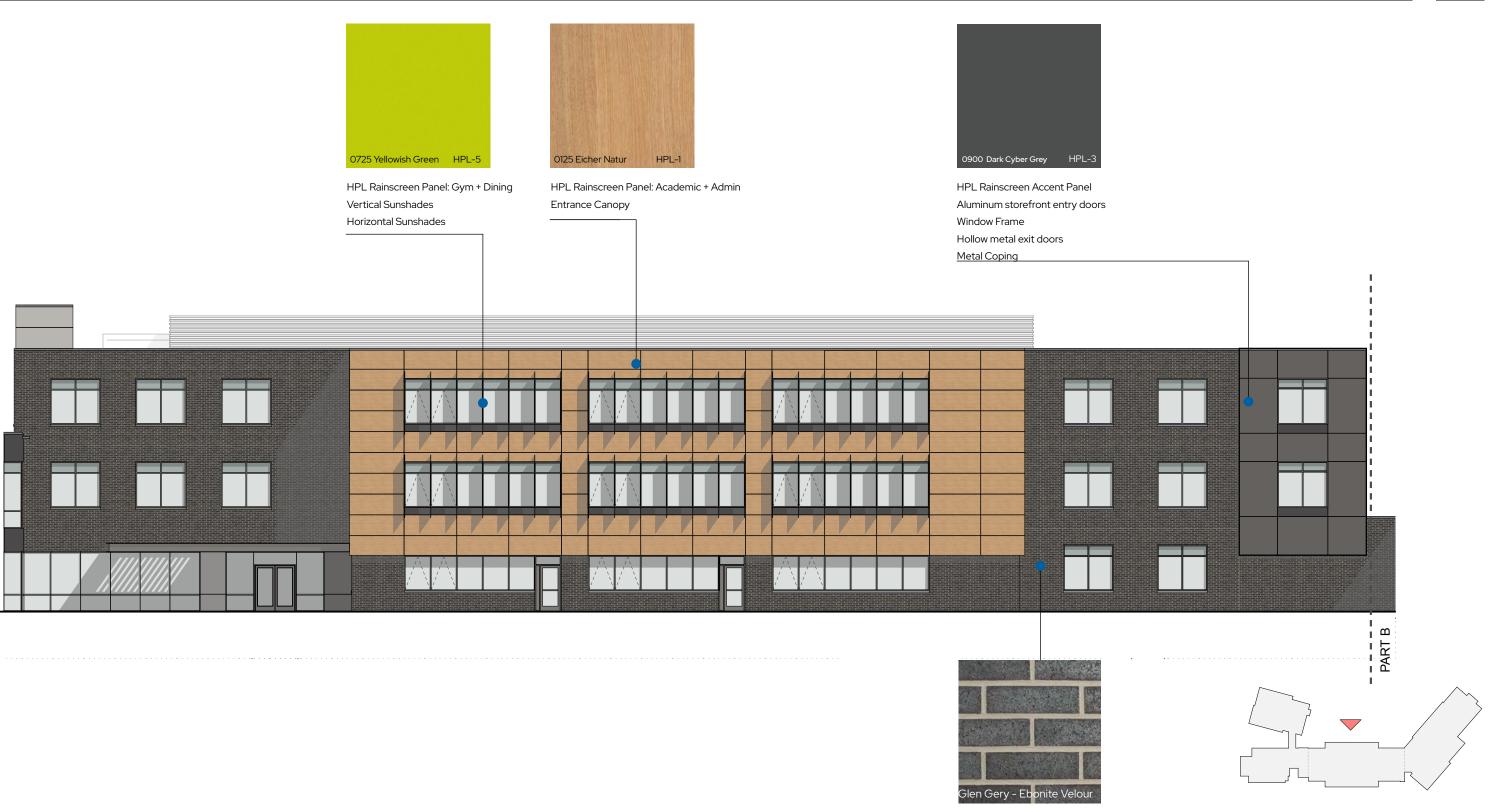
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# PROPOSED PARTIAL ELEVATION

**Building Key Plan** 

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Brick

Partial North West Elevation - PART A

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# PROPOSED PARTIAL ELEVATION

