

Hamilton County Department of Education
Facilities Committee Meeting
October 21, 2024 5:30 PM
3074 Hickory Valley Road
Chattanooga, TN 37421

- I. Call to Order
- II. Options for Custodial Contracts - Dr. Robert Sharpe, Chief Operations Officer
- III. 2023-24 Facilities Plan Priority List Recap - Dr. Justin Robertson, Superintendent
- IV. Lewis Group Architects Renderings and Where We Are Now - Justin Witt, Director Maintenance and Operations
- V. Questions and Closing - Gary Kuehn, Chairman
- VI. Adjourn

1 *Renovate Gateway into 6-12 Chattanooga High School*

Renovate the Gateway campus into Chattanooga High School. See attached one-page document for details.

\$50 million

2 *Build Clifton Hills on Current Site*

Build a new Clifton Hills on the current site, taking into consideration the floodplain, designed to hold 800 students. If appropriate, renovate existing space and build additional new space (similar to CSLA).

\$35-40 million

3 *Build Soddy Daisy Middle on Current Site*

Build a new Soddy Daisy Middle School on the current site. If appropriate, renovate existing space and build additional new space (similar to CSLA).

\$30-50 million

4 *Consolidation of Rivermont, Dupont and Alpine Crest*

Build a new elementary school combining the Alpine Crest, Rivermont, and Dupont school communities on the existing Dupont site. Utilize existing capacity at Red Bank Elementary and Hixson Elementary for a student population between 650-800 students.

\$35-40 million

5 *Renovate Brainerd 6-12 Campus on Current Site*

Renovate the current Brainerd HS site into a 6-12 campus combining both Dalewood MS and Brainerd HS communities. The expanded site will include an addition, renovations to much of the existing building, and athletic upgrades on the new 6-12 campus.

\$25-30 million

6 *Expand Thrasher Elementary School*

Expand Thrasher Elementary to hold 800 students

\$15-\$20 million

7 *Renovate former Cigna Building into K-2 Campus*

Renovate the existing former Cigna building into a K-2 primary school serving the East Brainerd Elementary zone.

\$15-\$20 million

Phased out Closure of Howard Connect Academy

Begin phased out closure of Howard Connect Academy by not accepting an incoming 6th grade class in the fall of 2024.

7 buildings improved | 11 school communities served | \$205 - \$250 Million spent



PROPOSAL

Chattanooga High School: Center for Creative Arts and High Tech Institute

In Hamilton County Schools (HCS) our vision is that by 2030, HCS will be a leader in developing our diverse graduates to be *connected, competitive and life ready*. Located on the current Gateway site, the *development of Chattanooga High School* is one step we can take as a community towards making this vision a reality for our students in HCS.

The new Chattanooga High School will be located in a *fully reimagined space* providing access to areas that support *academic* excellence, full access to the *arts*, and hands-on, *experiential workspaces* with close links to the high-tech workplace through two dedicated pathways: The Center for Creative Arts and the High Tech Institute.

As *unique pathways combined under one roof*, The Center for Creative Arts will continue its commitment to the arts, balanced with its rigorous college preparatory academic program. The new High Tech Institute will establish a connection to the local high tech industry in downtown Chattanooga as it continues to evolve. Both CCA and the High Tech Institute will foster a commitment to *rigorous academics, design thinking, project based learning experiences and real-word connections*.

Proposed Facility Resources:

Center for Creative Arts

- New performance spaces:
Auditorium and Black Box Theater
- State of the art technical theater equipment
- Multiple-medium Art Studio spaces
- Dance and Musical theater studios
- Music rooms with vocal and instrumental spaces
- Digital art, recording, film, and technical theater.

High Tech Institute

- Current CTE pathways
- High tech hands on lab space
- Computer Science lab space
- Internship and apprenticeship opportunities aligned to new and existing local industries and businesses

General Education

- Classrooms
- Library
- Multipurpose Room
- Cafeteria and outdoor eating terrace

For more information, visit:

www.hcde.org/blueprint



PROPOSAL

Chattanooga High School: Center for Creative Arts and High Tech Institute

Frequently Asked Questions:

Will Chattanooga High School include all of the studios, rehearsal spaces, performance spaces, etc. that students at Center for Creative Arts currently have access to?

Yes! The vision for the design of Chattanooga High School includes expanded, not limited, access for students in all arts majors.

Will the school have access to typical school resources such as libraries, multi-purpose room, cafeteria, etc.?

Yes. The newly renovated space will be a fully functional school environment for students with additional resources designed around the pathways of study offered at the school.

Will the school have a full athletics program on the new campus?

No. The physical campus space does not allow room for athletic facilities on site. Students attending Chattanooga High School who want to participate in athletics can participate in athletic partnership at another school location.

Will existing equipment located at the current CCA site be able to transfer to this new site to support the arts pathway?

Yes. Existing equipment that can be moved will be relocated to the new site during the renovation process.

Will there be additional staff to support both pathways available at Chattanooga High School?

Yes. Staffing will be supported through our district staffing model and allocated according to the model for supporting school pathways.

Will there continue to be an audition process for students at Chattanooga High School?

Yes. Chattanooga High School: Center for Creative Arts and The High Tech Institute will continue to have an admissions process that connects both fit and aptitude to enrollment in each unique pathway.

For more information, visit:

www.hcde.org/blueprint

HAMILTON COUNTY GOVERNMENT
2024 BOND ISSUE

Proposed Projects Overview*

Brainerd/Dalewood to 6-12	\$25 to \$30 million
Clifton Hills Elementary	\$10 to \$20 million
Deferred Maintenance	\$60 million
Gateway	\$40 million**
New North River Elementary	\$42 million
Soddy Daisy Middle	\$25 to \$30 million
Thrasher Elementary	\$5 million
School Contingencies and other projects	\$10 to \$20 million
General Government Projects	\$10 million
Recreation Investments	\$5 million ***

WWTA

Wastewater Investments	\$10 million****
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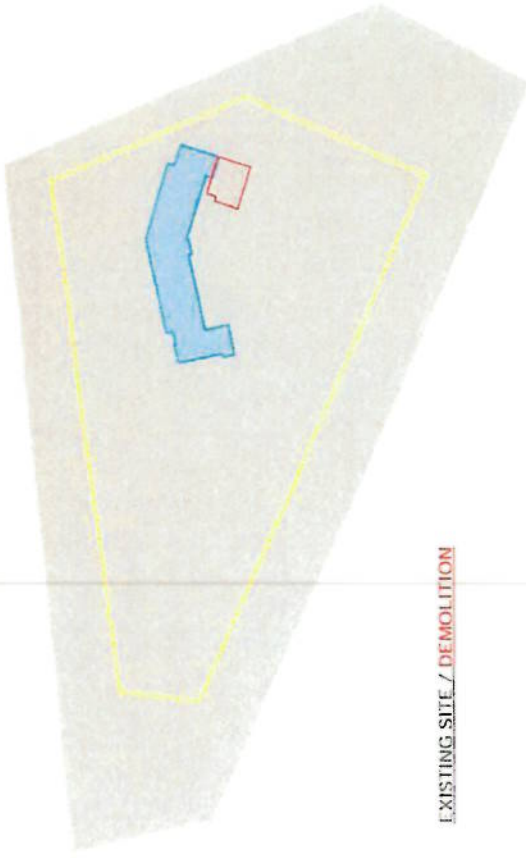
*Subject to county commission approval on a project by project basis

**Not including \$2 million in state funding

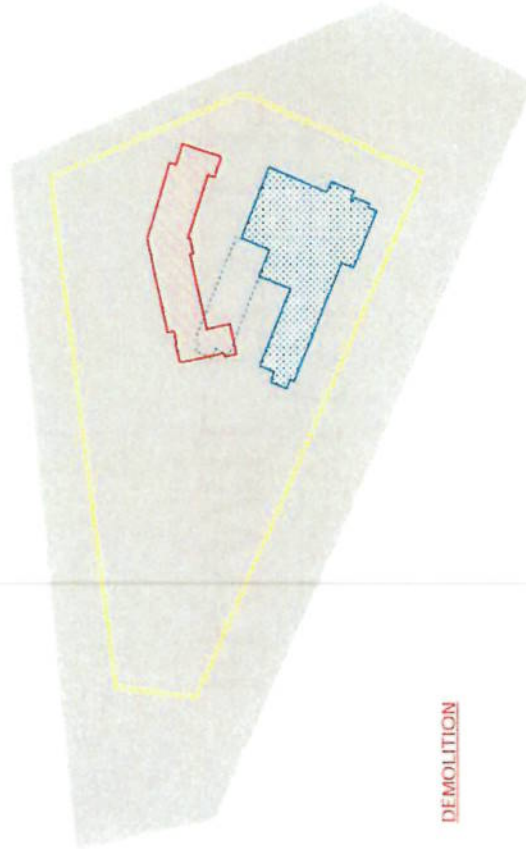
***Funded through Hotel/Motel Tax Revenue

****Funded by WWTA

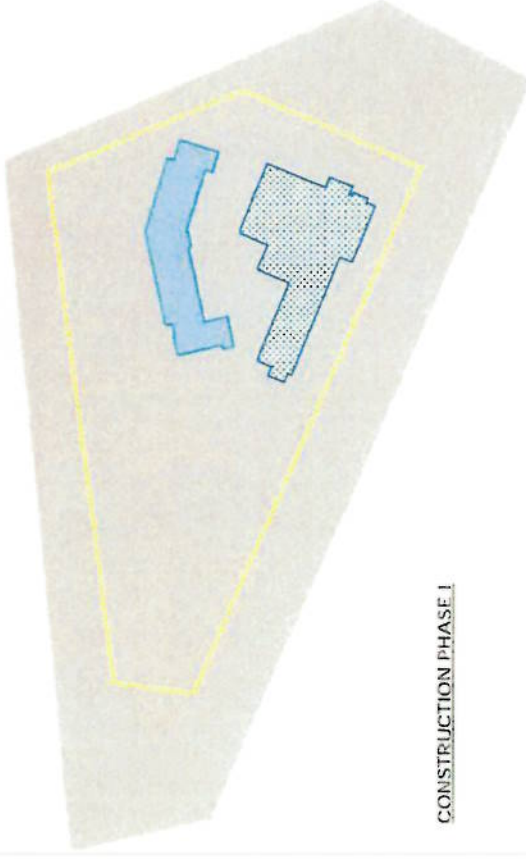
A NEW DUPONT ELEMENTARY SCHOOL FOR:
HAMILTON COUNTY SCHOOLS



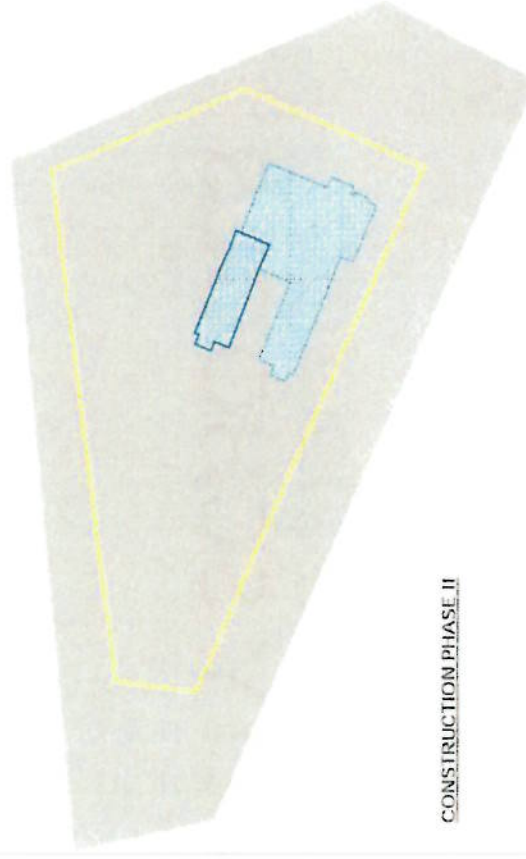
EXISTING SITE / DEMOLITION



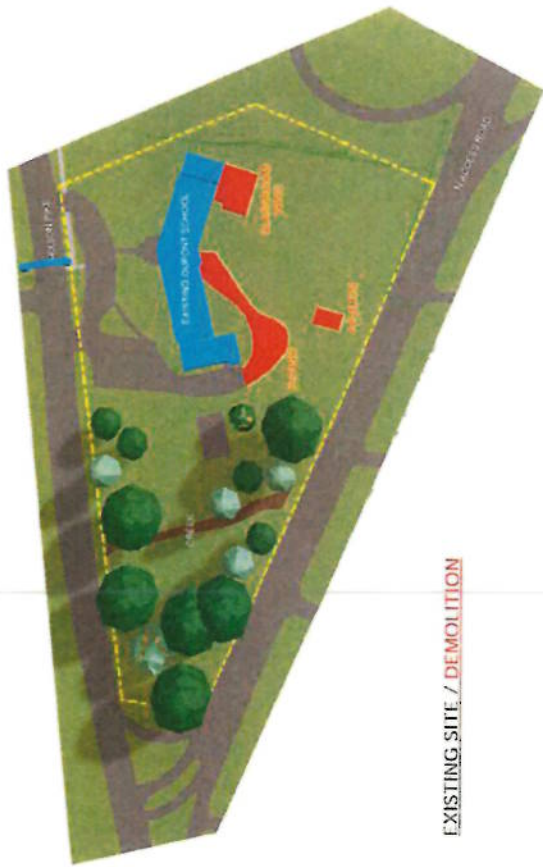
DEMOLITION



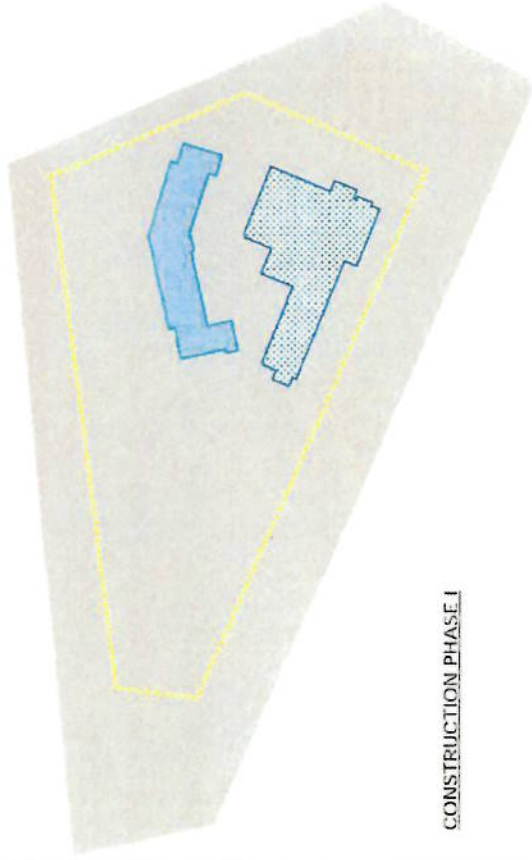
CONSTRUCTION PHASE I



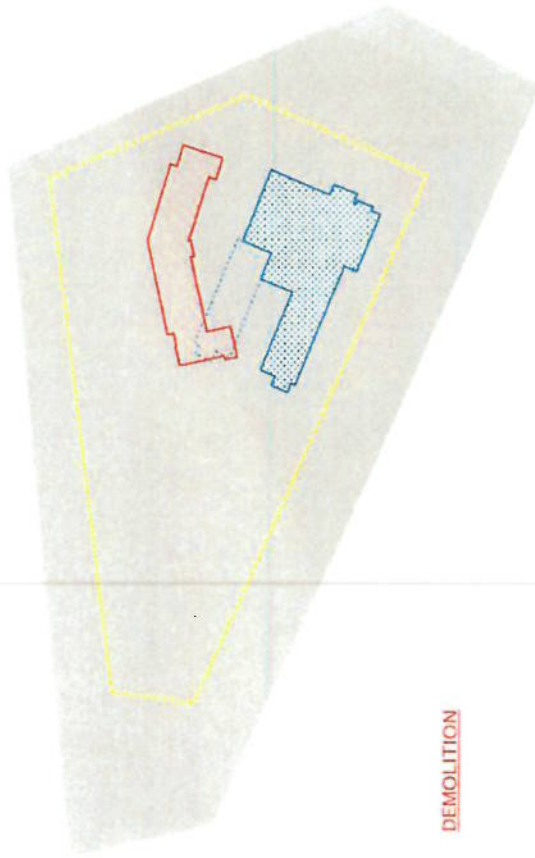
CONSTRUCTION PHASE II



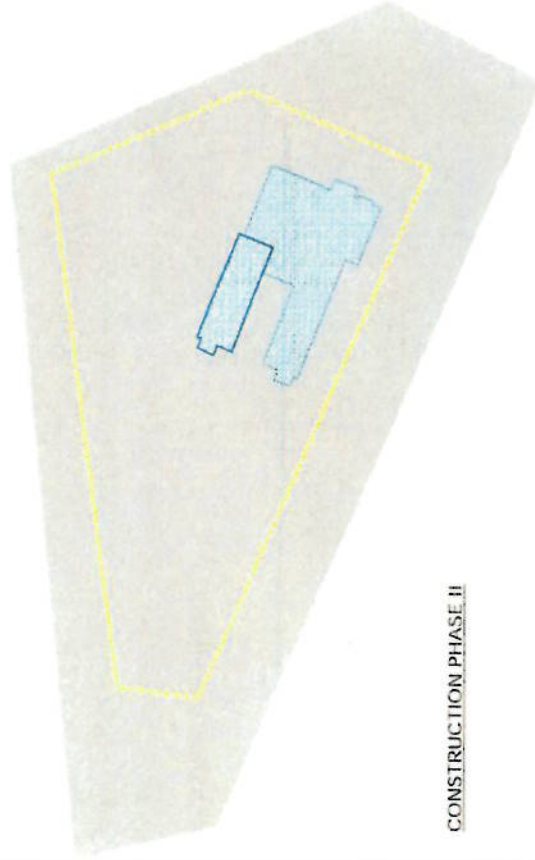
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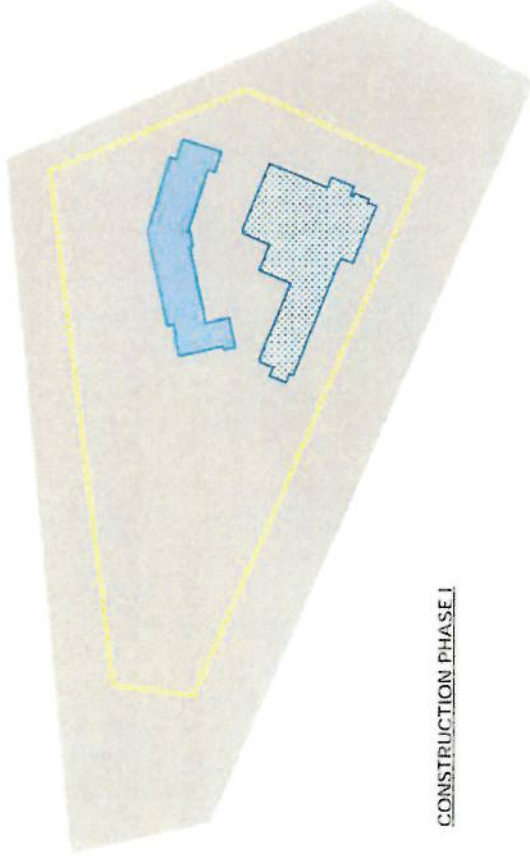
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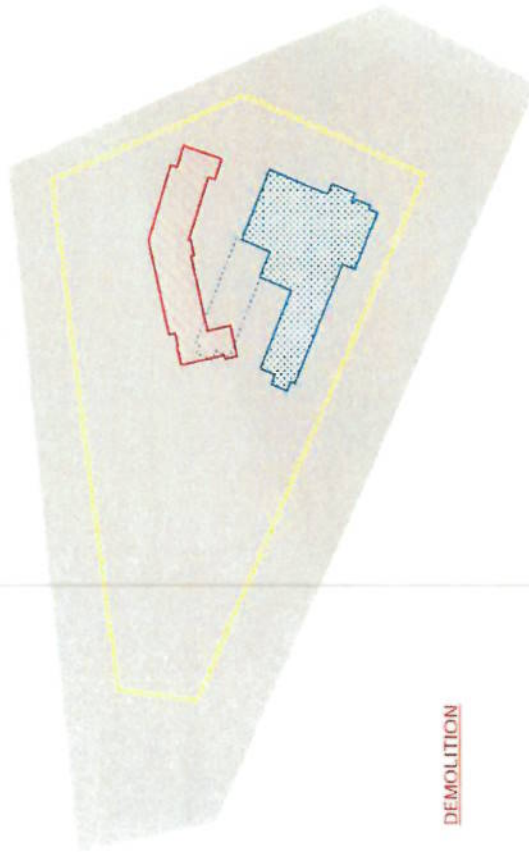
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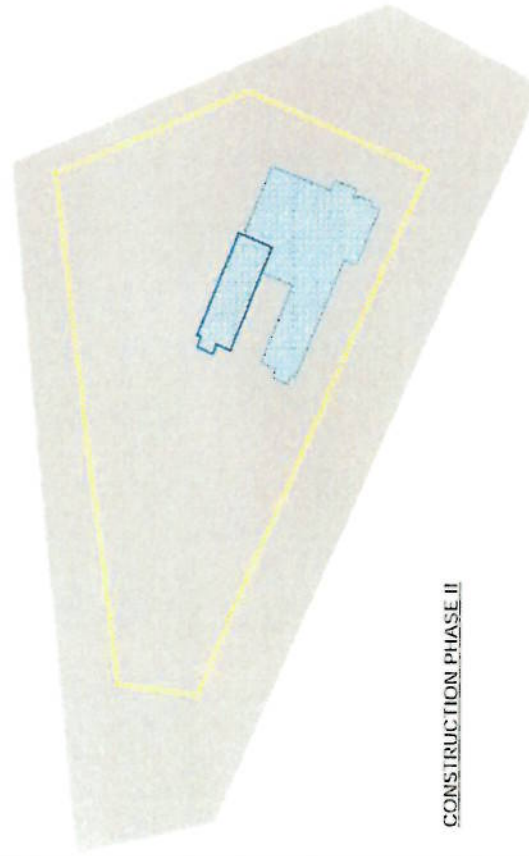
EXISTING SITE / DEMOLITION
 DEMOLISH (RED) SECTIONS OF EXISTING
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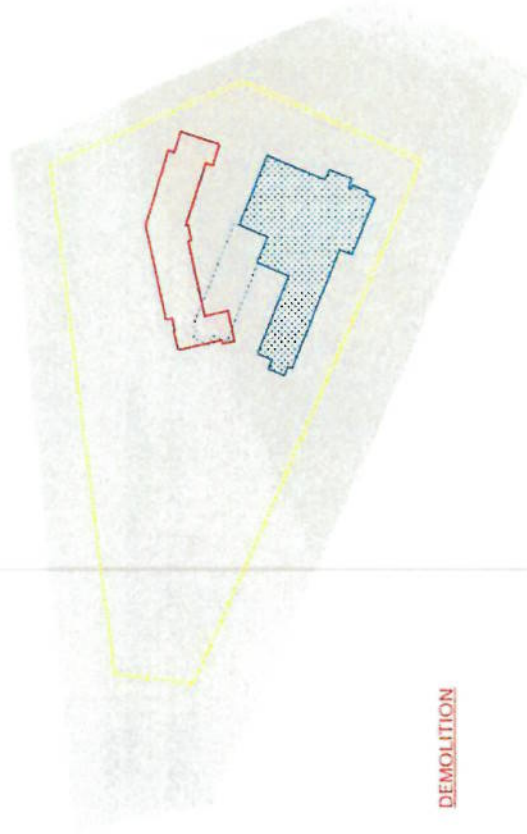
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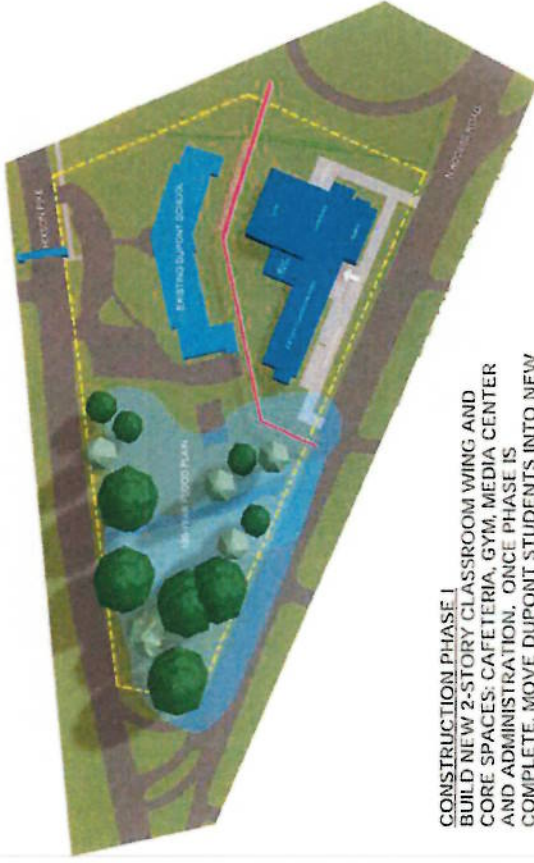
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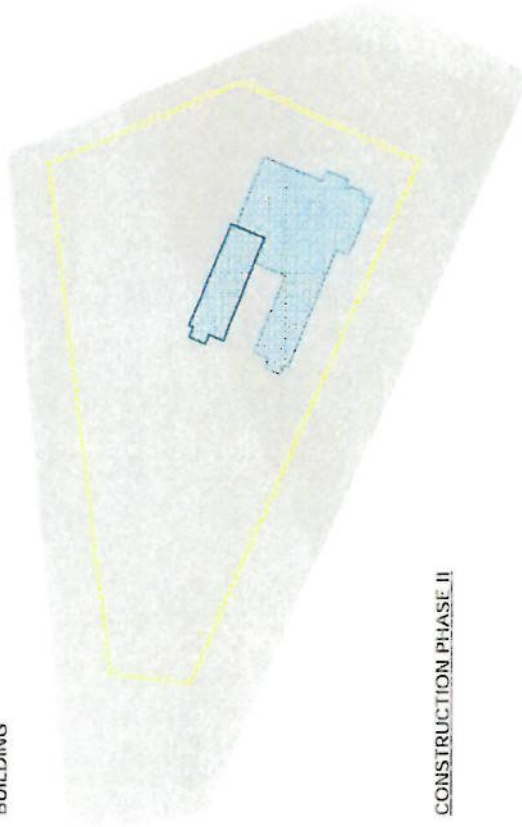
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DEMOLITION



CONSTRUCTION PHASE I
BUILD NEW 2-STORY CLASSROOM WING AND
CORE SPACES: CAFETERIA, GYM, MEDIA CENTER
AND ADMINISTRATION. ONCE PHASE IS
COMPLETE, MOVE DUPONT STUDENTS INTO NEW
BUILDING



CONSTRUCTION PHASE II

A NEW DUPONT ELEMENTARY SCHOOL FOR :

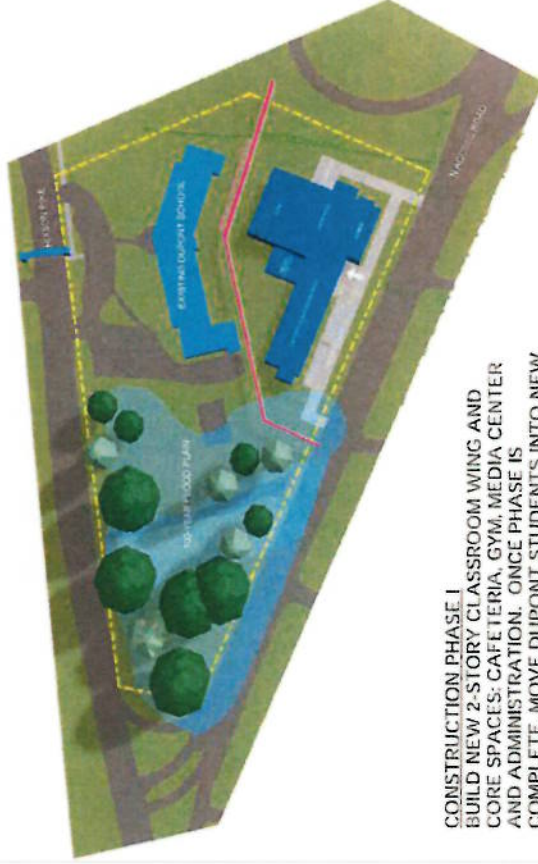
HAMILTON COUNTY SCHOOLS

05.03.2024

LEWIS GROUP ARCHITECTS



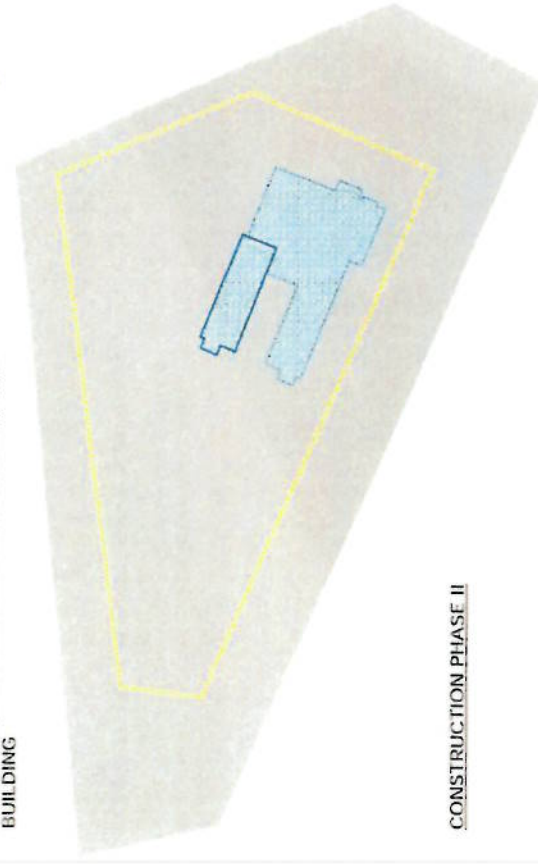
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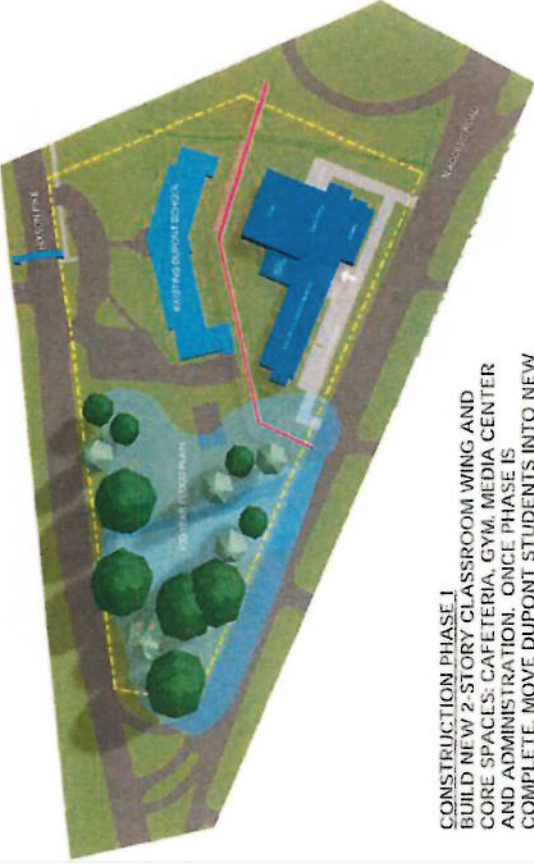
CONSTRUCTION PHASE II



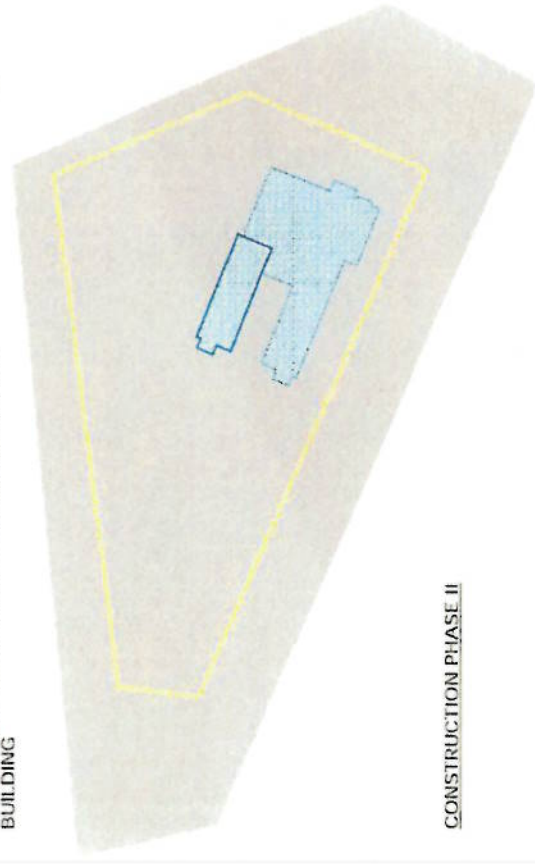
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DEMOLITION
 DEMOLISH (RED) EXISTING SCHOOL, PAVING SIDEWALKS AND UTILITIES