**Building Key Plan** 





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#### Partial North West Elevation - PART B

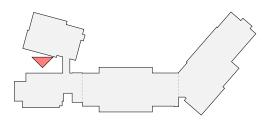
### MALCOLM X ELEMENTARY SCHOOL MODERNIZATION

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## PROPOSED PARTIAL ELEVATION

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**Building Key Plan** 





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# PROPOSED 3D MASSING

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GCSSIGAL



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## PROPOSED AERIAL VIEWS

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# EXTERIOR PERSPECTIVE VIEW

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# EXTERIOR PERSPECTIVE VIEW

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# EXTERIOR PERSPECTIVE VIEW

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### **PRECEDENT DESIGN IMAGES - EXTERIOR**



The project envisions a rich and diverse exterior material expression consisting of material, patterns and colors all found in nature with the intent to create calming and trans formative spaces echoing the unique natural beauty of the Malcolm X site. The contemporary palette consists of low-maintenance materials to ensure optimum performance over time and offer high-levels of weather and fire resistance.

Major material selections include brick, stone veneer and concrete contrasted by hi performance modern exterior cladding panels. The wall panel expression consists of generous areas that show case the natural warmth and beauty of wood as well as other colors found in nature.

Vertical and horizontal sunshades elements provide shade, reduce glare and save energy. These elements are envisioned as opportunities for bright accent colors. Generous windows and storefront extents are sensitively located to maximize daylighting and views in, out and through spaces while at the same time designed to support Net-Zero goals.





#### MALCOLM X ELEMENTARY SCHOOL MODERNIZATION

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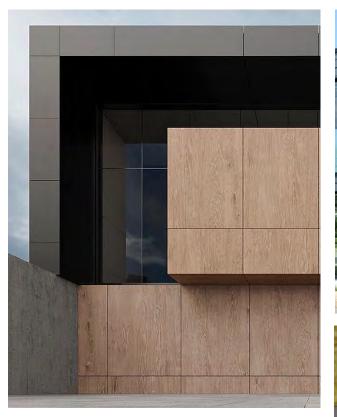
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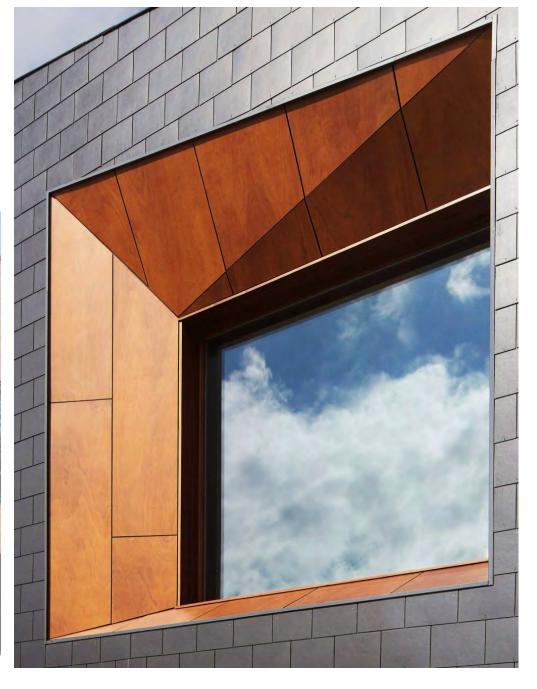