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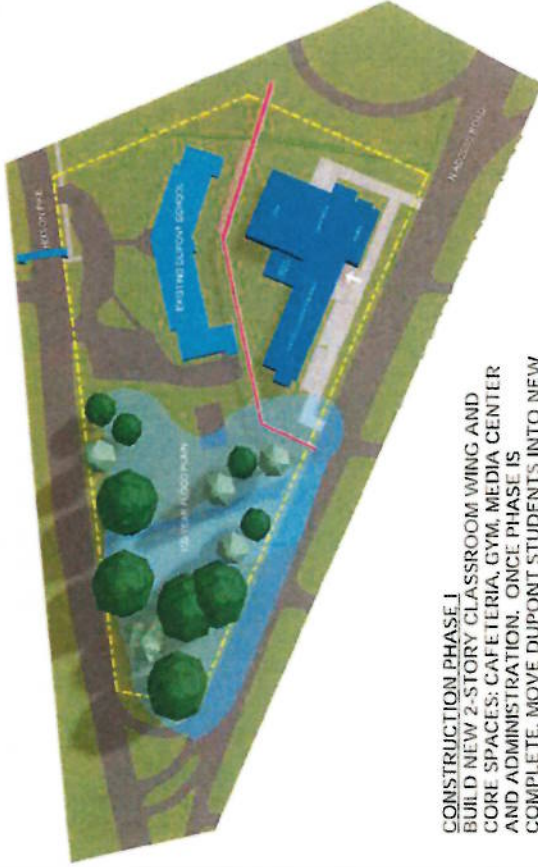
HAMILTON COUNTY SCHOOLS

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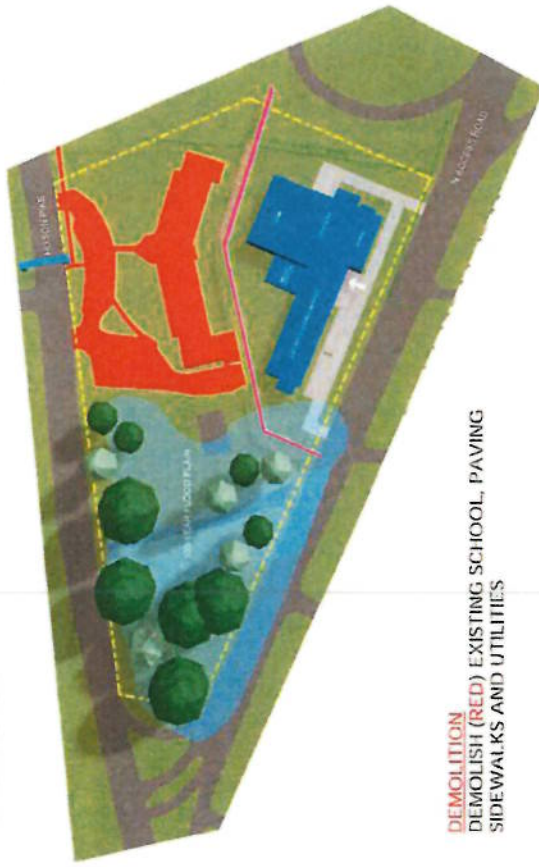
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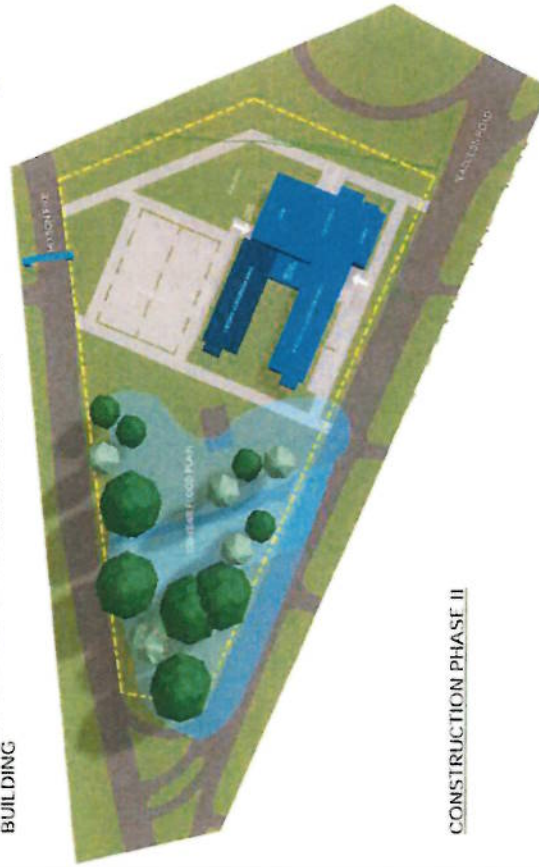
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 SIDEWALKS AND UTILITIES



CONSTRUCTION PHASE II

HARD COSTS

BUILDING CONSTRUCTION ONLY - 125,000 SF @ \$335/SF	\$42,000,000
SITE COSTS	\$1,000,000
CONTINGENCY (5%)	\$2,150,000
DEMOLITION*	\$500,000
PLAYGROUND EQUIPMENT**	-

TOTAL HARD COSTS **\$45,650,000**

SOFT COSTS***

ARCHITECTURAL + ENGINEERING^ FEES	\$2,320,000
A+E REIMBURSABLE EXPENSES	\$20,000
CIVIL ENGINEERING	\$50,000
STORMWATER MANAGEMENT	-
FURNITURE, FIXTURES & EQUIPMENT (FF&E)	\$1,100,000
FOOD SERVICE EQUIPMENT	-
TECHNOLOGY**	\$750,000
SURVEYING	\$25,000
GEOTECHNICAL ENGINEERING	\$25,000
ENVIRONMENTAL ASSESSMENT	\$15,000
3RD PARTY TESTING / SPECIAL INSPECTIONS	\$100,000
BUILDING PERMIT FEES	\$100,000

TOTAL SOFT COSTS **\$4,505,000**

- * CONTINGENT ON NO HAZARDOUS MATERIALS
- ** BY OTHER FUNDING SOURCE (PTA)
- *** ANTICIPATE BUDGETING 10%-15% FOR ALL SOFT COSTS
- ^ STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING & FIRE PROTECTION ENGINEERING
- ** IT EQUIPMENT, CABLING, PHONE, SECURITY, A/V

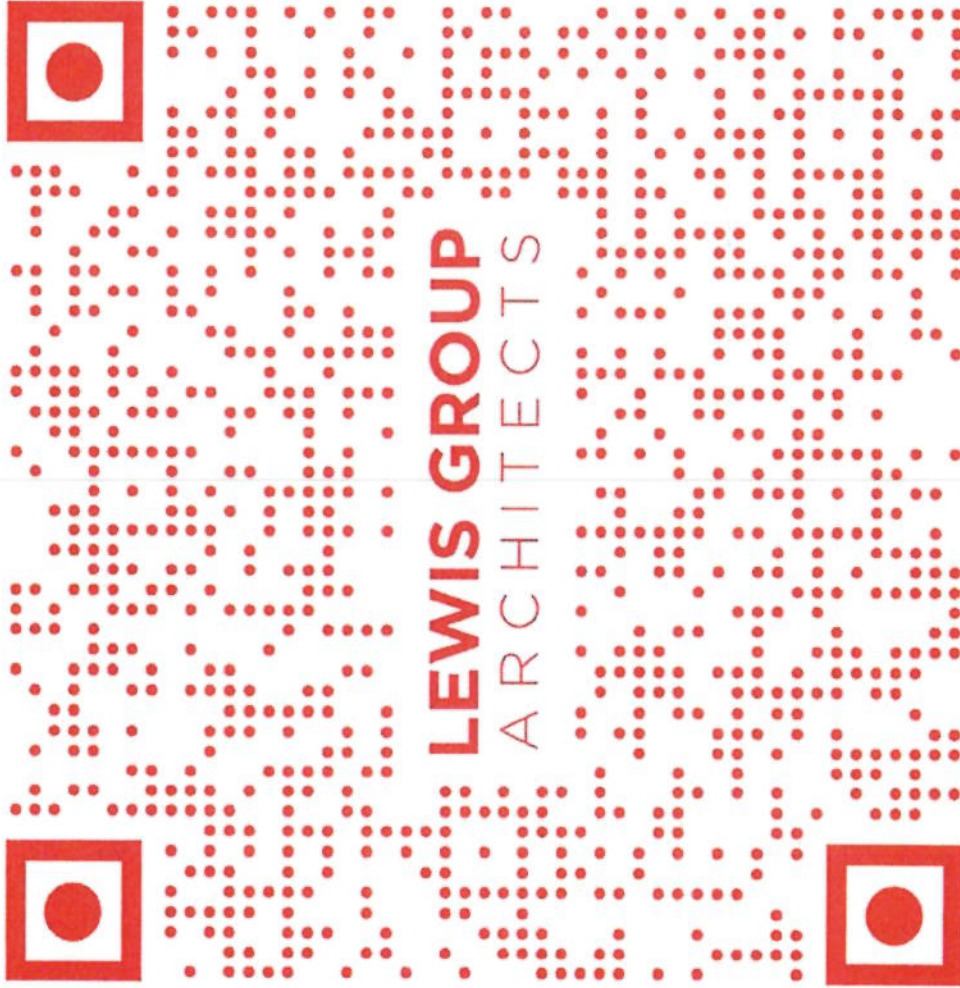
DOES NOT INCLUDE UTILITY CONNECTION / RELOCATION FEES, UTILITY SERVICES, OR MOVING

A NEW DUPONT ELEMENTARY SCHOOL FOR :

HAMILTON COUNTY SCHOOLS

05.03.2024

LEWIS GROUP ARCHITECTS



COMPARISON OF IMPROVEMENT OPTIONS FOR
SODDY DAISY MIDDLE SCHOOL

HAMILTON COUNTY SCHOOLS

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- Existing Site Conditions
- New Building Construction
- Demolition Plan
- Site Configuration

Soddy Daisy High School 6-12 Scheme

- Description of Planning Approach
- Existing Site Conditions
- New Building Construction
- Site Configuration

Comparison of Schemes

- Pros & Cons
- Project Data

07.02.2024

HAMILTON COUNTY SCHOOLS

LEWIS GROUP ARCHITECTS

SODDY DAISY MIDDLE SCHOOL (SDMS) SCHEME:

DESCRIPTION OF PLANNING APPROACH

In this approach to architectural upgrades to SDMS, LGA considered a partial replacement of the existing facilities through a phased program of additions, renovations, and partial demolition. Unlike the existing classroom wings, the core facilities (gymnasium, cafeteria, and media center) in the existing school are in good condition and may not warrant complete replacement. This scheme proposes the following:

- Construction of an L-shaped, 2-story replacement classroom wing on the north side of the site.
- Construction of a new main entry and administration suite expansion.
- Renovation of select portions of the existing building for additional administration spaces and connectors.
- Demolition of the unused portions of the classroom wings.
- Site improvements to vehicular flow and parking.
- Restoration of remaining unused land to landscaping.

SDMS SCHEME - EXISTING SITE CONDITIONS



MASSING VIEW



SITE PLAN



KEY

- | | |
|--|-------------------|
| Active Sign - water | Other |
| Active Greenery Sign | Existing Building |
| Active Land (Professional) Sign | Water |
| Active Land (Other) Sign | Existing Building |
| Normal Station | Sports - water |
| Sign | Sports - other |
| Sign | Sports |
| Classroom Structure | |
| Under Study - Neighborhood Supply District | |
| B. Water - up | |
| Water | |
| Water | |
| Water Water | |

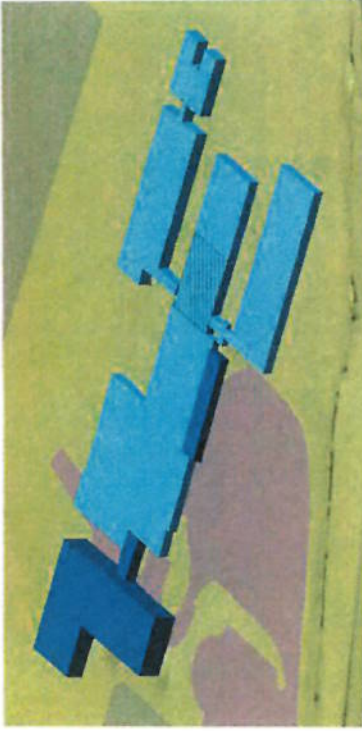
COMPARISON OF IMPROVEMENT OPTIONS FOR SODDY DAISY MIDDLE SCHOOL

07.02.2024

SDMS SCHEME - NEW BUILDING CONSTRUCTION



SITE PLAN



MASSING VIEW

KEY

- New Construction
- Existing Building
- Removals
- Water
- Sports Fields
- Vegetation

07.02.2024

COMPARISON OF IMPROVEMENT OPTIONS FOR SODDY DAISY MIDDLE SCHOOL

HAMILTON COUNTY SCHOOLS

LEWIS GROUP ARCHITECTS

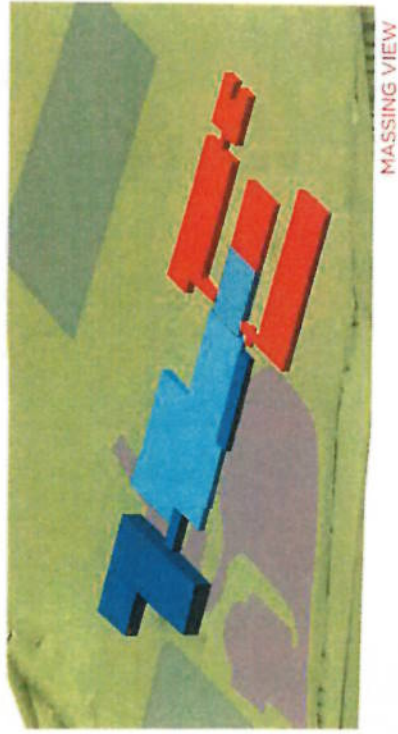
SDMS SCHEME - DEMOLITION PLAN



SITE PLAN



COMPARISON OF IMPROVEMENT OPTIONS FOR SODDY DAISY MIDDLE SCHOOL



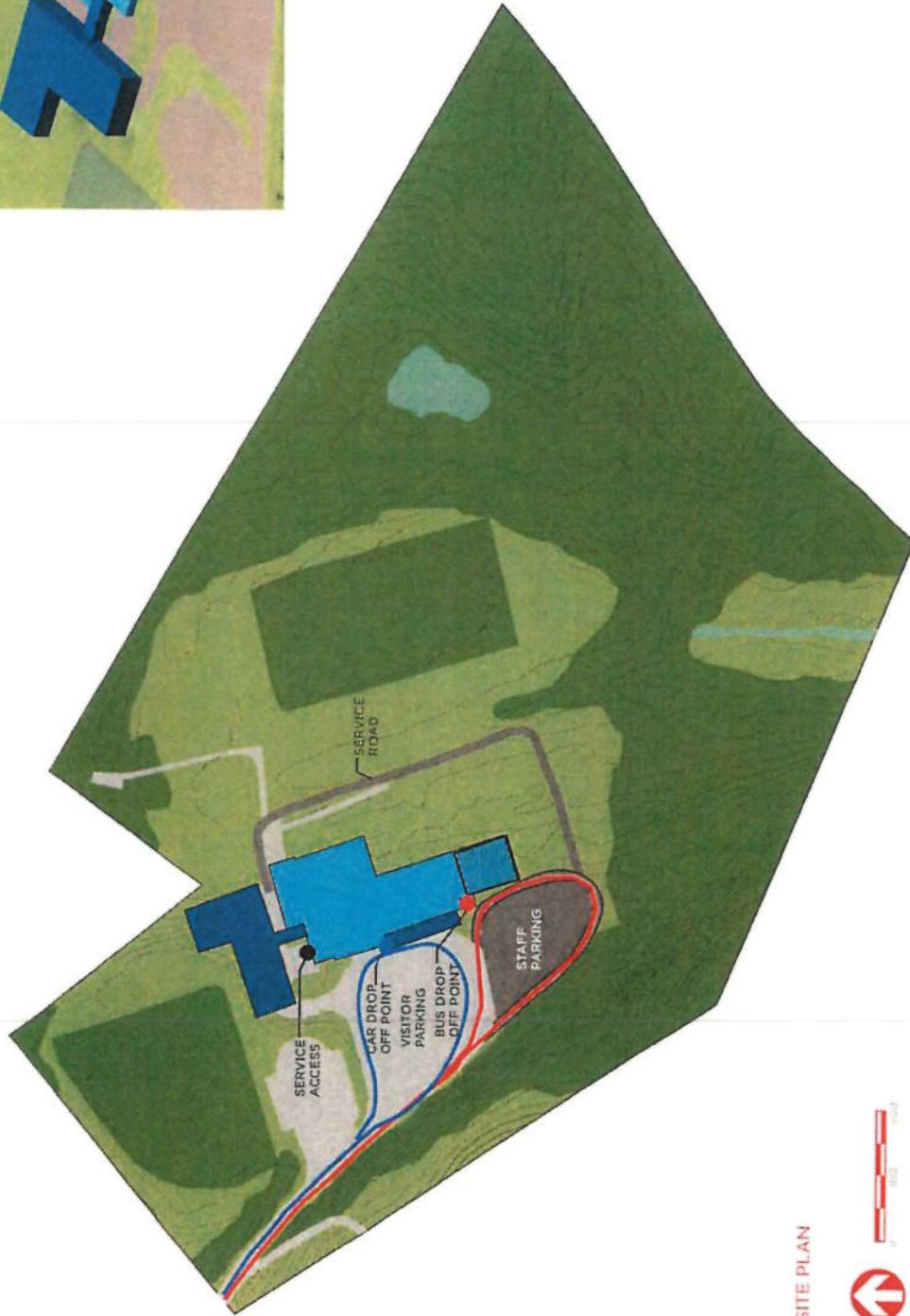
MASSING VIEW

KEY

- New Construction
- Existing Building
- Renovations
- Demolition
- Sports Fields
- Trees
- Water

07.02.2024

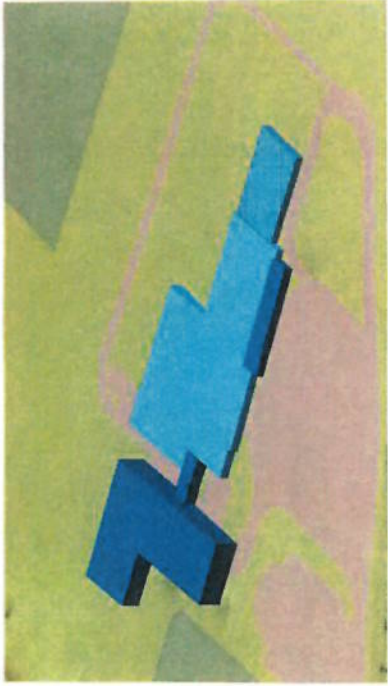
SDMS SCHEME - SITE CONFIGURATION



SITE PLAN



COMPARISON OF IMPROVEMENT OPTIONS FOR SOLIDBY DAISY MIDDLE SCHOOL



MASSING VIEW

KEY

- New Construction
- Existing Building
- Retention/Grass
- Sports Field
- Trees
- Water
- Secondary Scheme
- Car Drop Off Point
- Staff Drop Off Point

07.02.2024

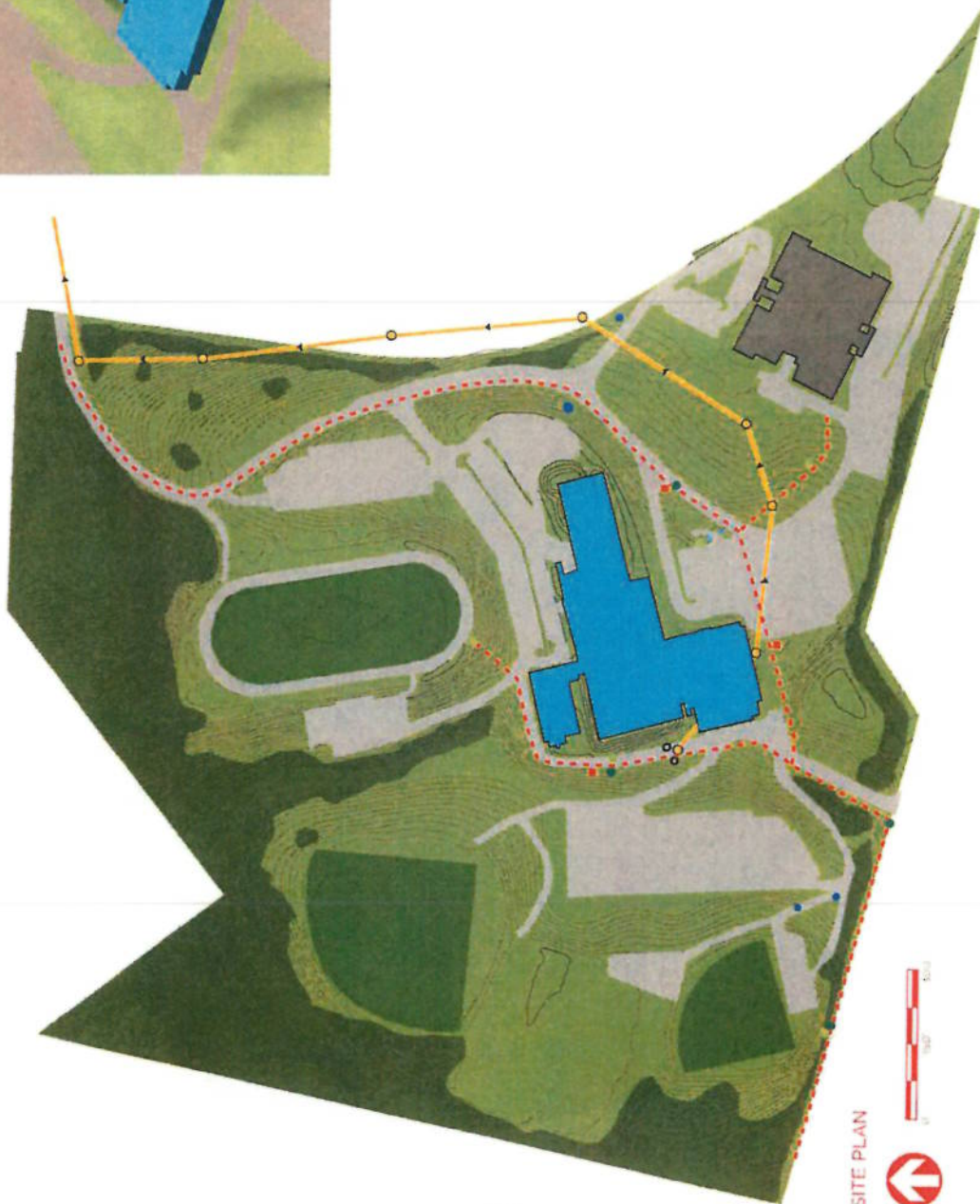
SODDY DAISY HIGH SCHOOL (SDHS) 6-12 SCHEME:

DESCRIPTION OF PLANNING APPROACH

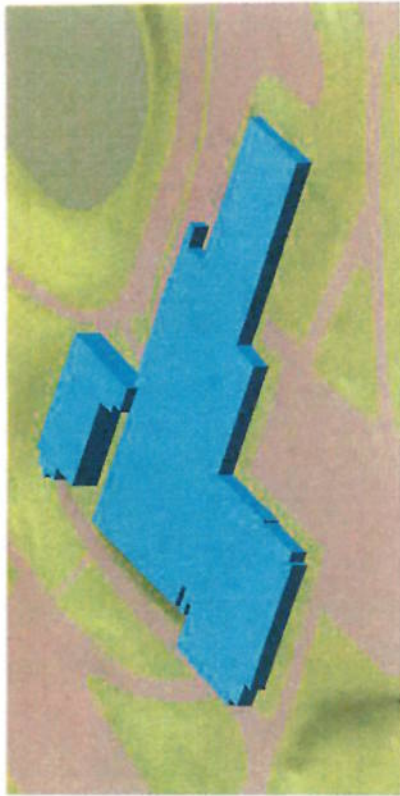
In this approach to a replacement school for SDMS, LGA considered relocating the 6th-8th grade student body to the SDHS campus through a phased program of additions and renovations. This scheme proposes the following:

- Construction of a 2-story 6th-8th grade classroom wing and gymnasium on the north side of the existing building that shares existing core facilities such as kitchen, competition gymnasium, and other core components with the high school. The classroom wing would be located on either side of a new commons area for middle school dining that is in proximity to the existing high school dining and kitchen area. Space will be included in the classroom wing for middle school administrative offices as needed.
- Renovation of select portions of the existing building for connectors as needed.
- Site improvements to vehicular flow and parking.

SDHS 6-12 SCHEME - EXISTING SITE CONDITIONS



SITE PLAN



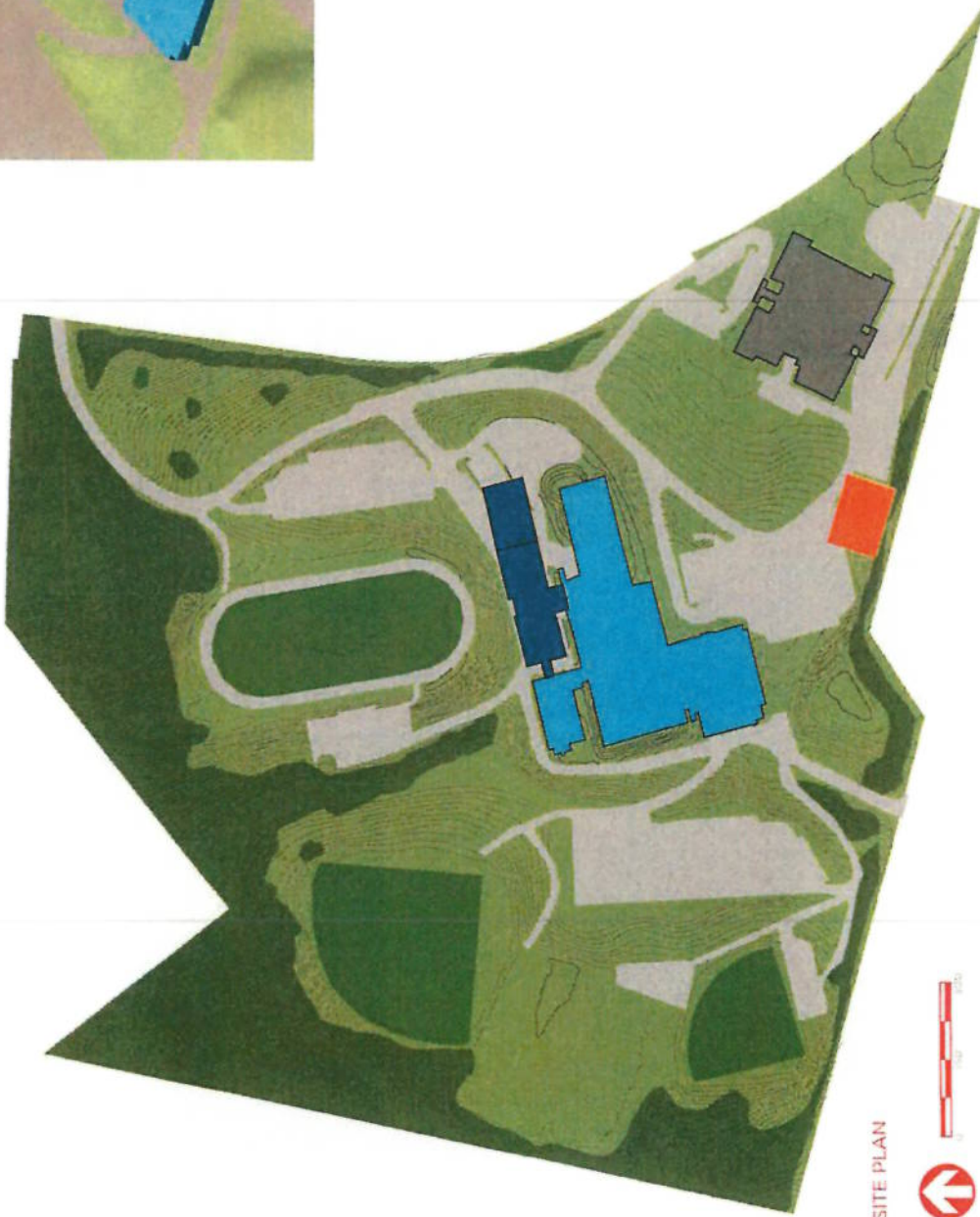
MASSING VIEW

KEY

- | | |
|---|----------------------------|
| Waste Water Treatment | Other |
| Active Crayke Main | Power Line |
| Existing | New Addition |
| Water Supply - Northwest Utility District | Existing Building |
| 5" Water Line | Sports Fields |
| 4" Water Line | Trees |
| Valve | Existing Elementary School |
| Water Meter | |

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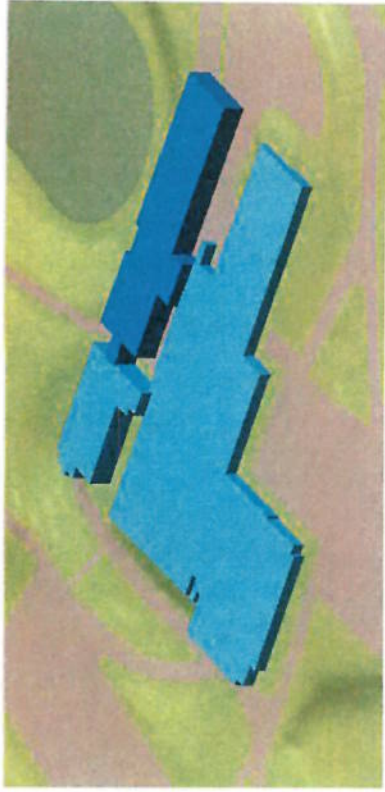
SDHS 6-12 SCHEME - NEW BUILDING CONSTRUCTION



SITE PLAN



COMPARISON OF IMPROVEMENT OPTIONS FOR SODDY DAISY MIDDLE SCHOOL



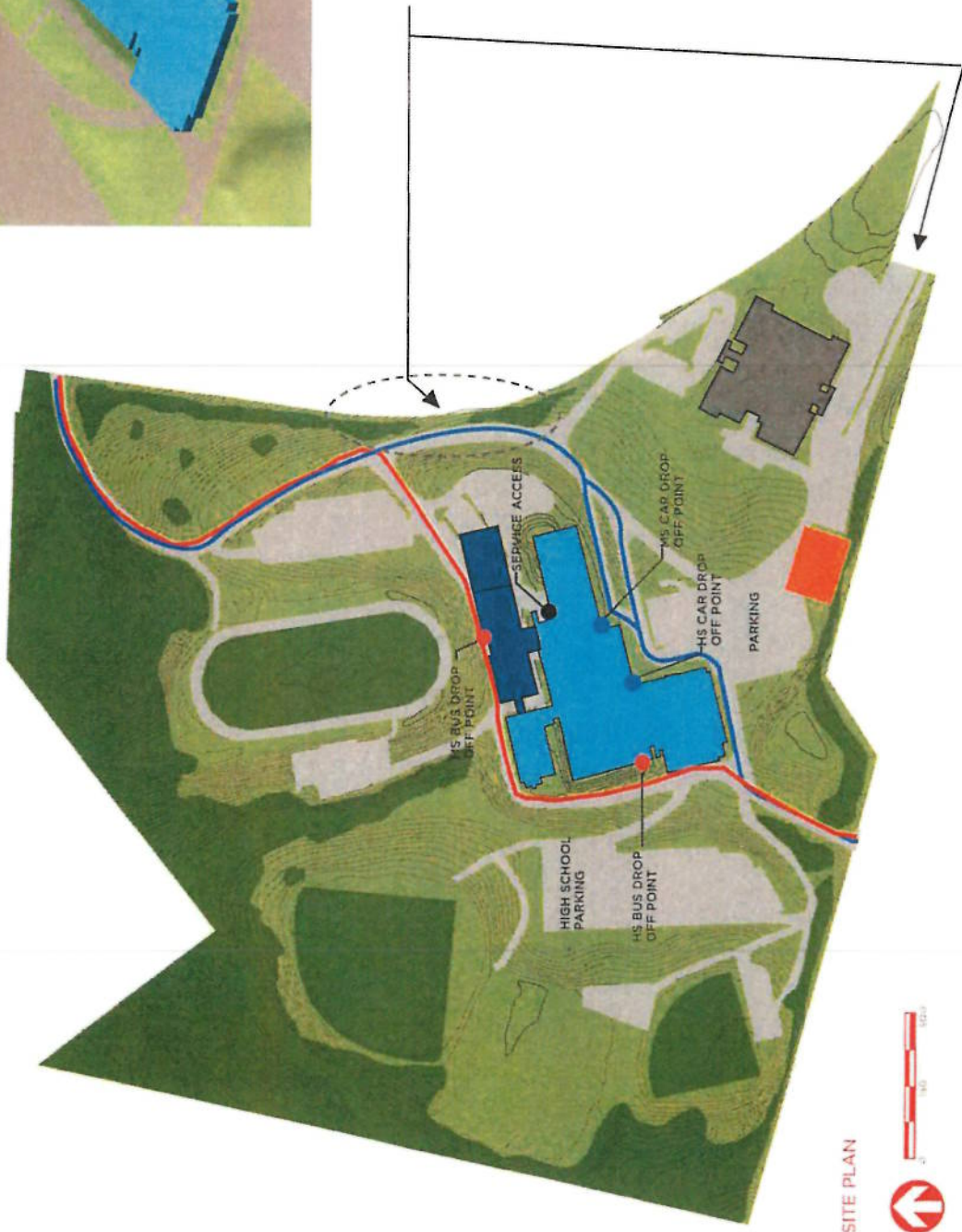
MASSING VIEW

KEY

- New Construction
- Existing Building
- Sports Field
- Trees
- Future Performing Arts Center Location
- Existing Elementary School

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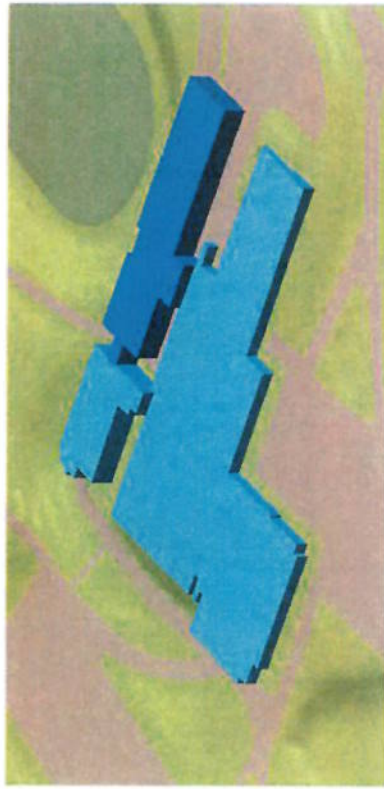
SDHS 6-12 SCHEME - SITE CONFIGURATION



SITE PLAN



COMPARISON OF IMPROVEMENT OPTIONS FOR SODDY DAISSY MIDDLE SCHOOL



MASSING VIEW

WITH THE ADDITION OF 605 STUDENTS, LGA RECOMMENDS A TRAFFIC STUDY TO EXPLORE THE CAPACITY OF THE CURRENT CAMPUS DRIVEWAYS AND MAIN ROAD ACCESS POINTS. ADDITIONAL ENTRANCE FROM MAIN ROADS OR OTHER ADJUSTMENT TO ACCESS POINTS MAY BE NECESSARY.