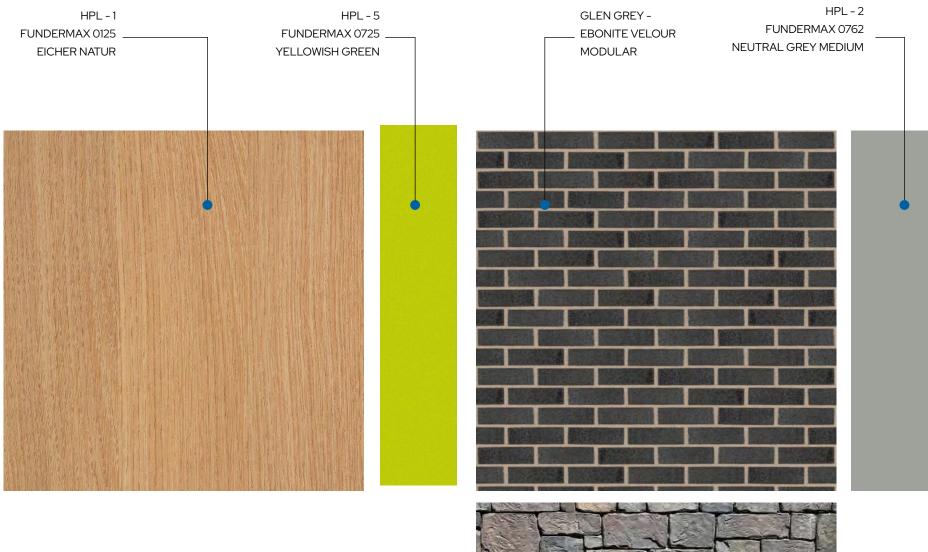
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STONE VENEER

MALCOLM X ELEMENTARY SCHOOL MODERNIZATION

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## EXTERIOR MATERIAL EXPRESSION

HPL-3 FUNDER MAX 0900 DARK CYBER GREY



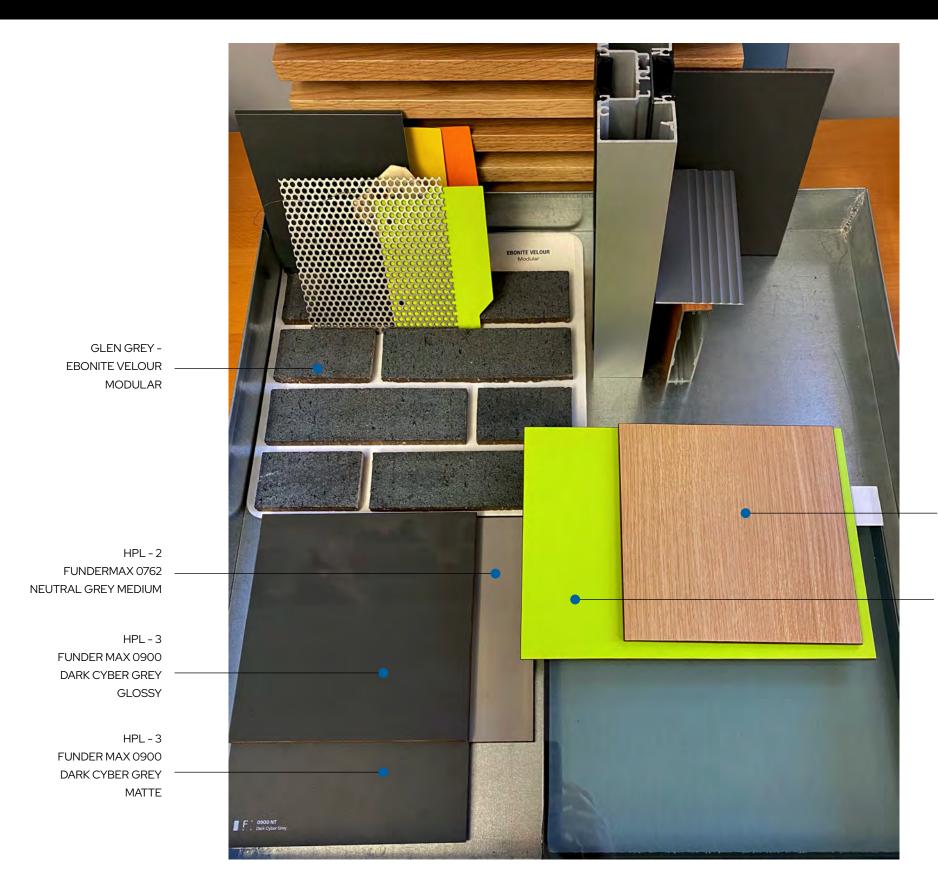
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# EXTERIOR MATERIAL EXPRESSION

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HPL - 1 FUNDERMAX 0125 EICHER NATUR

HPL-5 FUNDERMAX 0725 YELLOWISH GREEN

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