KEY

- New Construction
- Existing Building
- Sports Field
- Trees
- Future Performing Arts Center Location
- Existing Temporary Storage
- Car Drop Off Area
- Bus Drop Off Area

07.02.2024

COMPARISON OF SCHEMES

Soddy Daisy Middle School Scheme

Pros:

- Construction cost savings through continued use of viable portions of the existing building.
- Maintaining school ground floor on the higher elevations of the site to prevent drainage problems.
- Continuity of community location, transportation patterns.
- Potential for expandability if necessary.
- Addition of classroom wing + administration suite allows continuous operation of existing school facility during construction with minimal interruption.
- (Construction of new entry to be phased to minimize interruption of school).
- Limited site costs.

Cons:

- Limited vehicular access to site for construction vehicles.
- Potential disruption to use of baseball field, baseball parking, and nearby access points.
- Light renovations (lighting upgrades, mechanical or electrical upgrades, finishes, etc.) may be required in remaining portions of existing building.
- Potential for hazardous material abatement.
- Some disruption of access during construction of new entry.

Soddy Daisy High School 6-12 Scheme

Pros:

- Operational efficiencies and savings through colocation of schools in the same building.
(*Operational efficiencies may include transportation, custodial & maintenance personnel, campus security, IT security*)
- Addition allows continuous operation of existing school facility during construction with minimal interruption.

Cons:

- Complication of vehicular flow patterns with addition of 600+ students to the campus potentially requiring additional campus access point from main roads.
- Significant grading and site planning challenges on the high school site (narrow buffers between new construction and football field, perimeter drive aisle, and kitchen service area).
- Limited potential for expandability.
- Likely significant site cost.

PROJECT DATA

Soddy Daisy Middle School Scheme

Existing Middle School Capacity: **654** / 75% Capacity (Current Equipment: **488**)
 Proposed Middle School Capacity: **605** / 81% (Proposed Capacity)

TYPE OF WORK	EST. SQUARE FOOTAGE (SF)	ESTIMATED COST	
		LOW	HIGH
New Construction		\$0	\$0
2-story classroom wing (Classrooms + Computer + Reading Center) New Entry & Administration Auditor	58,000 Sq 1,500 Sq	\$18,200,000 \$1,500,000	\$18,600,000 \$1,700,000
Heavy Renovation		\$0	\$0
18 classrooms	6,500 Sq	\$1,625,000	\$1,900,000
Light Renovation		\$0	\$0
Existing existing (existing existing) Lighting, door, hardware, etc.	49,000 Sq	\$4,000,000	\$6,700,000
Demolition			
Removal of existing classroom work	26,000 Sq	\$2,000,000	\$2,000,000
Site Costs	As required	\$1,000,000	\$1,000,000
Sub-total		\$19,725,000	\$26,600,000
Contingency (5%)		\$986,250	\$1,330,000
Total Estimated Cost		\$20,711,250	\$27,930,000

Soddy Daisy High School 6-12 Scheme

Existing High School Capacity: **1526** / 74% Capacity (Current Equipment: **1128**)
 Proposed High School Capacity: **2131** / 76% (Proposed Capacity)

TYPE OF WORK	EST. SQUARE FOOTAGE (SF)	ESTIMATED COST	
		LOW	HIGH
New Construction		\$0	\$0
2-story classroom wing (Classrooms + Computer + Reading Center + Computer Access + Cafeteria)	46,000 Sq	\$10,000,000	\$11,700,000
Performing Arts Center	22,000 Sq	\$400	\$400
Heavy Renovation		N/A	N/A
Light Renovation		N/A	N/A
Demolition		N/A	N/A
Site Costs	Significant	\$1,000,000	\$1,000,000
Sub-total		\$11,400,000	\$12,700,000
Contingency (5%)		\$570,000	\$635,000
Total Estimated Cost		\$11,970,000	\$13,335,000

COMPARISON OF IMPROVEMENT OPTIONS FOR SODDY DAISY MIDDLE SCHOOL

HAMILTON COUNTY SCHOOLS

LEWIS GROUP ARCHITECTS

07.02.2024

BRAINERD / DALEWOOD

Facility Report

JULY 22, 2024

For:



Hamilton County Property Management

4005 Cromwell Road, Chattanooga, TN 37421

Phone: 423-209-7960

By:



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PURPOSE OF THE REPORT

MTa was hired to perform a report that included the following:

1. Task I - Defining issues impacting the remodeling of the existing building.
 - a. The report will include a narrative of redevelopment issues that will impact cost and schedule, such as:
 - i. City Ordinances.
 - ii. Current Building Code and Energy Code issues.
 - iii. ADA / ICC 117.1 accessibility issues
2. Task II – Defining issues of how the existing building may impact a particular building program.
3. Task III – Provide a listing of material serviceability concerns.
4. Task IV – Provide a summary of available program documents.
 - a. MTA will review any existing program documents. Based on this review, MTA will:
 - i. Provide an assumed combined required program area to house both the High School and the Middle School.
 - ii. Define a list of shortcomings of existing areas that will need to be resolved by future building additions.
5. Task V – Provide a listing of additional research, reports, or surveys required to minimize any delays to design or construction.

As we started to work on this report, Task I and IV were emphasized by the County and are the only Tasks provided in this abbreviated report. If requested by Hamilton County, MTA will continue to work on the full original scope of this report.

Special Notes to consider:

1. *All financial costs noted in this report are indicated in today's cost. No inflation factor has been added to any cost.*
2. *MTa assumes that the valuation of the buildings (for replacement cost) / and building construction cost would escalate in an equal fashion.*
3. *This report is limited and did not include:*
 - b. *Survey or detailed as-built documentation of the existing layouts.*
 - c. *Geotechnical, Historical, or separate Environmental studies.*
6. *The construction industry continues to experience escalations of cost and shortages of materials. The cost defined in this report will be based on historical information and information provided by local contractors. MTA did have the cost reviewed and vetted by a local contracting firm but this does not guarantee the accuracy of this information beyond the date of issuance.*
7. *All financial quantities listed in this project are without any contingency.*

EXECUTIVE SUMMARY

The possible liabilities for this project are summarized throughout this report. This Executive Summary is meant to highlight just the most significant issue in each of our project tasks.

Code:

The requirement to provide a Storm Shelter for this school is the most significant issue in the building code. To date, the Hamilton County Department of Education has not built a storm shelter constructed to the standards required by the 2018 IBC. The cost of this added requirement will be significant and will be dependent on the size of the space required by the AHJ (authority having jurisdiction). Both the City of Chattanooga and Hamilton County have adopted current editions of the code that require a shelter in Educational Occupancies.

Program:

MTa was able to identify an appropriate area for this combined school that is commensurate with Tyner Middle / High School. We believe that HCDE will need to fully vet our proposed program and determine what classes will be offered as Electives, Vocational, and Non-traditional programs. Until the proposed classes and their schedules are rectified, will we not be able to confidently determine the final new building area needed.

Additional Programming Requirements:

Within the project team, several questions to the overall program have been discussed. We know this occurs in other schools but how scheduling of the following programs can effectively occur within Middle and High School programs:

1. Currently there is only one band room.
2. Currently there is only one choir room.
3. We assume that the Middle School Football will continue to use the existing locker rooms, but would it make sense to combine them in a new field house?
4. Currently there is only one baseball field. We assume a softball field will need to be provided. What other athletic facilities need to be provided or improved for this School?

TASK I - DEFINING ISSUES IMPACTING REMODELING

The existing facility was built in 1959 based on the drawings by Selmon T. Franklin. Throughout the years building additions occurred to include the vocational addition that included the Auto mechanical area (1979), the vocational classroom area that includes the cosmetology area (1991), and the newest addition on the Northwest side of the campus (1993). As constructed, the conglomeration of buildings totals 157,925 SF without any modular area considered. Sitting on 53.06 acres, the parking lots were originally configured to park 456 vehicles. The property is zone R-1.

The building is a steel-framed building with masonry-bearing walls. The exterior finish is primarily masonry veneer. We would expect that this building would be considered by Authorities Having Jurisdiction (AHJ) as a Construction Type 2B - unprotected. The existing building is not sprinkled but the initial area was broken up into smaller buildings between firewalls.

This 65-year-old building still has an active "Certificate of Occupancy" however it should be noted that many of the existing systems may have exceeded their standard lifespans.

Early in our study, it became clear that a few issues were going to drive any future work on this facility. There are at least three significant considerations that need to be contemplated when reviewing possible code-driven scope upgrades.

1. Based on the 2012 International Existing Building Code (Tennessee Fire Marshal Adopted Code). This project would be considered a Level 2 alteration. This code doesn't mandate a full upgrade to the current code but does impact design decisions. The main concerns to be addressed would be:
 - a. Revising accessibility where possible.
 - i. Possible revision allowing ADA-accessible toilet facilities throughout.
 - b. Revising all of the Fire Alarm systems.
 - i. The new system will be required to meet current codes, including horns and strobes.
 - c. Resolving all the non-protected window openings in the non-sprinklered corridors (currently filled with wire glass). All are required to be rated 1 hour.
 - d. Resolving all the non-protected door openings in the non-sprinklered corridors. All are required to be rated 1 hour.
2. Based upon a City of Chattanooga Ordinance – Sec 17-3.6.1 – if a building remodel cost is over 30% of the replacement cost, one must upgrade the building to meet current codes (ADA, Energy, and Building). This concept is important knowing that full upgrades to different systems could require more cost than desired.

Based on the remaining two known issues, we considered that the City's code was going to be most stringent and defined the "replacement cost of the facility" per Code section 101.4.7.1. (attached below).

The 2023 RS Means defines this type of space to have a cost per Square Foot (\$/SF) cost of \$226.40. This figure would make the city-approved replacement cost **\$35,754,000**. 30% of that cost is **\$10,726,000**. That sum is the financial limit placed by the City to keep this project from requiring full building code updates if expended in a single phase.

MTa believes the replacement cost of this facility is closer to \$63,000,000. We are using the numbers provided by public information noted in the City Code to evaluate the

replacement cost for this report. In the last 3 years, the replacement cost of all buildings has increased significantly due to the substantial increase in building construction costs.

Based on the occupancy of this structure (educational), and the current building code in the City of Chattanooga, MTa believes an addition of substance will require the addition of a Storm shelter (IBC 423.4 & ICC 500). When Hamilton County and the City of Chattanooga upgraded their building codes to the 2018 International Building Codes (IBC) this became the rule. Any assembly space will require the placement of a storm shelter. The IBC code (section 423.4.1 exception 1) specifically requires a storm shelter to accommodate the required occupancy for the new building.

Below is a link to the 2018 IBC section 423.4:

<https://up.codes/viewer/knoxville/ibc-2018/chapter/4/special-detailed-requirements-based-on-occupancy-and-use#423>

Below is a link to the Highlights on Storm Shelters & ICC 500:

https://www.fema.gov/sites/default/files/documents/fema_ICC-500-2020-highlights_publication_082021.pdf

Below is a link to the standard ICC 500:

https://codes.iccsafe.org/content/ICC5002020P1/chapter-1-application-and-administration#ICC5002020P1_Ch1_Sec104

TASK II AND TASK III ARE NOT INCLUDED IN THIS REPORT.

TASK IV - PROVIDE A SUMMARY OF AVAILABLE PROGRAM DOCUMENTS

Provide an assumed combined required program area to house both the High School and the Middle School.

HCDE provided MTa with a preliminary building program for Tyner. This program was used by MTa as the "standard" in which the new Brainerd / Dalewood would be configured. We have access to other building programs, but the design team felt it was most appropriate to vet the new program against the newest school in the HCDE inventory of facilities that offered traditional education (in place of a Creative Arts, Vocational, or STEM program).

The Tyner program was altered based on the student population required in each division of schools (Middle vs High). The program for Tyner initially had a 90% utilization factor population of 675 students for High School and 563 students for the Middle school components. For the Brainerd / Dalewood combined program, we used the latest census to populate the required areas based on a 90% utilization factor population of 646 students for High School and 284 students for the Middle school component.

We also made several assumptions that helped define the projected area needed to fulfill the required programs. These were:

In the Middle School Division

1. We reduced the number of core classrooms by 50% to satisfy the population of students.
2. We provided an equal area for the Related Arts / CTE program even though the population was significantly less. Currently, Dalewood has over 7,575 SF of non-traditional program area that we did not specifically include in this programmed area but may be included if other programs (i.e. Broadcasting, CTE STEM, Foreign language) are not required.
3. We added an area allowing an office element to be located near the middle school entry.
4. We provided additional gymnasium areas due to the desire to reuse the existing gym at Brainerd. If the decision is to build a new Middle School gym and reuse the existing High School gym for High School activities, some areas can be reduced.

In the High School Division

1. We added a field house component to the High School program allowing Football storage and locker facilities to remain close to that program element. All other functions of the gymnasium would stay within the Basketball gym.
2. We reduced the size of the gymnasium capacity from 1,200 to 1,000 occupants (based on the school census).

Shared Use areas

1. We removed the requirement for a small auditorium as indicated in Tyner's program deferring to the full existing auditorium in the Brainerd/ Dalewood program.
2. We provided only the existing 2,800 SF, that is currently provided in Brainerd, instead of populating a full 4,400 SF Exceptional Education suite. Currently, Brainerd does not have a full Exceptional Ed. program.
3. We have recommended an addition of 2,000 SF to the cafeteria if lunch scheduling cannot be revised to allow for the full load of 930 students. This work will be a complex endeavor if constructed in the location shown due to the need to fly everything into this location over the existing buildings.

The summary of programs and areas is as follows:

MIDDLE SCHOOL DIVISION		Tyner	Brainerd	
CORE ACADEMIC:		19,600	10,885	
	90% Utilization classrooms	563	284	
		26	13	
RELATED ARTS		6,620	732	
CTE			5,870	added
GENERAL USE:		2,000	2,506	
Office area			3,500	added
MIDDLE SCHOOL GYM AREA		16,440	20,720	
		44,660	44,213	
Circulation	20%	8,932	8,843	
Total 6-8 Sq. Ft.		53,592	53,056	
HIGH SCHOOL DIVISION		Tyner	Brainerd	
CORE ACADEMIC:		24,850	23,066	
	90% Utilization classrooms	675	646	
		24	24	
GENERAL USE:		9,000	4,676	
			5,000	add a Field house new gym, no stage, no wrestling
HIGH SCL GYMNASIUM AREA		32,345	22,045	
Est. 9-12 Sq. Ft.		66,195	54,787	
Circulation	20%	13,239	10,957	
Total 9-12 Sq. Ft.		79,434	65,744	
SHARED USE AREAS		Tyner	Brainerd	
AUDITORIUM		0	12,318	
BAND/CHORAL		14,775	5,412	no small auditorium
ELECTIVES		15,800	17,425	
EXCEPTIONAL ED.		4,400	2,800	not a full program at Brainerd
CAFETERIA		12,500	7,950	
			2,000	added room
ADMINISTRATION:		8,479	3,840	
MEDIA:		6,350	5,930	
GENERAL USE:		2,600	1,720	
Est. Shared Use Sq. Ft.		64,904	64,617	
Circulation @ 20%		12,981	12,923	
Total Shared Use Sq. Ft.		77,885	77,540	
AREA SUMMARY				
Total Sq. Ft. Middle School (6-8) Division		53,592	53,056	
Total Sq. Ft. High School (9-12) Division		79,434	65,744	
Total Sq. Ft. Shared Areas		77,885	77,540	
Grand Total Sq. Ft.		210,911	196,340	
			38,415	New SF required
			157,925	existing area
	Students	1,238	930	
	SF / Student	170.36	211.12	

As noted previously, each of the existing schools has several programs that are not specifically noted in the Tyner program. We have not attempted to provide an area for all these programs to exist in the new joint school program. We have provided an area commensurate with that in Tyner's middle school-related arts and high school elective programs. Where existing construction didn't conflict with the arrangement of core classrooms – additional area was allowed to remain. These areas are tabulated as follows:

- Tyner's program allows for 6,620 SF-related arts for the middle school and 15,800 for the high school elective area.
- In comparison, the Joint program allows for 6,602 SF-related arts for the middle school and 17,425 for the high school elective area.

A list of these areas is provided below:

Brainerd High

Program	Current Sq Ft
Family Resource Center	2,035
Cosmetology Lab	3,580
Speech	1,480
Avionics Classroom	1,740
Avionics Lab	4,000
Culinary Arts	2,760
Driver Training	975
Typing (2 classrooms)	2,381
Bookkeeping	975
Business Machines	1,175
Short Hand	975
Home Making	1,475
General Shop	2,380
Total Program Sq. Ft.	25,931

Dalewood Middle

Program	Current Sq Ft
Family Life Center	1,200
On Point	
Family Partnership	
Ben Carlson's "Think Big" school	760
Career Cluster (Media Center)	1,130
Computer Science	
Audio Visual	
Digital Fabrication	
Castle Store & Gameroom	835
Audio Video Innovation Center	2,250
Fitness Center	600
Yoga and Dance Studio	500
Bike Program	300
Total Program Sq. Ft.	7,575
	33,506

Define a list of shortcomings of existing areas that will need to be resolved by future building additions.

Based on this Summary, we recommend adding the following area to the existing Brainerd High School campus to cover the additional programs required by the addition of a middle school.

- 3,500 SF Middle school office addition
- 5,870 SF Middle School classroom addition
- 22,045 High School gymnasium addition
- 2,000 Middle School Cafeteria Addition
- 5,000 Field House addition
- 38,415 SF new construction**

Not knowing the ultimate scope of the project, MTa considered possibilities towards scope to determine how they would fair against the City's limiting cost of \$10,726,000 (30% of Replacement Cost).

We have not established a specific list of areas to renovate but we understand providing minimal revised finishes and lighting upgrades would improve this school's aesthetic image. With the overall existing area containing 157,925 SF, improvements would need to be prioritized be less than \$88/ SF or less to stay under the 30% replacement cost prescribed in the City Code if accomplished in a single phase.

As the design architect considers the exact scope of the renovation, specific work around the ceilings in the original school needs to be defined closely. Abatement of asbestos contained within the ceiling plane will be a costly endeavor but may prove to be necessary to achieve the required aesthetic result. We caution against wholesale remodeling of the ceilings knowing that this abatement scope would inflate the cost of a relatively simple remodel causing the contract to exceed 30% of the Replacement Cost.

Although not specifically requested in our scope of work, an initial programmatic budget for this project would be:

<u>Area</u>	<u>Cost / SF</u>	<u>Subcost</u>	
23000	\$550	\$12,650,000	New gym
3500	\$450	\$1,575,000	New office
5800	\$450	\$2,610,000	New fieldhouse
5870	\$700	\$4,109,000	New classroom addition
2000	\$500	\$1,000,000	New cafeteria addition
		\$21,944,000	New Construction
157,925	\$63	\$10,000,000	Existing interior renovations
		\$31,944,000	Total project construction cost
		unknown	fixtures, furniture, & equipment
		\$1,700,000	Project design fees

In this budget, the classroom addition would be constructed in a manner to provide the code requirements of a storm shelter.

TASK V – PROVIDE A SCHEMATIC TEST FIT

In the attached test fits located in the Appendix, MTa shows how a “High School” and a “Middle School” curriculum may coexist on this site based on the previous commentary. Please note that these are only two of several possible scenarios. These indicate the general size of area needed to fulfill the combination of the two schools. This area can be rearranged to meet several differing requirements that may be more of a priority for the County and School System. In our study the following comments were heard by both schools:

- Each school wanted to maintain programmatic division between the others school.
- Each school considered a different “start of school” timing and separate transportation being advantageous.
- Each school wanted to keep as many active programs as possible when combined.

MTa intentionally grouped the construction in a centralized area in “Scheme A” to minimize the impacts of construction on an operational school. We feel this consolidation would be beneficial, lowering construction costs and providing a safer environment for construction, by limiting contractor/student access.

With this configuration, the school would receive a new main façade to the public way. This grouping of the main elements would also help minimize the travel distances faced by each student and help control the differing age groups more effectively. We would hope that the main gymnasium would act as the bridge between the two separate schools garnering a new sense of community for this newly combined school.

APPENDIX

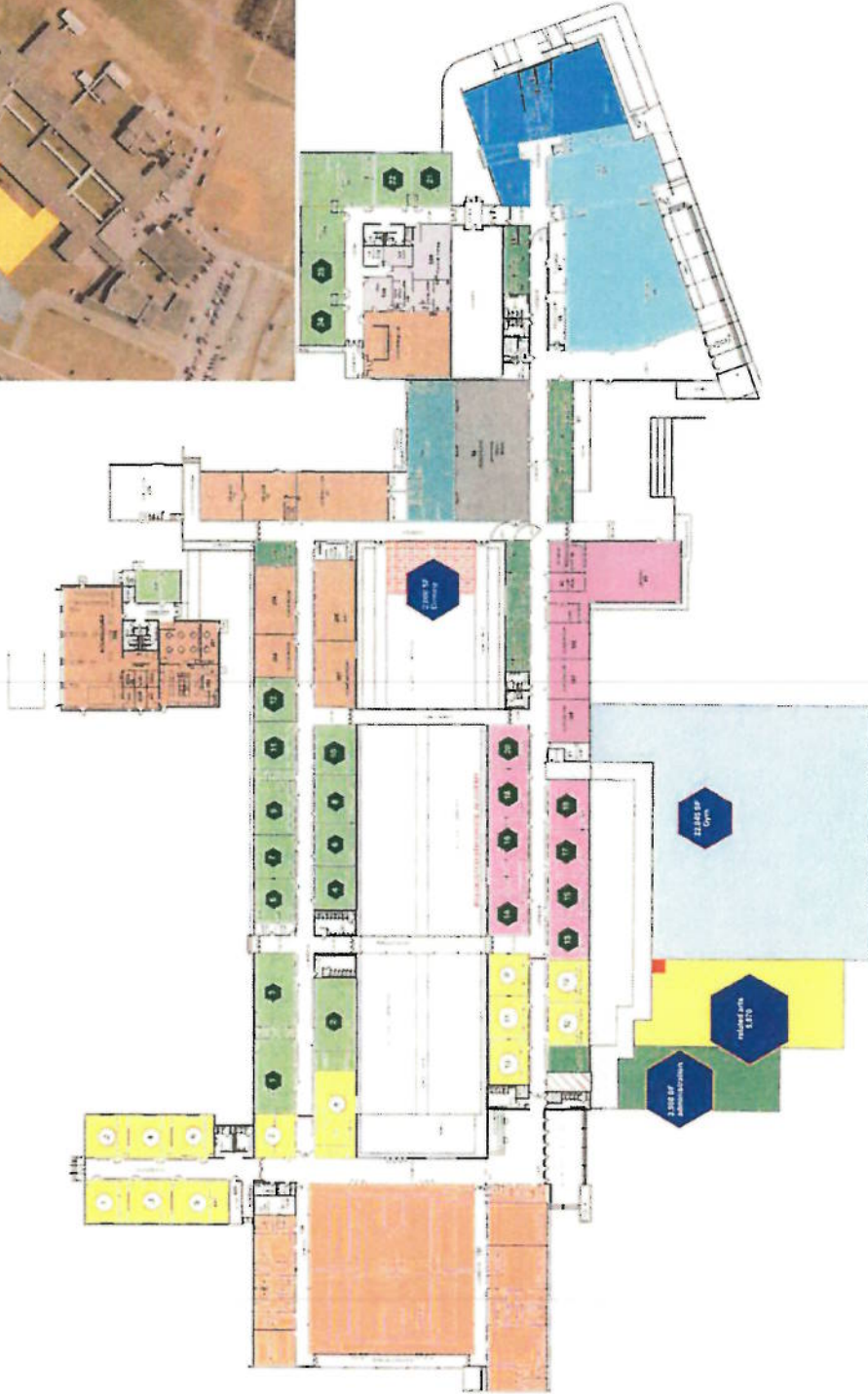
All attachments are found at this link ([Brainerd Dalewood report](#))

Supporting documents

1. City of Chattanooga Code of Ordinances – Section 101.4.7.
2. 2018 IBC – section 423.4 Storm Shelters
3. FEMA ICC 500 highlights
4. Brainerd / Dalewood Schematic Test Fit
5. Tyner Preliminary Program
6. Brainerd / Dalewood Preliminary Program

Plans and construction documents

1. Brainerd
 - o Partial Plans by Selmon T. Franklin (3/20/1959)
 - o Partial Plans by Yearwood and Johnson (9/14/1979)
 - o Partial Plans by DHW (3/22/1991)
 - o Plans by DHW (11/22/1993)
 - o Brainerd Overall Plan
 - o ACAD floor plan
2. Dalewood
 - o Partial Plans by Butler Wilhoite Hildebrand (6/10/1962)
 - o Partial Auditorium Plans by Butler Wilhoite Hildebrand (3/20/1964)
 - o Partial Addition Plans by Billingsley Architecture (3/19/2004)
 - o Dalewood Overall Plan



Faculty Offices



Schematic Design

10/1/2010

10/1/2010

10/1/2010

10/1/2010

10/1/2010

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10/1/2010

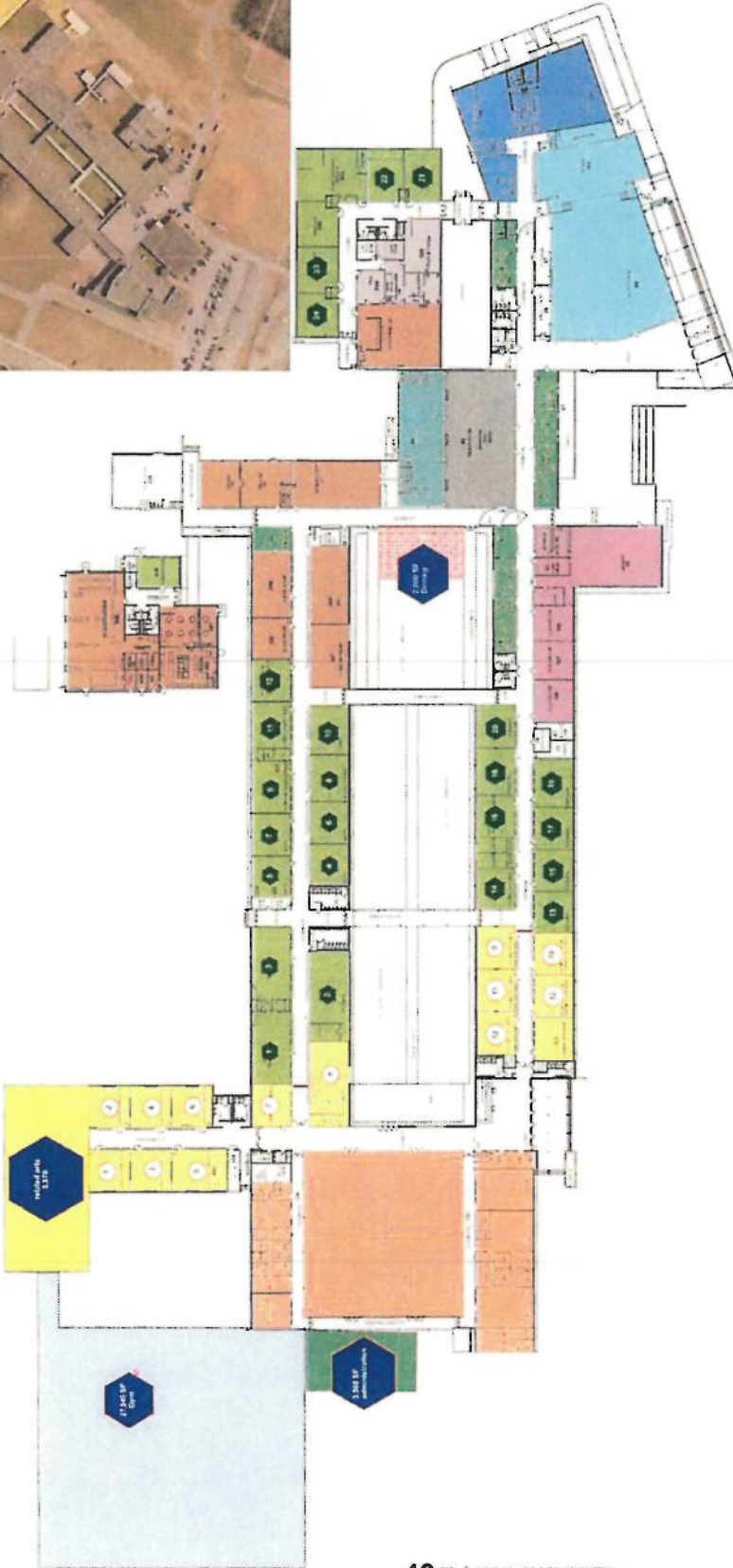
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10/1/2010



Schematic
Design

Author	DATE
Checked	DATE
Approved	DATE

Issue Date: 10/12/2011
 Project No.: 1101
 Project Name: [illegible]

**ARCHITECTURAL
 SCHEME B**

Sheet Number

A102

GATEWAY

Facility Report

MAY 28, 2024

For:



Hamilton County Property Management

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Phone: 423-209-7960

By:



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PURPOSE OF THE REPORT

MTa was hired to perform a report that includes the following:

1. Task I - Defining issues impacting the remodeling of the existing buildings.
 - a. The report will include a narrative of issues such as:
 - i. Redevelopment issues that will impact cost, such as:
 1. Change of Occupancy issues
 2. ADA / ICC 117.1 accessibility issues.
 3. City Ordinances.
 4. Current Building Code and Energy Code issues.
 5. Storm Shelter required by City and County codes.
2. Task II – Defining issues of how the existing building may impact a particular building program.
 - a. What limitations does MTa see in the existing site:
 - i. Easements and overall site constraints
 - ii. Parking
 - iii. Bus circulation
 - iv. Athletic fields or green space
 - v. Security
 - b. What limitations do we see in the “systems” that may have consequences for the space to operate as intended? i.e.:
 - i. Will the existing structural system allow certain program elements?
 - ii. Is the existing HVAC system currently configured in an acceptable way to be modified for its new use? Are there issues with controlling it in its new use?
3. Task III – Provide a listing of material serviceability concerns.
 - a. During our site visits, we will list building materials that we feel need to be improved during any future remodel. i.e. roofing, pavement, door hardware, etc.
4. Task IV – Provide a listing of additional research, reports, or surveys required to minimize any delays to design or construction.
5. Task V – Provide a schematic test fit, or layout, showing how a “Technical school” and an “Art’s based school” curriculum may coexist on this site.

Special Notes to consider:

1. *All financial costs noted in this report are indicated in today's cost. No inflation factor has been added to any cost.*
2. *MTa assumes that the valuation of the buildings (for replacement cost) / and building construction cost would escalate in an equal fashion.*
3. *This report is limited and did not include:*
 - b. *Survey or detailed as-built documentation of the existing layouts.*
 - c. *Geotechnical, Historical, or separate Environmental studies.*
6. *The construction industry continues to experience escalations of cost and shortages of materials. The cost defined in this report will be based on historical information and information provided by local contractors. MTa did have the cost reviewed and vetted by a local contracting firm but this does not guarantee the accuracy of this information beyond the date of issuance.*
7. *All financial quantities listed in this project are without any contingency.*

EXECUTIVE SUMMARY

The possible liabilities for this project are summarized throughout this report. This Executive Summary is meant to highlight just the most significant issue in each of our project tasks.

Code:

The most significant issue provided in the building code is what the State of Tennessee expects to occur for this "Business" occupancy to be transformed into an "Educational" occupancy. The greatest liability in both cost and schedule consequence is the requirement to have a full Structural report accomplished on this 59-year-old group of buildings. The requirement to change "Occupancies" on this building is our largest concern as it applies to both design and construction cost.

Program:

The most significant issue provided in "possible building programs" is the request to place a full auditorium with an orchestra pit and full working stage within this existing structure. As noted in the diagram in section Task 2, Building notes 1b and 1c, there is no existing area on any of the 4 levels to place an auditorium with a working stage or a competition gymnasium due to ceiling height requirements.

Serviceability:

The most significant issue as it applies to the existing building materials or systems is the age and type of mechanical system currently serving the existing facility. Currently, 56 rooftop HVAC units serve the building, and an estimated half of those units are 20 years old. A cost/benefit review of this system should be commissioned prior to renovating the school with this existing system in place.

Additional Reports:

Finally, we believe the following reports will be required to proceed with any large school project:

1. A structural report will be required. As noted previously this report will be the keystone on which the requests for the "Change of Occupancy" will rest.
 - a. Within this report a geotechnical report may be required to specifically define the seismic site classification of this property.
2. A Traffic Study will be required with City permitting.
3. Asbestos testing did not occur during the Phase 1 ESA. A separate study will be required before demolition will be permitted by the Chattanooga / HC Air Pollution Control Board.
4. ADA review of the existing elevators and lifts.
5. It is possible the City of Chattanooga may require a tree survey as the basis of improvements to the site due to the change of occupancy.

TASK I - DEFINING ISSUES IMPACTING REMODELING

The existing facility was built in 1965 per the Hamilton County Assessor of Property. As constructed, the building is a conglomeration of several buildings that total 189,456 SF. Sitting on 11.18 acres, the parking lot is configured to park 480 vehicles. The property is zone C-3. The property is within the limits of the Urban Overlay zone but is not within the limits of the form-based code. The property is also within the Short-term vacation rental zone.

The building is a steel-framed building with both masonry and metal stud infill. The exterior finish is primarily masonry veneer. We would expect that this building would be considered by Authorities Having Jurisdiction (AHJ) as a Business Occupancy. In our research, it appears that the West Buildings (called the Gateway Strip) were constructed as a Construction Type IVB – unprotected. Separated from the West Building by a 4-hour firewall, the East buildings should be considered a Construction Type 2B - unprotected. The existing building is sprinkled.

The existing facility has not been condemned or decommissioned. Nor are there any official code-related complaints towards it with the City Building or State Fire Marshal's office that we could determine. This 59-year-old building still has an active "Certificate of Occupancy" however it should be noted that many of the existing systems may have exceeded their standard lifespans.

Early in our study, it became clear that a few issues were going to drive any future work on this facility. There are at least 4 significant considerations that need to be considered when reviewing possible code-driven scope upgrades.

1. Change of Occupancy. There are mandated upgrades that will be required when this building is changed from a "Business occupancy" to an "Educational occupancy". All these requirements are explained within Chapter 10 of the 2012 International Existing Building Code and are based on the higher "risk category" as defined by Table 1604.5 of the IBC.

The State of Tennessee requires this building to change occupancy if it is to serve K-12 students. All the requirements to change the "Occupancy" are required, without limits on cost or schedule.

*The State is currently working to update its codes to the 2021 International Building Code. The current proposal has an exception that won't mandate the Storm Shelter requirement for all schools until July 1, 2026.

2. Based on the 2012 International Existing Building Code (Tennessee Fire Marshal Adopted Code). This project would be considered a Level 3 alteration. This code doesn't mandate a full upgrade to the current code but does impact design decisions. The main concerns to be addressed would be:
 - a. Revising accessibility
 - i. None of the restrooms are ADA accessible, as well as none of the doors have the required clearances to meet current ADA. The stairwells are too narrow for the occupancy load.
 - b. A Structural analysis of the building.
 - i. Will be required to show that current structural systems are performing at the required design loads.
 - c. Adding "Fresh Air" supplies to all the spaces.
 - d. Revising all of the Fire Alarm systems.
 - i. The new system will be required to meet current codes, including horns and strobes.

3. Based upon a City of Chattanooga Ordinance – Sec 17-3.6.1 – if a building remodel cost is over 30% of the replacement cost, one must upgrade the building to meet current codes (ADA, Energy, and Building). This concept is important knowing that full upgrades to different systems could require more cost than desired.

Based on the remaining two known issues, we considered that the City's code was going to be most stringent and defined the "replacement cost of the facility" per Code section 101.4.7.1. (attached below).

The 2023 RS Means defines this type of space to have a cost per Square Foot (\$/SF) cost of \$226.40. This figure would make the city-approved replacement cost **\$42,892,800**. 30% of that cost is **\$12,867,800**. That sum is the financial limit placed by the City to keep this project from requiring full building code updates if expended in a single phase.

MTa believes the replacement cost of this facility is closer to **\$56,836,000**. We are using the numbers provided by public information noted in the City Code to evaluate the replacement cost for this report. In the last 3 years, the replacement cost of all buildings has increased significantly due to the substantial increase in building construction costs.

4. Current City issues impacted by Energy Codes – while we believe this issue provides the least amount of liability for this project – the Existing HVAC units may be impacted by the Energy code. Also, none of the existing entries have vestibules (or air locks) which is required by the current code.
5. Based on the occupancy of this structure (educational), and the current building code in the City of Chattanooga, MTA believes this Change of Occupancy will require the addition of a Storm shelter (IBC 423.4 & ICC 500). When Hamilton County and the City of Chattanooga upgraded their building codes to the 2018 International Building Codes (IBC) this became the rule.

Below is a link to the 2018 IBC section 423.4:

<https://up.codes/viewer/knoxville/ibc-2018/chapter/4/special-detailed-requirements-based-on-occupancy-and-use#423>

Below is a link to the Highlights on Storm Shelters & ICC 500:

https://www.fema.gov/sites/default/files/documents/fema_ICC-500-2020-highlights_publication_082021.pdf

Below is a link to the standard ICC 500:

https://codes.iccsafe.org/content/ICC5002020P1/chapter-1-application-and-administration#ICC5002020P1_Ch1_Sec104

Not knowing the ultimate scope of the project, MTa considered possibilities towards scope to determine how they would fair against the City's limiting cost of \$12,867,800 (30% of Replacement Cost). We ended up exploring 6 possible construction scopes. For this exercise, we populated construction costs based on assumed scopes of work & allowances. These scopes may be revised during further programming and design work, but they are a good starting point for further discussions.

It is important to recognize the existing building area per floor to understand how each scenario is derived. The existing building has four floors and lays out in this configuration, starting on the lowest level (facing downtown):

1 st floor	59,300 SF
2 nd floor	78,779 SF
3 rd floor	29,577 SF
4 th floor	21,800 SF
Total area	189,456 SF

It was not assumed that every SF of the existing area would be effectively used in any of these remodels. That is why, for instance, we only use 33,000 SF of the 59,300 SF indicated on the lowest level.

HCDE has provided MTa with a preliminary building program for CCA. This program was used in the development of scenario No. 3. The total of the program area was 155,450 SF for the 6th -12th School for the Arts. MTa added an additional area to the theater area making out a new CCA Program Area 156,700 SF.

In the development of most of these scenarios, exterior work was excluded. In the two new school scenarios (Nos. 4 & 5), the new buildings obviously received new exteriors. In scenario No. 6, the buildings received a new school entry.

In Scenarios Nos. 3, 4, & 5, a new 20,000 SF Auditorium was constructed. This production theater is significantly more expensive than any surrounding "educational" construction and has been tallied separately for transparency. The CCA request for this program element included a full working stage with curtains and rigging, an acoustic shell and acoustical clouds, and an orchestra pit with pit fillers allowing the stage to be extended.

Scenario No. 1 – Minimal work for Technical School on the first level. This includes:

1. The work required to upgrade as required by the State to change occupancy.
 - i. Structural Modifications, Fire Alarm, and other requirements of the Existing Building Code.
2. The adding of a storm shelter per the City of Chattanooga building code requirements for change of occupancy.
3. The modification of 33,000 SF (of the 59,300 SF) on the first level only.
4. The remainder of the building is to be unimproved and will be used "as-is".
5. Only a Catering kitchen is provided in this scenario.
6. The cost of equipment (i.e. saws, dust collection, air compressors, etc.) is not included in this costing scenario.
7. The interior of the Construction Career Center (Mary Ann Garber) is the level of expectation for this work.
8. Assumed the Existing HVAC system would remain.

Gateway Development Scenario No. 1				
Building Revisions Required for Occupancy Change				
189,456	\$15	per SF	\$2,841,840	Allowance for Structural, Fire Alarm revisions (overall building - 4 floors)
Addition of Exterior Modular Storm Shelter				
2	\$374,417	each	\$748,834	Allowance based on Occupant load of 200
Site Revisions for Technical school				
1	\$500,000	AI	\$500,000	Allowance for Fire Line modifications storm shelter placement and site adjustments for traffic modifications
Building Revisions for Technical school program				
33,000	\$200	per SF	\$6,600,000	Allowance for Technical School program revisions
			\$10,690,674	Sub-total for Scenario No. 1
			\$1,069,067	GC OH&P
			\$11,759,741	Total Construction Cost for Scenario No. 1 (under the 30% Replacement cost threshold of \$12,867,800)
	7.3897%			Designer's Fee percentage
			\$869,010	Designer's Fees
	Unknown			Furniture, Fixtures, Equipment
	Unknown			Special inspections
			\$12,628,752	Project Cost

Scenario No. 2 – Minimal work for Technical School on the first level and the minimal work required to cost-effectively start a High School program without any athletic programs. This includes:

1. The work required to upgrade as required by the State to change occupancy and to upgrade the full existing building as required by the City of Chattanooga code.
2. The modification of 161,000 SF (189,456 SF total) on all 4 levels.
3. A full kitchen is provided in this scenario.
4. Exterior precast storm shelters for 800 occupants are provided.
5. A gymnasium space will be provided for PE, but not for competitive sports.
6. The cost of equipment (i.e. saws, dust collection, air compressors, etc.) is not included in this costing scenario.
7. The interior of the Construction Career Center (Mary Ann Garber is the level of expectation for this work.)
8. Assumed the existing HVAC system would be replaced.

Gateway Development Scenario No. 2				
Building Revisions Required for Occupancy Change				
189,456	\$15	per SF	\$2,841,840	Allowance for Structural, Fire Alarm revisions
Kitchen and serving lines				
1	\$1,300,000	800 Occ	\$1,300,000	Kitchen with all new equipment
Addition of Exterior Modular Storm Shelter				
8	\$374,417	each	\$2,995,336	Allowance based on Occupant load of 800
Site Revisions for of High school				
1	\$750,000	AI	\$750,000	Allowance for Fire Line modifications storm shelter placement and site adjustments for traffic modifications
HVAC Revisions with new System				
189,456	\$62	per SF	\$11,746,272	Allowance for new HVAC systems
Building Revisions for Technical School program				
33,000	\$200	per SF	\$6,600,000	Allowance for Technical School program
Building Revisions for High school program				
128,000	\$185	per SF	\$23,680,000	Allowance for High School program
			\$49,913,448	Sub-total for Scenario No. 2
			\$4,991,345	GC OH&P
			\$54,904,793	Total Construction Cost for Scenario No. 2
	6.6392%			Designer's Fee percentage
			\$3,645,261	Designer's Fees
	Unknown			Furniture, Fixtures, Equipment
	Unknown			Special inspections
			\$58,550,053	Project Cost

Scenario No. 3 – Provide Minimal work for Technical School on the first level.

Remodeling as required to host The Chattanooga School for Creative Arts program with a new production theater. This includes:

1. The work required to upgrade as required by the State to change occupancy and to upgrade the full existing building as required by the City of Chattanooga code.
2. The modification of 169,700 SF (189,456 SF total) on all 4 levels.
3. Programmatically this is the same as Scenario No. 3 except for Areas provided specifically for CCA's program of 156,700 SF.
4. The addition of a 20,000 SF Auditorium with a working stage. This space will provide the required storm shelter.
5. Assumed the existing HVAC system would be replaced.

Gateway Development Scenario No. 3				
Building Revisions Required for Occupancy Change				
189,456	\$15	per SF	\$2,841,840	Allowance for Structural, Fire Alarm revisions
Kitchen and serving lines				
1	\$1,700,000	1,100 Occ	\$1,700,000	Kitchen with all new equipment
Site Revisions for CCA				
1	\$2,000,000	Al.	\$2,000,000	Allowance for Fire Line modifications and site adjustments for traffic modifications
HVAC Revisions with new System				
189,456	\$62	per SF	\$11,746,272	Allowance for new HVAC systems
Building Revisions for CCA program				
136,700	\$185	per SF	\$25,289,500	Allowance for Specific Program revisions
Building Revisions for Technical program				
33,000	\$200	per SF	\$6,600,000	Allowance for Specific Program revisions
New Theater Addition for CCA program				
20,000	\$1,000	per SF	\$20,000,000	Allowance for theater and ancillary support spaces
			\$70,177,612	Sub-total for Scenario No. 3
			\$7,017,761	GC OH&P
			\$77,195,373	Total Construction Cost for Scenario No. 3
	6.4934%			Designer's Fee percentage
			\$5,012,619	Designer's Fees
	Unknown			Furniture, Fixtures, Equipment
	Unknown			Special inspections
			\$82,207,992	Project Cost

Scenario No. 4 – Provide Minimal work for Technical School on the first level. Remodel the 2nd level with the High School programmatic area. The two upper levels will remain mostly “as-is” and will continue to operate as a business occupancy. This includes:

1. The work required to upgrade as required by the State to change occupancy and to upgrade the full existing building as required by the City of Chattanooga code.
2. The modification of 111,000 SF (189,456 SF total) on the two lower levels.
3. Programmatically this school can hold up to 800 students but will be limited to providing trade-type electives on the lower level.
4. Assumed the existing HVAC system would be replaced on the lower two levels only.

Gateway Development Scenario No. 4				
Building Revisions Required for Occupancy Change				
189,456	\$15	per SF	\$2,841,840	Allowance for Structural, Fire Alarm revisions
Kitchen and serving lines				
1	\$1,300,000	800 Occ	\$1,300,000	Kitchen with all new equipment
Addition of Exterior Modular Storm Shelter				
8	\$374,417	each	\$2,995,336	Allowance based on Occupant load of 800
Site Revisions for of High school				
1	\$750,000	At	\$750,000	Allowance for Fire Line modifications storm shelter placement and site adjustments for traffic modifications
HVAC Revisions with new System				
111,000	\$62	per SF	\$6,882,000	Allowance for new HVAC systems
Building Revisions for New Main Entry				
2,000	\$700	per SF	\$1,400,000	Allowance for new High School Entry with elevator
Building Revisions for Technical School program				
33,000	\$200	per SF	\$6,600,000	Allowance for Technical School program
Building Revisions for High school program				
78,000	\$185	per SF	\$14,430,000	Allowance for High School program
			\$37,199,176	Sub-total for Scenario No. 4
			\$3,719,918	GC OH&P
			\$40,919,094	Total Construction Cost for Scenario No. 4
			6.7704%	Designer's Fee percentage
			\$2,770,397	Designer's Fees
			Unknown	Furniture, Fixtures, Equipment
			Unknown	Special inspections
			\$43,689,491	Project Cost

Summary of Scenarios

As you can see the only Scenario that works within the limiting cost of \$12,867,800 (30% of Replacement Cost) is the first one. All other scenarios must be upgraded to meet the current Chattanooga Code which is the 2018 IBC or completed within a phased project.

Gateway Development Scenarios		
Scenario	Construction Cost	Project Cost
Scenario No. 1	\$11,759,741	\$12,628,752
Scenario No. 2	\$54,904,793	\$58,550,053
Scenario No. 3	\$77,195,373	\$82,207,992
Scenario No. 4	\$40,919,094	\$43,689,491

Special notes of clarification

In each of the first 3 scenarios, there is an allowance to upgrade the structure as will be required for the Change of Occupancy. This Allowance is just "a guess" until further exploration and structural evaluations are made.

The cost of "significant revision" to the existing HVAC system due to the age of the existing system is not included in scenario 1. In scenarios 2 and 3 the HVAC systems are to be replaced before the remodeled finish ceilings are installed. In scenario 4, only the lower two levels are replaced. The cost to replace the existing rooftop systems in favor of a more energy-efficient and maintenance-friendly system is \$62 / SF.

Project Cost includes estimated construction costs and estimated building design fees based on the State Fee Schedule. This cost does not include the following:

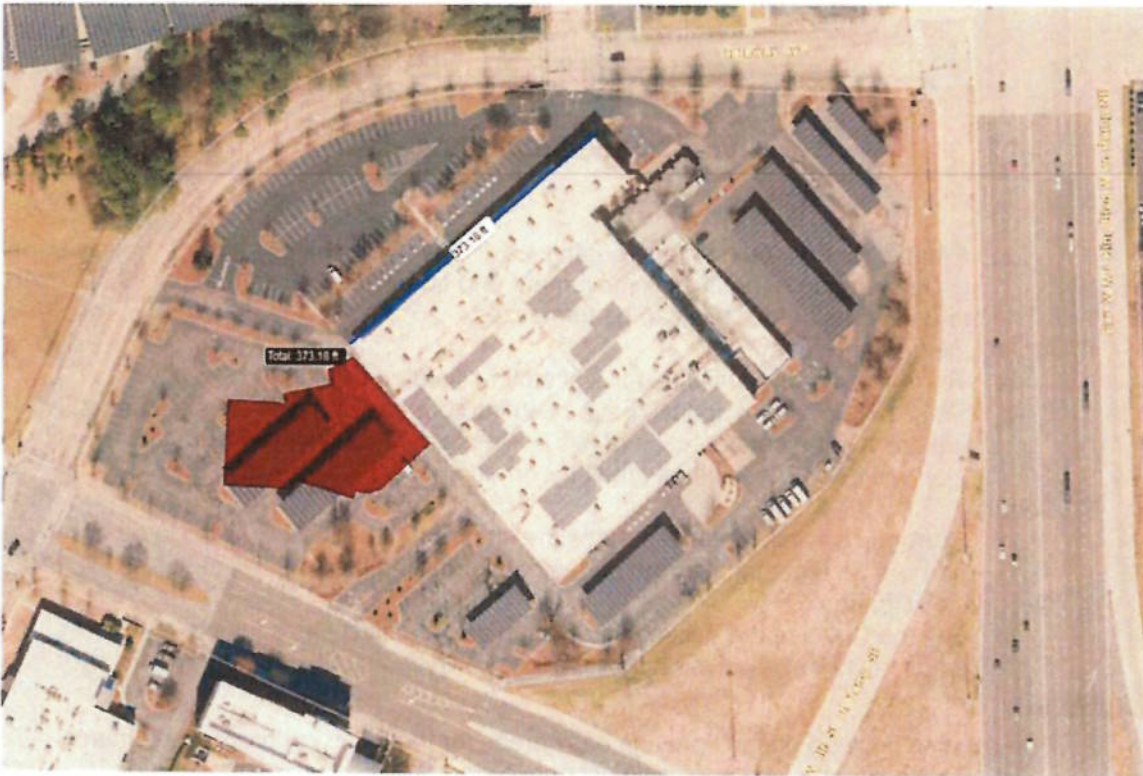
1. Civil Design fees.
2. Geotechnical Testing or report cost.
3. Asbestos testing and abatement documentation.
4. FFE (Furniture, Fixtures & Equipment) cost.
5. Permit review or permit fees.
6. Survey as-built documentation of existing construction.
7. Special inspections or construction material testing.
8. Cost of permitting.

TASK II - DEFINING ISSUES OF HOW THE EXISTING BUILDING MAY IMPACT A PARTICULAR BUILDING PROGRAM

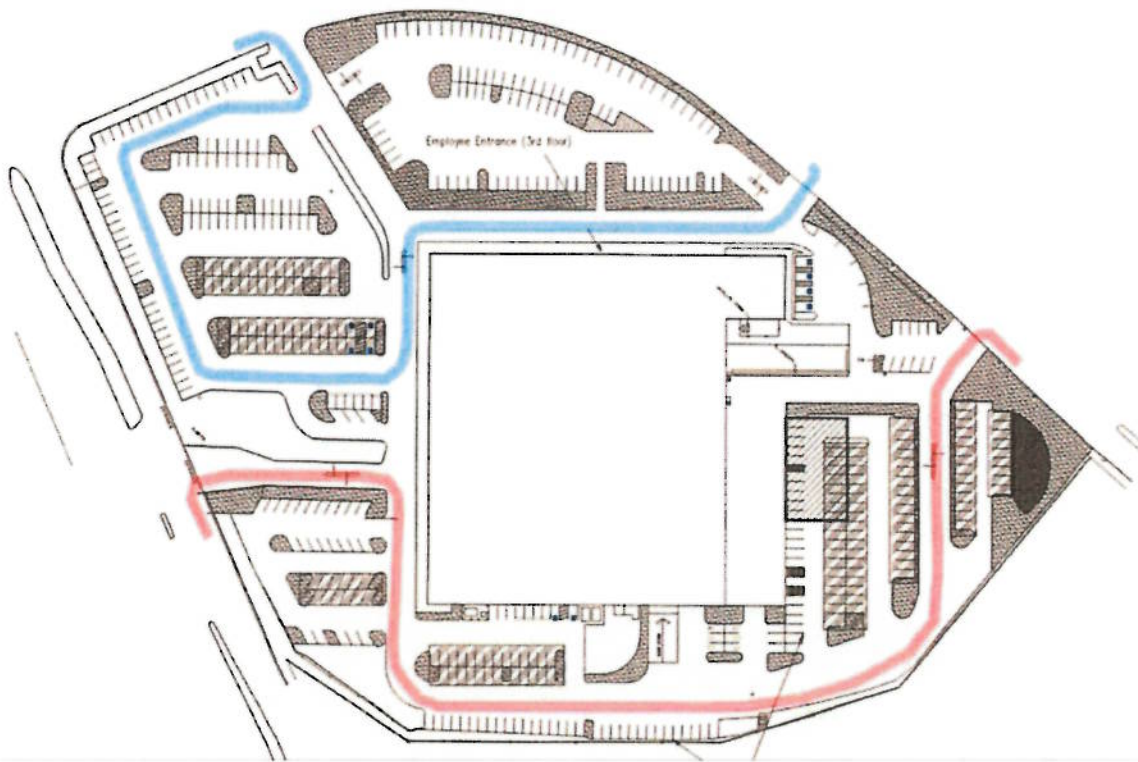
MTa believes the configuration of the existing construction does provide opportunities & limitations based on the following:

Site:

1. Easements and overall site constraints
 - a. Based on the existing configuration, the site has very few "deeded" encumbrances other than the existing building occupying the center of the site.
 - b. The site slopes significantly from the West to the East. This has created a facility with 4 main levels. Exterior doors open onto the site from the lower three levels.
2. Parking
 - a. The survey carried out by Earthworx, LLC dated 2/26/2024 shows 480 spaces.
 - b. A significant quantity of parking is located under the large solar PV panels.
 - c. If a new auditorium is to be constructed on this site. The parking quantities might fall below current HCDE standards for High School programs. (for reference - CCA has approximately 320 spaces).



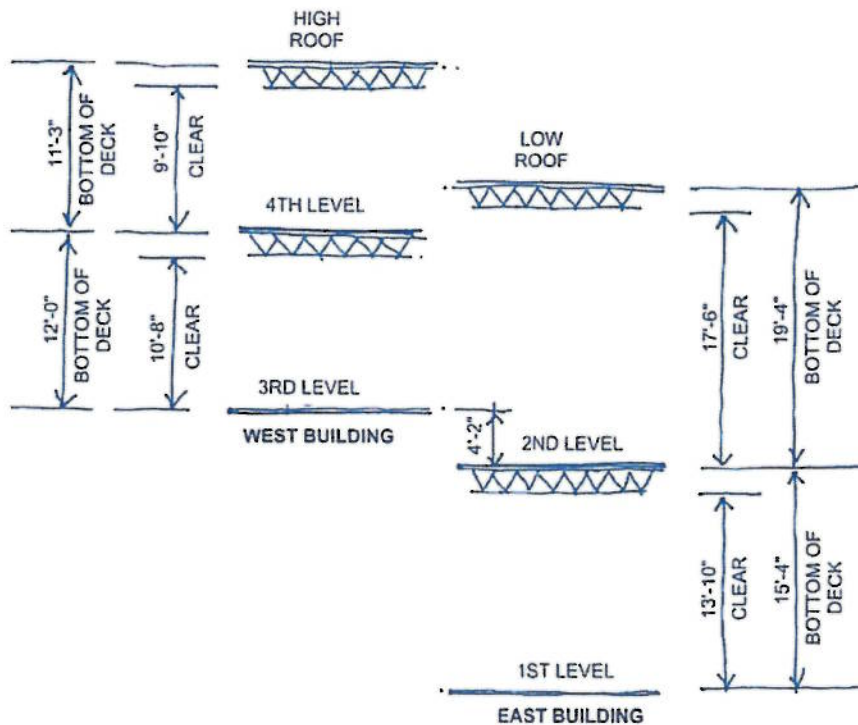
3. Bus circulation
 - a. It is currently unknown what the bus load will be for this school, however with the current configuration of 4 entries and exits – one could deduce that vehicular circulation will need to be reformatted to minimize conflicts with the car/ bus routes.



- b. A traffic report would help to organize exit ways onto the city streets; however, an understanding of both peak movement and quantities of cars and buses will need to be known before this can be formalized.
- 4. Athletic fields or green space
 - a. There is no room available for any athletic field on this site.
 - b. Small pocket green spaces have been introduced in the current site plan. It is unknown if the conversion of this business parking plan to an educational site plan will free up additional areas for green space.
- 5. Security
 - a. Currently a 4' tall fence separates the site from the TDOR ROW. No other barriers protect the site from pedestrians crossing the site.
- 6. Occupancy Change
 - a. Will the City use the occupancy change as a catalyst for requiring new landscaping, sidewalks, and bike accessibility?

Building:

- 1. The existing building doesn't provide easy areas for the following program elements:
 - a. There is not a location for an economic start on a chemistry lab:
 - i. Acid neutralization tank and chemical piping.
 - ii. Hoods and MUA/ Gas / Chemistry casework/ eyewashes/ EPO/ etc.
 - b. There is not a good location for a competition gymnasium area:
 - i. Any converted space will need to be reviewed for ceiling height and acoustical separation. It is currently assumed that this area will only allow PE activities to occur.



GENERAL FLOOR LEVEL SKETCH
NTS

- c. There is not an appropriate space for any production theater to occur (Height issues noted in last bullet 1b).
- d. There is not a cost-effective place to locate a kitchen.
- 2. Will the existing structural system allow certain program elements?
 - a. The current structural system must be evaluated further to ensure that it meets the requirements for an occupancy change (as noted in Task I, paragraph 1).
 - b. This review can also determine:
 - i. If modifying the existing structural system will allow a storm shelter to be housed in the existing building.
 - ii. What are the requirements to support large fresh air HVAC Units?
 - iii. Verify all egress paths are loaded for 100 lbs/ft.
 - iv. Verify if a geotechnical report is needed to confirm seismic restraints of hanging ceilings, gas piping, fire protection, and HVAC systems.
- 3. Firewalls
 - a. How will the delineation of the firewalls mandate awkward circulation patterns by controlling the location of existing rated openings?
 - b. What liabilities does the school have to the unknown level of penetrations in the existing firewalls?
- 4. Stairs
 - a. How will the existing vertical circulation (stairs) need to be modified to provide acceptable egress from each level?
 - b. Each stair will require evaluation of all aspects (handrail and guardrail configuration, landing, tread, and riser proportions, etc.).
- 5. A review of Sun Control devices (awnings, canopies, or shades) is necessary.

6. Access Control / Security systems will need to be vetted.
 - a. Access control is in place, classroom doors will need to be revised with intruder locksets.
 - b. Visitor vestibules and intruder-resistant glass film have not been used in the existing.
 - c. Need to discuss perimeter fencing.
7. Plumbing fixtures
 - a. Many will need to be replaced for new use.
 - b. A new grease interceptor will be required for the new kitchen. Existing to be decommissioned and removed.
8. HVAC - Is the existing HVAC system currently configured in an acceptable way to be modified for its new use?
 - a. Are there issues with controlling it in its new use?
 - b. Is it acceptable to reuse all existing ductwork?
 - c. 75% of the HVAC units appeared to be near the end of serviceable life. (a full survey needs to occur).
 - d. Fresh Air supply will need to be added.
9. Electrical – The existing electrical service on the lower level was sized to run BCBS printing operations. Will this suffice for technical school loading?
 - a. Lighting fixtures are not standard, some tubes / some LED.
 - b. Fire Alarm will need major revision.

TASK III – PROVIDE A LISTING OF MATERIAL SERVICEABILITY CONCERNS

During site visits, MTa reviewed miscellaneous building materials and systems and will list building materials that we feel need to be improved during any future remodel. i.e. roofing, pavement, door hardware, etc.

(List is attached to Appendix)

TASK IV – PROVIDE A LISTING OF ADDITIONAL RESEARCH, REPORTS, OR SURVEYS REQUIRED

MTa believes the following list of additional research, reports, or surveys should be considered to minimize any delays to design or construction.

6. Additional construction documents (especially anything that pre-dates 1997). The current list of known documents is:
 - a. Partial Preliminary Plans by Frank McDonald, 2/14/1997
 - b. Plans by Frank McDonald – Renovations to Gateway Plaza, 7/26/2002.
 - c. Plans by Artech – Exterior Revisions, 5/18/2009
 - d. Plans by Artech – Interior Renovation, 7/07/2009
 - e. Plans by Artech – Addition, 1/07/2004
7. **A structural report will be required. As noted previously this report will be the keystone on which the requests for the “Change of Occupancy” will rest.**
8. Having the PV energy sale contract and any particulars allowing the alteration of the existing system is needed. We assume at least one of these arrays will need to be modified in the future.
9. A Traffic Study will be required with City permitting.
10. Asbestos testing did not occur during the Phase 1 ESA. A separate study will be required before demolition will be permitted by the Chattanooga / HC Air Pollution Control Board.
11. ADA review of the existing elevators and lifts.
12. A Cost / Benefit analysis of the existing mechanical system would provide important decision-making information.

TASK V – PROVIDE A SCHEMATIC TEST FIT

1. In the test fit below, MTa shows how a “Technical school” and an “Art’s based school” curriculum may coexist on this site. A rough program (CCA Facilities Requirements) was provided by Hamilton County Department of Education and is the basis of this work.

(Test layouts are attached to the Appendix)

APPENDIX

All attachments are found at this link ([Gateway Report](#))

Supporting documents

1. Task III – Material Serviceability Concerns
2. Task V – Schematic Test Fit
3. City of Chattanooga Code of Ordinances – Section 101.4.7.
4. 2018 IBC – section 423.4 Storm Shelters
5. FEMA ICC 500 highlights
6. CCA Facilities Requirements
7. 2024 HCDE Initial Program for CCA

Plans and construction documents (most information delivered as hard copy)

1. Partial Preliminary Plans by Frank McDonald, 2/14/1997 (hard copy)
2. Plans by Frank McDonald – Renovations to Gateway Plaza, 7/26/2002 (hard copy)
3. Plans by Artech – Exterior Revisions, 5/18/2009 (hard copy)
4. Plans by Artech – Interior Renovation, 7/07/2009 (hard copy)
5. Plans by Artech – Addition, 1/07/2004 (hard copy)
6. Survey by EarthWorx, 2/26/2024.
7. Phase 1 ESA by S&ME, 1/09/2024

School Construction Delivery Methods

Design, Bid, Build (Current Approved Method per MOU with County)

1. Architect Selection Through RFP process with County
 - a. Request Proposals
 - b. The committee short-lists to five firms for interviews
 - c. The committee recommends 3 firms to the County Mayor and Superintendent
 - d. The County Mayor and Superintendent make the final selection from the 3 firms
 - e. The final selection is sent to County Commission and School Board for approval.
2. Design Phase with HCDE under contract with Architect
 - a. Programming-Sizing School, Number of Students, Type of Classes
 - b. SD-Schematic Design- Blocking, footprint, and site layout
 - c. DD-Design Development. More detailed. Finishes, room sizes
 - d. CD-Construction Documents-100% Completely detailed, ready for bid
3. Bidding Phase
 - a. Documents submitted to Hamilton County Purchasing
 - b. Hamilton County Advertises for Bids and sets bid dates
 - c. Bids received and the lowest and best bid is submitted to the County Commission and School Board for approval.
4. Construction Phase-HCDE under contract with General Contractor
 - a. Contract Signed jointly with Hamilton County and HCDE
 - b. The County issues a notice to proceed to the GC
 - c. Invoices sent to the Facilities director for approval and forwarded to Hamilton County for payment.
5. Closeout
 - a. Consent of Surety for Final payment/release of retainage
 - b. Test and Balance
 - c. Closeout Documents: O&M's, Warranties, CO

Comments:

CMAR-Construction Manager At Risk (Proposed Second Option)

1. Architect Selection through RFP process with HCDE
 - a. Request proposals
 - b. Committee Selection process-TBD
 - c. The final selection is sent to the School Board for approval. County Commission approval?
2. CMAR Selection through RFP process with HCDE as early as Schematic Design.
Two part contract: Phase 1 Preconstruction, Phase 2 Construction Services
 - a. Request Proposals
 - b. Committee Selection process-TBD
 - c. The final selection is sent to the School Board for approval. County Commission approval?
 - d. CMAR signed by HCDE
3. Phase 1 of CMAR Contract-Preconstruction/Design working with Architect and HCDE to work towards a GMP(Guaranteed Maximum Price) The preconstruction cost from the CMAR will be a lump sum cost noted in their RFP response.
 - a. SD-CMAR provide cost estimate, Constructability, VE options
 - b. DD- CMAR provide cost estimate, Constructability, VE options
 - c. 50% CD- CMAR provide cost estimate, Constructability, VE options
 - d. 100% CD- CMAR provide cost estimate, Constructability, VE options
4. Bidding from Subcontractors to CMAR-Phase 1 Preconstruction Continued
 - a. CMAR Compiles bid packages of trades
 - b. CMAR solicits bids and receives bids
 - c. CMAR reviews and shares bid results with HCDE and Architect
 - d. CMAR produces a GMP proposal to HCDE
5. Phase 2 Construction Services
 - a. GMP approved and added as amendment to CMAR contract
 - b. CMAR Holds the Subcontracts
6. Construction Phase
 - a. Same as DBB but all payments and PO's will be through HCDE
7. Closeout
 - a. Same as DBB

Comments: